A TECHNICAL NOTE
TO
THE EIGHTH PLAN OF INDIA
(1992-97)

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GOVERNMENT OF INDIA
PLANNING COMMISSION
PERSPECTIVE PLANNING DIVISION

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FOREWORD

The concept of development and the role of planning in India has been clearly perceived from the very beginning. The First Five Year Plan, which marked the beginning of a new era of development under the stewardship of our great leader Pandit Jawaharlal Nehru, said :

"The central objective of planning in India ... is to initiate a process of development which will raise living standards and open out to the people new opportunities for a richer and more varied life... Economic planning has to be viewed as an integral part of a wider process aiming not merely at the development of resources in a narrow technical sense but at the development of human faculties and the building up of an institutional framework adequate to the needs and aspirations of the people".

This has been the frame of reference all these years. The Eighth Plan reiterated the human development goals. Prime Minister Shri P.V. Narasimha Rao, in his foreword to the Eighth Plan, wrote :

"...Human Development, in all its many facets, is the ultimate goal of the Eighth Plan. It is towards fulfilling this goal that the Eighth Plan accords priority to the generation of adequate employment opportunities to achieve near-full employment by the turn of the century, building up of people's institutions, control of population growth, universalisation of elementary education, eradication of illiteracy, provision of safe drinking water and primary health facilities to all, growth and diversification of agriculture to achieve self-sufficiency in foodgrains and generate surpluses for exports..."
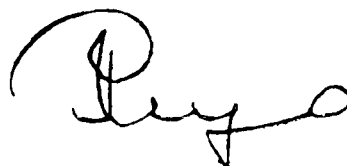
Needless to state that economic growth and social development are both important for achieving the ultimate goal of human development.

Matching of resources and instrumentalities with the goals of development requires substantial amount of technical work. Potential of resources, nature and quantities of investment in different sectors, balance of payments constraints, energy and infrastructure requirements, efficiency of use of resources or incremental capital-output ratio, etc., are all to be assessed in constantly changing situation. These have all to be assessed in a certain framework where relationship of one variable with another is clearly defined on the basis of real behaviour of the economy. Assessment of those relationships is necessarily an on-going process. The framework which defines these processes is called a "model" in the jargon of economists. These models express the relationships in mathematical terms. Historically, planning models have played two roles. One was that of defining a strategy of development, i.e., answering questions of priority between industry and agriculture, between heavy industry and light industry, between consumer goods and investment goods, etc. Mahalanobis model was an important landmark in this category of models. The other role of planning models has been that of assessing parameters and arriving at targets which are consistent with resources on one hand, and mutually consistent on the other. It is this second category of models which have to be constantly estimated and updated.

The Eighth Plan was finalised in a relatively short period of time. All the necessary technical work had been done for this purpose. However documentation of the technical work has taken sometime. The staff of the Perspective Planning Division under the leadership of Professor S.R. Hashim has done a painstaking job in this respect. Dr. Arjun Sengupta, Member-Secretary of Planning Commission has provided the overall guidance. The technical work of the Eighth Plan also benefitted from the guidance from Dr. C. Rangarajan, Member, Planning Commission during the period when the Eighth Plan was being finalised.

Our perception about the effective working of the economic system has been changing in the light of our own experiences. We took a major step in initiating economic reforms since 1991. Under the reformed system, market and decentralised decision making will play larger role in economic system, thus releasing new economic energy for fast growth and more effective development. Planning instruments and planning models will also have to adopt to the new situation. Dr. Arjun Sengupta, Member- Secretary, Planning Commission has taken new initiatives in networking with some of the most prominent national and international modelling groups and academicians with Planning Commission playing a nodal role in developing suitable modelling frames which answer more adequately to the needs of the changed economic scenario. I very much hope that the results of these efforts will be available for use in the formulation of the Ninth Plan. The present Technical Note provides a base line on which further structures can be developed.

17th May, 1995
New Delhi.   (Pranab Mukherjee)

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PREFACE

Indian planning process is extremely complex. It involves outlining the strategies for development and the supporting policy environment, working out the macro-parameters for the growth and its sectoral pattern, allocation of resources between centre and states and for different sectoral activities, detailed allocation of budgetary support and consideration of specific projects/programmes and schemes in the public sector. Formalised modelling is used for working out the macro-parameters for growth and its sectoral pattern and allocation of resources for different sectoral activities. Since the Fifth Plan, the numerical exercises and the technical work at the back of the formulation of the plan are being presented separately in the form of a technical note. The technical note outlines the methodology of plan formulation in detail by capturing the diverse inter-relationships of forces and factors that lie behind the national plan and describe in detail the various assumptions, techniques and analysis that form the basis of the plan. From this point of view, the technical notes have been found very useful. The Eighth Plan Technical Note is the fourth in this series. This note describes in detail the technical work that went behind formulation of the Eighth Plan and contains eight chapters. Chapter-1 presents the mathematical framework of the multi-sectoral input-output model which is used to derive mutually consistent sectoral output targets and corresponding sectoral investment demands. A set of sub-models have been used to assess the impact of those variables which are not adequately captured through the input-output frame. Chapter-2 describes demography and employment. Chapter-3 describes the financial resources sub-model. A detailed description of the determination of the agricultural output targets are provided in Chapter-4. Chapter-5 gives industry sub-model. The methodology adopted for projections of export and import are covered under trade sub-model in Chapter-6. Chapter-7 outlines the method of estimation of sectoral private consumption in consumption sub-model.

Launching of the Eighth Five Year Plan also coincided with major initiatives in economic reforms and liberalisation. In the changed economic environment, market will play a larger role, private sector would be expanding and the public sector would become increasingly more autonomous and subject to market forces. The international trade will start having larger impact on the domestic economy. The Government will be in social sectors and in creating a suitable environment for growth and development including infrastructure. This will require some re-orientation in the planning process. Some thoughts along these lines have been spelt out in Chapter-8.

Needless to say that technical work relating to the preparation of the plan demands cooperation, collaboration and active participation of all the Divisions in Planning Commission. Such help was available in full measure.

Work on the Eighth Plan had started much before the Eighth Plan began. Guidance of Dr. C. Rangarajan, the then Member, Planning Commission was very valuable during the period of the finalisation of Eighth Plan and the related technical work. However, the write-up on technical note was somewhat delayed. It was the keen interest shown, encouragement given and guidance provided by Dr. Arjun K. Sengupta, Member-Secretary, Planning Commission which enabled us to bring out the note in its final form.

A team of officers of the Perspective Planning Division undertook the final drafting of the note. The team was led by Shri K. L. Datta and included Mrs. Savita Sharma, Shri Mohan Chutani, Shri Rajeev Malhotra, Shri R.K. Chandolia, Shri Subroto Dhar, Shri S.V. Ramana Murthy and Shri Alok Kumar
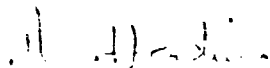
The sub-model on trade has been prepared by Shri Prabhu Dayal with the assistance of Shri M.R. Verma. Shri J. Satyanarayana was intensively involved in the modelling work at the time of the preparation of the Plan. Shri R. K. Pruthi, Technical

Director provided computer programming support during preparation of the Plan. The industry sub-model has been prepared by Shri E. Rajagopalacharyulu, Shri R.B. Tyagi and Shri A. Jacob. The perspective on energy use efficiency has been prepared by Shri R.Y. Kadeer. These industry-specific studies were supervised by Shri Shailendra Sharma. Shri S.N. Raghavan also helped in drafting at an earlier stage.

The model has a heavy programming responsibility. This was efficiently handled by Shri A.K. Bhattacharya, Senior System Analyst. The manuscript was typed by Shri Pardeep Bajaj. Shri N.P.S. Chadha, Principal System Analyst assisted by Shri Vinod Kumar System Analyst and Shri Raj Singh Sehrawat, Tradesman prepared the DTP format.

Last but not the least, I am grateful to Dr. S.P. Gupta former Adviser, Perspective Planning Division for taking pains to go through the draft of this note carefully. The responsibility for errors and ommissions, if any, however, rests with me.

17th May, 1995
New Delhi.

(S.R. Hashim)
Principal Adviser
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INTRODUCTION

A Five Year Plan is conceived in terms of a set of social and economic goals. Feasibility of achieving these goals depends on availability of resources and other enabling conditions. Checking the feasibility of goals against enabling conditions itself requires elaborate technical work. How much of financial resources can be made available in the future, how the saving behaviour would change or how it could be modified, what would be the balance of payments constraints or the resource use efficiency, etc., are some of the concrete questions of macro-economic nature which have to be answered. Yet another set of questions pertain to the instrumentality of achieving the goals. These instrumentalities could relate to physical conditions, like availability of necessary infrastructure and essential inputs, energy, technology, etc. Instrumentalities could also relate to policies and institutions and mobilisation of resources.

The relationship between the goals, macro-economic parameters and physical conditions are amenable to modelling in terms of a set of defined mathematical relationships. Technical work of the plan pertains to determining the exact nature of these relationships as well as preparing the suitable data-base for the plan.

This technical note describes the mathematical models and quantitative work that lies at the back of the formulation of the Eighth Five Year Plan. The use of formal mathematical models in capturing the economic realities and spelling out the development philosophy started from the early days of planning. The path-breaking exercise of P.C. Mahalanobis culminated in the formulation of a mathematical model which guided India's planning strategies right from the early days, particularly since the formulation of the Second Plan. This model came to be known as Mahalanobis model.

Leontief Input-Output table which details out the precise relationship between the output of an industry and the inputs drawn from other industries to produce that output, became a very powerful instrument in determining economic interrelationship between different sectors of production. With the construction of the Leontief input-output tables for India during the early sixties, input-output tables came to be used in the projection of long term economic growth scenario and also for working out sectoral output and investment consistency of the Fourth Plan. For the Fifth Plan, Prof. Sukhomoy Chakravarty evolved a model integrating the models of Harrod-Domar type and the Leontief input-output system in a demand-supply frame relating growth with investment. Thus we had a plan model which integrated macro- economic parameters with the consistency requirements at a more disaggregated level of intersectoral relationships. The model has undergone some variations overtime. More variables have been endogenised in successive plans. The Eighth Plan model belongs to this family of models where investment, consumption and imports - the three major variables determining the growth rate and the level of living are endogenously determined in the model.

The model system used in the Eighth Plan exercise comprises of a core model and a set of inter-linked sub-models The core model consists of macro-economic model, input-output model and investment model. The sub-models are for Agriculture, Financial Resources, Consumption, Industry and Trade. A simple description of the working of the model systems is given in what follows.

To start with we make an estimate of investible resources which the economy could make available over the Plan-period. At the macro level those resources are called savings. Savings depend both on income levels and on habits (i.e., observed behaviour). Income levels, or the way the income would grow over the plan period is not certain at this stage. So we work with a few alternatives. Savings behaviour is assessed from past observations of how different saving agents have

The consumption sub-model estimates private consumption demand for different goods and services, taking into account the growth pattern of the economy as postulated in the Plan, the projected growth in population and its rural-urban composition and the inequality in consumption distribution. Private consumption is divided into four segments : rural and urban, and each into poor and non-poor groups of population. The model incorporates the parameters of consumer behaviour for each of these separate segments of population. A detailed exercise is done for assessment of the poverty cut-off points and the pattern of distribution of consumption for poor and non-poor. The consumption model, in effect, quantifies the extent of improvement in levels of living as a result of increase in per capita consumption expenditure and reduction in the disparity of consumption expenditure between different income classes of the population. The changes in consumption expenditure during the plan period suggest a relatively higher growth in per capita terms in rural areas as compared to urban.

The investment necessary to generate the desired level of output at sectoral level is worked out in the investment sub- model. Investment requirements of different sectors are known as "investment by destinations" and the type of capital goods which form the investment are known as "investment by source" in the model. The relationship between outputs and investments are assessed through econometric techniques (or econometric models). Aggregate gross investment in a sector consists of new investment and replacement investment. New investments are geared to capacity creations. Sectoral investment is again divided into committed investment for on-going projects and investment for projects initiated during the plan period. Investment to output relations have a gestation lag as investments are spread over a number of years before a project or programme starts generating output.

The model treats public and private investments separately, as allocation of investment in public sector is a target while that in private sector is an indicative forecast. Finally, the model checks the consistency of output requirements in the post-plan period with long term objectives and matches it with the growth potentials of the Plan.

The final demand elements of imports and exports are projected with the help of the trade sub-model which estimates exports and imports in conjunction with balance of payments and current account deficit. The current account deficit, in turn, becomes the foreign component of investible resources of the economy.

Import requirements are broadly of two types. One is of those imports which are required in the production process. The other is of those imports which balance the gap between demand and production for consumption purposes. Production related imports are estimated through an import matrix which is a sub- matrix of the input-output table, and describes in detail the import input requirements of each industry.

The projected levels of imports in conjunction with the desirable level of current account deficit, which in turn has implications for foreign debt and debt servicing, determines the needed level of exports in aggregate. This aggregate level of exports is then disaggregated into commoditywise exports on the basis of commoditywise feasibility studies based on past trends and future prospects. These also have to take into account the policy changes and the World trade environment.

After the final demand components, disaggregated by industries/sectors (or "final demand vectors"), have been worked out, the consistent production levels can be worked out. These production levels would enable final demands to be met, while at the same time fully meeting the needs of industrial consumption (inputs). This exercise is accomplished through the core model, which has input-output matrix at its base. This exercise is undertaken for alternative sets of final demand, implying alternative sets of growth possibilities. The set in which the detailed exercise is

consistent with the set of macro-parameters worked out in the beginning is finally considered feasible.

At the detailed production level, two more checks are provided to check the feasibility of production for agriculture and to check the demand supply balance for important industrial outputs. This is done through two sub-models which are known as Agriculture sub-model and Industry sub-model respectively.

Agriculture sub-model essentially checks the feasibility of levels and growth of production of important commodities in agriculture. This is done specially for agriculture because the land and water constraints operating on the output of this sector do not get fully reflected in the input-output matrix.

Feasibility of agricultural output targets is determined in relation to type of land use, availability of irrigation and fertiliser application levels. The parameters relating to cropping intensity, area under irrigation and rainfed crops as well as area under high yielding and traditional variety of seeds by major crops at regional level are measured. The Plan objectives of growth and diversification of agriculture, self-sufficiency in food and generation of surpluses for exports are further assessed through the parameters estimated in the agriculture sub-model.

The Industry sub-model deals with outputs of selected industries or commodities and checks at the demand-supply balances as well as capacity-use constraints. Sectoral estimates of capacity and output, along with likely absorption of the commodity in major consuming sectors are worked out at a disaggregated level. The estimates of output are worked out in physical units, as the commodities are considered at more homogenous levels. The commodity-wise demand and supply within each input-output sector is obtained through material balance studies. Successive stages are : (i) identification of major consuming sectors and their sub-sectors, their current production and targets of production in the Plan; (ii) determination of input norms in the past on the basis of observed data and adopting these for future period in the light of relevant technical information; (iii) calculation of material requirements from the targets of production of user sector and the input norms; and (iv) estimation of addition to stocks and other uses.

Material balances are prepared for key products such as coal, electricity, petroleum products, steel, heavy machinery and petro-chemicals, sugar, cloth, jute, non-ferrous metals.

The starting point of the entire exercise, as discussed earlier, is the assesment of investible resources. This exercise is further taken up in detail in the Financial Resources sub- model.

The financial resources sub-model estimates the availability of resources in order to finance the investment needs estimated in the input-output and investment model necessary to generate the desired growth rate. The sub-model assesses the level of domestic savings sectorally as well as in terms of its composition using econometric estimation procedure. These estimates are consistent with the macro aggregates of the plan. The estimate of resource in the Financial Resources sub-model is procedurally recursive to the input-output cum investment model due to the simultaneity between savings and income.

The aggregate savings function is estimated by regressing Gross Domestic Savings (GDS) on Gross Domestic Product (GDP). The elasticity of domestic savings with respect to GDP is estimated from appropriate savings function. The Eighth Plan postulates that both the marginal propensity and the average propensity to save during the plan period would be of the same order.

Household savings is estimated on the basis of it's functional relationship with household disposable income. The marginal rate of household saving and the elasticity of household savings are estimated with respect to household disposable income. The savings of the household sector in the form of physical assets are independently estimated by relating them to gross capital formation in terms of productive assets. The relationship between gross physical assets and gross disposable income of the household sector is assessed by regressing the former on household disposable income.

Savings in the public sector are estimated separately for Government sector and public enterprises in the framework of National Accounts. The savings of Government sector are assessed from a detailed analysis of various components of income such as direct and indirect taxes, non-tax revenues and public expenditure. The savings of public sector enterprises are assessed from the enterprise level analysis of their operational performance evaluated in terms of return to investment and retained profits. The savings of private corporate sector is assessed separately.

The scheme of financing pattern of public sector plan consists of budgetary support to the plan and internal and extra budgetary resources (IEBR) of public enterprises. This is backed up by inflow of foreign savings. The inter sectoral flow of funds in terms of flow of household savings to public sector is worked out from an analysis of the financing system embracing the structure of interest rates and other monetary and financial variables which govern the relative rates of return in public and private enterprises.

The Five-Year Plan has to be set within a perspective of long term growth and constraints, including the long-term demographic trends and constraints on basic resources, like land, water, energy and environment. The Eighth Plan has been formulated against the background of a perspective covering the period of 15 years from 1991-92 to 2006-07. The perspective of development visualises elimination of poverty and unemployment, a certain level of food consumption, reduction in disparity between urban and rural areas in respect of income and consumption and meeting the basic socio-economic needs and aspirations of the people. The factors which basically influence the scenario of the perspective plan are demographic trends and basic resource endowments. The structure of population growth and the associated growth and size of labour force characterize the demographic trends. Basic resource endowments are assessed in terms of land ,water, energy and other essential minerals and environment.

The output level of the terminal year of the Eighth Plan serves as the base for projections of growth in the future. The sectoral production levels in the perspective period are estimated from the input output model on the basis of exogenously estimated values of the macro variables, keeping the base level technology co-efficient matrix and other associated parameters generally unchanged. The feasible growth rate consistent with the long-run projection of sectoral demand was set at 5.6% per year for the plan period and 6.2% per year in the post-plan period. The pattern of long term growth in the perspective period is thus consistent with the investment policy framed in the plan, keeping in view the socio-economic requirements of the population. The growth rate in the post plan period estimated as 6.2 per cent per year was revised marginally upwards to 6.28 per cent per annum considering related improvements in efficiency in key areas and institutional reforms. The model results are based on an exogenously determined savings rate of 23.9 per cent and investment rate of 24.9% in the post-terminal period.

Since the model described above is basically a production and investment model, the social objectives of the plan get integrated into the model only through their additional consumption requirements or through their additional investment requirements both of which become part of the final demand in the system. Thus, when people cross the poverty line during the plan period their consumption requirements

change and increase and these have to be provided for when more of schools and hospitals have to be built these add to the investment requirements and in consequence requirements of producing more cement, bricks and medical equipments. However, the instrumentalities of bringing people above the poverty line have to be worked out outside the model. These are essentially social processes and necessitate social mobilisation, institution building and adopting a set of socio-economic policies. Model, as it is, yields a set of production and investment levels, and given the existing levels of techniques and the trends in technology, it will yield a given level of employment in the system. But if the need for employment is more, then policies and patterns of growth will have to be adopted which yield higher levels of employment. To a very large extent such policies by way of pattern of growth are already inter-woven in the model, though they are not mathematically tractable. A particular emphasis on agriculture and related inputs, sufficiency of food production, etc., for example, are a part of the pattern of growth. But most of the policies and details of programmes related to social objectives have to be worked out outside the model.

Thus, the model is a crucial step in plan-formulation though it is not the entire plan.

CHAPTER - 1

THE MODEL STRUCTURE

The quantitative modelling and associated numerical scheme of calcu-
lation of the Fifth Plan which by all means was the handiwork of late Professor
Sukhamoy Chakravarty, changed the language and approach of Indian planning. The
scope of the change in the approach of planning in India since then has largely been
conditioned by what Prof. Chakravarty articulated nearly two decades ago in the form
of integration of the models of Harrod-Domar type and Leontief input-output system.
The models used in Indian planning since then have relied on extending this approach
in a demand-supply frame.

The model system used in the Eighth Plan exercise comprises of a core
model and a set of inter-linked sub models. The core model consists of:

(i) Macro economic model,

(ii) Input-output model, and

(iii) Investment model.

A multi-sectoral input-output model is used to derive mutually consistent
sectoral output targets and corresponding sectoral investment demands. The model
frame is enveloped by a family of sub-models which play a crucial role in unfolding the
details of the intricacies of economic interdependence which are complementary to the
core model. Thus, the guiding spirit of the model is inter-industry consistency. No
attempt is made at approximating social optimality.

The requirements for consumption and investment, each separated into
public and private sectors, demand for export and import and of intermediate goods are
first assessed in tune with the various objectives set in the plan. These estimates of
demand, both sectoral as well as aggregate, are worked out in the core model. While
the consistency of output levels is assessed through the input-output model, their supply
feasibilities are checked mainly through the sub-models. The sub-models play a crucial
role in estimating the sectoral supply potentials. The sub models are estimated
separately and their integration with other sub models and the core model is achieved
by iterative processes.

I. Macro-Economic Model

The macro-economic model provides medium and long term projections
for (a) gross domestic product (GDP) at factor cost which is consistent with the desired
growth rate in the plan, and (b) total investment. These projections are based on a
number of structural relationships, most of which are in the form of income and
expenditure identities developed within the model. The forecast estimates of the macro
variables such as gross domestic product, public and private consumption, savings,
investment and net inflow from the rest of the world are worked out by balancing income
and expenditure for a series of alternative growth rates of income (or GDP) during the
plan period. The set of estimates which is found consistent with the aggregate savings
behaviour and domestic production possibilities is adopted.

Aggregate import in the terminal year of the plan is obtained from the
input-output model. Aggregate consumption and exports adopted in the model are
determined exogenously. Net revenue from indirect taxes is also treated as exogenous.
This coupled with the aggregate gross domestic product at factor cost produces the
gross domestic product at market prices. The estimate of investment in the macro model

is matched with the investment need assessed from the investment model. The model ensures aggregate macro economic balances amongst income and expenditure, comprising aggregate gross domestic product, public and private consumption, savings, investment and net inflow from the rest of the world.

II. Input-Output Model

The core of the Plan model is the input-output model which has an input coefficient matrix based on a calibrated input-output table, taking into account the economic flows of the base year of the Plan. In the input-output model, where the entire economy is divided into 60 sectors, supply and demand of the product of each sector is fully balanced. The intermediate demand of each sector is obtained through inter-relationships amongst different sectors using input-output coefficients representing the technology of production process. The final demand of the product of each sector is determined separately in respect of private consumption, public consumption, gross fixed investment, change in stocks and export. The consumption demand is endogenous in the model on the assumption of likely changes in consumption distribution parameters, separately for rural and urban areas. The import vector, i.e., sectorwise imports is determined mainly as input requirements in the production system, through the input-output model.

The scalar values of the macro variables relating to final demands estimated in the macro model are transformed into vectors in the input-output model. The final demand vectors consist of final private and public consumption, external trade and investment. The final demand vector, though exogenous to the input-output model, is, none-the-less, governed by the overall target rate of growth and also the observed internal economic relations expressed in terms of import coefficient matrix governing the trade vectors, production functions governing the investment vector and consumption parameters expressed in terms of consumption expenditure elasticities governing the private consumption expenditure.

The scalar values of Government consumption, gross fixed investment and changes in stocks are transformed into vectors in the input-output model. Private final consumption vector is worked out from the consumption model. The aggregate level of export in the macro model is largely a balancing item, balancing the balance of payments account after imports are endogenously determined and current account deficit is exogenously targetted. The export vector is exogenously determined on the basis of past trends, future potentials and promotional possibilities. Sectoral changes in stocks are obtained as fixed proportions of the increase in output levels of different sectors. These final demand vectors are added to arrive at aggregate final demand, which is used in conjunction with the input-output matrices (Leontief inverse) to derive output, value added and imports for each sector of the input-output model. The rates of indirect tax, net of subsidies are then prorated to the base year so that the estimates of net indirect taxes generated in the macro model agree to that obtained from its sectoral estimates.

The structure of input output model used in the Eighth Plan exercises is described below.

a) Inter-Industry Flow Matrix

The plan projections are based on 1991-92 as the base year. An input-output table for 1991-92 has been constructed using the inter-industry transactions matrix for the year 1983-84 produced by the Central Statistical Organisation (CSO), Department of Statistics, Ministry of Planning. The inter industry flows in the input output table of 1983-84, which is originally constructed for 115 sectors, has been aggregated into 60 sectors for use in the Eighth plan exercises. The inter-industry table of 1983-84 is updated to 1991-92 on the basis of input norms, commodity output, exports, imports, investment, public and private consumption each at the prices prevailing in 1991-92. The price index used to update the input-output table has been

developed in two stages. First, the actual price rise between 1983-84 and 1989-90 has been assessed for each sector from the detailed data on wholesale price index as available from the Office of the Economic Adviser, Ministry of Industry, Government of India. Then, for the period 1989-90 to 1991-92, a forecast estimate of the price rise developed on the basis of past trend has been used to arrive at 1991-92 prices. (This way, the prices prevailing in 1991-92 is a forecast estimate based on the actuals until 1989-90). This updated input output table is balanced with the sectoral estimates of output and final demand of the base year of the plan.

b) Sectoral Output

The sectoral outputs in the base year are estimated on the basis of the commodity outputs of approximately 300 items in 1983-84 and 1991-92 in terms of their values and physical production levels. The sectoral outputs in 1991-92 are estimated from the growth rates of value of output and physical unit of production between 1983-84 and 1991-92. In case of agriculture, the sectoral estimates of output are based on the projected output levels of 1991-92. In case of manufacturing sector, only the values of commodities are available. These values of commodities at 1983-84 prices are converted into base year price levels using the rise in price index between 1983-84 and 1991-92. Then, the real growth rates of output between 1983-84 and 1991-92 are obtained. These growth rates in real terms are used to estimate the output levels in manufacturing sector in 1991-92. In case of construction and services sectors for which output levels are not available, the growth rates in real terms have been obtained on the basis of past trends of value added and output. The sectoral output in the input output table of 1983-84 are then converted into 1991-92 levels on the application of value added to output ratios in conjunction with the growth in output during the period 1983-84 to 1991-92. These estimates of output for 1991-92 are balanced with the forecast estimates of the output levels of 1991-92 obtained on the basis of actual observations until 1989-90 and forecast estimates for the period 1989-90 to 1991-92.

c) Value Added

The estimates of gross value added are available by 14 sector classification in the National Accounts Statistics. The base year estimates of gross value added in the input output model have been worked out on the basis of sectoral value added contained in the input output table of 1983-84. The value added estimates in the input output table are first aggregated to 14 sector classification of the national accounts. These are converted into 1991-92 prices using sectoral GDP deflators obtained by regressing the time series data of GDP deflators on the wholesale price index. The sectoral GDP deflators are estimated from the National Accounts Statistics. The wholesale price index for each sector has been estimated by aggregating the wholesale price index of more than 400 commodities, which are available from the Office of the Economic Adviser, Ministry of Industry,Government of India. The sectoral value added in 1991-92 are forecast estimates based on the actuals until 1989-90. These estimates of gross value added in 1991-92 are used as controls to balance the sectoral estimates of value added in the base year. The conversion of commodity output into industry output for the base year has been made with the help of a "make matrix" for 1983-84. It means that the "make matrix" of 1983-84 has been assumed to be valid for the production structure of 1991-92.

d) Final Demand Vectors

The final demand vectors consist of private and public consumption, gross fixed investment, changes in stocks, export and import vectors. The method of generation of each of these vectors is discussed below.

i) Private Consumption

The private consumption expenditure for 1991-92 is estimated first by commodity groups following the sector classification of the National Accounts Statistics. These are then disaggregated using the consumption model which generates the

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private consumption vector for the base year at purchaser's price, in conformity with the aggregate private consumption as given in the macro economic balance. The aggregate private consumption in the macro balance is bifurcated into rural and urban segments using per capita consumption differential between rural and urban areas. The private consumption vector is estimated separately for people below and above the poverty line in rural and urban areas on the basis of poverty cut-off points in each area determined outside the model. The private consumption vectors for people below and above the poverty line in rural and urban areas are estimated on the basis of a demand system consisting of a Linear Expenditure System (LES) for broad groups of commodities and a set of consumer demand functions in the form of Engel equations for disaggregated commodity levels. The private consumption vector of each of these four groups of population are added to obtain the private consumption for the entire population.

This vector of private consumption is obtained at purchaser's prices. It is converted into market prices using trade and transport margin rates which are estimated outside the model. The sectoral private consumption at purchaser's prices are converted into market prices using a set of equations as described below.

Defining

C_i = Private consumption of sector i of the input-output table at purchaser's price, i = 1, 60

C_i^* = Private consumption of sector i of the input-output table at market prices, i = 1, 60

i = 1, 60 are the 60 sectors of input output model.

T_k = Margin rates with k where,

k = 1 = Trade margin rates

= 2 = Railway transport margin rates

= 3 = Other transport margin rates

For the 60 sectors of input output model,

i.) for i = 1,2, ... 55, 58, 60

$$C_i^* = C_i (1 - \Sigma_{k=1}^{3} T_{ki})$$

ii.) for i = 56

$$C_i^* = C_i + \Sigma_{j=1}^{60} C_j T_{2j}$$

iii.) for i = 57

$$C_i^* = C_i + \Sigma_{j=1}^{60} C_j T_{3i}$$

iv.) for i = 59

$$C_i^* = C_i + \Sigma_{j=1}^{60} C_j T_{1j}$$

"Purchasers price" and "market price" are defined as below:

i) Purchasers price (PP) = The price at which consumers buy from the market or the price at which the commodity is sold at the market.

ii) Market price (MP) = Purchasers price less trade and transport margin.

It means market price is equivalent to purchaser price less trade and transport margin of the commodity.

iii) Factor Cost (FC) = Market price less all indirect taxes net of subsidies.

It means factor cost is equivalent to market price minus all indirect taxes (i.e., taxes on central excise, sales tax, customs duties, etc.) less subsidies.

ii) Public Consumption

The public consumption or Government consumption refers to the expenditure on the current needs of the administrative departments of Central and State Governments and various local bodies and it excludes expenditure on capital formation. The aggregate public consumption expenditure is obtained from the macro- model. The commodity composition of this aggregate consumption expenditure (i.e., the Government consumption vector) is obtained by using the commodity composition as reflected in the input-output table of 1983-84 appropriately adjusted for variation in prices and checking it against the trend analysis of time series data on different components of public consumption.

iii) Gross Fixed Investment

The aggregate gross fixed investment for the base year of the Plan is obtained from the macro economic balance. As the sectoral composition of gross fixed investment is limited to a very few items, the aggregate investment is decomposed into 60 sectors of the input-output table on the basis of the sectoral share of fixed investment in 1983-84 as reflected in the input output table of 1983-84, duly adjusted for variation in prices. The estimates of capital goods delivered by different sectors have also been computed separately based on trend analysis of relevant data for the purpose of finalising the vector of gross fixed investment for 1991-92.

iv) Change in Stocks

The estimates of changes in stocks are obtained in the following way.

The estimate of aggregate of final uses, i.e., final demands plus inter-mediate uses is obtained for each sector of input-output table. The difference between the aggregate final use and supply (production plus import) of the commodity is attributed to changes in stocks. The level of inventory holding in case of certain agricultural commodities such as foodgrains, which are directly available are also taken into account while arriving at the changes in stocks. The total of changes in stock in all sectors is then checked against the corresponding figure obtained from the macro-balance.

v) Exports

Given the aggregate level of exports from macro-balance,the estimate of exports of different commodities are made on the basis of a detailed analysis of the

trade statistics available from the Directorate General of Commercial Intelligence and Statistics (DGCI&S) and the Reserve Bank of India (RBI). The Report of the Working Group on Balance of Payments (constituted by the Planning Commission for the Eighth Five Year Plan) has also been used. The available data on invisibles are utilised to determine the service component of exports. The value of export for each of the input-output sectors is first estimated at f.o.b. prices and then it is converted into market prices using relevant sectoral trade and transport margin rates estimated exogenously. The conversion of sectoral exports from f.o.b. to market prices are made in the following way.

Defining

E_i = Export of sector i at f.o.b. prices

E_i^* = Export of sector i at market prices;

i = 1, 60 are the 60 sectors of input output model.

T_k = Margin rates with k where,

k = 1 = Trade margin rates

= 2 = Railway transport margin rates

= 3 = Other transport margin rates

For the 60 sectors of input output model,

i.) for i = 1,2, ... 55, 58, 60

$$E_i^* = E_i (1 - \Sigma_{K=1}^{3} T_{ki})$$

ii.) for i = 56

$$E_i^* = E_i + \Sigma_{j=1}^{60} E_j T_{2j}$$

iii.) for i = 57

$$E_i^* = E_i + \Sigma_{j=1}^{60} E_j T_{3j}$$

iv.) for i = 59

$$E_i^* = E_i + \Sigma_{j=1}^{60} E_j T_{1j}$$

vi) Imports

The value of import of goods and non-factor services in the base year of the plan is obtained from the macro economic balance. The estimates of sectoral composition of import for the base year at current prices are obtained from the data on actual import in terms of value and quantity, available from DGCI&S, the Reserve Bank of India and Working Group on Balance of Payments constituted by the Planning Commission for the Eighth Plan.

e) Input-Output Table for Base Year

The input-output matrix for 1983-84 has been published by the Central Statistical Organisation. Its dimension is 115 x 115 sectors. These 115 sectors have been aggregated into 60 sectors for constructing an input-output matrix for the purpose of the Eighth Plan exercise. The basic input-output table of 1983-84 represents the technology and product mix of that year at the prices prevailing in 1983-84. This table has been updated for the base year of the plan after appropriate adjustments in prices and macro economic variables. The method of updating is described below.

The sectoral intermediate demands are the row totals of inter- industry flows in the input-output table. These are also obtained by subtracting the final demand from the corresponding gross value of output. The column totals of the inter-industry flow matrix give the total value of input use in an industry which can also be described as the difference between "gross value of output" and "gross value added". On the assumptions that the industry's share of production in 1983-84 for each domestically produced commodity is maintained irrespective of the levels of commodity production, the industry-wise output levels for the base year are estimated using (a) the output coefficient matrix which is also known as "make matrix' and (b) the commodity output level of the 60 sectors of input-output table in 1991-92. The column control total for the input matrix for the base year of the plan at current prices for each industry sector has been obtained as a difference between the gross output and gross value added of the sector. The flow matrix of the base year of the plan is finally set after balancing on the basis of RAS method using the above mentioned row and column totals as control variables. The aggregate intermediate use which is obtained as row totals of inter-industry flows are compared with the control totals of the rows of the input-output table. The difference between the two are scanned with the help of the latest information, mainly on technological changes. The aggregate input use in each sector is compared with its column control total. The difference between the two is reconciled allowing for some difference on the ground of technological changes that have taken place between 1983-84 and 1991-92 and for which adequate information is available. The input-output coefficients in certain sectors which are known to have altered between 1983-84 and 1991-92 have been estimated exogenously and are excluded from the adjustment process of the matrix through RAS balancing. The input matrix which is balanced at market prices is converted into a matrix at factor costs using appropriate indirect tax rates of each sector.

f) Import Matrix

The import matrix consists of a technology matrix and the import content of final demand of each sector. The technology matrix embodies the import content of the product which is worked out on the basis of import intensity of the product by 60 sectors of the input output table. The import content of the final demand of each sector is estimated separately for public and private consumption and for gross fixed investment. The import flows of these two segments of import matrix i.e., for the intermediate use and final demand, are then balanced alongwith the flows of domestic component of the input-output table of the base year of the plan at market prices. No distinction is made between competitive and non-competitive imports.

g) Indirect Tax Matrix

The import duty on private and public consumption and on gross fixed investment is estimated by applying the import duty rates on import content of the associated demand. The domestic component of demand is obtained by subtracting the import content of demand from total demand. Then, remaining indirect tax rates are applied to domestic component of demand to obtain the domestic taxes on the above three final demand vectors, i.e., public and private consumption and gross fixed investment. Taxes on exports are estimated on application of export duty rates on export vector. The estimates are made for each input-output sector of the final demand vectors.

The import duty matrix is generated from the import duty in each sector and the import content of the product. The inter-industry flow matrix for the economy is then decomposed into domestic matrix and import matrix. The remaining indirect tax rates are applied to domestic matrix. The taxes on inputs are obtained as the column sum of import duty matrix and remaining indirect tax matrix. The domestic component of final demand vectors are obtained by subtracting the import content from the total demand for private and public consumption and gross fixed investment.

The inter-industry transactions matrix is an aggregation of two mutually exclusive matrices, i.e., the domestic matrix and the import matrix. The domestic matrix may be carved out by subtracting the import matrix (alongwith import duty) from the balanced input-output matrix of the base year at current prices. The indirect tax and final demand for public and private consumption, gross fixed investment and exports are estimated separately from the import duty and remaining indirect tax. The components of import duties in the indirect tax matrix have been generated by applying independently estimated import duty rates, on the import matrix. In a similar way, the export duty rates, estimated outside the model, have been applied to the export vector. The remaining indirect tax rates have been applied to the domestic matrix to get the remaining indirect taxes. The sum of these three components of taxes constitute the indirect tax matrix. This is subtracted from the balanced input-output table at market prices to generate the input-output table for the base year at ex-factory prices.

h) Input-Output Coefficients for Terminal Year

The input-output coefficient matrix for the terminal year of the plan is projected from the coefficient matrix of the base year, after incorporating the anticipated changes in product and technology mix on the basis of information available for various sectors/industries in the economy.

The demand for import in the terminal year has been estimated separately in respect of intermediate use, private consumption, public consumption and investment. The import demand arising from intermediate use has been estimated for each sector on the basis of the import coefficient matrix. The import demand arising from private consumption in the terminal year has been estimated from the coefficient of import to total private consumption in the base year, given the projected sectoral private consumption in the terminal year. Same method is used for estimating import demand for public consumption and gross fixed investment in the terminal year. The import coefficients have been changed in specific sectors in the light of the material balances worked out by various Working Groups consitituted by the Planning Commission and also taking into account the possibility of import substitution. It may be noted that any change in the import coefficient has been matched by corresponding change in the domestic component of the demand so as to ensure that the technical coefficients are consistent.

III. Investment Model

The investment model estimates the investment requirements for a desired level of output and converts "investment by destination" into "investment by origin or source". An econometric simulation model has been used to estimate investment by destination. The estimated investments by destination are converted into "investment by source" with the help of a capital coefficient matrix. Then these are dovetailed with the input-output model to ensure consistency.

The estimation of investment by destination for the Eighth Plan exercise has been made for broad aggregate sectors due to data constraints. Sectoral allocation of investment is determined by postulating investment functions. Aggregate gross investment in a sector consists of new investment and replacement investment. New investments are geared to capacity creation. The replacement investments are decomposed into "pure replacement" and "modernisation". Sectoral investment is again divided into committed investment for on-going projects and investment for projects

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initiated during the plan period. Investment to output relations have a gestation lag as investments are spread over a number of years before a project or programme starts generating output.

Investment requirements consistent with a particular growth scenerio can be worked out for the plan period as a whole by sectors and in aggregate. The sectoral investment functions are estimated from distributed lag model taking into account the activity specific distribution of investment and gestation between investment and output of the sector. At the same time, incremental capital-output ratios (ICOR) are estimated for each sector on the basis of time series or cross section data on investment and incremental output, utilising production function approach in a conventional manner. Investment is also related to output with endogenously determined lag on the assumption of uniform spread of total investment over the plan period. The feaslbility of the estimate of ICOR obtained from econometric exercises are assessed in the light of the ICOR estimated from the past data using conventional method i.e. dividing investment by incremental value added and projecting these for the future. The investment estimates derived from econometric estimation of the parameters of ICOR are changed in the light of productivity improvements possibly resulting from specific policy measures, or technological, engineering and organisational measures.

The parameters of the investment functions utilised in the investment model have been estimated by relating investment to incremental output with appropriate lag structure. The lag structure for each sector has been obtained through regressions fitted to the annual data on investment and output for the period 1973-74 to 1989-90.

Since the model operates with lags, and the lags in some sectors exceed the plan period, the estimation of investment during the Eighth Plan depends on the output in the post Eighth Plan period. Because of data constraints, it has been assumed that total investment is distributed equally over the gestation period. On this assumption the sectoral invesment functions are estimated from the time series data on domestic capital formation at market prices and gross value added at factor cost (both at constant prices) for 11 broad sectors. These are used to estimate investment for 60 sectors of the input-output model using the base period investment of these 11 sectors. These ICORs are used to determine the sectoral investment necessary to generate a desired output level. Investment by destination are converted into investment by source, i.e., by production activities, with the help of capital coefficient matrix, constructed from the data on capital formation by type of assets. The asset composition is framed under construction, machinery and equipment and inventory holdings or stocks. The potential effect of alternate allocation of investment by destination on sectoral growth rate is measured. Then, these are dovetailed into the input-output model to check their consistency. In case of a mismatch between availability of resources and resource requirements for investment, the requirements are adjusted and the shock is absorbed by the growth rate in post terminal year of the Plan. The investment model also generates investment by broad categories of assets, for example, construction, machinery and equipment, and changes in stocks. The model treats public and private investments separately as allocation of investment in public sector is a target while that in private sector is an indicative forecast. The model also categorises investments into replacement, modernisation and new investment. Finally, it checks the consistency of output requirements in the post-plan period with long term objectives and matches it with the growth potentials of the Plan.

The incremental capital output ratios have been estimated for 11 broad sectors, classifying investment into replacement investment, induced fixed investment including inventories and autonomous investment. The share of replacement and induced investment in total investment is decided on the basis of observed relations in the past. The investment requirements for generating a given level of capacity is known as induced investment. The creation of capacity output is determined from the incre-

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mental capital output ratios with appropriate distributive lags, using the time series data on investment and incremental output.

The capital co-efficient matrix used in the investment model to convert investment by destination to investment by source is originally estimated for 1983-84 by CSO. This has been converted into base year of the plan period and at 1991-92 prices. The capital co-efficients differ inter-sectorally and inter- temporally during the time horizon of the gestation period. The capital coefficient matrix of 1991-92 has been used for projections.

IV. The Sub-Models

A family of sub-models have been developed in order to evaluate a number of critical parameters, most of which are extraneous to the core model.

a) Sub-Model : Agriculture

The agricultural sub-model is developed to determine the feasibility of output targets for each sector within agriculture, consistent with the type of land use in terms of irrigation, seed and fertilisers. The area under cultivation in association with the cropping pattern and consequently, cropping intensity, are assessed at a detailed regional and crop level. The demand- supply balance at such disaggregated level which is very essential for ensuring consistency in the medium term and which cannot be appropriately tackled by the input-output model, is ensured in the agricultural sub-model. The parameters relating to cropping intensity, area under irrigation and rainfed crops as well as area under high yielding and traditional variety of seeds by major crops at regional level are measured through the agricultural sub-model developed especially for this purpose. The Plan objectives of growth and diversification of agriculture, self-sufficiency in food and generation of surpluses for exports can adequately be assessed through the parameters estimated in the agricultural sub-model in conjunction with the input-output model. For example, the private consumption demand for food-grains as independently estimated by the consumption sub-model using consumer demand function and Linear Expenditure System are matched with the foodgrains supply from the input- output model.

b) Sub Model: Consumption

The consumption model estimates the demand for different goods and services for private consumption. It takes into account the growth pattern of the economy postulated in the Plan, a projected growth in population and its rural-urban composition and the inequality in consumption distribution.

The private consumption is divided into four segments : rural and urban, each into below and above the poverty line, i.e., for poor and non-poor group of population. The decomposition of aggregate private consumption into rural and urban segments is done on the basis of likely estimates of population in the two segments and the per capita consumption expenditure differential between the two. The private consumption in rural and urban areas are again separated for poor and non-poor groups of population on the basis of exogenously determined poverty cut-off point and on the assumption that monthly per capita expenditure within each area (rural or urban) follow a log normal distribution. The inequality parameter of the log normal distribution is initially adopted from the National Sample Survey (NSS) data on consumer expenditure distribution of the latest year (1987-88) and then these are changed in the light of the likely redistribution during the plan period. A detailed modelling is done for assessment of the poverty cut-off point and the pattern of distribution of consumption for poor and non-poor. The consumption basket estimated through the consumption sub-model is dovetailed with the input-output model to ensure supply-demand balances.

The concept of poverty line is quantified by the Task Force on Projection of Minimum Needs and Effective Consumption Demand, set up by the Planning

Commission in the Sixth Plan. The poverty line estimated by the Task Force are updated for use in later years, following the methodology recommended by the Study Group on the Concepts and Estimation of Poverty Line set up during the Seventh Plan. The increase in price of consumption goods as reflected in the private consumption deflator of the CSO, are used to update the poverty line at 1991-92 prices for use in the Eighth Plan. The same deflator has been used to update the poverty line in urban and rural areas, which implicitly meant that changes in prices of goods, particularly consumed by the poor have remained the same in the two areas.

The sectoral private consumption used in the input-output model is estimated through a two-stage nested behaviouristic consumption model. This model comprises a Linear Expenditure System (LES) for broad groups of commodities and a set of best-fitting Engel curves for items of consumption within each broad commodity LES Group. This two-stage procedure results in a consumption vector compatible with 60 sectors of the input-output model. The aggregate private consumption derived from the macro model is used in this model. LES which is a complete consumer demand system is estimated separately in rural and urban areas and within each area separately for population below and above poverty line using the time series of cross section data obtained from various Rounds of the National Sample Survey on household consumption expenditure. Alternative forms of functions are tried separately for poor and non-poor group of population within rural and urban areas, in order to choose the best fitting Engel curve for each commodity by applying single equation weighted least squares method to the cross section data on household consumption expenditure. The percentage of population in the different expenditure groups are used as weights to estimate the different forms of function.

c) Sub-Model:Industry

The feasibility of output targets in industrial sectors obtained from the input-output model are assessed with the help of material balance approach. Sectoral estimates of capacity and output alongwith likely absorption of the commodity in major consuming sectors are worked out at a disaggregated level. The estimates of output are worked out in physical units and the sectors here consist of homogenous products, i.e., a homogenous commodity.

The material balance approach has remained an essential tool in the determination of feasibilities of output projection. The input-output sectors mostly consist of a group of non-homogenous products whereas the material balance approach treats the selected homogenous products.

The input-output model estimates sectoral output in the terminal year of the plan. A sector may comprise more than one commodity. The commodity-wise demand and supply within each input-output sector is obtained through material balance studies. Econometric studies are also carried out in case of specific commodities. The production targets of the commodities within a sector are set in such a way that their aggregate growth rate is in conformity with that of the input-output sector comprising these commodities.

In this method, the demand for a specific commodity mainly used as intermediate product is arrived at by the application of end-use analysis. The successive stages are:

(i) identification of major consuming sectors and their sub-sectors, their current production and targets of production in the Plan;

(ii) determination of input norms in the past on the basis of observed data and adopting these for future period in the light of relevant technical information;

(iii) calculation of meterial requirements from the targets of production of user sector and the input norms; and

(iv) estimation of addition to stocks and other uses.

Material balances are prepared for key products such as coal, electricity, petroleum products, steel, heavy machinery and petro-chemicals, sugar, cloth, cotton, jute, non-ferrous metals, etc.

d) Sub-Model : Trade

The sub-model on trade works out the projections for exports, imports and current account balance in the base and terminal year of the Plan. The aggregate level of exports are made consistent with the sectoral estimates of exports in the trade model. A similar method is applied for imports with the difference that the sectoral imports obtained in the trade model are likely to undergo a change in the light of the inter-relationship implicit in import coefficient matrix which forms a part of the input-output system. The sectoral imports and exports arrived at from the input-output model are suitably adjusted in the light of the parameters relating to import elasticity, export elasticity, changes in terms of trade set in the trade sub-model. The phasing of import, export, invisibles and current account deficit during the five-years of the Plan are obtained in the core model. These are checked for feasibility in the light of the information obtained in trade sub-model and then finally aggregated to arrive at the aggregates of imports, exports, invisibles and current account deficits for the five years of the Plan.

An import coefficient matrix compatible with the input-output table has been generated based on the past data on use of imported inputs into the product and other technical data available in the Working Group Report on Balance of Payments constituted by the Planning Commission for the Eighth Plan. Import for each sector is estimated separately for intermediate uses, consumption and investment. The projection of sectoral imports and exports for the plan period are made on the basis of simulation exercises treating policy packages as exogenous. The choice between alternative import allocation and export target and their effect on balance of payments and overall rate of economic growth are explored from simulation exercises.

e) Sub-Model:Financial Resources

The estimation of domestic savings, separately for public and private sector and the financing of investment requirement in plan are assessed from a host of inter related variables in the financial resources sub model. Inter sectoral flow of funds are also worked out in the financial resources sub-model. The savings in the public sector are estimated separately for Government sector and public enterprises in the framework of national acounts. The savings of Government sector are assessed from a detailed analysis of various components of income such as direct and indirect taxes, non-tax revenues and public expenditure, such as debt servicing and subsidies. The savings of public sector enterprises are assessed from the enterprise-level analysis of their operational performance evaluated in terms of return to investment and retained profits. The savings of private sector is assessed separately for private corporate sector, co-operative sector and household sector. The savings behaviour of the household sector has been related to disposable income and price inflation. The composition of savings has been disaggregated into currency, deposits, small savings, provident funds and corporate securities. Finally, the inflow of foreign savings including invisibles are obtained from the estimate of the Reserve Bank of India and the Ministry of Finance. These are integrated under the frame of public sector plan outlay and its pattern of financing.

The scheme of financing pattern of public sector plan consist of budgetary support to the plan and internal and extra budgetary resources (IEBR) of public enterprises. This is backed up by inflow of foreign savings. The inter-sectoral

flow of funds in terms of flow of household savings to public sector is worked out from an analysis of the financing system embracing the structure of interest rates and other monetary and financial variables which govern the relative rates of return in public and private enterprises.

The financial resources sub-model estimates the availability of resources in order to finance the investment needs estimated in the input-output and investment model, which is necessary to generate the desired growth rate. This estimate of resource in the financial resources sub-model is procedurally recursive to the input-output cum investment model due to the simultaneity between savings and income.

V) Structure of Output and Value Added

The sectoral growth rates of value added and gross output obtained from the multi-sectoral input-output-cum-investment planning model are given in Table-1.1. The growth rates in gross output are generally found to exceed the growth rate in value added as a result of the rise in the ratio of input to output within the sector. The structure of value added and output as a result of the growth scenario are given in Table-1.2. The share of sectoral output in total output for the base and the terminal year of the plan shows a shift in the structure of output from primary to secondary and tertiary sectors.

Sectoral investment allocations consistent with the sectoral output profile are given in Table-1.3. The pattern of investment shows a significant shift of investment in favour of agriculture and allied activities to 18.64 per cent of total investment in the Eighth Plan (1992-97). The results also show that the above increase in investment in agriculture sector has not altered the relative share of investment in infrastructure sector.

VI) The Perspective Plan

The Eighth Plan has been formulated against the background of a perspective covering the period of 15 years from 1991-92 to 2006-07. The perspective of development visualises elimination of poverty and unemployment, a minimum level of food consumption, reduction in disparity between urban and rural areas in respect of income and consumption and meeting the basic socio-ecoomic needs and aspirations of the people. The factors which basically influence the scenario of the perspective plan are demographic trends and basic resource endowments. The structure of growth of the population and the associated growth and size of the labour force characterize the demographic trends. Basic resource endowments are assessed from land, water, energy and other essential minerals and environment.

The output level of the terminal year of the Eighth Plan serves as the base for projections of growth in the future. The sectoral production levels in the perspective period are estimated from the input output model on the basis of exogenously estimated values of the macro variables, keeping the base level technology co-efficient matrix and other associated parameters generally unchanged. The results show that acceleration in the rate of economic growth is an essential pre-requisite for realisation of the objectives set out in the perspective period. The choice of growth path is confronted with a trade-off between faster growth in the plan period and somewhat slower growth in the post-plan period. In the background of initial capacity constraints, the feasible growth rate consistent with the long-run projection of sectoral demand was set at 5.6% per year for the plan period and 6.2% per year in the post-plan period. The pattern of long term growth in the perspective period is thus consistent with the investment policy framed in the plan keeping in view the socio-economic requirements of the population. The growth rate in the post plan period estimated as 6.2 per cent per year was revised marginally upwards to 6.28 per cent considering related improvements in efficiency in key areas and institutional reforms. The model results are based on an

exogenously determined savings rate of 23.9 per cent and investment rate of 24.9% in the post-terminal period.

The demand requirements in the perspective period are critically based on the target to eliminate poverty. This would necessitate increase in income, particularly of the poor and availability of foodgrains. The increase in per capita consumption of the people, particularly of those in the poor group would make a draft on foodgrains demand. Thus, the foodgrains requirements in the year 2006-07, on the basis of growth of population and income are estimated at 283 million tonnes. Total consumption is projected to rise at the rate of 5.9% per year during the post terminal period. The major indicators of development for the perspective period are given in Table-1.4.

The basic data used to run the model as well as some of the detailed results by 60 sectors of the input-output model are given in Annexure Tables 1.1 to 1.25. It gives for base and terminal year of the plan,the matrices of caliberated input-output coefficients, value of inter-industry use and final demands, the import coefficients and import transactions. The annexure tables also give the structure of final demand, the structure of imports in final demand and the structure of indirect taxes. The output coefficient and the capital coefficient matrix are also given in the annexure. The mathematical scaffolding of the model is described below.

Mathematical Scaffolding of Eighth Five Year Plan

The quantitative framework of the Eighth Plan consists of a core model and several sub models. The core model consists of macro model, input-output model and investment planning model. The sub models which are primarily designed to supply the inputs to the core model exogeneously are developed in the areas of agriculture, industry, consumption, trade, financial resources and demography and employment.

1. Macro-Economic Model

The macro-economic model estimates the scalar values of the macro variables such as income, measured by Gross Domestic Product at factor cost, Indirect Taxes, GDP at market prices, Gross National Product, Savings, Disposable Income for base and terminal year, including values of variables such as Exports, Imports, Public and Private Consumption, and Investment. The model can be conceived in the form of a set of structural equations, most of which are based on income and expenditure identities. Some of the variables and parameters used in the macro model are either exogeneously determined or are obtained from other sub-models.

Target growth of the economy is determined from the assessment of macro economic aggregates such as consumption, savings, investment and net inflow from the rest of the world. The values of the macro variables are set by balancing income and expenditure for a number of alternative growth rates using simulation exercise based on econometric modelling. The set which is consistent with the aggregate savings behaviour and domestic production supply possibilities is adopted.

The base year (1991-92) GDP at factor cost along with the targetted rate of growth of Plan determines the GDP at factor cost of the terminal year (1996-97).

$$Y^t = Y^0 (1 + \bar{r})^5 \quad \dots\dots\dots (1.1)$$

Y^t = Aggregate GDP at factor cost in the terminal year (t)
Y^0 = Aggregate GDP at factor cost in the base year (0)
$\bar{r}$ = Targetted annual rate of growth of GDP at factor cost

The GDP at factor cost and the net indirect taxes estimated by the Financial resources sub-model gives the GDP at market price.

$$Y^t_M = Y^t + TTX^{*t} \quad \dots\dots\dots (1.2)$$

Y^t_M = Aggregate GDP at market price in the year t
TTX^{*t} = Total Indirect Taxes in the year t.

GNP is the sum of GDP at market prices and net factor income from abroad.

$$GNP^t = Y^t_M + NFI^{*t} \quad \dots\dots\dots (1.3)$$

GNP^t = Aggregate GNP at market price in year t
NFI^{*t} = Net Factor Income from Abroad in year t

Domestic savings are estimated exogenously and gross investment is defined as the sum of domestic savings and net imports of goods and non-factor services less net factor income from abroad and other current transfers from the rest of the world.

$$INVS^t = SAV^{*t} + NIMP^t - NINV^{*t} \quad \dots\dots\dots (1.4)$$

$INVS^t$ = Gross Investment at Market Prices in year t
SAV^{*t} = Gross Savings at Market Prices in year t

Exports are exogenously determined by the Trade Sub-model. Imports are also estimated exogenously in the Trade Model and are incorporated in the macro-model. An alternative estimate of imports is determined in the input-output model. The estimate of imports from the input-output model is made consistent with the import estimate from the trade cum macro model through a controlled parameter. By definition,

$$NIMP^t = M^t - E^{*t} \ldots\ldots\ldots(1.5)$$

$NIMP^t$ = Net Imports in year t.
M^t = Aggregate Import of Goods & Non-Factor Services in year t.
E^{*t} = Aggregate Export of Goods & Non-Factor Services in year t.

$$NINV^{*t} = NFI^{*t} + CDY^{*t} \ldots\ldots\ldots(1.6)$$

CDY^{*t} = Other Current Transfers (Net) in year t.

Disposable Income is the sum of GNP at market price and other current transfers.

$$DI^t = GNP^t + CDY^{*t} \ldots\ldots\ldots(1.7)$$

DI^t = Gross Disposable Income in year t.

Total consumption is the difference between Disposable Income and Savings.

$$TCON^t = DI^t - SAV^{*t} \ldots\ldots\ldots(1.8)$$

$TCON^t$ = Total Consumption in year t.

The Total Consumption is decomposed into Public and Private consumption in the macro model. The decomposition is effected using an exogenously determined parameter, alpha.

$$PC^t = TCON^t \times alpha \ldots\ldots\ldots (1.9)$$

$$CM^t = TCON^t (1 - alpha) \ldots\ldots\ldots(1.10)$$

PC^t = Aggregate Public Consumption in year t.
CM^t = Aggregate Private Consumption in year t
alpha = Proportion of Public Consumption to Total Consumption

The changes in stocks is derived as a proportion of Gross Investment.

$$ST^t = ALFA^* \times INVS^t \ldots\ldots\ldots(1.11)$$

$ALFA^*$ = Proportion of Changes in Stocks in Gross Investment
ST^t = Aggregate Changes in Stocks in year t.

Gross fixed investment is the difference between investment and changes in stocks.

$$FAC^t = INVS^t - ST^t \ldots\ldots\ldots(1.12)$$

FAC^t = Gross Fixed Investment, market price, year t.

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The model iterations begin with an initialised value of investment. The above income and expenditure identities in combination with the input-output model endogenously determine investment in the terminal year of the plan. The link between macro model and input-output model is established by aggregate imports and the process of iteration between these two models begins. The iterative process ends when the investment in the terminal year is obtained as the same value given in the macro model. Investment model is run to derive investment requirement at broad aggregate sectors. Then investment by destination is converted into investment by origin. The mismatch between the availability of investment and requirement of investment is removed by adjusting the post terminal growth rate.

2. Input-Output Model

· The input-output model is used to derive mutually consistent sectoral output and corresponding sectoral investments and other final demands. The final demand vectors (at the 60 sector level) of consumption and exports are exogenous and the remaining final demand vectors are determined in the input-output model.

Changes in Stock

$$ST_i^t = s_i \ (X_i^t - X_i^0) \ \ ST^t / \Sigma \ s_i \ (X_i^t - X_i^0) \ \dots\dots(2.1)$$

ST_i^t = Sectoral Changes in Stocks in year t.

s_i = Sectoral Changes in Stocks Coefficients.

X_i^t = Output of Sector i at factor cost, year t.

X_i^0 = Output of Sector i at factor cost, year 0

Public Consumption

$$PC_i^t = b_i \ x \ PC^t \ \dots\dots(2.2)$$

PC_i^t = Public Consumption of Sector i in year t.

b_i = Share of i-th Sector in Public Consumption

Here, $\displaystyle\sum_{i=1}^{60} b_i = 1$

Gross Fixed Investment

$$GFM_i^t = P_i \ x \ FAC^t \ \dots\dots(2.3)$$

GFM_i^t = Gross Fixed Investment,Sector i, at market price,year t.

P_i = Proportion of Gross Fixed Investment originating from Sector i.

Here, $\displaystyle\sum_{i=1}^{60} P_i = 1$

Imports

The imports are determined as sum total of import contents of intermediate use and of final demands. The demand for imports arising from inter-industry use is estimated using the import coefficient matrix. The demand for imports for final use is estimated from the import content of the various component of final consumption.

$$MS_i^t = \sum_j a_{ij}^{tm} \ X_j^t + CM_i^t + GM_i^t + GFIM_i^t \ \dots\dots(2.4)$$

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$$\text{where, } M^t = \sum_i MS_i^t \quad \dots\dots\dots(2.5)$$

MS_i^t = Total Imports of Sector i, year t.

a_{ij}^{tm} = Imported inputs of Sector i per unit of output of Sector j, year t (Commodity x Commodity Matrix).

X_j^t = Industry output of Sector j, year t.

$\sum_j a_{ij}^{tm} X_j^t$ = Import requirement for intermediate use

$$GM_i^t = h_i \times PC_i^t \quad \dots\dots\dots(2.6)$$

GM_i^t = Import content of Public Consumption, Sector i, year t.

h_i = Import coefficient of Public consumption, Sector i.

$$GFIM_i^t = m_i \times GFM_i^t \quad \dots\dots(2.7)$$

$GFIM_i^t$ = Import content of Fixed Investment, Sector i, year t.

m_i = Proportion of Imported Fixed Investment to Total Fixed Investment, Sector i.

GFM_i^t = Gross Fixed Investment at Market Price, Sector i, year t.

$$CM_i^t = C_i \times CMP_i^t \quad \dots\dots\dots(2.8)$$

CM_i^t = Import content of Private Consumption, Sector i, year t.

C_i = Proportion of Imported Private Consumption to Total Private Consumption, Sector i.

CMP_i^t = Private Consumption at Market Price, Sector i, year t.

Conversion from Market Price to Factor Cost:

The final demand vectors at market prices are converted into factor cost on application of indirect tax rates.

Public Consumption

$$G_i^t = GM_i^t + (PC_i^t - GM_i^t - n_i \times GM_i^t)/(1 +t_i) \quad \dots\dots(2.9)$$

G_i^t = Public Consumption of Sector i at Factor Cost, year t.

t_i = Other Indirect Taxes per unit Value of Output, Sector i.

n_i = Import Duties per unit Value of Imports, Sector i.

Exports

$$E_i^t = (1 - e_i) \times EMP_i^t \quad \dots\dots(2.10)$$

E_i^t = Exports of Sector i at Factor Cost, year t.

e_i = Export Duty per unit Value of Exports, Sector i.

EMP_i^t = Exports at Market Prices, Sector i, year t.

Gross Fixed Investment

$$GFI_i^t = GFIM_i^t + GFM_i^t /(1+t_i) - (1+ n_i) GFIM_i^t /(1+t_i) \quad \dots\dots(2.11)$$

GFI_i^t = Gross Fixed Investment, Sector i, at Factor Cost, year t.

private Consumption

$$C_i^t = CM_i^t + [\ CMP_i^t - (1+n_i)\ CM_i^t\ ]\ /\ (1 + t_i)\ \dots\dots(2.12)$$

C_i^t = Private Consumption at Factor Cost, Sector i, year t.

Total Indirect Taxes (Net)

The difference between the aggregates of various final demand components at market price and at factor cost produces the estimates of the respective components of net indirect taxes.

$$\cdot TGX^t = PC^t - \sum_i G_i^t \quad \dots\dots(2.13)$$

TGX^t = Indirect Tax (including import duty) on Public Consumption, year t

$$TIX^t = FAC^t - \sum_i GFI_i^t \quad \dots\dots(2.14)$$

TIX^t = Indirect Tax (including import duty) on Gross Fixed Investment, year t.

$$TCX^t = CM^t - \sum_i C_i^t \quad \dots\dots(2.15)$$

TCX^t = Indirect Tax (including import duty) on Private Consumption, year t.

$$TEX^t = EMP^t - \sum_i E_i^t \quad \dots\dots(2.16)$$

TEX^t = Export Duty

The indirect taxes on intermediate use are estimated as

$$TINX^t = \sum_{i=1}^{60} \sum_{j=1}^{60} (a_{ij}^t - a_{ij}^{tm})\ X_j^t\ t_i \ + \sum_{i=1}^{60} \sum_{j=1}^{60} a_{ij}^{tm}\ X_j^t\ n_i \ \dots\dots(2.17)$$

$TINX^t$ = Total Indirect Taxes on Inputs in year t.

a_{ij}^t = Inputs of Sector i per unit of Sector j, year t (Commodity x Commodity Matrix).

The total (net) indirect taxes is the sum of indirect taxes on inputs and indirect taxes on various components of final use.

$$TTX^t = TINX^t + TCX^t + TGX^t + TIX^t + TEX^t \ \dots\dots(2.18)$$

TTX^t = Total (Net) Indirect Taxes in year t.

The estimate of total (net) indirect taxes from the input-output model is made compatible with that estimated in the macro model using iterative procedure.

Output

The sectoral ouput levels, consistent with the demands from final uses, are projected by the input-output model as sum total of intermediate uses and final demands thereby ensuring a consistency between the different sectors in output structure.

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$$X_i^t = \sum_j a_{ij}^t X_j^t + C_i^t + G_i^t + GF_i^t + ST_i^t + E_i^t - MS_i^t \quad \text{.........(2.19)}$$

The input-output model also provides sectoral profiles of input use, industry output, value added and net indirect taxes.

The industry output is derived using the market share matrix (make matrix) and the commodity output vector.

$$G_j^t = \sum_j D_{ij} X_j^t \quad \text{........(2.20)}$$

G_j^t = Gross Industry Output, Sector j, year t.
Dij = Market Share Matrix (Make Matrix).

Value Added

The value added profile is derived by subtracting input use from the industry output.

$$V_j^t = G_j^t [1 - \sum_i b_{ij}^t \times (1+t_i) - \sum_i b_{ij}^{tm} \times (n_i - t_i)] \quad \text{......(2.21)}$$

V_j^t = Gross Value Added, Sector j, year t.

b_{ij}^t = Inputs of sector i, per unit of sector j, year t (Commodity x Industry Matrix).

b_{ij}^{tm} = Imported inputs of sector i, per unit of sector j, year t (Commodity x Industry Matrix).

After the outputs are balanced in the input-output model, the estimated imports which provide a crúcial link between the input-output model and the macro model are taken up by the macro-model for iterations with the input-output model till the investment demand in the terminal year of the plan converges to the same value in successive runs of the model . The controls are then shifted to the investment model from the macro-model.

3. Investment Model

Investment requirements at broad sector levels (11 sectors) and conversion of investment by destination to investment by origin are worked out in the investment model. The value added of both base and terminal year at 60 sector of input-output model are aggregated to 11 sectors of the investment model and the sectoral growth rates during the plan period are calculated. These are then used for estimating investment by destination. Investment Model also estimates the aggregate post-terminal growth rate consistent with the sectoral growth rates of the medium term.

Post Terminal Growth Rate

The gestation lags between investment and output makes it imperative to integrate the long-term perspective with medium term. This consistency between the medium term and the long term growth rates is achieved at broad 11 sector levels of the national accounting frame.

A post terminal growth rate estimated iteratively also brings about consistency in estimated investment (based on sectoral medium term and post terminal growth rates) and the investment level projected by the interactions of macro model and the input output model.

The post terminal growth rate is estimated with the help of iterative process. In case of a mismatch between available resources and estimated investment, the latter is adjusted and the shock is absorbed by the post terminal rate of growth. An econometric procedure is adopted for this solution. The model is non-linear in parameters and is solved using Newton-Raphson Method.

Investment Estimates:

For projecting year-wise investment by destination, an econometric simulation model has been used taking into account investment lags. This model incorporates an accelerator-type investment theory in which current demands for investment goods depend on the expected growth of output. These projections are carried out using the following equations.

$$VABB(I) = [(VT(I)/VO(I)) ** (1/YRS)] \quad ......(3.1)$$

$VABB(I)$ = Rate of growth over Plan period, 11 sectors.
$VT(I)$ = Sectoral Value added, 11 sectors, terminal year.
$VO(I)$ = Sectoral Value added, 11 sectors, base year.
$YRS = 5$

Using $VABB(I)$ and the sectoral rate of growth of value added over the perspective period, defined as $RT(I)$, terminal year values $VITL$ and $VITL1$ are defined depending on the sectoral lags as:

$$VITL = VO(I) \times (1+VABB(I))^{TL} \quad \text{if } TL < 5$$

$$VITL = VO(I) \times (1+ RT(I))^{TL-5} \quad \text{if } TL \geq 5 \quad ....(3.2)$$

where $TL = T + AL(I)$; $T = 1,.....5$

$AL(I)$ = Lags between investment and output

$$VITL1 = VO(I) \times [1+VABB(I)]^{TL1} \quad \text{if } TL < 5$$

$$VITL1 = VO(I) \times [1+ RT(I)]^{TL1-5} \quad \text{if } TL \geq 5 \quad ....(3.3)$$

where $TL1 = T$

A function DIFV is defined as:

$$DIFV = VITL - VITL1 \quad ....(3.4)$$

Using (3.4),

$$AI(I) = AK(I) \times DIFV + AUTO(I) = PINV (I,J) \quad .....(3.5)$$

$AI(I)$ = Sectoral Investments for the Jth year, $J = 1, 5$.
$AK(I)$ = Incremental Capital Output Ratio, 11 sectors , $I = .1,11$.
$AUTO(I)$ = Autonomous Investment in Terminal year, $I=1,11$.

$$TS(I) = \sum_{J} PINV(I,J) \quad ....(3.6)$$

$TS(I)$ = Sectoral Gross Investment over the Plan Period, 11 Sectors

$$PT = \sum_{I} TS(I) \quad ....(3.7)$$

PT = Aggregate Gross Investment over the plan period.

The estimated investments by destination for the terminal year (PINV(I,5)) are converted into investment by source sectors with the use of a capital coefficient matrix.

$$GFICON = \sum_I PINV(I,5) \times PCON(I) \quad ......(3.8)$$

GFICON = Final value of gross investment in construction sector at market prices, terminal year

$$GFIMAC = \sum_I PINV(I,5) \times PMAC(I) \quad ......(3.9)$$

GFIMAC = Final value of gross investment in machinary and equipment at market prices, terminal year

$$TSTK = \sum_I PINV(I,5) \times PSTK(I) \quad ....(3.10)$$

TSTK = Final value of changes in stocks at market prices, terminal year

PCON(I), PMAC(I), PSTK(I) are elements of the capital coefficient matrix (11 x 3)

$$GFITOT = GFICON + GFIMAC \quad ....(3.11)$$

GFITOT = Total Gross Fixed Investment, terminal year

In the event of non-convergence, i.e., if there is a mis-match between availability of investment and required investment to meet the desired medium term growth rate, the controls are shifted to the input output model along with revised values of control ratios RAC, RAM and RAST and PII(I). The control ratios are defined as follows.

i) RAC = GFICON/GFITOT = Ratio of investment in construction to total fixed investment, terminal year.

ii) RAM = GFIMAC/GFITOT = Ratio of investment in machinery and equipment to total fixed investment, terminal year.

iii) RAST =TSTK/TGFI = Ratio of changes in stocks to total investment, terminal year, where TGFI is aggregate gross investment in the terminal year.

iv) PII(I) = Proportions of gross fixed investment in machinery and equipment for each sector (except construction) to total gross fixed investment in the terminal year. However, for the construction sector,

PII(I) = RAC.

Also, $\sum_I PII(I) = 1$

In effect, the investments by source sectors are dovetailed with the input-output model for sectoral consistency.

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Table-1.1

Growth in Value Added and Value of Output : Eighth Plan

(Percent per annum)

S.No.	Sector	Value Added	Value of Output
0	1	2	3
1.	Agriculture	3.25	4.28
2.	Forestry & Logging	-1.23	-1.11
3.	Fishing	5.46	7.00
4.	Mining & Quarrying	7.96	8.90
5.	Manufacturing	7.35	8.21
(i)	Food and Beverages	2.14	3.42
(ii)	Textiles	5.87	7.10
(iii)	Wood & Paper Products	7.63	7.95
(iv)	Leather&Rubber Products	16.03	16.15
(v)	Plastic Products	3.70	8.05
(vi)	Petroleum Products	3.31	4.70
(vii)	Chemicals	7.48	8.10
(viii)	Non-Metallic Mineral Prod.	8.45	8.45
(ix)	Basic Metals	8.23	8.93
(x)	Non-Electrical Machinery	6.36	7.86
(xi)	Electrical Machinery	9.53	13.78
(xii)	Transport Equipment	8.76	9.29
(xiii)	Other Manufacturing	8.72	11.15
6.	Construction	4.70	5.29
7.	Electricity,Gas&WaterSupply	7.83	7.62
8.	Railways	3.49	4.06
9.	Other Transport	7.70	8.49
10.	Communications	6.09	6.92
11.	Other Services	6.02	6.60
	Total	5.60	6.73

Table-1.2
Structure of Output and Value Added : 1991-92 and 1996-97

(Percent)

S.No.	Sector	Value Added		Value of Output[J]	
		1991-92	1996-97	1991-92	1996-97
0	1	2	3	4	5
1.	Agriculture	25.22	22.53	19.80	17.63
2.	Forestry & Logging	1.61	1.15	0.93	0.63
3.	Fishing	0.84	0.83	0.49	0.50
4.	Mining & Quarrying	2.04	2.28	1.45	1.60
5.	Manufacturing	21.50	23.34	36.06	38.62
(i)	Food and Beverages	1.96	1.66	5.14	4.39
(ii)	Textiles	5.74	5.81	6.95	7.08
(iii)	Wood & Paper Products	0.93	1.02	1.32	1.40
(iv)	Leather & Rubber Prod.	0.83	1.33	1.38	2.10
(v)	Plastic Products	0.15	0.14	0.33	0.35
(vi)	Petroleum Products	0.29	0.26	2.62	2.38
(vii)	Chemicals	2.12	2.31	3.97	4.23
(viii)	Non-Metallic Mineral Prod.	1.04	1.19	1.20	1.30
(ix)	Basic Metals	1.65	1.87	3.68	4.08
(x)	Non-Electrical Machinery	1.51	1.57	2.28	2.40
(xi)	Electrical Machinery	1.65	1.98	2.52	3.46
(xii)	Transport Equipment	1.82	2.11	2.69	3.03
(xiii)	Other Manufacturing	1.80	2.08	1.97	2.41
6.	Construction	5.13	4.92	7.08	6.62
7.	Electricity, Gas & Water Supply	2.40	2.67	2.74	2.85
8.	Railway Transport	1.54	1.39	1.23	1.09
9.	Other Transport	4.40	4.85	4.64	5.04
10.	Communications	1.17	1.20	0.72	0.73
11.	Other Services	34.16	34.85	24.86	24.70
	Total	100.00	100.00	100.00	100.00

Table-1.3
Investment in Eighth Plan

(Rs.Million at 1991-92 prices)

S.No.	Sector	Investment (1992-97)	Share (Percent)
0	1	2	3
1.	Agriculture	1427603	17.89
2.	Forestry and Logging	28000	0.35
3.	Fishing	31919	0.40
4.	Mining and Quarrying	395850	4.96
5.	Manufacturing	1884532	23.62
6.	Construction	205036	2.57
7.	Electricity, Gas & Water Supply	1021483	12.80
8.	Railways	372836	4.67
9.	Other Transport	506346	6.35
10.	Communication	259963	3.26
11.	Other Services	1846123	23.13
12.	Total	7979690	100.00

Table 1.4

Indicators of Development: A Perspective

S.No.	Indicator	1991-92	1996-97	2006-07
0	1	2	3	4
1.	Savings Rate	21.6	21.6	23.9
2.	Investment Rate	24.1	22.5	24.9
3.	GDP Growth Rate (%)	-	5.6	6.3
4.	Food Grain Consumption (Kg per capita, yearly)	182	194	225
5.	Population (Million)	856	938	1099
6.	Labour Force (5+) (Million)	328.94	364.31	440.74
7.	Life Expectancy (Year)			
	Male	57.7	60.1	66.1
	Female	58.7	61.1	67.1

N.B.:1. The saving and investment rates are expressed as percent of GDP at market prices.

2. The growth rate of GDP is annual average for the period beginning 1991-92.

CHAPTER-2

DEMOGRAPHY SUB-MODEL

The demographic density and spread provides the starting point of all planning exercises. Alongside population dynamics has to be explicitly assessed and its different characterisitics have to be closely considered while developing the equations for all other sub-models.

Population Projections

Population Projections for the period 1992-2007 were worked out with no major changes in methodology used for the Seventh Five Year Plan, mainly because the full results of the 1991 Census of India were yet to be released, especially the age-sex distributions; and 1991 Census results when available, showed that differences were minor. For these estimates, the year 1986 was taken as the bench-mark year and the crude birth rate (CBR), crude death rate (CDR) and growth rate (GR) for the period 1981-86 as revealed by the Sample Registration System (SRS) were considered as the base level estimates. The Standing Committee of Experts on Population Projections, which met in 1988-89 finalised the projections for the period 1990-2005 on the basis of these bench-mark data. In view of the proximity of the 1991 Population Census, the Standing Committee did not make any fundamental change in the population projection methodology adopted by the Expert Committee on Population Projections. Some modifications were, however, made on the basis of the CBR, CDR and Infant Mortality Rate(IMR) figures for the period 1986-90 and also the population total, sex-ratio, percentage of urban population and work participation rates, as obtained from Census of India, 1991 and the Couple Protection Rate (CPR) of 1991. The method used is the component method of population projection, the componenents under consideration being (a) Fertility (b) Mortality and (c) Migration. The broad assumptions and methodology are discussed in the following paragraphs.

Fertility

Assumptions regarding fertility are based on the evaluated results available from administrative statistics on performance of family planning programmes in terms of likely levels of couples effectively protected in recent years and the proportion of females married, in the age group 15-44 as recorded by the 1981 Census of India.

It is assumed that the changes in the proportion of married females in the reproductive age-groups 15-29 and 30-44 observed during 1971 and 1981 will continue till the year 2007. In the age-group 15-29 a decline is assumed due to the trend of increase in the age at marriage, whereas in the age-group 30-44 an increase is assumed as it is felt that less number of widows would be likely. The observed changes in the trends for the two age-groups during 1971-81 have been linearly extrapolated for the later periods. The proportion of married females in the age-group 15-44 thus worked out is presented in Table-2.1.

The Couple Protection Rates (CPR) published by the Department of Family Welfare are adjusted for quality as recommended by the Committee appointed by the Government of India in the Department of Family Welfare. The CPRs to be achieved in the future years for different States and the country as a whole are estimated by using a logistic curve connecting data available on CPR at two points of time viz., 1972 and 1987 and using more or less the same asymptotic values as used for the Seventh Plan projections. A comparative picture of the CPR values that were used for the Seventh and Eighth Plan documents is indicated in Table-2.2.

However, there has been a significant change in the formulae used for obtaining the future GMFR (General Marital Fertility Rates) values. The GMFR gives

the number of births per year per 1000 married females in the age-group 15-44. As the General Fertility Rate (GFR) defined as the number of births per year per 1000 females aged 15-44, has been estimated from the Sample Registration System (SRS) data for the period 1981-85, this period becomes the new bench mark in this exercise. Fresh GMFR values could be calculated for the country as a whole and for different States for 1985 using the proportion of married females. The relationship between CPR and GMFR for a period under consideration used for the Eighth Plan is consequently updated as;

$$GMFR^t = \frac{1 - CPR^{t-1}}{1 - CPR^{1984}} * GMFR^{1985}$$

Using the projected CPR for the future years, the GMFR values and hence the GFR values for the future years are projected.

Mortality.

The mortality assumptions of the Seventh Plan Demography Sub-Model have generally been kept unchanged for the Eighth Plan. Starting with SRS life table of 1980, which gives an expectation of life at birth of 54.1 years for males and 54.7 year for females in 1980, an annual improvement of 0.5 years in life expectancy at birth was assumed for males till it reached a level of 60 years after which the annual increase was reduced to 0.45 years. In case of females, the annual gain in life expectancy at birth was assumed at 0.55 years till it reached 60 years after which the improvement is reduced to 0.50 years per annum. For the quinquennial 2001-2006, it has been assumed that expectation of life at birth for males will rise at the rate of 0.40 per annum till it reaches the age of 65. For females, the annual gain has been assumed to be 0.25 per annum. On this basis, the expectation of life at birth for the country as a whole is 64.8 for males and 65.8 for females for the quinquennium 2001-2006 and 66.1 years for males and 67.1 years for females in 2006-2011.

At the State level, separate life tables for males and females are constructed for the period 1979-80/1978-80 using SRS age-specific death rates. The expectation of life at birth are estimated using Greville's method. Annual increase in expectation of life at birth is assumed to follow a function of the level achieved at the point of time. For males, it is estimated according to the pattern given in Table-2.3 whereas for females, there was an additional improvement of 0.05 years per annum on the e_0^0 values.

A review using the SRS death rates recorded for the period 1981-86 showed that except for Kerala and Maharashtra, the assumption could be kept unchanged. However, for these two States, it was found that the death rates recorded by SRS for the period 1981-86 are themselves much lower than those estimated on the basis of the 1978-80 rates. For these two States, therefore, certain adjustments are done by using the survival ratios based on the life expectancy for the period 1981-86 worked out from the SRS age-specific mortality rates for the period 1981-86.

Migration.

Using the data on place of birth, the number of persons whose place of birth was outside India was recorded from the 1971 and 1981 Census results (1991 census results on this aspect are not available). Applying the 10 year survival ratios of 0.9165 for males and 0.9122 for females on these number, inter-decadal migrants into India is observed. From the number of persons born in India but living abroad, the number of out-migrants is also found. It is observed that the net migrants as on 1981 is negligible. Thus for the future years in the light of past experience, the net migration is considered to be negligible at the all-India level.

On the basis of the place of last residence data and duration of residence 0-9 years, inter-state migration is observed to be slightly above 1% in the States of Bihar, Haryana, Maharashtra and Uttar Pradesh. So adjustment is made for these four states only. It is assumed that in these States the trend in migration rate observed during 1961-71 and 1971-81 would be continued in the next three decades, during 1981-2007.

Method of Projection

It is assumed that the age-specific mortality rates for males and females separately, would conform to the South Asian Model pattern of Life Table presented by the United Nations for males and females separately and these Life Tables are assumed for the end of projection period 2007. From the set of initial Life Tables 1980 and final Life Tables of 2007, values of n_{q_x}'s (i.e, probability that a person aged x years does not survive till age n) for the intervening years are derived assuming that mortality would decline linearly.

From the n_{q_x} values, the e_0^0 (expectation of life at birth)-values are calculated for each of the intervening years and are made to converge to the level of e_0^0 assumed earlier in the mortality assumption by an iterative procedure. Finally, the survival ratio's for each 5 year age-group are calculated from the derived Life tables and are used to project the population for each five year age-group quinquennially.

The 0-4 age-group population for the various periods are derived by using the projected General Marital Fertility Rate (GMFR) for the quinquennium, number of married females in the age-group 15-44, survival ratio's for birth in the age-group 0-4 for males and females, and an assumed sex-ratio of 105 males to 100 females at birth. As GMFR gives the number of births per year per 1000 married females in the age-group 15-44 years, for a period "t" under consideration:

Number of births during (t-4,t) =

$5 \times GMFR_t \times$ (No. of married females aged 15-44)$_t$.

Using the sex-ratio (for males 105/205), the number of boys and girls born were estimated. Multiplying these by the survival rates (Infant Mortality Rates for 0-1 year and Child Mortality rates for 1-4 years, separately for boys and girls), the number of surviving boys and girls aged 0-4 years for the period t and hence the age-distribution and total population for the period are obtained.

The 1991 Census results show that the projected population for 1991 on 1st March, according to this method has only a slight difference of around 1.4 per cent but the number of females per 1000 males, which was expected to rise as the 1981 census showed, had again dipped. These necessitated some modifications for the post-1991 projected results for the overall total population figures. Taking the 1991 census sex-wise population base data and the growth rates as observed by using the methodology already described, the modifications are incorporated. This did not, however, imply change in the vital rates.

Age-distribution Projection

The age-distribution for the years are based on the annual estimates worked out for these years. For a period t lying in between period 1 and 6, say, (as quinquennial age-distribution are obtained by the projection methodology) a value of K is determined, such that

$$Kp_1 + (l-k) P_6 = P_t$$

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where P_1, P_t and P_6 are the annual populations of period 1, t and 6 respectively. Using this constant 'k', the population $P_t(x)$ for age-group "x", is calculated as

$$P_t(x) = k\ P_1\ (x) + (l-k)\ P_6\ (x)$$

Single Year Age Projection

An oscillatory interpolation curve is assumed for getting the single-year age-distribution as the single year Census data will have inherent response-biases in terms of number preferences etc. An oscillatory interpolation formulae, using Sprague multipliers is employed for this exercise.

Rural-Urban Distribution of Population

The Standing Committee of Experts on Population Projection in 1989, on the basis of the 1981 Census results, projected for India the percentage of urban population to total to be 27.87% in 1991 with a total urban population of 235 millions. This was done by projecting the Urban population in each State separately mainly by using the increasing Urban-Rural Growth Differential method (URGD). The method is based on the assumption that the urban-rural growth differential follows a logistic pattern, though the exact forms (parameter values) were different for different States. The All-India urban proportion and urban total was derived by adding the projected urban population of the various States and Union Territories.

However, the 1991 census results have shown a much smaller sized urban population of 217.2 million, which constitutes only 25.72% of the total 1991 census population. This indicates 2.15% shortfall in urban proportion. As this sudden fall could not be explained by the urban-rural growth differentials, the urban population for the next decade 1991-2001 is projected on the basis of the average annual rate of growth observed during the last 20 year period i.e. 1971-91, rather than the decelerated rate of growth observed during 1981-91, this representing the long term trend of urbanisation. In the post 2001 period the rate of growth of urban population is assumed to be gradually declining in line with the assumed reduction in the rate of natural increase, though the share of urban population increases continuously.

To obtain the sex-composition of rural and urban population, the size of the rural male population is first estimated. It is assumed that the trend of the rural sex-ratio would be similar to that of total population for which projections by sex are already available. The formulae used are:

$$[R_m/R]_{1991+5r} = [R_m/R]_{1991} * [T_m/T]_{1991+5r}/[T_m/T]_{1991}$$

where r = 1,2,3, and so on.

R = Rural population

T = Total population of all areas

R_m=Rural male population

T_m= Total male population of all areas.

Once the rural male population are obtained by applying the above ratios to the corresponding projected rural populations, the rural female population are worked out by subtraction.

The age distribution of rural and urban population, sex-wise, for the 5 broad age-group viz., 0-14, 15-29, 30-44, 45-59 and 60+, as reported by the 1981 census (in the absence of the 1991 census results) are put in a 5x2 matrix form. The marginal totals were adjusted to correspond to 1981 smoothed age-data by repeated iterations (by method of difference elimination). Projections by age and sex for rural and urban areas for future years are obtained by the method of difference elimination on the 1991, 1996, 2001, 2006, 2011, urban-rural sex wise break-ups of the total population.

Labour Force Projection

Based on the recommendations of the Committee of Experts on Unemployment Estimates set up by the Planning Commission in 1969 (Dantawala Committee), the National Sample Survey Organisation (NSSO) has standardised the concepts and definitions of Labour force, employment and unemployment and the same has been adopted in quinquennial surveys on employment and unemployment since 1972-73 (27th Round). The various estimates are based on 3 concepts viz., Usual Status, Weekly Status and Daily Status.

These are explained below:

(i) Usual Status Concept

This concept refers to the usual activity status-employed or unemployed or outside labour force of those covered by the survey. Thus, the activity status is determined with reference to a period of 365 days. A person is said to be employed if he is working for a relatively longer time during the reference period and unemployed if he was available or seeking work.

(ii) Weekly Status Concept

According to this concept the activity status is determined with reference to a period of the preceding 7 days. A person who reports as having worked at least for one hour on any day during the reference period of the week while pursuing a gainful occupation was deemed to be employed. A person who did not work even for one hour during the reference period but was seeking work or was available for work was deemed to be unemployed.

(iii) Daily Status Concept

Here activity status of a person for each day of the preceeding 7 days is recorded. A person who worked at least for one hour but less than four hours was considered having worked for half a day. If he worked for 4 hours or more during a day, he was considered as employed for the whole day.

Labour force is estimated on the basis of usual status participation rate. Estimates of rates of labour force participation for broad age-groups for males and females, for rural and urban areas separately have been provided by the latest NSSO round on employment-unemployment during 1987-88 (43rd round). Though the earlier rounds of NSSO on employment-unemployment have shown that the labour force participation rates (LFPRs) have been decreasing, especially for males, for the projection it has been assumed that with concerted efforts during the Eighth Plan and later, the LFPRs both for males and females in rural and urban areas will increase. Further, it is expected that the LFPRs according to the three concepts described earlier, will follow an increasing trend as given in Table-2.4.

Applying these labour force participation rates to the projected population figures for the different periods, the total labour force for the periods, have been obtained for each concept separately. This also gives the number of people in the

labour force aged 5 and above. It is assumed that there are no workers below the age of 5 years.

The estimates of labour force for rural and urban areas sex-wise is done using projected labour force participation rates according to the 3 concepts. These participation rates have, however, been adjusted so that the totals of these categories match the total labour force figures mentioned in the previous paragraphs.

For the purpose of estimating labour force for the ages 15-59 child labour rates for age-group 0-14 years and aged labour force participation rates for 60+ are obtained by repeating the calculations same as those for the specific group of population. The labour force in 0-14 and 60+ is obtained from the projected age-group populations. The labour force in age 15-59 group is finally obtained by subtraction. The results are presented in Table-2.5.

Employment Projections

The Eighth Plan aims to reduce unemployment to negligible level by the turn of the century. Treating employment generation and economic growth as mutually complementary, the Eighth Plan aims to generate gainful and sustainable employment through economic growth and restructuring of output composition of growth.

The growth and structural change in employment during the period 1977-78 to 1987-88 assessed from the quinquennial survey of employment and unemployment by NSSO, have been used to estimate the parameters relating to employment estimation in the Eighth Plan. The main feature of employment growth during the period 1977-78 to 1987-88, as revealed by the NSSO surveys on employment and unemployment, and given in Table-2.6 to Table-2.9, are as follows.

a) Annual growth of employment has been at about 2 per cent,

b) Growth rates of employment have been relatively more in urban areas as compared to rural,

c) Employment of males and females has grown more or less at the same rate,

d) All major sectors except agriculture, experienced employment growth of more than 3 per cent per annum,

e) The employment growth in 1983-87 has been observed to decelerate in all the sectors except agriculture, construction and trade. Employment growth in manufacturing sector has declined from 3.76 per cent per year in 1977-83 to 2.18 per cent per year in 1983-87 and in services from 4.49 per cent per year to 2.06 per cent per year during the same periods,

f) Employment growth in 1983-87 has decelerated from 2.48% per year in 1977-83 to 1.38% per year in 1983-88 in the organised sector and has declined marginally in organised manufacturing sector in 1983-88,

g) Public sector has been the major source of employment generation in the organised sector,

h) The growth of employment of the educated, particularly among the women has been relatively high and has accelerated in 1983-87 as compared to 1977-83.

The sectoral distribution of workers given in Table- 2.10 shows that in 1977-78, 71 per cent of the workers were engaged in agriculture and allied occupations. The proportion had declined to 64 per cent by 1987-88. The corresponding figure revealed by the 1991 census, though not strictly comparable with NSS estimates

because of conceptual differences, indicate a marginal decline from 66.5 per cent in 1981 to 64.9 in 1991. Then, a change in the structure of work force by employment status is also witnessed (Table-2.11). The proportion of casual labour increased while that of the self-employment declined from 1977-78 to 1987-88. It is largely a reflection of the occupational shifts from agriculture to non-agriculture and change in pattern of hiring even in agriculture. The share of unorganised sector in non-agricultural employment has increased from 72 per cent in 1977-78 to 77 per cent in 1987-88, at the background of near stagnancy of the share of unorganised sector in overall employment at 90 per cent.

The employment projections in the Eighth Plan have been made using sectoral employment elasticities with respect to output or value added.

· The non-agricultural sectors registered a rate of growth of employment of more than 3% per annum during 1977-78 to 1987-88. The agriculture sector which engages two third of total work force, registered an average rate of growth of employment of 0.92 per cent per annum. Construction, mining and electricity which together account for about 5 per cent of total employment registered a rate of growth of employment of more than 5 per cent per annum during 1977-78 to 1987-88. Transport sector, which is responsible for 2.8 per cent of total employment generation, experienced an average annual rate of growth of employment of 4.7 per cent in 1977-78 to 1987-88. Manufacturing and services sector account for 11% and 17% of total employment generation respectively. Employment in manufacturing and services including trade increased annually by 3.0 per cent and 3.4 per cent respectively during the same period.

A declining trend in elasticity of employment with respect to value added is witnessed in 1983-88. The aggregate employment elasticity with respect to value added estimated as 0.54 during the period 1977-78 to 1983, declined to 0.36 in 1983 to 1987-88. At the disaggregated level, mining and construction are the two sectors which did not witness decline in elasticity during the above period. In agriculture, the elasticity reduced from 0.49 in 1977-83 to 0.36 in 1983-88, implying a decline of 26 per cent. The decline in the elasticity from 1977-83 to 1983- 88 were 62 per cent in manufacturing, 35 per cent in electricity and 57 per cent in transport and other services.

For the purposes of employment projection in the Eighth Plan, the elasticities have been projected to increase mainly through shifts in spatial patterns of growth and labour- intensive composition of output. The sectoral employment elasticities are given in Table-2.12.The method of arriving at the sectoral employment elasticities is outlined below.

(a) Agriculture

The elasticity in agriculture sector is projected as 0.50 in the Eighth Plan as against 0.36 observed during the period 1983 to 1987-88. The low elasticity observed in 1983-88 is primarily due to steep decline in elasticity in agriculturally advanced states such as, Punjab, Haryana and Uttar Pradesh, where the sources of agricultural growth are now turning to be labour substituting. The employment elasticity in agriculture in the remaining regions is observed to be between 0.55 to 1.0. Eighth Plan strategy emphasises faster rate of growth of agriculture in the Eastern region and in dryland areas of peninsular India. It is estimated that if a regionally diversified agricultural output experiences an average annual rate of growth of 4 percent and animal husbandry by 5 per cent, the overall growth of employment in agriculture would exceed 2.5 per cent. Besides, emphasis on crop diversification into non-staple variety particularly in the agriculturally developed regions and faster growth of allied activities such as animal husbandry, fishery, horticulture is expected to add significantly to employment potential in agriculture sector.

(b) Manufacturing

In the manufacturing sector, the employment elasticity is projected in the Eighth plan is 0.50 as against 0.26 observed in 1983-88 and 0.68 in 1977-83. This projection is primarily based on the premise that the pattern of manufacturing growth envisaged in the Eighth plan will raise the share of manufacturing output originating from small scale and decentralised sectors. The growth in exports has also been from this segment of industry. The assumption of larger share of small scale sector in manufacturing growth is based on the trends observed in the recent past. More recent data reveal reasonably high employment elasticity in a number of industry groups within the organised sector. These include sugar, fish canning and preservation, tobacco products, cotton ginning, printing and dyeing, woollen textiles, leather, textiles, jute and mesta products, glass and glassware. The employment elasticity in unorganised and small scale sector is estimated in the range of 0.5 to 0.6 as against 0.15 in the organised sector. The growth in value added in small scale sector by 10 per cent per year and in large scale sector by 5% per year would result in overall employment growth in the manufacturing sector by nearly 4 per cent per annum.

(c) Construction

Construction as a group and its major sub sectors, such as road construction and housing have high employment elasticity. An elasticity of 1.0 in construction sector, based on the past trend is projected in the Eighth Plan. Linking of 31% of the villages with population ranging between 1000-1500 and 10% of those with larger size, with motorable roads will alone require construction of 8 lakh km of road length thereby generating greater employment opportunities.

(d) Transport

The employment elasticity in transport sector reduced from 0.92 in 1977-83 to 0.35 in 1983-87. The winds of economic liberalisation leading to the relaxation in regulatory measures in transport sector is likely to result in higher growth of small scale transport services, whose employment elasticity is higher. Keeping these in view, the elasticity in transport sector is projected as 0.60 in the Eighth Plan.

(e) Other Services

The services sector witnessed a sharp decline in the employment elasticity from 0.98 in 1977-83 to 0.42 in 1983-87. The measures relating to economic reform and the associated deregulation and removal of bureaucratic hurdles are expected to result in a significant growth of the services sector as a whole and its small scale segment in particular. The objectives in the area of education and health envisaged in the Eighth Plan demanded creation of additional employment potential as a part of infrastructure building activity. In tandem, a general expansion of economic activities is associated with creation of infrastructure services, particularly in the form of employment generation in the tertiary sector whose growth in recent past has been much above the rest of the economy. The Services Sector as a major segment of the tertiary sector, has witnessed value added growth of about 6% during 1980-81 to 1986-87 as against 4% during the 1970s.

The employment intensity of tourism, rural transport and repair services is high and these sectors are expected to grow faster with the expansion of agri-business in the Eighth Plan. Keeping this in view the employment elasticity in the services sector is projected as 0.70 in the Eighth Plan.

Estimate of Employment

The required employment generation in order to reduce unemployment to negligible level by the turn of the century has been estimated on the basis of the

backlog of unemployment in the base year and the likely additions to the labour force during the reference period. The backlog of unemployment has been assessed in terms of open unemployment with appropriate adjustments for the severely underemployed who are likely to look for alternative new full time employment opportunities. This is close to the estimate of unemployment measured in terms of "usual" or "weekly" status. The unemployed, according to "weekly status" concept, are without work for the entire period under reference, i.e., they did not have work even for one hour during the week. The extent of unemployment measured in terms of "weekly status" concept enables an assessment of the magnitude of severely underemployed as this method excludes work for half or less than half the time during the reference week.

The latest estimates of employment and unemployment which relates to the year 1987-88 have been adopted to estimate unemployment. The estimate of the magnitude of unemployment at the beginning of the Eighth Plan is obtained as the difference between the estimates of labour force and employment. Total employment at the beginning of the Eighth Plan, i.e., 1992-93 is estimated as 301.7 million on "weekly status" basis. The labour force in the age group five - plus is estimated to be 319 million. Thus backlog of open unemployment according to "weekly status" is estimated at 17 million at the beginning of the Eighth Plan. The estimates of employment show that about 2 per cent of those recorded as employed on the basis of "weekly status" had work for half or less than half of the period. These 2 per cent of the employed constituting 6 million in number are treated as "severely underemployed', and are included in the estimates of backlog of unemployment for purpose of manpower planning. Thus the number of persons in the labour force who are likely to search for full time employment opportunities at the beginning of the Eighth Plan is estimated to be around 23 million.

The labour force in five plus age group is projected to increase by about 35 million during the Eighth Plan (1992-97) and by another 36 million during the next five years. Thus, considering the backlog of unemployment of 23 million, the total number of persons requiring employment in the Eighth Plan is estimated as 58 million and 94 million over the ten year period 1992-2002. An aggregate employment growth of about 4 per cent per annum is necessary to achieve the goal of employment for all by the terminal year of the Eighth Plan. Since the feasibility of attaining an employment growth of 4 per cent per year in the Eighth Plan is somewhat remote, an alternative exercise was made whereby the employment objectives in the plan could be realised by lengthening the time horizon. The calculations show that, at the background of the output structure envisaged in the Eighth Plan and the subsequent period, aggregate employment growth of around 3 per cent per annum was sufficient to wipe out the backlog of unemployment by the year 2000 AD.

The performance of employment generation in the recent past coupled with the anticipated change in the structure of output in favour of employment intensive investments indicate that an average employment growth of around 2.6 to 2.8 per cent per annum is more likely to be within the realm of feasibility. This growth in employment, if achieved over the next ten years, will be able to create a situation where the economy may attain a near full employment by the end of the Ninth Plan, i.e., by 2002 A.D. Last but not the least, this calculation and the associated employment scenario will be contingent upon the attainment of a higher average rate of growth of GDP in the Ninth Plan (1997- 2002 A.D.) by 6.28% per year as compared to 5.6% per year adopted in the Eighth Plan (1992-97) and also on the premise that a structural shift in output takes place in favour of the sectors which are relatively more employment-intensive.

The measures outlined in the Eighth Plan are expected to contribute to a faster growth of the economy in the post-plan period and, at the same time will increase the overall employment content of growth. The associated structure of growth of the economy underlined above is able to raise employment elasticity to around 0.5 in the Eighth Plan accompanied by perceptible improvement in labour productivity. As a result, the value added growth rate of 5.6 per cent per year envisaged in the Eighth Plan is likely to result in an employment growth of nearly 2.8 per cent per annum. This

growth in employment is able to generate an average of about 8 to 9 million additional employment opportunities per year. The trend in employment growth in the Eighth Plan is likely to accelerate somewhat in the Ninth Plan due to higher growth of gross domestic product by 6.28% per year with an output structure conducive to employment generation. These are likely to result in the creation of an average of 9.5 million employment opportunities per year in the Ninth Plan. This by and large would be sufficient to reduce unemployment to a negligible level by the end of the Ninth Plan, i.e., by the year 2002 A.D.

Table-2.1
Married Females in Age Group 15-44

Year	Proportion of married females in age-group 15-44
1992	76.7
1997	75.9
2002	74.7
2007	73.7

Table-2.2
Estimated Value of CPR in Plan Exercises

Year	Seventh Plan	Eighth Plan
1990	37.6	37.9
1995	44.6	44.6
2000	51.6	49.8
2005	-	53.5
2007	-	54.6

Table-2.3

Anticipated Annual Increase in e_0^0 for Males for Various Base Levels of e_0^0

Expectation of life at birth	Annual increase in e_0^0 (Years)
30-34.9	0.2
35-39.9	0.3
40-44.9	0.4
45-49.9	0.5
50-59.9	0.6
60-64.9	0.4
65-69.9	0.2

Table-2.4

Labour Force Participation Rates

Years	Usual Status (US)	Weekly Status (WS)	Daily Status (DS)
1987-88 (NSS,43rd Round)	0.382	0.371	0.368
1992	0.382	0.371	0.368
1997	0.387	0.375	0.370
2002	0.392	0.380	0.375
2007	0.400	0.385	0.380

Table-2.5

Table-2.5
Labour Force Projections

(Million)

Age Group	1992	1997	2002	2007
		Usual Status		
5+	328.94	364.31	400.75	440.74
15+	316.65	351.61	387.92	427.87
15-59	294.60	325.87	357.81	393.02
		Weekly Status		
5+	319.46	353.01	388.49	424.21
15+	306.70	339.83	375.16	410.85
15-59	285.63	315.22	346.37	377.50
		Daily Status		
5+	316.05	348.31	383.37	418.70
15+	303.32	335.15	370.08	405.37
15-59	282.42	310.75	341.54	372.32

Table-2.6
Growth of Employment: 1977-78 to 1987-88

	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
	1	2	3	4	5	6	7	8	9
Employment (million)									
1977-78									
	136.2	59.8	196.0	36.1	7.7	43.8	172.3	67.5	239.8
1983									
	147.9	65.9	213.6	45.4	9.6	55.0	193.3	75.5	268.8
1987-88									
	157.7	70.1	228.2	51.7	11.1	62.7	209.4	81.5	290.9
Annual Rate of Growth (Percent)									
1977-78 to 1983									
	1.51	1.7	1.59	4.23	4.18	4.22	2.11	2.06	2.10
1983 to 1987-88									
	1.43	1.2	1.46	2.97	2.95	2.96	1.80	1.71	1.77
1977-78 to 1987-88									
	1.48	1.5	1.53	3.66	3.62	3.66	1.97	1.90	1.95

N.B.: 1. The employment estimates are based on Usual Principal Status (UPS).
Source:1. N S Survey on employment and unemployment, 32nd, 38th and 43rd Round.
      2. Estimates of population based on 1971 & 1981 Census and provisional
         totals of 1991 Census.

Table-2.7
Sectoral Growth in Employment

(per cent per annum)

S.No.	Sector	1977-78 to 1983	1983 to 1987-88	1977-78 to 1987-88
0	1	2	3	4
1.	Agriculture	0.91	0.94	0.92
2.	Mining	6.32	5.69	6.03
3.	Manufacturing	3.76	2.18	3.05
4.	Construction	7.93	13.03	10.19
5.	Electricitry Gas & Water Supply	6.01	3.15	4.71
6.	Trade	3.52	3.83	3.66
7.	Transport, Storage and Communication	6.66	2.35	4.70
8.	Services	4.49	2.06	3.39
	Total	2.10	1.77	1.95

N.B.: The employment estimates are based on Usual Principal Status (UPS).

Source: Same as Table-2.6

Table-2.8
Growth in Organised Sector Employment

(per cent per annum)

Sl. No.	Sector	1978-83	1983-88	1978-88
0	1	2	3	4
1.	Agriculture	1.30	1.11	1.21
2.	Mining & Quarrying	2.56	0.88	1.71
3.	Manufacturing	2.07	-0.09	0.99
4.	Electricity Gas & Water Supply	3.67	3.26	3.47
5.	Construction	1.92	1.25	1.59
6.	Trade	1.94	1.43	1.69
7.	Transport, Storage and Communication	2.25	1.20	1.70
8.	Services	2.96	2.25	2.60
	Total	2.49	1.33	1.93
	Public Sector	3.90	2.17	2.54
	Private Sector	1.41	-0.43	0.49

Source: Estimated from Employment Market Information Programme of the Ministry of Labour.

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Table-2.9
Growth in Employment of the Educated

(per cent per year)

Sex/Residence	1977-78 to 1983	1983 to 1987-88	1977-78 to 1987-88
1	2	3	4
Rural	6.61	8.35	7.39
Urban	4.88	6.21	5.48
Male	5.51	6.76	6.07
Female	6.59	11.08	8.59
Total	5.59	7.14	6.29

N.B.   : Based on Usual Principal Status (age group 15 +)
Source: Same as Table-2.6

Table-2.10
Sectoral Distribution of Workers

(percent)

S.No.	Sector	1977-78	1983	1987-88
0	1	2	3	4
1.	Agriculture	70.70	66.31	63.90
2.	Mining & Quarrying	0.52	0.65	0.77
3.	Manufacturing	10.00	10.93	11.13
4.	Electricity, Gas and Water Supply	0.26	0.32	0.34
5.	Construction	1.82	2.47	3.96
6.	Trade	6.18	6.67	7.30
7.	Transport	2.13	2.71	2.78
8.	Financing, Real Estate, Insurance and Business Services	0.55	0.73	0.83
9.	Community, Social & Personal Services	7.82	8.78	8.80
	Total	100.00	100.00	100.00

N.B.:1. Based on Usual Principal Status.
    2. Total includes a negligible group of industry not recorded.
Source: Same as Table-2.6

Table-2.11

Distribution of Workers by Employment Status

(percent)

	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
	1	2	3	4	5	6	7	8	9
Self Employment									
1977-78	62.2	56.3	60.4	39.9	42.2	40.3	57.9	54.8	57.0
1983	59.5	54.1	57.8	40.2	37.3	39.7	55.0	52.0	54.1
1987-88	57.3	55.1	56.7	41.0	38.6	40.5	53.8	53.1	53.6
Regular Salaried Employment									
1977-78	10.9	3.7	8.6	47.2	30.6	43.2	17.9	6.6	14.6
1983	10.6	3.7	8.5	44.5	31.9	42.2	18.5	7.3	15.3
1987-88	10.4	4.7	8.6	44.4	34.7	42.7	18.0	9.3	15.2
Casual Wage Employment									
1977-78	26.9	40.0	31.0	12.9	27.0	15.5	24.2	38.6	28.4
1983	29.9	42.2	33.7	15.3	30.9	18.1	26.5	40.7	30.6
1987-88	32.1	40.2	34.7	14.6	26.7	16.8	28.2	38.6	31.2

N.B.: Based on Usual Principal Status.
Source: Same as Table-2.6

Table-2.12

Sectoral Value Added and Employment Growth in Eighth Plan :1992-97

S.No.	Sector	Growth of Value Added (% p.a.)	Employment Elasticity			Employment Growth Using Elasticity as in (5)
			1977-78 to 1983	1983 to 1987-88	Eighth Plan	
0	1	2	3	4	5	6
1.	Agriculture	3.1	0.49	0.36	0.50	1.6
2.	Mining.and Quarrying	8.0	0.67	0.85	0.85	6.8
3.	Manufacturing	7.3	0.68	0.26	0.50	3.7
4.	Construction	4.7	1.00	1.00	1.00	4.7
5.	Electricity, Gas and Water Supply	7.8	0.74	0.48	0.50	3.9
6.	Transport & Communication	6.6	0.92	0.35	0.60	3.9
7.	Other Services	6.0	0.99	0.42	0.70	4.2
	Total	5.6	0.61	0.36	0.47	2.6

CHAPTER-3

FINANCIAL RESOURCES SUB-MODEL

The Financial Resources Sub-model estimates the availability of domestic resources consistent with the investment requirement to attain the level of output determined by the input-output and investment models. The sub-model assesses the level of domestic savings sectorally as well as in terms of its composition using econometric estimation procedure. These estimates are consistent with the macro aggregates of the plan. The Eighth Five Year Plan envisages total gross investment of the order of Rs. 797698 crores over the five year period (1992-97) of the Plan. Domestic savings have been estimated at Rs. 742835 crores accounting for 93.1 per cent of total investment. The remaining Rs. 54863 crores are met through foreign savings. The net inflow of resources from abroad has been estimated taking into consideration various factors most important of which is the anticipated level of balance of payments deficit on current account. The Plan envisages an average rate of investment of 23.2 per cent of GDP. The average rate of domestic savings has been estimated at 21.6 per cent of GDP while the rate of foreign savings is placed at 1.6 per cent of GDP. This chapter describes the methodology adopted for estimating aggregate as well as sectoral savings for the Eighth Plan.

Domestic Savings

The annual rate of domestic savings in the Indian economy during the 1980s exhibited fluctuations. There was a perceptible decline in the rate of gross domestic savings during the Sixth Plan period,(1980-85), with the saving rate declining from 22.0 per cent in 1980-81 to 18.2 per cent in 1984-85. This trend was, however, reversed during the Seventh Plan period, (1985-90), when the saving rate increased from 19.7 per cent in 1985-86 to 22.3 per cent in 1989-90. The average rate of gross domestic saving rose from 19.6 per cent during the Sixth Plan period to 20.4 per cent during the Seventh Plan period.

The projections of domestic savings during the previous Five Year Plans have generally been based on somewhat optimistic assumptions about the increase in marginal propensity to save, to be achieved during the plan periods. The rates of domestic savings actually realised during the plan periods, however, have been at variance with the ones formulated in the Plans. For instance, the Sixth Plan assumed that the rate of domestic saving would rise from 21.48 per cent in 1979-80 to 24.88 per cent in 1984-85 whereas the realised savings rate for 1984-85 was 18.2 per cent. The Seventh Plan also projected the saving rate to increase from 23.1 per cent in 1984-85 to 24.3 per cent in 1989-90 but the saving rate actually rose from 18.2 per cent in 1984-85 to 22.3 per cent in 1989-90. In the light of this experience, the projections of domestic savings for the Eighth Plan have been made rather cautiously. The methodology adopted for projecting aggregate domestic savings is explained below.

An aggregate savings function has been estimated by regressing Gross Domestic Savings on Gross Domestic Product both being taken at current market prices, using annual time series data for the period 1980-81 to 1989-90. While it is true that domestic savings may be influenced by a host of factors other than the income variable, GDP has been chosen as the only explanatory variable under the assumption that it has a predominant influence on domestic savings. The estimated equation is given below.

$$GDS = -5755.85 + 0.225108 \ GDPMP \qquad \ldots\ldots\ldots\ldots(1)$$
$$(19.978)$$

$$\overline{R}^2 = 0.98 \qquad\qquad DW = 1.038$$

Where GDS is Gross Domestic Savings and GDPMP is Gross Domestic Product at market prices.

The marginal propensity to save during the 1980s estimated in the above equation works out 22.5 per cent with respect to GDP at market prices and the estimated coefficient is found to be statistically significant. However, use of the marginal propensity of savings as 22.5 per cent estimated for the period 1980-81 to 1989-90, for projections may involve some degree of overestimation due to the sharp rise in the domestic savings rate from 21.09 per cent in 1988-89 to 22.3 per cent in 1989-90. One has to exercise caution in using the estimated coefficient for the purposes of projections.

. Before deciding the magnitude of marginal propensity to save for the Eighth Plan, the elasticity of domestic savings with respect to GDP at market prices through the specification of the saving function in log-linear form for the period 1980-81 to 1989-90 was estimated. The estimated relation is:

$$\text{Log GDS} = -2.084 + 1.038718 \text{ Log GDPMP} \qquad \text{........(2)}$$
$$(18.904)$$

$$\overline{R}^2 = 0.98 \qquad\qquad DW = 0.964$$

The estimated elasticity coefficient from the above equation is 1.039 and is statistically significant. This coefficient can be considered to be close to unity. It is also worthwhile to note in this context that changes in income influence savings generally with a lag. The elasticity of domestic savings with respect to GDP at market prices is adopted as unity, on the basis of the above reasoning and assuming that changes in GDP in any year will have an impact on domestic saving in the following year. In other words, it is reasonable to assume that the observed elasticity during the 1980s is not very much different from unity. This is also reflected in the near stagnancy of the saving rate during most of this period. In the light of the above analysis, the Eighth Plan postulates that both the marginal propensity and the average propensity to save during the plan period would be of the same order of 21.6, which is the saving rate adopted for 1991-92, the base year of the Eighth Plan. At the background of the annual average rate of growth in GDP of 5.6 per cent set in the Plan, total gross domestic savings over the period 1992-97 have been estimated at Rs. 742835 crores at 1991-92 prices.

Gross domestic savings in the economy is composed of savings in the public and private sectors. The savings in the private sector include the savings of the household sector and the savings of the private corporate and cooperative sectors. The savings in the public sector comprise of budgetary saving of the government and savings of the public sector enterprises. The savings in the different sectors for the Plan period have been separately estimated. The savings performance of the different sectors during the 1980s and the projections for the Eighth Plan are given in Table-3.1.

Sectoral savings in the Plan period have been projected mainly by relating them to disposable income The framework of inter-sectoral transfers is presented in Annexure-3.1.

Household Savings

The estimates of disposable income and savings of the household sector during the Sixth and Seventh Plan periods along with the projections for the Eighth Plan are given in Table-3.2. The household sector comprises of individuals, non-government and non-corporate private enterprises engaged in various economic activities as well as non-profit institutions such as charities and trusts. The gross savings of the

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household sector are made up of additions to financial assets net of financial liabilities and additions to physical assets including depreciation.

Household savings have been estimated on the basis of their functional relationship with respect to household disposable income. The regression analysis has been carried out using the data for the period 1980-81 to 1989-90 at current prices and in gross terms, i.e., household saving is measured as gross of depreciation provision while household disposable income used as the explanatory variable, includes the consumption of fixed capital by households. The regression equations have been estimated in the linear and log-linear forms.

$$HS = -11177.371 + 0.246435 \ HDI \qquad \dots\dots\dots\dots (3)$$
$$(17.116)$$

$$\overline{R^2} = 0.97 \qquad\qquad DW = 1.020$$

where, HS is Household Savings and HDI is Household Disposable Income.

$$Log \ HS = -3.9987 + 1.19044 \ (log \ HDI) \ \dots\dots\dots (4)$$
$$(15.694)$$

$$\overline{R^2} = 0.96 \qquad\qquad DW = 1.025$$

The marginal rate of household saving with respect to household disposable income is obtained as 0.24 from equation (3). The estimated coefficient is found to be statistically significant. The elasticity of household saving with respect to household disposable income is estimated as 1.19 in equation (4). The coefficient is statistically significant. However, before making use of these estimated coefficients for the purpose of projections for the Eighth Plan, a careful analysis of the household saving behaviour is considered necessary. Savings-income ratio of household sector witnessed considerable fluctuations during the 1980s. Considering the plan periods as a whole, the average savings-income ratio of households increased from 16.55 per cent during the Sixth Plan (1980-85) to 19.47 per cent in the Seventh Plan period (1985-90). The annual estimates reveal that the savings ratio of households declined from 18.41 per cent in 1980-81 to 15.98 per cent in 1984-85 and the ratio gradually increased to reach the level of 21.81 per cent in 1989-90. In view of this, the use of the estimated marginal coefficient of 0.24 as well as the elasticity coefficient of 1.19, for projections is likely to lead to over estimation of household savings, mainly due to the acceleration it witnessed towards the end of 1980s. Besides, there was no prima-facie reason for continuance of the acceleration into the Eighth Plan period. Moreover, private final consumption expenditure has been postulated to grow at an annual rate of 5.3 per cent during the Eighth Plan as against the average annual increase of 4.3 per cent observed during the period 1980-81 to 1990-91. In view of above, marginal rate of saving in the household sector is projected as 20.3 per cent over the period of the Eighth Plan, while the average rate of saving for the plan period has been placed at 21.0 per cent. On this basis, the total household savings for the Eighth Plan is estimated at Rs. 605170 crores, comprising of gross physical assets of the order of Rs. 288000 crores and net financial assets to the tune of Rs. 317170 crores. The savings of the household sector in the form of physical assets have been independently estimated in the following way.

Savings in Physical Assets

The savings of households in the form of physical assets relate to gross capital formation in terms of productive assets such as machinery and equipment, (both agricultural and non-agricultural), construction of residential and non-residential buildings and structures such as cattle-sheds and worksheds as well as assets created through own account labour in activities such as construction of field bunds, field

channels, deepening of irrigation wells and soil conservation works. The trend growth in gross physical assets in the household sector during 1980-81 to 1990-91 has been estimated at around 16 per cent per annum at current prices and 7.3 per cent at 1980-81 prices. The difference between the two growth rates may be explained by the changes in the index of investment cost.

The share of physical assets in total household savings shows a substantial decline during the 1980s, from 60.6 per cent in 1980-81 to around 50 per cent towards the late 1980s. The decline in the share is accompanied by severe annual fiuctuations.

The relationship between gross physical assets and gross disposable income of the household sector during the period 1980-81 to 1989-90 has been assessed by regressing the former on household disposable income The relationship estimated for the above is:

$$PA = -5055.22 + 0.123485 \ HDI \qquad \ldots \ldots \ldots (5)$$
$$(8.639)$$

$$\overline{R}^2 = 0.89 \qquad DW = 1.427$$

where PA represents gross physical assets and H.. represents gross household disposable income, both being at current prices

Although the coefficient of 0.123 estimated from the above equation is found to be statistically significant, it has been considered realistic to take the marginal coefficient of 0.10 for the purpose of projections of physical a.. ... , ..., Plan. There has been a decline in the share of physical assets in total ... during the 1980s Total gross savings in the form of physical assets ... ... sector has thus been estimated at Rs.288000 crores for the Eighth Plan This accounts for 47.6 per cent of total household savings of Rs 605170 crores ... during the Plan. The savings in financial assets constitute the remaining 52.4 per cent of total savings, amounting to Rs 317170 crores.

Savings in Financial Assets

The financial assets of the household sector consist of currency, deposits with commercial banks and cooperative institutions as well as non-banking companies, investment in shares and debentures including units of Unit Trust of India and mutual funds, life insurance funds, contributions to provident funds and pension funds and net claims on government. Savings of the household sector in the above mentioned categories of financial assets represent net addition, i.e , net of financial liabilities of the hosusehold sector. Household savings in different types of financial assets, which taken together amount to Rs. 317170 crores for the plan period, have been estimated separately for each category of financial asset, as shown in Table-3.3. The methodology adopted for estimating saving in financial asset is discussed below.

The outstanding amount of currency with the public, as on the 31st March, increased from Rs. 13426 crores in 1981 to Rs. 53087 crores in 1991 registering an annual growth of 14.7 per cent. On the other hand, the trend growth rate of GDP at current market prices for the period 1980-81 to 1990-91 is estimated at 14.10 per cent. The elasticity of currency with respect to GDP at market prices works out to 1.04. The elasticity of currency held by household alone with respect to GDP at market prices turns out to be marginally lower at 1.01 as compared to the elasticity of 1.04 estimated for currency held with the public. Considering the recent instruments introduced in the capital market to attract particularly the small investors in the household sector, it may be reasonable to project a marginal decline in the elasticity for currency held with households. On this basis, elasticity for currency held with the household is projected

as 0.9 during the Eighth Plan. As the basis of the growth of 5.6 per cent per annum in GDP in the plan, the growth in currency is estimated at 5.0 per cent. The savings of households in the form of currency are thus estimated at Rs. 41775 crores, which has been worked out as the difference in the currency held by the households between the base and terminal years of the plan.

Aggregate deposits with the scheduled commercial banks increased from Rs. 38348 crores in 1981 to Rs. 204774 crores in 1991, registering an annual growth of 18.2 per cent. The bank deposits held by households, however, increased at a marginally higher rate of 18.6 per cent during the same period. The elasticity of demand for aggregate bank deposits with respect to GDP at market prices for the period 1981-89 is estimated at 1.29, while the same for bank deposits held by households is estimated at 1.32. The structural changes initiated to reform the financial sector is witnessing a preference pattern which is different from the past. This is likely to change the structure of savings, ultimately leading to competition between various financial instruments. For example, there is a competition between mutual funds and bank deposits. In view of this, the elasticity of household demand for bank deposits has been reduced marginally to 1 3 in the plan period. The demand for bank deposits in the household sector is postulated to grow at 7.3 per cent during the plan period. Savings in the form of net addition to bank deposits have been calculated as the difference in the bank deposits held by households between the base and terminal years. Total household saving in the form of commercial bank deposits is thus estimated at Rs. 50900 crores for the Eighth Plan.

Household savings in the form of deposits with cooperative banks and societies have been around 10 per cent of household deposits with commercial banks. Using this ratio, the household savings by way of deposits with cooperatives during the Eighth Plan have been estimated at Rs. 5090 crores.

The deposits of the household sector with non-banking companies include deposits with financial as well as nonfinancial companies in both private and public sectors. Such deposits amount to about 15 per cent of household deposits with commercial banks during the Seventh Plan period. This ratio has witnessed marginal decline recently. However, the non-banking companies have started attracting household deposits through innovative schemes such as the issue of post-dated monthly interest cheques for the whole year in advance providing maximum interest rate admissible for term deposits for even shorter maturity periods, cumulative interest deposits, etc. In view of these developments deposits with non-banking companies have been assumed at 15 per cent of household deposits with commercial banks during the Eighth Plan. The deposits of households with non-banking companies following this have been estimated at 7600 crores.

Household savings in the form of investment in shares and debentures include investment in private corporate and cooperative sectors as well as investment in bonds of public enterprises and in schemes of mutual funds. The household investment in shares and debentures registered a rapid growth of around 27 per cent per annum during the 1980s. This is reflected in the buoyancy witnessed in the capital market. The elasticity of such investment with respect to household disposable income works out to about 1.9 for the 1980s. On this basis, the growth in household sector's investment in shares and debentures is estimated to rise by 10 per cent per annum for the Eighth Plan. The total household investment in these financial instruments is thus estimated at Rs. 82990 crores.

Household savings in the form of insurance funds cover life insurance, postal insurance and Central and State Government employees group insurance funds. The savings of households in all these types of insurance funds increased at 19.4 per cent per annum during the 1980s. The elasticity of insurance funds with respect to household disposable income works out to about 1.4. Using this elasticity, household savings in insurance funds are estimated to grow at annual rate of 7.4 per cent during

the Eighth Plan. Total household savings in insurance funds are placed at Rs. 32865 crores for the Plan period.

Household savings in the provident funds cover Central and State Government provident funds, non-government provident funds, public provident funds and pension funds. Household savings in provident funds registered an annual growth of 18.1 per cent during the 1980s. The elasticity of savings in provident funds with respect to household disposable income is estimated at 1.3 for the 1980s. On the basis of this elasticity, the provident funds can increase at an annual rate of around 7 per cent during the Eighth Plan. However, in view of the tax incentives and the fairly high rates of interest given for such funds, a higher growth of 8 per cent per annum has been assumed for such savings during the Eighth Plan. Household savings in provident funds are thus estimated at Rs. 70580 crores for the Eighth Plan.

Household claims on government include small savings, government securities and various types of bonds floated by the government from time to time. Such claims registered an annual growth of nearly 27.5 per cent during the 1980s. The high growth rate could be attributed mainly to special tax incentives given under various small savings schemes. The elasticity of savings in these instruments with respect to household disposable income is high at around 1.86 for the 1980s. Towards the end of the decade this elasticity increases to 2.0. Using this elasticity, net claimsof household on government are expected to increase at around 11 per cent per annum during the Eighth Plan. Such claims have been estimated at Rs. 25370 crores for the Eighth Plan.

The total financial savings of households covering all kinds of financial instruments are thus estimated at Rs. 317170 crores for the Eighth Plan, as shown in Table-3.3. There would be substantial changes in the structure of financial assets held by the household during the plan resulting from changes in household preferences for different types of financial instruments. The share of deposits held by households with commercial banks and non-banking companies in their total financial saving is expected to decline from 26.6 per cent in the period 1985-90 to 20 per cent during the Eighth Plan period. On the other hand, the share of household savings in the form of shares, debentures and units of Unit Trust of India and other mutual funds is expected to increase from 9.4 per cent in 1985-90 to 26.2 per cent during 1992-97. However, household savings in the form of insurance funds and provident funds would follow the trend growth rates observed in the past, partly due to the compulsory nature of these savings instruments and partly due to the tax benefits provided for their forms of savings.

Savings in the public sector

The decade of the 1980s witnessed a sharp decline in the share of public sector savings in aggregate domestic savings. Gross savings of the public sector as a proportion of GDP at market prices declined from an average of 3.64 per cent during 1980-85 to 2.22 per cent in 1985-90. This decline in the ratio of public sector savings has been caused mainly by the poor savings performance of the government sector. The savings of government as a proportion of GDP at market prices deteriorated sharply during the 1980s, from an average of 0.94 per cent in 1980-85 to (-) 1.54 per cent in 1985-90. However, the extent of erosion in public sector savings caused by the poor savings performance of the government was minimised to a certain extent by the better savings performance of public enterprises. The average ratio of gross savings of public enterprises to GDP at market prices increased from 2.70 per cent in 1980-85 to 3.76 per cent in 1985-90.

Government Savings

The savings of the Government for the Eighth Plan have been projected on the basis of estimates of government disposable income. Table-3.4 shows that total receipts of Government as a ratio of GDP at market prices increased from an average

of 16.31 per cent during 1980-85 to 18 77 per cent in 1985-90. It is projected as 20.86 per cent during 1992-97. Tax receipts ratio which increased by 1.64 percentage points between 1980-85 and 1985 is expected to rise by 1.69 percentage points in 1992-97. The collection of direct taxes which declined from an average of 2.65 per cent of GDP to 2.52 per cent between 1980-85 and 1985-90, is projected to increase to 3.00 per cent of GDP in 1992-97. The rise in the direct tax ratio is envisaged mainly through broadening of the tax base and thereby widening the tax net. On the other hand, the ratio of indirect taxes to GDP which increased by 1.76 percentage points from 12.89 in 1980-85 to 14.65 in 1985-90 is postulated to rise by 1.21 percentage points to reach the level of 15.86 per cent during 1992-97. The relative rise in the indirect tax ratio envisaged during the Eighth Plan is attributed to the reforms in the structure of excise and customs duties. The ratio of receipts from entreprenurship and property taxes to GDP rose by 0.40 percentage point, from 0.79 per cent in 1980-85 to 1.19 per cent in 1985-90. This ratio is projected to increase only by 0.32 percentage points to reach 1.51 per cent in 1992-97. The relatively smaller increase in this ratio during the Eighth Plan may be attributed to two factors. One is that the public enterprises would be accorded greater autonomy to retain their profits in order to meet their own investment needs. Secondly, the public enterprises would have to share their profits with the new equity holders following the disinvestment of equities held by the government.

The total transfers from the government to the rest of the economy as a proportion of GDP rose by 2.03 percentage points from 6.6 per cent in 1980-85 to 8.57 per cent in 1985-90. This ratio is, however, expected to increase by only 1.61 percentage points during the Eighth Plan to reach an average of 11.4 per cent during 1992-97. This would be achieved through a reduction in the ratio of subsidies to GDP from 1985-90 to 3.12 during 1992-97. Further, the growth in current transfers is also to be contained to modest levels. However, the ratio of interest on public debt to GDP is expected to increase sharply from 1.06 per cent in 1985-90 to 1.79 per cent in 1992-97. This is on account of the past commitments on debt accumulated during the 1980s and hence not amenable to control within a short period. Due to the changes in the ratios of receipts and transfers of the government, the ratio of government disposable income to GDP which showed a consequent decline from 10.4 per cent in 1980-85 to 9.2 per cent in 1985-90. This is projected to rise marginally to nearly 9.7 per cent during 1992-97.

In order to improve the savings performance of the government, the Eighth Plan envisages substantial containment in the growth of government final consumption expenditure. The ratio of consumption expenditure to GDP which increased by 1.74 percentage points between 1980-85 and 1985-90 is postulated to rise by 0.27 percentage points between 1985-90 and 1992-97. The deterioration in government savings witnessed during the 1980s is thus sought to be reversed through bringing down the negative savings ratio from 1.54 in 1980-85 to 1992-97.

Savings of Public Enterprises

Gross savings of public enterprises, including railways and communications, as a proportions of GDP increased from an average of 2.7 per cent during 1980-85 to 3.76 per cent in 1985-90. This ratio is, however, expected to be of the order of 3.1 per cent during the Eighth Plan period 1992-97. The decline in the savings ratio of public enterprises has been postulated taking into account various factors. Gross savings of public enterprises increased substantially during the 1980s mainly due to the contribution of large profits in a few sectors such as petroleum, railways and communications. Furthermore these sectors were able to realise such profits mainly from rise in administered prices. On the other hand, the public enterprises in many sectors were either making losses or were not generating enough operating surpluses for financing their capital expenditure for modernisation and expansion. A process of restructuring of Public Enterprises is expected to be set into motion in the present trend of exposing the public enterprises both in the product and in the capital market. On account of these, the profits of public enterprises are likely to be eroded to some extent

during the initial phase of restructuring as the costs of such restructuring have to be met mostly out of their own resources. However, profits of public enterprises are likely to rise once the process of restructuring is complete.

Savings of Private Corporate Sector

Gross profits of the private corporate sector as a proportion of GDP increased from 1.64 per cent during 1980-85 to 2.03 per cent in 1985-90. This ratio is, however, postulated to decline to an average of 2.00 per cent during the Eighth Plan, 1992-97. The decline in this ratio is prompted by economic reforms. The private corporate sector has, hitherto, been making large profits in an environment of sheltered domestic market. With the lowering of tariffs and large scale removal of quantitative restriction, the private corporate sector has to compete with imports in terms of both price and quality. This challenge is certain to initiate a process of restructuring of the private corporate sector. This include mergers, foreign collaborations with companies, technological upgradations, modernisation diversification, etc. During this phase, the expansion of private corporate sector would rest on investments through domestic and foreign borrowings or through direct foreign investment. The impact of the investments on production and profits will be reflected with a time lag. Due to these considerations, the contribution of profits of the private corporate sector has been assumed at 2 per cent of GDP during the Eighth Plan.

Table 3.1

Sectoral Savings in the Eighth Plan

(Rs.Crores)

S.No.	Sector	Sixth Plan 1980-85	Seventh Plan 1985-90	Eighth Plan (1992-97)		
				1991-92	1996-97	1992-97
0	1	2	3	4	5	6
1.	Public Sector	33037	38505	8386	15864	68900
		(3.64)	(2.22)	(1.44)	(2.07)	(2.00)
	i) Government Sector	8554	-26651	-13807	-8241	-38100
		(0.94)	(-1.54)	(-2.37)	(-1.08)	(-1.11)
	ii) Public Enterprises	24483	65156	22193	24105	107000
		(2.70)	(3.76)	(3.81)	(3.15)	(3.11)
2.	Private Corporate Sector	14851	36056	13940	16580	68930
		(1.64)	(2.08)	(2.39)	(2.17)	(2.00)
3.	Household Sector	129573	282171	103463	132738	605170
		(14.25)	(16.29)	(17.77)	(17.36)	(17.60)
4.	Gross Domestic Savings	177461	356732	125789	165182	743000
		(19.56)	(20.60)	(21.60)	(21.60)	(21.60)

N.B.: 1. Savings of Government Sector includes notional depreciation of Government Sector.

2. The estimates for Sixth and Seventh Plan are at current prices while those for Eighth Plan are at 1991-92 prices.

3. Figures in parenthesis indicate percentage to GDP at market prices.

Table-3.2
Household Disposable Income and Savings in Eighth Plan

(Rs.Crores)

S.No.	Sector	Sixth Plan 1980-85	Seventh Plan 1985-90	Eighth Plan (1992-97)		
				1991-92	1996-97	Total 1992-97
0	1	2	3	4	5	6
1.	Gross National Disposable Income	923144	1772623	584883	762360	3426258
2.	Income accruing to Government from entrepreneurship & property	7203	20525	8400	10000	51959
3.	Operating surplus of railways & communications and retained profit communications and retained profit of non-departmental enterprises	24483	69156	22193	24105	107000
4.	Depreciation of Government Sector	10320	23175	7376	10310	45544
5.	Taxes and receipts of Government	143540	304591	102288	155538	665503
6.	Transfers from Government	59990	165762	61968	93911	384378
7.	Private Disposable Income (1-2-3-4-5+6)	797588	1484948	506614	653318	2940630
8.	Private Corporate Savings	14851	36056	13940	16580	68930
9.	Personal Disposable Income (7-8)	782737	1448892	492674	636738	2871700
10.	Private consumption expenditure	653164	1166721	389211	504000	2266530
11.	Household Savings (9-10)	129573	282171	103463	132738	605170
12.	Ratio of Household Savings to Disposable Income (percent)	16.55	19.47	21.00	20.85	21.07

N.B.:1. Gross National Disposable Income is derived from the estimates of GDP at market prices after accounting for net factor income from abroad and other current transfers.

2. Transfers from Government include subsidies, interest on public debt, current transfers to the rest of the economy and rest of the world.

3. The estimates relating to sixth and seventh plan are at current prices while those for the Eighth Plan are at 1991-92 prices.

Table-3.3
Net Financial Saving of the Household Sector

(Rs. Crores)

Sl. No	Instrument	Sixth Plan 1980-85	Seventh Plan 1985-90	Eighth Plan 1992-97
0	1	2	3	4
1.	Currency	10236	22036	41775
		(16.5)	(16.0)	(13.2)
2.	Bank Deposits and Non-Banking deposits	19960	36743	63590
		(32.1)	(26.6)	(20.0)
3.	Investment in Shares & Debentures	3863	12954	82990
		(6.2)	(9.4)	(26.2)
4.	Insurance Fund	5726	13431	32965
		(9.2)	(9.7)	(10.4)
5.	Provident & Pension Funds	14211	32920	70590
		(22.9)	(23.5)	(22.2)
6.	Net Claims on Government	8140	20173	25370
		(13.1)	(14.6)	(8.0)
	Total Financial Saving	62136	138157	317170
		(100.0)	(100.0)	(100.0)

N.B.: 1. The data for the Sixth and Seventh Plan periods are at current prices
as available in National Accounts Statistics. The Projections for the
Eighth Plan are at 1991-92 prices.
2. Figures within brackets represent the shares of various instrument
in total financial saving.

Table-3.4
Government Disposable Income and Savings

(Percent of GDP at market prices)

S.No.	Sixth Plan 1980-85	Seventh Plan 1985-90	Eighth Plan		
			1991-92	1996-97	1992-97
0 1	2	3	4	5	6

I. Receipts.

1. Receipts from entrepreneurship and property	0.79	1.19	1.44	1.70	1.51
2. Tax receipts	15.54	17.17	17.13	19.83	18.86
i. Direct Taxes	2.65	2.52	2.67	3.25	3.00
ii. Indirect Taxes	12.89	14.65	14.46	16.58	15.86
3. Miscellaneous Receipts	0.28	0.41	0.44	0.51	0.49
4. Total receipts (1 to 3)	16.61	18.77	19.01	22.04	20.86

II. Transfers to Rest of the Economy

5. Subsidies	2.69	3.57	3.53	2.96	3.12
6. Interest on public debt	1.64	2.96	4.13	5.59	4.79
7. Current transfers	2.28	3.04	2.98	3.72	3.27
8. Total Transfers (5 to 7)	6.61	9.57	10.64	12.27	11.18
9. Disposable Income of Govt.	10.00	9.20	8.36	9.76	9.69
10.Final Consumption Expenditure	10.16	11.90	12.00	12.18	12.12
11.Net Savings of Govt. (9-10)	-0.16	-2.70	-3.64	-2.42	-2.43
12.Notional depreciation of Govt.	1.10	1.16	1.27	1.34	1.32
13.Gross Savings of Govt. (11+12)	0.94	-1.54	-2.37	-1.08	-1.11

N.B.:The estimated ratios for the Sixth and Seventh Plans are based on current prices while those for the Eighth Plan are at 1991-92 prices.

CHAPTER-4

AGRICULTURAL SUB-MODEL

Agricultural sub-model has a two way use in the determination of agricultural output target in the Plan. First, the impact of application of certain critical inputs such as land and other infrastructure both in terms of quality and quantity on agricultural production and productivity in the long and medium term cannot be appropriately captured in the input- output model. Then, in the context of regional development, locational aspects of agricultural growth in terms of crops and input-intensity are also not possible to be quantified under the input-output frame. Besides several features of the agricultural plan such as development of rainfed areas and agricultural planning in terms of homogenous agro-climatic regions are also captured in the agricultural sub-model. The agricultural sub-model assesses the feasibility of output targets on the basis of detailed requirements and use of inputs at the background of above factors.

The sub-model determines crop output at detailed regional level treating area allocation under different crops and between different seed varieties as exogenous. The supply is determined at regional level using land, water, seed, fertiliser as explanatory variables. The model specification is not uniform for all the regions. The supply of foodgrains is estimated from this model. The demand for foodgrains is estimated from consumption sub-model as well as input-output model. The feasibility of demand for foodgrains is tested with its supply estimated from the regional models. The determinants of supply and parameters affecting supply have been estimated separately for each major states.

The agricultural sub-model assesses the production possibilities of agricultural crops for the Eighth Plan (1992-97) and also for the perspective period (1997-2007). The framework of the model consists of a set of econometric relationships among critical variables in the agricultural sector such as net sown area, gross cropped area, expansion in irrigation facilities, irrigated area under foodgrains, fertiliser consumption, rainfall index and yield levels, using time-series data. The production levels of foodgrain crops for the terminal (1996-97) and post-terminal (2006-07) years of the plan have been worked out from econometric modelling and also taking into account other relevant factors such as production performance in the recent past and the gaps between supply and demand of major crops. The estimated parameters are chosen after considering alternative specifications in terms of explanatory variables and functional forms based on single equation least square method.

The agricultural sub-model takes care of the supply side of the problem. The demand side is taken care of partly in the input-output model and partly in the consumption sub-model. The private consumption demand is obtained from a two stage nested behaviouristic consumption model where demand for foodgrains are estimated separately for rural and urban areas and within each area for people living below and above the poverty line using respective expenditure-elasticities. The inter-industry demand for agricultural commodities and the quantum of foodgrain stocks are estimated in the input-output model. The supply of foodgrains is estimated at a regional level by relating production with land and other inputs using econometric estimation procedure. The demand for agricultural commodities arising from private consumption, inter-industry use and stocks are matched with the supply which is worked out in the agricultural sub-model.

Net Sown Area, Gross Irrigated Area and Fertiliser Consumption

There is a severe land resource constraint in the economy, which is evident from the fact that net sown area has been hovering around 140 million hectares during the past two decades. There is also an increasing demand for land for non-agricultural usage such as industrial and commercial activities and housing in the

countryside. Keeping these in view, it has been assumed that Net Sown Area (NSA) would remain constant at 141 million hectares from the terminal year of the plan (1996-97) through the perspective period. At the background of land constraint acceleration in agricultural growth can take place only through a faster growth in cropping intensity. This depends much on the expansion and efficient use of irrigation facilities. The gross irrigated area from all sources (in terms of utilisation) is expected to increase from 75.7 million hectares in 1991-92 to 89.3 million hectares in 1996-97 and to 114 million hectares by 2006-07. The total supply of fertilisers available for use in the agricultural sector in the year 1996-97 has been estimated at 18.3 million tonnes, of which 70 per cent viz., 12.8 million tonnes is expected to be consumed by foodgrain crops.

Gross Cropped Area and Cropping Intensity

In the present framework, gross cropped area under all crops (GCA) has been estimated by relating it to net sown area (NSA) and gross irrigated area (GIA) using econometric model. The details of the model results are given in Annexure-4.1. Based on the assumption of expansion in net sown area and irrigation, GCA is expected to increase to 190.6 million hectares in 1996-97 and 203.4 million hectares by 2006-07 (Table-4.1). The above implies that the cropping intensity defined as the ratio of GCA to NSA would rise from 1.30 in 1991-92 to 1.35 in 1996-97 and to 1.44 in 2006-07. The ratio of gross irrigated area to gross cropped area would also increase from 41.5 per cent to 46.9 per cent during the Eighth Plan period and further rise to a level of around 56 per cent by 2006-07.

Gross Cropped Area and Irrigated Area under Foodgrains

Gross cropped area under foodgrains (GCA fg) has been estimated by relating it with gross cropped area under all crops. Similarly, gross irrigated area under foodgrains (GIA fg) has been estimated by relating it with the gross irrigated area under all crops. The details of the econometric models used to arrive at the estimates of gross cropped area, gross irrigated area and foodgrains are given in Annexure-4.1.

On the basis of the estimated model, gross irrigated area under foodgrains has been projected to increase from 53.8 million hectares in 1991-92 to 62.3 million hectares in 1996-97 and 77.7 million hectares in 2006-07. Gross cropped area under foodgrains is expected to increase from 127 million hectares in 1991-92 to 130 million hectares in 1996-97 and reach a level of 135 million hectares by 2006-07 (Table-4.2). The ratio of irrigated area to cropped area under foodgrains is thus expected to rise from around 42.4 per cent in 1991-92 to 47.9 per cent in 1996-97 and to 57.6 per cent in 2006-07.

Foodgrain Output

There has been a substantial increase in foodgrain production in the country since early 1970s mainly due to growth in productivity. The average yield of foodgrains increased from about 850 kg/ha in the early seventies to about 1350 kg/ha in the late eighties. This increase in productivity has been made possible mainly by three factors, viz., expansion of irrigated area, rise in fertiliser consumption and expansion of area under high-yielding varieties (HYV) of cereal crops. The task of building an econometric model incorporating all these variables has been found to be rather difficult particularly due to the existence of high degree of multicollinearity among these variables. It has also been difficult to evaluate precisely the relative contribution of these factors to overall productivity growth. In the present framework, the foodgrain production at all-India level has been estimated by relating it to increase in area under foodgrains and yield. Simultaneously, production of foodgrains has been estimated separately for 17 major states which account for about 98 per cent of the total foodgrain production in the country on the basis of a regional state specific foodgrain model developed for this purpose.

The yield of foodgrains at all-India level has been related to per hectare fertiliser consumption under foodgrains (FCPUCfg) and the rainfall index (RIND), on the premise that the variable per hectare fertiliser consumption would capture the effect of expansion of both area and fertiliser consumption. The estimate of fertiliser consumption for foodgrain crops is placed at 70 per cent of the fertiliser consumption for all crops. Rainfall index (RIND) has been considered as a separate explanatory variable since more than 50 per cent of the area under foodgrains is still dependent on rainfall. The fluctuations in rainfall is likely to affect the gross cropped area and availability of water for irrigation. Assuming normal weather conditions, foodgrain production has been projected to increase from 172.5 million tonnes in 1991-92 to 210 million tonnes in 1996-97 and 285 million tonnes by 2006-07 (Table-4.2). The results of econometric exercises show that two variables, viz., fertiliser consumption per hectare for foodgrain crops and the rainfall index are able to explain about 95 per cent of the changes in productivity measured in terms of yield.

The statewise foodgrain production for 1996-97 has been projected using estimated parameters of the econometric model and also taking into account the production performance, fertiliser consumption and area under cultivation in the recent past. The total foodgrain production in the terminal year of the plan has been estimated from an assessment of the regional production plans. The regional production plan, in turn, are based on detailed econometric exercises involving major inputs. The model structure for the region has finally been set on the basis of the relative importance of the variables in influencing production and the overall predictive power of the model. The model results are given in Annexure-4.3.

The results show that gross cropped area under foodgrains (GCA fg) and fertiliser consumption are the major variables that influence foodgrain production in the region. The fertilisers consumption and GCA(fg) at regional level for 1996-97 have been projected on the basis of their actual growth performance during 1980's, and the anticipated changes in the Eighth Plan. The foodgrain production for Assam, Himachal Pradesh, Jammu & Kashmir and Karnataka are estimated on the basis of the past performance and recent trend, as the econometric estimation procedure was not able to produce statistically significant results. The projected foodgrain production, fertiliser consumption and area under foodgrains at regional level are given in Table-4.4. In case of foodgrains, the contribution of area and yield in the total production have also been estimated at regional level (Table-4.5). These statewise foodgrain production estimates adds upto 210 M.T. which is the target set for the Eighth Plan.

Gross Cropped Area, Irrigated Area and Output of Major Food Crops

Gross cropped area under rice and pulses have been estimated as a function of gross cropped area under foodgrains. The gross cropped area under wheat and other cereals have been estimated on the basis of the trend in the recent past. While the output of wheat, pulses and other cereal crops have been estimated by relating them with the gross cropped area and fertiliser consumption under these crops, the output of rice has been estimated by considering rainfall index as an additional explanatory variable along with gross cropped area and fertiliser consumption.

At the all-India level, nearly 80 per cent of the area under wheat is irrigated, while it exceeds 90 per cent in the major wheat growing states such as Haryana, Punjab and Uttar Pradesh. As the irrigation potential in major wheat growing states have already reached an asymptote, it is, therefore, expected that rice would account for the most of the expansion of irrigated area under foodgrains in future. Even then, the percentage of irrigated area under rice might only reach a level of around 60 per cent by 1996-97 and the remaining 40 per cent of the cropped area under rice would continue to be dependent on monsoons. The percentage of irrigated area under coarse cereals and pulses is not expected to undergo perceptible change during the Eighth Plan. The estimated production for the crops are given in Annexure-4.2.

Targets of Principal Crops
Rice

The production of rice is postulated to increase at an annual rate of 4 per cent from an estimated level of 72.5 million tonnes in 1991-92 to 88.0 million tonnes in 1996-97, mainly due to growth in productivity (Table-4.3). While the area under rice is likely to increase only by about 0.5 per cent per annum, the average yield of rice is expected to increase from 1706 kg/ha. to 2023 kg/ha. during 1992-97, showing a rate of growth of 3.5 per cent per annum. The growth in the yield of rice is expected to originate primarily from expansion in irrigation and area under HYV, supplemented by growth in fertiliser consumption. These projections are broadly consistent with the trends observed during the 1980s. Between the period 1981-84 and 1989-92, rice production registered a growth of 4.2 per cent per annum of which growth in productivity accounted for 3.5 per cent and growth in area accounted for 0.7 per cent (Annexure-4.4).

Wheat

The area under wheat fluctuated around 23 to 24 million hectares during the Seventh Plan period and is expected to increase marginally to 24.25 million hectares by 1996-97 (Table- 4.3). The production of wheat is postulated to increase from 56 million tonnes at the beginning of the the Eighth Plan to 66 million tonnes by the end of Eighth Plan showing a growth of 3.3 per cent per annum. A large part of the growth in production would accrue from increase in yield from 2383 to 2722 kg. per hectare representing an annual rate of growth of 2.7 per cent. These projections are broadly consistent with the growth performance of wheat observed during the 1980s, as can be seen from Annexure-4.5.

Coarse Cereals :

The production of coarse cereals between 1981-84 and 1989-92 increased at an annual rate of 0.28 per cent (Annexure-4.6). The growth in production was exclusively due to growth in yield by 2.1 per cent per annum, which more than compensated the decline in area by 1.7 per cent per annum during the same period. Furthermore, it is observed that there has been some acceleration in the output growth of coarse cereals during the Seventh Plan period when production increased at an annual rate of 2.2 per cent due to faster growth in yields at about 3.1 per cent per annum. However, the low level of yield in 1991-92, the base year for the Eighth Plan, at around 800 kg/ha and coupled with the projected yield of 1996-97 at 1033 kg/ha resulted in a sharp increase in productivity growth of the order of 5.2 per cent per annum in the Eighth Plan. It may be mentioned that the average yields of coarse cereals were above 900 kg/ha both in 1989-90 and 1990-91, while it declined to around 800kg/ha in 1991-92 due to adverse weather conditions. Hence, if one makes an adjustment for the base year yield assuming normal weather conditions, the growth in productivity from the long term trend values would be around 3 per cent per annum for the Eighth Plan. On the basis of the projected yield level of 1033 kg/ha for 1996-97, the production of coarse cereals is expected to reach a level of 39 million tonnes by 1996-97 (Table-4.3).

Pulses:

The production of pulses has not shown any significant increase during the eighties. Between the periods 1981-84 and 1989-92, production increased at an annual average rate of only one per cent which was mainly due to growth in productivity of the order of 0.9 per cent per annum (Annexure-4.7). However, during the Seventh Plan, production of pulses increased by about 1.5 per cent per annum, mainly as a result of the initiatives taken under the National Pulses Development Programme. Pulses being a major source of protein for the poorer sections of the population, it is essential to achieve a much faster rate of growth in production through greater emphasis on the National Pulses Development Programme. It is postulated that the area under pulses would increase by one million hectares, while productivity is expected to increase by about 3.1 per cent per annum during the Eighth Plan. As a result,

production of pulses is likely to reach a level of 17 million tonnes by 1996-97 from the estimated production of 14 million tonnes in 1991-92 (Table-4.3).

Foodgrains

The foodgrain production increased at an annual average rate of 2.76 per cent between 1981-84 to 1989-92 (Annexure-4.8). The respective contribution of area and yield in growth of foodgrain production is given in Annexure-4.9. Foodgrain production is expected to increase from 172.5 to about 210 million tonnes during the Eighth Plan period, an increase of about 37.5 million tonnes as compared to the increase of 25 million tonnes in the Seventh Plan period. The annual average rate of growth in foodgrain production in the Eighth Plan is thus expected to be of the order of about 4 per cent as compared to 3.3 per cent realised during the Seventh Plan period. Much of the growth in foodgrain production during the Eighth Plan is likely to originate from growth in productivity of the order of 3.5 per cent per annum (Table-4.3). Taking into account the projected increase in population from 844 million in 1991 to 941 million by 1996-97, and also the rise in demand for food associated with the growth in income, foodgrain demand is expected to reach a level of 208 million tonnes by 1996-97. Thus the postulated growth in production of foodgrains will help in improving the per capita consumption of foodgrains from 182 kg per annum in 1991-92 to 193.6 kg per annum by 1996-97. This would help in achieving the goal of self-sufficiency in food during the Eighth Plan period.

Table-4.1
Area and Cropping Intensity in Eighth Plan

(Area : Million hectares)

Variables	1991-92	1996-97	2006-07
1. Net sown area	140.0	141.0·	141.0
2. Gross irrigated area	75.7	89.3	114.0
3. Gross cropped area	182.2	190.6	203.4
4. Cropping intensity	1.30	1.35	1.44
5. Ratio of gross irrigated area to gross cropped area (percent)	41.5	46.9	56.0

Table-4.2
Agricultural Perspective

Area : Million hectares
Production : Million Tonnes

Variables	1991-92	1996-97	2006-07
1. Gross cropped area	182.2	190.6	203.4
(a) Foodgrains	127.0	130.0	137.9
(b) Other crops	55.2	60.6	66.4
2. Gross irrigated area	75.7	89.3	114.0
(a) Foodgrains	53.8	62.3	77.7
(b) Other crops	21.9	27.0	36.3
3. Fertiliser consumption +	13.5	18.3	30.0
(a) Foodgrains +	9.4	12.8	21.0
(b) Other crops +	4.1	5.5	9.0
4. Production			
(a) Foodgrains	172.5	210.0	285.0
(b) Oilseeds	17.5	23.0	37.0
(c) Sugarcane	235.0	275.0	408.0
(d) Cotton *	10.5	14.0	23.0

+ : Million tonnes

* : Million bales of 170 Kgs.

Table-4.3
Area, Production and Yield of Foodgrain Crops: 1991-92 and 1996-97

Area : Million hectares
Production : Million Tonnes
Yield : Kg per hectare

Crop		1991-92	1996-97	Growth Rate (% per year) 1991-92 to 1996-97
1. Rice	Area	42.5	43.5	0.5
	Production	72.5 ·	88.0	4.0
	Yield	1706	2023	3.5
2. Wheat	Area	23.5	24.3	0.7
	Production	56.0	66.0	3.3
	Yield	2383	2722	2.7
3. Coarse cereals	Area	37.5	37.8	0.1
	Production	30.0	39.0	5.4
	Yield	800	1033	5.2
4. Pulses	Area	23.5	24.5	0.8
	Production	14.0	17.0	4.0
	Yield	596	694	3.1
5. Foodgrains	Area	27.0	130.0	0.5
	Production	72.5	210.0	4.0
	Yield	1358	1615	3.5

Table-4.4
Foodgrains: Fertilizer Consumption, Area, Production and Yield

Sl. No.	States	Fertiliser Consumption		Gross Cropped Area		Production		Yield	
		1991-92	1996-97	1991-92	1996-97	1991-92	1996-97	1991-92	1996-97
0	1	2	3	4	5	6	7	8	9
1.Andhra Pradesh		1700	2000	7500	7190	12800	13400	1707	1887
2.Assam		45	50	2800	3000	3400	3800	1211	1267
3.Bihar		625	1050	9400	9600	12000	14900	1277	1552
4.Gujarat		750	1000	4250	4800	4000	5900	941	1229
5.Haryana		650	900	3900	3900	9100	12700	2333	3256
6.Himachal Pradesh		40	60	900	900	1400	1500	1556	1667
7.Jammu & Kashmir		55	100	900	950	1400	1500	1556	1579
8.Karnataka		925	1470	7300	7400	6000	8500	1096	1149
9.Kerala		260	400	600	550	1100	1100	1833	2000
10.Madhya Pradesh.		830	1600	17800	17600	16000	19700	899	1119
11.Maharashtra		1500	1900	14000	14800	8800	14900	629	1007
12.Orissa		210	370	7250	7300	8400	9800	1159	1342
13.Punjab		1300	1550	5700	6000	19500	23500	3421	3917
14.Rajasthan		450	500	12200	13000	8200	12500	672	962
15.Tamil Nadu		850	960	4200	4300	7900	9200	1881	2140
16.Uttar Pradesh		2400	2800	20500	20700	36000	41000	1756	1961
17.West Bengal		770	1300	6500	6800	12500	14000	1923	2059
18.Others		140	290	1300	1300	2000	2100	1538	1615
All India		13500	18300	127000	132000	172500	210000	1358	1615

N.B.: Fertiliser Consumption in '000 tonnes
Production in '000 tonnes
Area in '000 hect.
Yield in Kgs per hectare

Table-4.5
Contribution of Area and Yield in Foodgrain
Production in Eighth Plan

Sl. No.	States	Increase in Prod.	Contribution to Production by		Interaction Effect
			Area	Yield	
0	1	2	3	4	5
1.	Andhra Pradesh	600	-113.8	225.8	-12.0
2.	Assam	400	60.7	36.7	2.6
3.	Bihar	2900	8.8	89.3	1.9
4.	Gujarat	1900	27.2	64.4	8.3
5.	Haryana	3600	0.0	100.0	0.0
6.	Himachal Pradesh	100	0.0	100.0	0.0
7.	Jammu & Kashmir	100	77.8	21.1	1.2
8.	Karnataka	500	21.9	77.0	1.1
9.	Madhya Pradesh	3700	-4.9	106.1	-1.2
10.	Maharashtra	6100	8.2	86.8	5.0
11.	Orissa	1400	4.1	95.2	0.7
12.	Punjab	4000	25.7	70.6	3.7
13.	Rajasthan	4300	12.5	82.1	5.4
14.	Tamil Nadu	1300	14.5	83.5	2.0
15.	Uttar Pradesh	5000	7.0	92.1	0.9
16.	West Bengal	1500	38.5	58.8	2.7
17.	Others	100	0.0	100.0	0.0
	All India	37500	10.9	87.1	2.0

N.B.: Production in '000 tonnes

CHAPTER- 5

THE INDUSTRY SUB-MODEL

The structure of the industry sub-model is based on the approach of material balances which has been an important feature in the planning process since the Third Five Year Plan. The material balance studies serve the purpose of supplementing and cross-checking the results obtained from the multisectoral Input-Output (I-O) model.

There are certain basic differences between input-output analysis and the material balance approach. The static framework of the I-O model provides economywise sectoral projections of output for the terminal year of the Plan which are consistent with the overall rate of economic growth postulated in the Plan. On the other hand, the material balance studies help in estimating output for selected commodities and services on the basis of independent demand and supply projections. The technical coefficients in the I-O model are expressed in value terms at constant prices, while the material balance studies use input coefficients or norms in physical units. The projections obtained through the I-O model relate to sectors which in many cases comprise more than one commodity or product (e.g., all types of petroleum products) while the material balance studies generally relate to single commodities or services. The I-O model provides projections of sectoral output based on interindustry demand and final demand. There are independent projections of supply in the I-O model. The material balance studies provide independent estimates of demand and supply for selected commodities and services.

In general, the demand projections in the material balance approach are based on the end-use method covering both interindustry use as well as final use. The demand projections are obtained by applying the input norms to the exogenously estimated terminal year output of consuming or user industries. The supply projections in the material balance studies are made on the basis of information relating to existing capacities, rates of capacity utilisation, projects in pipeline and creation of additional capacities during the plan period. Given the uncertainties in the completion of projects at different stages of construction, the supply projections in the material balance studies can be considered as feasible output levels during the plan period. Despite some limitations, the material balance approach serves a useful purpose of cross-checking the results obtained through the I-O model.

The changes in process of production take place at the level of commodity. Such changes can be captured through commodity-specific studies of demand and supply. A sector of I-O table being an aggregate of many commodities, it is difficult to account for technological changes at the level of sectors. Material balance approach is therefore found to be a useful supplement to the I-O approach.

The methodology adopted for preparing material balances for the Eighth Plan remains broadly the same as explained in the Technical Notes of the Sixth and Seventh Five Year Plans. However, the physical input norms for various types of end-uses of a fairly large number of commodities prepared earlier have been revised and updated using more recent data from the different sources. The updated input norms take into account changes in product process technology as well as comodity substitution in interindustry use and also changes in final demand due either to price or other factors. Further, the input norms for the terminal year of the Plan have been modified, wherever necessary, in order to reflect technological changes or commodity substitution that are likely to take place during the plan period.

The list of the commodities for which material balance studies have been carried out for the Eighth Plan is given in Table 5.1. A brief description of the methodologies adopted for selected commodities is given below.

COAL

The major sectors which consume coal are power, steel and metallurgical industries, manufacturing industries including small scale industries, and railways. The household sector also uses coal for domestic purpose. Power, steel, cement and fertiliser plants which account for about 75 per cent of the total coal consumption in the country are considered as distinct end-users in the material balance for coal.(Table 5.2) Using the recent statistics for these sectors, it has been possible to estimate their coal input coefficients.

While the efficiency of use of heat energy in thermal plants has improved due to improvement of technology in the new plants and in plants with higher capacity such as super thermal power stations, the coal consumption norm has not shown improvement due to deterioration in the quality of coal supplied to the thermal plants. The demand for coal in the thermal power sector has been estimated after making necessary adjustments in the coal consumption norm for quality parameters and also for improvement in the operating efficiency of the plants. Besides utilities, there is now a substantial power generation by captive power plants in the industrial sector. The projection of coal for power generation includes both the utilities and the non- utilities.

Steel plants are the major consumers of coking coal, while some coking coal is also supplied to merchant coke ovens for producing hard coke used in the foundries and forges. Requirement of raw coking coal by steel plants depend primarily on the production programme of hot metal. The ratio of coal to hot metal in turn, depends to a great extent on the quality of coking coal and other raw materials as well as other factors such as the process technology and the scale of operation. The technology adopted at present does not permit exclusive use of coking coal domestically available due to its high level of ash content. The indigenous wahsed coal has, therefore, to be blended with imported coal before charging to coke ovens. A programme for modernisation of the various steel plants has been initiated with a view to adopt more energy efficient technology and this is expected to bring down the coal to hot metal ratio. Besides setting up new washeries, the existing ones are also being modernised which would improve the quality of coal. These measures are expected to bring down the consumption of coking coal per unit of steel output.

Sponge iron is used mainly in mini-steel plants to produce steel by electric arc furnace process. As a policy measure, setting up of sponge iron plants is being encouraged in order to reduce the dependence of mini steel plants on scrap. The existing sponge iron plants use non coking coal as a reducing agent. Demand of coal for this sub sector is estimated from the capacity of coal based sponge iron plants that is likely to come up in the Eighth Plan .

Coal is used by various industries such as fertilisers, cement, paper, textiles and rayon, glass and ceramics, refractories, brick kilns etc. Of these, cement and fertilizer industries are the major consumers of coal. In respect of the cement industry, dry process technology is more energy efficient and all the new plants would adopt this technology. This factor has been taken into account while estimating the specific coal consumption norm and projection of demand for coal in the cement industry. In the case of fertiliser industry, more emphasis is being laid on gas-based plants and hence the demand for coal is not expected to increase. The requirement of coal for the remaining industries in the manufacturing sector such as glass and ceramics, brick kilns, etc., has been projected on the basis of past trends due to lack of reliable data about their coal consumption and corresponding levels of production.

The requirement of coal by railways has been steadily declining on account of increased dieselisation and electrification of railway tracks. This trend is expected to continue during the period of the Eighth Plan as well.

The offtake of soft coke for domestic use is gradually declining due to high delivery cost and the consumer preference for cleaner cooking fuels like kerosene and LPG. In order to reduce the imports of petroleum products like kerosene and also with a view to checking deforestation, it is necessary to encourage the use of soft coke as a substitute cooking fuel. Central Mine Planning and Design Institute Limited (CMPDIL) has developed a mechanised manufacturing process which provides soft coke as a smokeless fuel and also enables recovery of by-product. If this process proves to be successful, the demand for soft coke could pick up in the near future.

Crude Petroleum

Refinery throughput in 1991-92 has been estimated at 51.42 million tonnes. With the expansion of the existing refineries and the commencement of production i the two new refineries, viz., Mangalore and Cauvery refineries, refinery throughput is expected to reach 63.3 million tonnes by 1996-97 as against the projected domestic production of 50 million tonnes of crude petroleum.

Petroleum Products

Petroleum products which are put together as a single sector of I-O Model comprise variety of products and the end use of each product differs from the other. Consumption of petroleum products is therefore studied by type of product and by the end- use. (Table 5.3)

The petroleum products are generally classified into three broad categories based on their physical properties and their applications. The category of light distillates comprises liquid petroleum gas (LPG), naphtha, motor gasoline (Mogas) and other light distillates like special boiling point spirit (SBP) and haxane. The category of middle distillates consists of kerosene (SKO), high speed diesel (HSD), aviation turbine fuel (ATF), low speed diesel oil (LDO) and other minor fractions like jute batching oil (JBO),mineral terpentine oil (MTO), etc. The category of heavy distillates include fuel oil, low sulphur hot stock (LSHS), heavy hot stock (HHS), lubes and greases, bitumen, petroleum coke and other minor fractions.

The demand for petroleum products for road transport sector has been projected on the basis of the past relationship observed between the population of registered motor vehicles and the intensity of their utilisation. The requirement of ATF in the air transport sector has been projected on the basis of past trend. Demand for petroleum products in the rail transport sector has been projected on the basis of originating traffic.

The demand for naphtha, LSHS and other petroleum products used in fertiliser and petrochemical industries have been projected on the basis of plantwise requirement and also taking into account the use of natural gas in some of the existing units and the new plants that are likely to be set up during the Plan period. Natural gas is expected to serve as a substitute for petroleum products in power, fertilisers, petrochemicals and sponge iron industries. Efforts are also being made to use compressed natural gas (CNG) as a substitute for HSD in road transport.

The factors influencing demand for kerosene are substitution of kerosene by electricity for lighting of households and substitution of kerosene by LPG as a cooking fuel. Increase in use of electricity as a primary source of lighting has been faster in rural areas - where three-fourths of population is located, than in urban areas (Table 5.4). The shift from kerosene to LPG, as a cooking fuel has been sharper in urban areas. As a combined effect of these two factors, the drop in growth rate of kerosene consumption has been much sharper than the decline in growth rate of population (Table 5.5).

The relationship between growth of kerosene consumption by house-holds and growth of population observed in the Seventh Plan is expected to continue in the Eighth Plan. Projected demand of 12100 thousand tonnes of kerosene in 1996-97 includes 529 thousand tonnes required for industrial consumption.

The consumption of LPG for domestic use has increased from 953 thousand tonnes in 1984-85 to 2268 thousand tonnes in 1989-90. Keeping in view the availability of LPG from refineries and natural gas fractionation plants (C3/C4 fraction), it is envisaged to provide 18 lakh new connections per year during the Eighth Plan period. Assuming an average consumption of 129 kg per year per household, the demand of LPG for domestic use works out to 3634 thousand tonnes in 1996-97. The demand for LPG in the industrial sector has been projected at 403 thousand tonnes based on past trend and also taking into account the increasing use of natural gas in the industries.

There has been a gradual reduction in the consumption of FO/LSHS in the power utilities during the last few years, partly due to the reduction in specific consumption of FO/LSHS and partly due to the increase in the share of gas-based power generation. The specific consumption norm has declined from 14.9 ml/kwh in 1985-86 to 10.1 ml/kwh during 1989-90, and it is envisaged to decline further to a level of 7.0 ml/kwh by the end of Eighth Plan period.

The consumption of petroleum products in agriculture sector is related to the population of tractors and pumpsets and the extent of their use.

Administered prices have been the main instrument to govern the demand for petroleum products. Prices of petroleum products have been revised upwards thrice since 1990. These have been done in the background of severe balance of payment crisis to moderate the growth in consumption of petroleum products. Yet, the administered price of kerosene for domestic consumption have not been increased, mainly to help the poor who use kerosene for both cooking and lighting. On the other hand, the price of naphtha and LSHS which are used as feedstock in fertiliser industries are increased in order to reduce the consumption of naphtha and LSHS to promote the use of natural gas as a feedstock. The Eighth Plan postulates that flaring of natural gas would be completely eliminated by the end of the plan period. During the Plan period, the area of administered prices will be reduced, so that market prices can directly influence the product-wise consumption. These aspects have been considered while projecting the demand for different categories of petroleum products in the Eighth Plan.

Textiles

The demand for textiles, including export demand, has been projected at 22.8 million metres in 1996-97, based on the analysis of consumption behaviour in the recent past. The production target has been estimated on the basis of the existing and anticipated additional capacity for yarn production. The production of yarn, however, depends primarily on the availability of fibres. The fibres consists of natural fibres like cotton and silk as well as manmade fibres like nylon, polyster and acrylic. The availability of cotton fibre fluctuates with production of cotton. On the other hand, the production of manmade fibres, apart from being capital intensive, is also constrained by the availability of petroleum products which form their principal raw material base. The cloth production generally consists of pure cotton, blended-mixed, and pure art silk varieties. The requirement of cotton yarn has been estimated using the ratio for conversion of yarn to cloth, for pure cotton and blended-mixed varieties of cloth production. The requirement of cotton fibre has been estimated using the ratio of conversion of fibre to yarn. On this basis, the requirement of cotton has been estimated at 13 7 million bales. The projected cloth production from mill sector and decentralised sector have been placed at 3.5 billion metres and 21.2 billion metres respectively.

Fertilisers

In order to achieve the growth in agricultural production postulated in the Eighth Plan, the demand for fertilisers in 1996-97 has been projected at 18.3 million tonnes, based on econometric exercises relating fertiliser consumption with agricultural production. The projected demand for fertilisers consists of 11.5 million tonnes of nitrogenous fertilisers, 5 million tonnes of phosphatic fertilisers and 1.8 million tonnes of potassic fertilisers. On the basis of existing capacity as well as new capacity that is likely to be created during the Plan period, nutrient-wise import requirement has been estimated (Table 5.1).

Finished Steel

There has been a progressive rise in the growth of steel consumption. The average annual growth rate in steel consumption has increased from 4.5 per cent during the Sixth Plan (1980-85) to 5.8 per cent during the Seventh Plan (1985-90). In absolute terms steel consumption increased from 10.66 million tonnes in 1984-85 to 14.8 million tonnes in 1989-90, and further to 15.2 million tonnes in 1991-92. The growth in steel consumption had slowed down very much during the period 1990-92 mainly as a result of curbs on imports which affected the general level of activity in the economy. Steel is consumed mainly in the manufacturing sector, in construction and some minor quantities in defence. The demand for steel has therefore been estimated on the basis of past trend in these user sectors. (Table-5.6)

The on-going process of economic reforms and liberalisation is trying to bring about a restructuring of the growth in the manufacturing and construction sectors. As a result, metal products and metal processing industries are expected to register a higher growth than chemical and metallurgical process industries. These factors will influence the growth in consumption of steel in the medium term.

Non-Ferrous Metals

Aluminium, copper, zinc and lead are the major non-ferrous metals that are most widely used in the metallurgical industries. The projections of demand and domestic production of different non-ferrous metals during the Eighth Plan are based on the information available in the Report of Working Group on Non-Ferrous Metals for the Eighth Plan. While some modifications have been made wherever found necessary.

The country is endowed with large deposits of bauxite, with known reserves of the order of 2650 million tonnes. The aluminium industry has made rapid strides in the last two decades which has made the country not only self sufficient but has also enabled us to export alumina as well as aluminium. The present installed capacity of aluminium in the country is 610 thousand tonnes per annum which is expected to reach a level of 772 thousand tonnes by 1996-97. NALCO is expected to export around 38 thousand tonnes of alumina per year, after meeting its own requirements. The use of aluminium is expanding rapidly in a number of areas such as furniture and fixtures, packaging applications etc., apart from the traditional areas like conductors, utensils, etc.. The demand for aluminium has been estimated taking into account the new areas of applications and also the observed growth in consumption in the recent years.

As regards zinc, the proven reserves as on March, 1990 are estimated at 7,343 thousand tonnes. It is observed that there is a declining trend in the consumption of zinc partly due to changes in technology in the consuming industries (e.g., down-sizing of automobiles, use of thinwall die-casting etc.) and partly due to the use of cheaper substitutes like aluminium and plastics. Zinc is widely used in galvanizing brass-bronze, manufacture of zinc-based alloys, die-casting and chemicals.

Zinc is being replaced with aluminium alloys, stainless steel and plastics for a variety of applications. With the commissioning of Chanderiya smelter in Rajasthan, it would be possible to export around 100 thousand tonnes of zinc annually. However, small quantity of imports would be needed in the terminal year of the Eighth Plan, 1996-97, to meet domestic demand.

The known reserves of lead in the country as on March,1990 are estimated at 1686 thousand tonnes. The rate of growth in the consumption of lead declined during the period 1990-92 due to slackening of growth in industrial production. However, as industrial production is anticipated to pick up during the Eighth Plan period, the demand for lead has been projected to grow at an annual average rate of 4.5 per cent during the Plan period. With the commissioning of Chanderiya smelter, the installed capacity for production of lead is expected to increase from 89.5 thousand tonnes in 1991-92 to 104 thousand tonnes in 1996-97, which would enable the country to meet its demand in 1996-97 with marginal imports of four thousand tonnes in 1996-97.

The demand for copper is presently growing at about 6 per cent per annum. The cost of production of copper in the country is quite high, as compared to international level, because of the low grade ores and also due to the small scale of operations in comparison to world standards. Hindustan Copper Limited (HCL), is presently the sole agency for copper mining and refining. The installed capacity of HCL is envisaged to rise from 47.50 thousand tonnes in 1991-92 to 62.50 thousand tonnes in 1996-97. However, high protective tariff wall in case of copper has been an important incentive for the domestic producer. As the situation changes with tariff and trade reforms,the imports are likely to increase.

Rail Transport

Rail transport services cover passenger and freight traffic. Projections are made by end-use analysis. Major commodities which account for a substantial share of the total volume of freight traffic carried by the railways are considered distinctly (Table 5.7).

The volume of transportation requirements in respect of these commodities has been estimated using the rail transport coefficient which indicates the proportion of commodity moving by the rail mode. It has been observed that there is a reasonable degree of stability in the rail transport coefficients over the years, except for the unusual years characterised by fluctuations in commodity supply or transport constraints (Table 5.8). These coefficients for the terminal year of the Plan have been projected taking into account variation in the pattern of locational dispersal of production centres (e.g., location of a new thermal power plant at the coal pithead or in the coastal area). The demand for rail freight traffic in terms of Tonne Kilometers (TKMS) have been projected on the basis of the estimated lead distance for a particular commodity. (Table 5.7)

The demand for rail freight traffic in respect of steel and raw materials for the steel industry has been estimated on the basis of the envisaged production plans of the integrated steel plants. This covers (i) saleable steel products, i e., finished and semi-finished steel products as well as pig iron for sale and (ii) raw materials other than coal, viz., iron ore, limestone, dolomite, manganese ore, etc. consumed by the steel plants.

The major portion of coal traffic carried by the railway is for thermal plants. The rail transport coefficient of coal has declined from 76.3 per cent in 1983-84 to about 69.1 per cent in 1991-92 due to location of new thermal power stations at coal pitheads and this trend is expected to continue during the Eighth Plan period. Coal for steel plants, coke ovens and for railways own use is moved by railways, while the

demand for other consumers is partly met by road movement. The rail transport coefficient for coal in 1996-97 has been estimated at 61 per cent.

Iron ore from Goa mines to Marmugoa port is transported by waterways through barges while in the case of Kudremukh project, ore concentrates are moved through pipelines for pelletisation. Iron ore exported through the ports in the eastern region, viz., Vizag, Paradip and Madras, is transported to the ports by rail. The rail transport coefficient for iron ore has been in the range of 40 to 50 per cent during the last ten years. Since a change in pattern of movement of iron ore is not envisaged during the Eighth Plan period, the coefficient for 1996-97 has been projected at 45 per cent.

The rail transport coefficient for cement has been varying between 47 and 55 per cent during the 1980s. After the announcement of complete decontrol of cement prices, the coefficient rose to 60.2 per cent in 1989-90, but subsequently declined to 58.9 per cent in 1990-91 and 57.5 per cent in 1991- 92. The coefficient is expected to decline further during the Eighth Plan period and get stabilised at around 55 per cent due to wider dispersal of cement production centres which would reduce the lead distance to the consuming centres and would induce a shift to other modes of transport that might be preferred to rail.

Movement of foodgrains through railways takes place mainly in respect of inter-state bulk movement and transport from ports in the case of imports. Rail transport coefficient for foodgrains has been in the range of 14 to 16 per cent during normal years. However, abnormal periods such as droughts necessitate longer distance movement of foodgrains to the drought-stricken areas. The coefficient was 20.2 per cent and 21.4 per cent during the drought years of 1986-87 and 1987-88 respectively. Assuming normal production levels for 1996-97, the coefficient has been projected at 15.5 per cent.

The rail transport coefficient for fertilisers has shown a declining trend during the last two decades. Availability of natural gas through the pipelines has facilitated the shift in location of fertiliser plants nearer to consumption centres. The coefficient has been projected to decline from the average level of 63 per cent during 1989-92 to 60.5 per cent in 1996-97.

A part of the petroleum products are moved through pipelines from the refineries, while some are also moved through road to meet the demand in the areas close to the refineries. The rail transport coefficient of petroleum products, has been found to be in the range of 42.3 to 44.5 per cent during the Seventh Plan period (1985-90), while it was 43.6 per cent in 1990-91 and 43.2 per cent in 1991-92. The Kandla-Bhatinda product pipeline is expected to be commissioned during the Eighth Plan period, which would have a capacity to move 6 million tonnes upto Karnal and 1.5 million tonnes thereafter upto Bhatinda. This would substantially reduce the demand for movement of petroleum products by rail in the northern region. In view of this, the rail transport coefficient has been projected at 37 per cent for 1996-97.

Railways transport many other commodities such as granite stones, lime stone, gypsum, rock phosphate, timber, paper and paperboards, steel manufactures, aluminium, electrical goods, glassware, coir products, jute, oilseeds, sugar, salt, dairy products, etc. and all these have been categorised as "other goods". The volume of rail traffic of many of these commodities has been declining over the years. The rail movement of these commodities depends on various factors such as the comparative cost advantage due to the freight structure in different modes of transport, the flexibility and convenience in handling and intermodal transfer and most important, the time factor in transporting the commodities. Although this category of freight traffic is quite remunerative for the railways, priority is generally accorded to movement of core commodities. The volume of freight traffic of the category of "other goods" was in the

range of 35 to 37 million tonnes during the last three years and this has been assumed at 35 million tonnes for 1996-97. (Table 5.7.)

Electricity generation

Electricity consumption is generally classified into the following broad categories: (i) industrial consumption; (ii) agricultural consumption (mainly for irrigation pumpsets); (iii) domestic consumption; (iv) railway traction; (v) commercial consumption; (vi) public lighting; (vii) public waterworks and sewage; and (viii) miscellaneous uses. While a part of the demand for electrical energy is met by captive generation, in balancing consumption demand against supply, total consumption of electrical energy is considered. Thus, both utilities and non- utilities generation of electricity is accounted for in this study.

The industrial sector is the largest consumer of electricity although its share in total electricity consumption has been declining over the years. While this decline in the share can partly be attributed to the faster growth in consumption in other sectors such as in agriculture and household sector, the important reasons are the use of more energy- efficient technologies and adoption of energy conservation measures in some industries. Electricity consumption in the industrial sector can be broadly divided into two categories, viz., consumption by major or large industries and consumption by other industries. The demand for electricity by major industries has been projected on the basis of end-use method. The norms of specific electricity consumption per unit of output in physical terms have been estimated for major industries using the information available in various official documents like the General Reviews of the Central Electricity Authority, the Annual Survey of Industries, the Reports of the Bureau of Industrial Costs and Prices, etc. Energy-intensive industries such as aluminium, steel, cement, fertilisers, paper, etc., account for more than half of the total industrial energy consumption. Since the specific electricity consumption in the industrial sector depends on various factors such as the installed capacity, i.e., size of the industrial units, capacity utilisation, quality of power supply, choice of feedstoᵏ' processing technology, etc., these aspects have been studied in detail in estimating the norms for the individual industries. Furthermore, the changes in the processing technology and the modernisation programmes envisaged in the specific industries during the Eighth Plan period have been taken into consideration while projecting the norms of electricity consumption for the plan period. (Table-5.9)

The consumption of electricity by industries other than major industries includes the consumption by small registered and unregistered industrial units. It is difficult to estimate the specific electricity consumption norms for each industry. The share of electricity consumption by "other industries" in the total industrial electricity consumption in the past has been estimated and this share is not expected to change significantly during the Eighth Plan period (Table-5.10). The projected demand for electricity in the industrial sector has been cross-checked through independent regression analysis, wherein electricity consumption in the industrial sector for the period 1979-80 to 1990-91 has been regressed on the value added in mining, quarrying and manufacturing sector at 1980-81 prices of the corresponding periods. The estimated equation is given below:

$$\text{Log } Y = 1.2827 + 0.9564 \text{ Log } X, \qquad (R^2 = 0.9897)$$

where "Y" represents electricity consumption in the industrial sector (in billion kwh), including both utilities and non-utilities, and "X" represents the value added in mining, quarrying and manufacturing, (at 1980-81 prices)

Using the estimated coefficient from the above equation along with the projected growth rate in value added in mining, quarrying and manufacturing for the Eighth Plan, the demand for electricity in the industrial sector for 1996-97 works out to 157.77 Bkwh, as against the projected demand of 155 Bkwh given by the end-use

method. The difference of 2.77 Bkwh could be attributed to the changes in process technologies and other factors considered in the end-use method.

Electricity consumption in the agricultural sector is primarily for the operation of irrigation pumpsets and it depends, therefore, on the number of electric pumpsets in operation and the intensity of their use. There is a strong correlation between the number of pumpsets energised and the consumption of electicity in the agricultural sector, as relvealed by the following regression equation:

$$Log \ Y = -14.7933 + 1.59168 \ Log \ X, \quad (R^2 = 0.984)$$

where "Y" represents the consumption of electricity in the agricultural sector and "X" represents the number of pumpsets energised, and the equation has been estimated using the time-series data of the period,1979-80 to 1990-91.

The demand for electricity in the agriucltural sector for 1996-97 has been projected using the estimated coefficient from the above equation along with the targetted number of pumpsets to be energised by 1996-97. The estimated demand works out to 77.48 Bkwh. The demand has, however, been projected at a slightly lower level at 76 Bkwh assuming that there would be some improvement in the level of efficiency in the use of irrigation pumpsets during the plan period.

There has been a rapid growth in the domestic consumption of electricity during the 1980s.This could be attributed to various factors like the growth in population, urbanisation, income and, most importantly, the expansion of electricity supply in the rural areas. The demand for electricity for domestic consumption has been projected on the basis of the following relationship:

$$Log \ Dx = -19.83 + 2.52 \ Log \ Dy, \quad (R^2 = 0.99)$$

where "Dx" represent the consumption of electricity in the household sector (Bkwh) and "Dy" represents private final consumption expenditure (at 1980-81 prices); the equation has been estimated using the time- series data of the period 1975-76 to 1989-90.

Using the estimated coefficient from the above equation along with the projected estimate of private final consumption expenditure for 1996-97, the demand for electricity for domestic consumption has been projected at 65.46 Bkwh. The demand for electricity for railway traction purposes depends on the actual route kilometres electrified and the volume of goods and passenger traffic on such routes. The demand has been projected on the basis of regression analysis. Two alternative specifications have been attempted for this purpose. In the first specification, the estimated equation is :

$$Y = 0.166516 + 0.890864 \ X, \quad (R^2 = 0.9703)$$

where "Y" represents electricity consumption in railway traction (Bkwh) and "X" represents the route kilometres electrified;the equation has been estimated using the time-series data of the period 1980-81 to 1990-91.

Using the estimated coefficient from the above equation along with the envisaged programme of electrification in the railways during the Eighth Plan period, the projected demand for railway traction works out to 6.79 Bkwh. In the above specification, the demand projection depends mainly on the route kilometres electrified and it does not take into account the volume of traffic in such routes. In order to capture the growth in the volume of traffic in electrified routes, an alternative specification has

been attempted wherein the electricity consumption in railway traction has been related to value added in railway transport sector. The estimated equation is:

$$\text{Log } Y = 1.3925 + 0.7568 \text{ Log } X \qquad (R^2 = 0.9772)$$

where "Y" represents electricity consumption in railway traction (Bkwh) and "X" represents the value added in railway transport sector (at 1980-81 prices); the equation has been estimated using the time-series data of the period 1975-76 to 1990-91.

Using the estimated coefficient from the above equation along with the projected growth in value added in railway transport sector, the projected demand for electricity works out to 6.56 Bkwh as against that of 6.79 Bkwh estimated on the basis of the earlier specification. The higher figure of 6.79 Bkwh has been adopted under the assumption that intensity of traffic would increase further with the expansion of railway electrification.

The demand for electricity in the remaining categories, viz., commercial uses, public lighting, public waterworks and sewage pumping and miscellaneous categories, has been projected on the basis of past trends.

The total demand for electricity in the terminal year of the Plan, 1996-97, of all the categories discussed above adds upto 335.84 Bkwh. This estimate has been cross-checked with the estimates obtained from the regression:

$$\text{Log } Y = -6.9599 + 1.560 \text{ X}, \qquad (R^2 = 0.991)$$

where "Y" represents total electricity consumption in the economy, utilities and non-utilities taken together, in Bkwh, and "X" represents GDP at factor cost at 1980-81 prices; the equation has been estimated using the time-series data of the period 1980-81 to 1990-91.

The projected demand on the basis of the estimated coefficient of the above equation works out to 339.07 Bkwh, as against 335.84 Bkwh estimated on the projected demand of individual categories of users. The difference between the two estimates could be attributed to structural changes in the subsectors which are reflected in the projected demand of individual categories.

The gross requirement of electicity generation has been estimated on the basis of the above projected demand. The addition to generation capacity has been estimated taking into account the losses in transmission and distribution as well as the requirements of auxiliary consumption, of both utilities and non-utilities. The Eighth Plan envisages specific schemes to reduce these loss and has incorporated their impact into the projections. Furthermore, the Eighth Plan also envisages a larger scope for non-utilities in additional generation capacity. The detailed demand-supply balance for electricity for 1996-97 is given in Table-5.10.

Correspondence with input output model projections

A comparision of flows estimated through the material balances has been made with those obtained in the input-output model.(Annexures 5.23 to 5.28) To make the material balance classifications conceptually comparable with the input output classification, aggregation of certain sectors had to be carried out in presenting these tables. The two distributions broadly correspond with each other. The marginal variations that are exhibited between the two distribution are due to the composition effect in the input output sectors i.e., while the material balance projection refers to a specific commodity input output projection refers to all the commodities falling in the relevant sector.

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In the present structure of input output model, the transportation needs of commodities are considered in terms of transportation inputs for a particular industry, whereas the commodity-wise transport projections given earlier in this chapter are oriented towards the output of commodities. For example the transportation needs of finished steel would be considered in the input output model not as a separate item but as a part of all industries which consume steel. And steel would be a part of the many commodities that flow as input to a particular sector.Thus a comparision between rail transportation projections based on material balance approach with input-output model projections of rail transport flows is not possible.

Table-5.1
Material Balance For Selected Commodities
1991-92 &1996-97

COMMODITY	UNIT		1991-92	1996-97
1.Coal	Mill.Tonnes.			
Production			229.26	308.00
Import			6.09	3.00
Export			0.11	1.00
Change in Stock			6.41	-
Consumption			228.83	310.00
2.Iron Ore	Mill.Tonnes.			
Production			56.50	72.00
Export			32.00	32.00
Consumption			24.50	40.00
3.Crude Oil	Mill.Tonnes.			
Production			30.34	50.00
Import			24.00	13.32
Change in Stock			2.92	-
Consumption			51.42	63.32
4.Petroleum products	Mill.Tonnes.			
Production			49.15*	61.57*
Import			9.44	22.92
Export			2.70	3.30
Change in Stock	(-)		0.77	-
Consumption			56.66	81.19
5.Nitrogenous Fertilizers	Mill.Tonnes.			
Production			7.30	9.80
Import			0.50	1.70
Change in Stock	(-)		0.70	-
Consumption			8.50	11.50
6.Phosphatic Fertilizers	Mill.Tonnes.			
Production			2.50	3.00
Import			0.90	2.00
Change in Stock	(-)		0.20	-
Consumption			3.60	5.00
7.Potassic Fertilisers	Mill.Tonnes.			
Import			1.30	1.80
change in stock	(-)		0.10	-
Consumption			1.40	1.80
8.Total Fertiliser nutrients	Mill.Tonnes.			
Production			9.80	12.80
Import			2.70	5.50
Change in Stock	(-)		1.00	
Consumption			13.50	18.30
9.Cement	Mill.Tonnes.			
Production			53.00	76.00
Import			-	2.00
Export			1.00	7.00
Consumtion			52.00	71.00

Table-5.1 (contd.)
Material Balance For Selected Commodities
1991-92 &1996-97

COMMODITY	UNIT	1991-92	1996-97
10.Finished Steel (main+mini)	Mill.Tonnes.		
Production		14.50	22.80
Import (canalised)		1.00	1.00
Export		0.30	2.80
Consumption		15.20	21.00
11.Aluminium	Th. Tonnes		
Production		514.17	656.00
Import		3.00	16.00
Export		68.00	–
Consumption		449.17	672.00
12.Copper (refined)	Th. Tonnes		
Production		45.49	55.00
Import(Incld.non-canalised)		104.51	145.00
Consumption		150.00	200.00
13.Zinc (Primary Metal)	Th. Tonnes		
Production		102.00	154.00
Import		10.00	26.00
Consumption		112.00 **	180.00
14.Lead (Primary Metal)	Th. Tonnes		
Production		48.39	96.00
Import(Incld.non-canalised)		20.00	4.00
Consumption		68.39	100.00
15.Railways	Mill.Tonnes		
(Originating traffic)		363.00	443.40
16.Electricity	Bill.KWH		
Generation(incl.non-utilities)		311.21	448.00
Import		1.43	2.00
Consumption		312.64	450.00

* Includes production of LPG from natural gas (one million
  tonne & 2.05 mill.tons. for 1991-92 & 1996-97 respectively)
** Abnormally Low Consumption.

Table-5.2
Material Balance for Coal : 1991-92 & 1996-97

(Million Tonnes)

Sl. No.	Consuming Industry	1991-92	1996-97
I	**DEMAND**		
A.	COKING COAL	31.66	42.00
1.	Steel (hot metal)	31.66 *	40.20
2.	Coke ovens, etc.	–	1.80
B.	NON-COKING COAL	197.28	269.00
1.	Sponge iron (coal based)	0.40	2.00
2.	Thermal power generation (coal based)	134.60 (2.30)	185.30 (4.70)
3.	Railways	4.42	3.00
4.	Cement	9.97	17.50
5.	Fertilizers	4.23	4.00
6.	LTC, soft coke, SSF	0.99	4.00
7.	Other Industries:		
(a)	Captive power generation	38.50 **	15.00 (2.10)
B.	BRICK KILNS, etc.	–	33.20 (0.20)
8.	Colliery consumption	4.06	4.00
9.	Export	0.11	1.00
10.	Total demand (A+B)	228.94 (2.30)	311.00 (7.00)
II	**AVAILABILITY**		
1.	Production	229.26	308.00
2.	Import	6.09	3.00
3.	Change in stock	6.41	0.00
4.	Net availability	241.76	311.00

Note: Figures in brackets represent washery middlings.
* Includes coal consumption in coke ovens, etc.
** Includes coal consumption in brick kilns, etc.

Table-5.3
Sectorwise Demand of Petroleum Products in 1996-97

(000' Tonnes)

End Use → Products	Rail	Water Way	Road	Air	Iron & Steel	Textil	Cement	Cerami Glass	Chem	Alum	Sugar	Mining	Engg Others	Fertil	Const Others	Indust Total	Misc	Tractor	Pumpset	Planta-tions	Electric Utility	Domestic Use	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Light Dist.																							
LPG																403						3634	4037
Mogas			7504													150							7654
Naphtha					25				3483					2756		6264					70		6334
SBP/Hexane)																							
Others)																	497						497
Sub Total			7504		25				3483					2756		6817	497				70	3634	18522
Middle Dist.																							
SKO																529						11571	12100
HSD	2085	538	20092		74	310	414	30	169	8	66	745	213	43	250	2322	600	3082	3244		254		32217
ATF				2452																			2452
LDO	9	85	18		47	31	18	36	94	10	3	9	81	7	250	586	375		40		328		1441
Others																	624						624
Sub Total	2094	623	20110	2452	121	341	432	66	263	18	69	754	294	50	500	3437	1599	3082	3284		582	11571	48834
Heavy Dist.																							
FO	27	636	15		225	376	77	112	395	159	15	35	175		600	2179	270			140	1947		5214
LSHS/HHS			5		275	352	49	137	254	70	4	24	52	2215	200	3632	20			40			3697
Lubes & Grease																1335							1335
Bitumens																	2579						2579
Pet Coke) Others)																1017							1017
Sub Total	27	636	20		510	728	126	249	649	229	19	59	227	2215	800	8163	2869			180	1947		13842
Total	2121	1259	27634	2452	656	1069	558	315	4395	247	88	813	521	5021	1300	18417	4965	3082	3284	180	2599	15205	81198

(1) = Includes demand for captive power generation and certain transportation needs.

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Table-5.4

Distribution of Housholds Based on the use of Primary Source of Energy for Lighting

STATE / UNION TERRITORY	NSS ROUND	PRIMARY SOURCE OF ENERGY FOR LIGHTING							
		RURAL				URBAN			
		ELECTRI-CITY	KEROSENE	OTHERS	TOTAL	ELECTRI-CITY	KEROSENE	OTHERS	TOTAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Andhra Pradesh	28	75	918	7	1000	438	557	5	1000
	38	166	828	6	1000	600	382	18	1000
	43	326	651	23	1000	709	283	8	1000
Assam	28	14	983	3	1000	364	631	5	1000
	38	29	954	17	1000	466	514	20	1000
	43	70	923	7	1000	691	292	17	1000
Bihar	28	19	979	2	1000	413	583	4	1000
	38	16	976	8	1000	433	552	11	1000
	43	70	923	7	1000	500	490	10	1000
Gujarat	28	158	811	31	1000	679	318	3	1000
	38	356	630	14	1000	811	181	8	1000
	43	527	462	11	1000	828	168	4	1000
Haryana	28	200	798	2	1000	722	274	4	1000
	38	386	602	12	1000	848	139	13	1000
	43	510	458	32	1000	825	155	20	1000
Himachal Pradesh	28	302	644	54	1000	848	146	6	1000
	38	652	337	11	1000	904	61	35	1000
	43	780	197	23	1000	933	36	31	1000
Jammu & Kashmir	28	184	731	85	1000	889	102	9	1000
	38	553	390	57	1000	915	48	37	1000
	43	705	225	70	1000	974	19	7	1000
Karnataka	28	125	871	4	1000	571	427	2	1000
	38	230	758	12	1000	673	312	15	1000
	43	395	602	3	1000	737	252	11	1000
Kerala	28	145	854	1	1000	474	524	2	1000
	38	293	698	9	1000	608	386	6	1000
	43	370	625	5	1000	728	264	8	1000
Madhya Pradesh	28	33	949	18	1000	470	525	5	1000
	38	99	872	29	1000	540	401	19	1000
	43	243	750	7	1000	767	220	13	1000
Maharashtra	28	85	840	75	1000	649	345	6	1000
	38	238	757	5	1000	735	255	10	1000
	43	417	577	6	1000	803	178	19	1000
Manipur	28	36	943	21	1000	447	551	2	1000
	38	44	808	148	1000	400	341	259	1000
	43	297	678	25	1000	750	250	-	1000
Nagaland	28	-	-	-	0	555	445	-	1000
	38	-	-	-	0	309	652	39	1000
	43	-	-	-	0	830	170	-	1000
Orissa	28	25	934	41	1000	417	577	6	1000
	38	81	894	25	1000	505	470	25	1000
	43	95	896	9	1000	557	435	8	1000
Punjab	28	232	750	18	1000	773	216	11	1000
	38	583	387	30	1000	834	142	24	1000
	43	706	223	71	1000	902	68	30	1000
Rajasthan	28	38	915	47	1000	505	488	7	1000
	38	91	869	40	1000	633	345	22	1000
	43	171	793	36	1000	729	267	4	1000
Tamil Nadu	28	121	877	_	1000	513	481	6	1000
	38	289	702	9	1000	640	348	12	1000
	43	395	599	6	1000	721	261	18	1000
Uttar Pradesh	28	17	973	10	1000	449	543	8	1000
	38	21	970	9	1000	529	453	18	1000
	43	49	935	16	1000	619	368	13	1000
West Bengal	28	15	982	3	1000	482	513	5	1000
	38	34	943	23	1000	530	455	15	1000
	43	45	949	6	1000	579	414	7	1000
Chandigarh	28	-	-	-	0	825	165	10	1000
	38	854	146	-	1000	943	55	2	1000
	43	925	38	37	1000	974	9	17	1000
Delhi	28	210	790	-	1000	663	333	4	1000
	38	527	429	44	1000	810	165	25	1000
	43	911	63	26	1000	907	66	27	1000

Contd.

Table-5.4 (contd.)
Distribution of Housholds Based on the use of Primary Source of Energy for Lighting

		PRIMARY SOURCE OF ENERGY FOR LIGHTING							
STATE / UNION TERRITORY		RURAL				URBAN			
	NSS ROUND	ELECTRI- CITY	KEROSENE	OTHERS	TOTAL	ELECTRI- CITY	KEROSENE	OTHERS	TOTAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Goa,Daman & Diu	28	117	883	-	1000	589	411	-	1000
	38	300	700	-	1000	795	205	-	1000
	43	739	251	10	1000	851	142	7	1000
Pondichery	28	158	837	5	1000	432	568	-	1000
	38	239	754	7	1000	550	450	-	1000
	43	453	535	12	1000	671	329	-	1000
All India	28	56	917	17	1000	535	460	5	1000
	38	149	836	15	1000	638	347	15	1000
	43	238	746	16	1000	718	269	13	1000

Table: 5.5
Population and Kerosene Consumption - Growth Rates

(Percent per annum)

Period	Growth Rate	
	Population	Kerosene Consumption
(1)	(2)	(3)
Sixth Plan (1980-85)	2.2	9.0 (a)
Seventh Plan (1985-90)	2.1	6.7
Eighth Plan (1992-97) Projected	1.8	5.7

(a) Period 1978-79 to 1984-85 with the data for 1978-79 being taken as triennial average for 1977-80

Table: 5.6
Sectorwise Demand For Finished Steel

(In Million tonnes)

S.No. Sector	1991-92	1996-97
0 1	2	3
1. Small Scale Industries	3.490 (22.97)	5.092 (24.24)
2. Large Scale Industries	5.933 (39.03)	8.321 (39.62)
3. Construction	5.625 (37.00)	7.335 (34.93)
4. Ordnance factories, defence, and Misc.	0.152 (1.00)	0.252 (1.20)
Total	15.200 (100.00)	21.000 (100.00)

Figures in brackets represent percentage of total

Table: 5.7

Projections Of Frieght Traffic In Railways

Sl. No.	Commodity & Year	T.Q (M.T.)	T.C (%)	O.T (M.T.)	LEAD (Kms.)	TKms (Bn)
0	1	2	3	4	5	6
(1)Steel(Integrated steel plants)						
i Saleable steel & pig iron for sale						
	1991-9?	12.06	94.90	11.44	1194	13.66
	1996-9?	18.10	95.00	17.20	1180	20.30
iiRaw materials for steel plants (excluding coal)						
	1991-92	–	–	29.55	315	9.31
	1996-97	–	–	44.00	350	15.40
(2)Coal: Total (including railways)						
	1991-92	219.00	69.30	151.88	630	95.64
	1996-97	294.00	61.00	179.40	670	120.20
(3)Iron ore exports						
	1991-92	32.00	40.00	12.76	546	6.97
	1996-97	32.00	45.00	14.40	580	8.40
(4)Cement						
	1991-92	53.00	57.00	30.49	725	22.11
	1996-97	76.00	55.00	41.80	660	27.60
(5)Foodgrains						
	1991-92	178.80	15.20	27.14	1363	36.98
	1996-97	210.00	15.50	32.60	1400	45.60
(6)Fertilizers (Materials)						
	1991-92	29.40	63.00	18.51	935	17.31
	1996-97	41.90	60.50	25.30	900	22.80
(7)Petroleum products						
	1991-92	60.90	42.00	25.62	591	15.13
	1996-97	84.40	37.00	31.20	650	20.30
(8)Other goods						
	1991-92	–	–	35.54	956	33.97
	1996-97	–	–	35.00	975	34.10
(9)Rail materials(excluding coal)						
	1991-92	–	–	20.00	160	3.20
	1996-97	–	–	22.50	170	3.80
Total :	1991-92			362.93	701	254.28
	1996-97			443.40	718	318.50

Abbreviations:

T.Q. = Transportable quntity

T.C. = Rail Transport coefficient

O.T. = Railway originating Traffic

TKms = Tonne kilometres

Table-5.8
Rail/Transport Coefficients - Proportion of Commodity Moved by Rail

Commodity	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
1	2	3	4	5	6	7	8	9	10	11	12	13	14
STEEL(Integrated steel Plant)(pig iron for sale & saleable steel)	98.3	103.2	100.0	99.1	101.2	99.7	100.2	101.1	99.8	89.9	92.6	94.8	92.5
COAL(Which requires Transport)	73.2	74.6	75.6	76.3	75.9	73.4	73.1	73.5	72.1	70.5	69.1	68.1	68.7
IRON ORE (EXPORT)	49.6	47.3	45.6	41.2	43.4	46.3	50.6	45.9	41.5	41.5	40.4	43.2	47.2
CEMENT	46.6	48.0	51.6	53.8	55.4	53.9	54.0	56.5	58.9	59.9	59.2	59.5	55.6
FOOD GRAINS	14.1	15.7	18.6	16.1	14.3	16.0	20.2	21.4	14.6	13.8	14.3	16.2	15.0
FERTILIZERS	61.8	67.6	64.9	59.1	61.2	66.4	66.4	67.4	63.6	62.9	66.6	62.8	63.7
POL PRODUCTS	47.6	50.2	47.9	48.4	46.2	42.3	43.3	44.5	43.8	44.0	43.6	44.3	42.8

(Million Kwh)

S.No.	Consuming Industry Group	Projected Demand (1996-97)
0	1	2
1	Food products	3105.45
2	Textiles	12631.61
3	Paper & paper products	4822.50
4	Rubber, plastic, petroleum & coal products	11444.16
5	Chemicals	19166.97
6	Non-metallic mineral products	12130.75
7	Basic metals & alloys	33702.60
8	Machinery industries	4895.70
9	Electrical machinery industries	158.52
10	Transport equipment	762.00
	Total: Major Industries Groups	102820.26

Table 5.10
Material Balance for Electricity: 1991-92 & 1996-97

(In Billion Kwh)

	1991-92	1996-97
1. Consuming Sectors:		
(i) Major Industries	74.93	102.82
(ii) Other Industries	37.--	52.18
All Industries (i+ii)	112.--	155.00
(iii) Domestic Consumption	34.12	65.46
(iv) Irrigation	53.48	76.00
(v) Commercial Consumption	12.15	18.33
(vi) Railway Traction	4.56	6.79
(vii) Public Lighting	1.87	2.85
(viii) Public Water-Works	4.02	6.36
(ix) Miscellaneous purpose	3.54	5.05
(x) All India Consumption (i) to (ix)	226.34	335.84
2. Consumption from utilities	204.54	308.84
3. Consumption from non-utilities	21.80	27.00
4. T & D losses	61.09	82.10
5. Energy available at Bus-bar	265.63	390.94
6. Import form other countries	1.43	2.00
7. Domestic availability at Bus-bar	264.20	388.94
8. Auxiliary losses : utilities	22.51	29.27
9. Generation: utilities	286.71	418.21
10.Generation: non-utilities	24.50	30.00
11.Auxiliary losses: non-utilities	2.70	3.00
12.Net availability: non-utilities	21.80	27.00
13.Gross Generation	311.21	448.21

CHAPTER-6

TRADE SUB-MODEL

This chapter describes the methodologies adopted for the projections of exports and imports for the Eighth Plan period, 1992-97. It is stipulated that foreign savings, during the Eighth Plan, in terms of the ratio of current account deficit to GDP would be reduced from 2.38 per cent on an average for the Seventh Plan period (1985-90) to an average of 1.60 per cent during the Eighth Plan. In order to achieve this goal, the Plan postulates that exports in volume terms would grow at 13.6 per cent per annum during the Eighth Plan as compared to 8.1 per cent recorded during the Seventh Plan. At the same time, imports have been projected to increase at a much lower rate of 8.4 per cent during the Eighth Plan as compared to 10.0 per cent in the Seventh Plan (Table 6.1). The ratio of exports to GDP is postulated to rise from 7.6 per cent in 1991-92 to 11.0 per cent in 1996-97. The average ratio of exports to GDP would substantially increase to 9.60 per cent for the Plan period, as compared to 5.21 per cent in the Seventh Plan. The ratio of imports to GDP is expected to increase from 10.7 per cent in 1991-92 to 12.2 per cent in 1996- 97. The average ratio of imports to GDP works out to 11.62 per cent during the Eighth Plan as compared to 8.33 per cent in the Seventh Plan. The elasticity of imports to GDP would decline from 1.7 estimated for the Seventh Plan to 1.5 during the Eighth Plan. The average ratio of trade deficit to GDP is thus expected to decline to 2.02 per cent during 1992-97 as compared to that of 3.13 per cent during 1985-90. The balance of payments (BOP) scenario envisaged for the Eighth Plan depends, therefore, very much on the growth of exports projected in the Plan. The projection of imports and exports in the plan period are made at 1991-92 prices.

EXPORTS

Export projections for individual commodities and commodity groups adopted in the Plan are in the nature of feasible targets estimated on the basis of detailed analysis as well as certain general assumptions. The analysis included the following aspects:

(i) the observed growth in exports in real terms in the recent past, 1986-87 to 1991-92;

(ii) the estimated elasticity of exports with respect to GDP;

(iii) the physical limits for exports of certain commodities in the iight of material balance studies; in particular, an assessment of the extent of surpluses available for exports after meeting the domestic demand requirements so that inflationary pressures do not build up in the economy;

(iv) prospects of world trade in general and the possibilities for expansion of exports to the countries in the Asian, African and South and Latin American regions, including introduction of new products as well as exploring new markets; and

(v) detailed econometric analysis of commodity exports at the disaggregated level using appropriate demand and supply functions.

The export projections are also based on certain general assumptions. First, it is assumed that the domestic producers would respond favourably to the recent changes in the industrial, trade, fiscal and monetary policies by expanding capacities for export production and also by competing effectively in the international markets. Secondly, it is assumed that infrastructural facilities such as power and transport, especially port and air shipment facilities, would expand adequately to match the growth in demand for such facilities. Thirdly, it is assumed that the domestic rate of

inflation during the Plan period would remain at a reasonably low level so as to maintain the price-competitiveness. Fourthly, it is also assumed that exchange rate adjustments would take place as and when required.

Export projections at the level of individual commodities and commodity groups are based on certain perceptions about the world markets in general and the potential for expanding export, in particular. The export potential in the medium as well as long term has been evaluated keeping in view the natural resource base and the country's comparative advantage in labour- intensive manufacturing and processing activities. Export projections at the disaggregated level in terms of commodities and commodity groups have later been fed into the Input-Output model for verifying their consistency with the domestic demand and production profile and the projections have been adjusted, wherever necessary, in order to ensure consistency with the economy-wide projections obtained from the Input-Output model.

In the light of the above analysis, it is postulated that exports would grow at the rate of 13.6 per cent per annum in volume terms during the Eighth Plan period from Rs.44292 crores in 1991-92 to Rs.83869 crores in 1996-97 (Table 6.2). Total exports over the five years of the Plan, 1992-97, are placed at Rs.330153 crores. Exports of manufactured goods would account for Rs.250800 crores comprising of 76 per cent of the total exports, while exports of agricultural and allied products would amount to Rs.50235 crores, a little over 15 per cent of the total exports. The changes in the structure of exports over the Plan period clearly reflect the strategy for export growth envisaged in the Plan. Exports of manufactured goods in the Eight Plan are expected to grow at the rate of 15.0 per cent per annum as compared to that of 13.6 per cent in overall exports. Exports of manufactured goods would increase from Rs.32384 crores in 1991-92 to Rs.65114 crores in 1996-97, while its share in total exports would rise from 73.1 per cent in 1991-92 to 77.6 per cent in 1996-97,implying an increase of 4.5 percentage points. Within the manufacturing sector, the objective is to achieve accelerated growth in labour intensive manufacturing activities such as textiles and textile products (e.g., readymade garments and coir manufactures) and handicrafts (e.g., gems and jewellery). Moreover, it is also perceived that the prospects of growth in world demand in respect of these items would be much better in the near future. Over the five-year period, 1992-97, textiles and textile products would account for 24.3 per cent of the total exports, while handicrafts would amount to 20.1 per cent.

Exports of agricultural and allied products are expected to grow at 9.4 per cent per annum during the Plan period from Rs.7700 crores in 1991-92 to Rs.12064 crores in 1996-97. The share of these exports in total exports would decline from 17.4 per cent in 1991-92 to 14.4 per cent in 1996-97, mainly to make room for the rise in the share of manufactured exports mentioned earlier. However, it is postulated that exports of processed agricultural products such as marine products, meat products as well as other processed food products like processed fruits and juices would increase at a faster rate as compared to traditional agricultural exports such as tea, coffee, spices, tobacco, etc., which have a relatively lower income elasticity of demand as compared to processed food products. It is also expected that there would be exportable surpluses of rice and sugar which would help to accelerate the growth in exports of these items during the Plan period. Furthermore, the projections take into account the possibilities of higher unit value realisation in respect of certain items of exports due to changes in product-mix, improvement in quality and packaging, etc. The changes in the structure of exports both at the group and commodity level indicate that the export projections are consistent with domestic resource cost in respect of many items. The export basket would consist more of labour-intensive (and less capital and energy-intensive) commodities.

IMPORTS

Import projections for the Eighth Plan have been made essentially on the basis of the import coefficient matrix of the Input-Output model. The import coefficient matrix, which was originally constructed using past data on import flows, has

been updated for the base year imports and prices. Certain coefficients in the import coefficient matrix have been projected for the terminal year of the Plan on the basis of information contained in the report of the Working Group on imports as well as other reports and studies. In this context, it may be pointed out that with a view to overcome the severe BOP crisis faced by the country in 1991-92, the base year of the Eighth Plan, various measures were undertaken to reduce the volume of imports. As a result, actual imports in 1991-92 were quite low as compared to the trends in the previous years. Nevertheless, it would not be correct to presume that the measures of import compression and the resulting cut in actual imports should have necessarily led to a reduction in the use of imported inputs in different industries, because it is quite plausible that some part of import requirements would have been met through depletion of inventories built through imports in the previous years. This is most likely to be the case in respect of many items of canalised imports where the agencies concerned invariably carry certain level of inventories. Hence, it was considered appropriate to estimate the normalised level of imports for the year 1991-92 for use as the base for projections over the Eighth Plan period.

Import projections obtained through the Input-Output model have been cross-checked with other independent studies. Econometric studies have been carried out using time-series data to estimate the relationship between imports and the GDP. Overall import elasticity as well as elasticities for specific commodity sectors with respect to growth in GDP have been estimated and these have been used to cross-check the import projections. Imports have been estimated separately for intermediate uses, consumption and investment purposes.

Import projections broadly fall into three categories. The first category of imports consists mainly of what are known as bulk items . These cover eight commodity groups, viz., crude oil and petroleum products, fertilisers and fertiliser raw materials, steel, non-ferrous metals, coking coal, newsprint and contingency imports such as cereals, pulses and edible oils. The second category includes all other items which are under the Open General Licence (OGL) as well as other miscellaneous imports under licenses. The third category relates to imports which are not covered in the trade data of the Directorate General of Commercial Intelligence and Statistics (DGCIS), but which are reflected in the Balance of Payments data compiled by the Reserve Bank of India.

The estimates of bulk imports have been made on the basis of the demand and supply projections for individual items contained in the material balance studies for selected commodities. The methodology adopted in these studies for various items differ from each other and has been discussed in detail in the chapter on "Industry Sub-Model". Briefly, supply projections have been made on the basis of detailed exercises relating to capacity utilisation and creation of fresh capacities through projects under construction and new projects. Demand requirements have been estimated based on their use as intermediate input in the various sectors of the economy and also their demand for final use. In the case of essential consumer items such as cereals, pulses, edible oils, sugar, etc., their demand requirements have been estimated and the gaps between production and demand have been taken as import requirements. These imports have been shown as contingency imports amounting to Rs. 7000 crores during the Plan period. In respect of some commodities, the projected levels of production have been found to be in excess of domestic demand and such excess supply have been considered to be available for exports.

The second category consists of heterogenous items. Imports of some items in this group have been projected on the basis of their relationship with the growth of GDP, while for some other items, the projections are based on the recommendations of Working Group on imports. Imports of capital goods have been projected on the basis of its relationship with capital formation, while the special import needs in sectors like off-shore drilling, telecommunications, space and other technology-intensive areas have been separately taken into consideration. Imports amounting to Rs. 55125 crores have been shown as "Statistical Adjustments". These include mainly government

imports including defence imports. Such imports have been projected on the basis of past trend.

The level and structure of imports envisaged in the Eighth Plan are based on certain general assumptions. These are as follows :

(i) The balance of payments position would continue to be under strain during the Eighth Plan period. However, imports of essential items would not be affected. The import requirements of the industrial sector would also not be affected due to the continuing reforms in the industrial, trade and fiscal policies.

(ii) Necessary policy measures would be taken up to reduce the growth in consumption of crude petroleum and its products;

(iii) Contingency imports would be kept at around Rs. 7000 crores at 1991-92 prices as envisaged in the Plan ;

(iv) Imports of miscellaneous items would continue to be at around the same level as reflected by their share in total imports in the past ; and

(v) Finally, and most importantly, greater flow of direct foreign investment envisaged in the Plan would help in financing the imports of machinery and capital goods at a larger scale.

As mentioned earlier, imports are expected to increase at an annual rate of 8.4 per cent from normalised level of Rs. 62345 crores in 1991-92 to Rs. 93314 crores in 1996-97 (Table-6.3). Total imports over the Plan period 1992-97 would amount to Rs. 399650 crores. Bulk imports would account for Rs. 135895 crores, representing 34.0 per cent of the total imports. Within bulk imports, crude petroleum and products would account for Rs. 74660 crores (18.7 per cent of the total imports), while fertilisers and fertiliser raw materials would amount to Rs. 34474 crores (8.6 per cent of the total imports). The remaining items of bulk imports, including contingency imports, would account for only 6.7 per cent of the total imports. Imports of capital goods, i.e., machinery and transport equipment, over the Plan period have been projected at Rs. 106140 crores, representing 26.6 per cent of total imports. The imports of precious and semi-precious stones (mainly intended for processing and re-exports), amounting to Rs. 40446 crores, account for 10.1 per cent of the total imports. The structure of imports delineated in the Eighth Plan indicates that the major share of import requirements is accounted for by the following broad categories : (i) energy imports; (ii) commodity imports which are highly energy-intensive (e.g. fertilisers),; (iii) commodity imports which are technology-intensive (e.g., capital goods such as machinery), and (iv) commodity imports which are meant for further processing and re-exports (e.g. precious and semi-precious stones).

Table-6.1
Balance of Payments Scenario in the Eighth Plan: 1992-97

S.No.	Item	Seventh Plan 1985-90 (average)	Eighth Plan 1991-92	1996-97	1992-97 (average)
0	1	2	3	4	5
		(As per cent of GDP at 1991-92 prices)			
1.	Exports	5.21	7.60	11.00	9.60
2.	Imports	8.33	10.70	12.20	11.62
3.	Trade Deficit	3.13	3.10	1.20	2.02
4.	Invisibles (net)	0.75	0.60	0.30	0.42
5.	current Account Deficit	2.39	2.50	0.90	1.60
6.	Rates of Growth in volume Terms: (per cent per annum)				
(i)	Exports	8.10	–	–	13.60
(ii)	Imports	10.00	–	–	8.40
7.	Import Elasticity (with respect to GDP)	1.70	–	–	1.50

Table-6.2
Export Projections in the Eighth Plan

(Rs. crores at 1991-92 prices)

S.No.	Commodities/Groups	1991-92 (P)	1996-97	Rate of Growth (percent)	Total 1992-97
0	1	2	3	4	5
I.	Agricultural & Allied Products	7700	12064	9.4	50235
1.	Tea	1132	1324	3.2	6224
2.	Coffee	310	342	2.0	1646
3.	Tobacco (Manufactured & Unmanufactured)	377	450	3.6	2099
4.	Oil Cakes	871	1250	7.5	5437
5.	Spices	370	447	3.9	2074
6.	Cashew Kernels	668	1047	9.4	4410
7.	Raw Cotton	316	323	0.4	1600
8.	Rice	755	1127	8.3	4831
9.	Marine Products	1374	2077	8.6	8863
10.	Meat and Meat Preparations	231	354	8.9	1503
11.	Misc. Processed Foods (incl. processed fruits & juices)	332	700	16.1	2654
12.	Fruits & Vegetables	349	573	10.4	2373
13.	Sugar & Mollases	144	1100	50.2	2861
14.	Unclassified items	471	950	15.1	3660
II.	Ores and Minerals	2280	2662	3.1	12416
1.	Iron Ore	1432	1400	0.0	7000
2.	Mica,Coal & other Ores & Processed Minerals	848	1262	8.3	5416

Contd.

Table-6.2 (contd.)

Export Projections in the Eighth Plan

(Rs. crores at 1991-92 prices)

S.No.	Commodities/Groups	1991-92 (P)	1996-97	Rate of Growth (percent)	Total 1992-97
0	1	2	3	4	5
III.	**Manufactured Goods**	32384	65114	15.0	250800
1.	Cotton Yarn, Fabrics & Manufactures	3209	5896	12.9	23456
2.	Readymade Garments	5411	11552	16.4	43633
3.	Natural Silk Yarn, Fabrics, made ups, etc.	347	617	12.2	2483
4.	Manmade Yarn, Fabrics & made ups,etc.	823	1288	9.4	5427
5.	Woolen Yarn, Fabrics & made ups, etc.	73	147	15.0	567
6.	Jute Manufactures	388	588	8.7	2507
7.	Coir and Manufactures	70	150	16.5	567
8.	Carpet mill-made	235	387	10.5	1601
9.	Sports Goods	108	177	10.4	733
10.	Rubber Manufactured Products	305	746	19.6	2693
11.	Glass,Glassware,Ceramics,Refractories, Cement, etc.	153	600	31.4	1868
12.	Leather and Leather Manufactures	3076	5463	12.2	21995
13.	Engineering Goods	5107	10277	15.0	39611
14.	Chemicals and Allied Products	3897	7810	14.0	30144
15.	Handicrafts	8346	17455	15.9	66339
(a)	Gems and Jewellery	6750	14702	16.8	55155
(b)	Carpets handmade	1000	1546	9.1	6543
(c)	Works of Art	596	1207	15.2	4641
16.	Unclassified items	836	1961	18.6	7176
IV.	**Petroleum Crude and Products**	1022	1340	5.6	6029
V.	**Others**	38*	1075	–	4279
VI.	**Total I-V (DGCI&S)**	43424 (43828)	82255 (82255)	13.6 (13.4)	323759
VII.	**Statistical Adjustment**	868	1614	13.2	6394
	Total Exports	44292 (44696)	83869 (83869)	13.6 (13.4)	330153
	Total Exports in U.S.Dollar (Million)	17720 (17868)	33548 (33548)	13.6 (13.4)	132061

N.B.:(i) P = Provisional
 (ii) * - Since actual exports are nearly Rs.400 crores more than
           the provisional estimate of exports, the residual works
           out to Rs.38 crores only, which otherwise should be
           around Rs.450 crores.
 (iii)   Figures in brackets are provisional exports.

Table-6.3
Import Projections in the Eighth Plan

(Rs. crores at 1991-92 prices)

S.No.	Commodities/Groups	1991-92 (P)	1996-97	Rate of Growth (percent)	Total 1992-97
0	1	2	3	4	5
I.	**Selected Bulk Imports**	22198.2 (21834.2)	˜2550.2 (32550.2)	8.0 (8.3)	135895
1.	Crude Oil and Petroleum Products	13129.5	17300.1	5.7	74660
(a)	Crude Oil	7868.6	4407.6	10.9	28160
(b)	Petroleum Products	5260.9	12892.5	19.6	46500
2.	Fertilisers (manufactured and raw materials)	4500.0	8988.6	14.8	34474
(a)	Fertilisers (manufactured)	2025.8	4757.8	18.6	17403
(b)	Fertiliser (raw materials)	2474.2	4230.8	11.3	17071
(i)	Sulphur	348.9	900.9	20.9	3194
(ii)	Rock Phosphate	494.0	1110.1	17.6	4121
(iii)	Phosphoric Acid	1360.7	1522.6	2.3	7283
(iv)	Anhydrous Ammonia	270.6	697.2	20.8	2473
3.	Finished Steel, Tool, Alloy and Special Steel	1540.2	1760.3	2.7	8312
(a)	Finished Steel	1255.0	1255.0	0.0	6275
(b)	Tool, Alloy and Special Steel	285.2	505.3	12.1	2037
4.	Major Non-Ferrous Metals	803.0	1193.6	8.3	5065
(a)	Aluminium	9.3	49.6	39.8	141
(b)	Copper	642.0	890.7	6.8	3923
(c)	Zinc	33.0	85.8	21.1	304
(d)	Lead	37.9	7.6	27.5	79
(e)	Tin	26.8	40.2	8.4	172
(f)	Nickel	54.0	119.7	17.3	446
5.	Coking Coal	1036.3	516.3	13.0	3477
6.	Newsprint	341.0	791.3	18.3	2907
7.	Synthetic & Regenerated Fibres	48.2	–	–	–
8.	Contingency Imports - Cereals, Cereal Preparations, Pulses, Vegetable Oils and Fats *	800.0 (436.0)	2000.0 (2000.0)	20.1 (35.6)	7000
II.	**Others**	31546.8 (25965.8)	47892.8 (47892.8)	8.7 (13.0)	208630
1.	Machinery & Transport Equipment	16200.0 (11435.0)	25098.0 (25098.0)	9.2 (17.0)	106140
2.	Precious and Semiprecious Stones	5500.0 (4822.0)	10200.0 (10200.0)	13.1 (16.2)	40446
3.	Chemicals (excluding fertilizers, fertilizer raw materials, artificial resins and plastic materials) @	2519.0	2200.0	2.7	11620
4.	Artificial Resins and Plastic Materials	1403.0	700.0	13.0	4711
5.	Iron & Steel Scrap	800.0	1800.0	17.6	6680
6.	Wood & Timber	418.5	693.0	10.6	2861
7.	Miscellaneous Items	4706.3 (4568.3)	7201.8 (7201.8)	8.9 (9.5)	36172
III.	**Total Imports (I+II)** (DGCI&S)	53745.0 (47800.0)	80443.0 (80443.0)	8.4 (11.0)	344525

Contd.

Table-6.3 (contd.)

Import Projections in the Eighth Plan

(Ps. crores at 1991-92 prices)

S.No.	Commodities/Groups	1991-92' (P)	1996-97	Rate of Growth (percent)	Total 1992-97
0	1	2	3	4	5
IV.	**Statistical Adjustment @@**	8600.0 (3900.0)	1287i.: (12871.0	8.4 (27.0)	55125
V.	Grand Total (III + IV) @@@	62345.0 (51700.0)	93314.0 (93314.0)	8.4 12.5)	399650
	Total Imports in U.S.Dollar (Million)	29438.0 (20860.0)	37325.6 (37325.6)	8.4 (12.5)	159860

N.B.:The imports in 1991-92 were abnormally low due to severe import
      restrictions to overcome the adverse BOP position. The restrictions
      were particularly severe for capital goods such as machinery and
      transport equipment. Imports shown in the Table for 1991-92 are the
      normalised estimates, while the figures shown in brackets are the
      actual imports.

P = Provisional

*   Represents notional amount.

@   Data are not comparable with DGCI&S because a sizeable proportion
     is included under fertiliser raw mat·r::ls.

@@   The difference between RBI's Balance · Payments data and
     DGCI&S figures on merchandise trade.

@@@ Assumed normalised imports.

CHAPTER-7
CONSUMPTION SUB-MODEL

The consumption expenditure of the population for different goods and services are generated in the consumption sub-model. The estimates of private consumption are worked out separately for rural and urban areas and within each area for poor and non-poor group of the population. The item-wise consumption estimates for these four groups of population are added to arrive at consumption expenditure for the entire population, which is used in the input-output model. This chapter describes the estimation procedure of private consumption expenditure in base and termin final year of the plan.

The private consumption vector for the base year of the Plan (1991-92) at purchasers prices i.e, prices inclusive of indirect taxes net of subsidies, and trade and transport margins has been generated by the consumption sub-model using aggregate private consumption for 1991-92 at current prices. The aggregate private consumption estimate of 1991-92 has been forecasted from the actual estimate of private consumption obtained from the estimates upto the year 1989-90 made by the Central Statistical Organisation in its National Accounts Statistics. The aggregate private consumption for the year 1991-92 is then bifurcated into rural and urban components on the basis of per capita consumption expenditure differential between the two segments of population as obtained from the consumer expenditure survey of National Sample Survey Organisation (NSSO). The per capita consumption expenditure differential between rural and urban areas for 1991-92 has been set on the basis of its past trend. The sectoral private consumption, separately for people below and above the poverty line in rural and urban areas have been derived first, on the basis of a linear expenditure system (LES) for 11 broad groups of commodities and services. Then within each LES group, the consumption expenditure has been estimated for a number of items using consumer demand functions. This way, the private consumption expenditure of different commodities and services are estimated separately for the above four groups of population. The sectoral consumption of the above four groups of population are added to obtain the sectoral consumption for the country as a whole. These estimates of consumption are expressed in terms of purchasers prices, i.e., it includes indirect taxes net of subsidies and trade and transport margins of the commodity concerned. The vector of consumption at market prices is obtained by netting out the trade and transport margins from the consumption expressed at purchasers prices. The trade and transport margin rates are determined exogenously.

The final demand vectors of private consumption have been generated for the base (1991-92) and the terminal year of the Plan (1996-97) as well as for the perspective period. The methodology behind generation of private consumption vector is outlined below.

The aggregate private consumption obtained from macro economic projection articulated through the macro model is divided into rural and urban areas using the following relations.

$$C = C_r + C_u \qquad \text{...........................(1)}$$

$$\bar{X}_r = C_r/12\, P_r \qquad \text{...........................(2)}$$

$$\bar{X}_u = C_u/12\, P_u \qquad \text{........................... (3)}$$

$$\bar{X}_u = b\, \bar{X}_r \qquad \text{........................... (4)}$$

where,

C = Total private consumption as given in macro model

C_r = Total private consumption in rural areas

C_u= Total private consumption in urban areas

$\overline{X}_r$ = Monthly per capita total private consumption in rural areas

$\overline{X}_u$= Monthly per capita total private consumption in urban areas

P_r = Population in rural areas

P_u = Population in urban areas

b = Estimate of the ratio of per capita consumption in urban to
   that in rural areas.

The monthly per capita total consumption (x) is assumed to be distributed lognormally in both rural and urban areas.

The lognormal distribution function is specified as:

$$dF(x|\mu,\lambda)=\frac{1}{\sqrt{2\pi}\lambda x} \ exp[-\frac{1}{2\lambda^2} \ (\log x-\mu)^2]dx \ \ldots\ldots\ldots\ldots(5)$$

where μ and λ are mean and standard deviation of log x of the distribution. For this distribution,

$$\mu = \log \overline{x} - 0.5 \ \lambda^2 \ \ldots\ldots\ldots\ldots(6)$$

Here $\overline{x}$ is the mean monthly per capita consumption expenditure, which is $\overline{x}_r$ in rural areas and x_u in urban areas.

Using an exogenously determined poverty line (x^*), the percentage of people below the poverty line, considering the distribution function specified in (5) is estimated as:

$$p_b= \varphi \ (y^*) \cdot 100 \ \ldots\ldots\ldots\ldots(7)$$

where,

P_b = Percentage of people below the poverty line.

$$y^* = (\log x^* - \mu)/\lambda \ \ldots\ldots\ldots\ldots(8)$$

x^* = Poverty line, and

φ = Normal distribution function with zero mean and unit variance.

The inequality parameter λ of the log normal distribution is estimated from the Lorenz ratio of monthly per capita household consumption expenditure distribution in rural and urban areas obtained from the NSS data, using the relation given in (9) below.

$$LR = 2\,\varphi\,(\,\lambda\,/\,\sqrt{2}\,) - 1 \quad\dots\dots\dots\dots\dots\dots(9)$$

where LR = Lorenz ratio of the consumption expenditure distribution.

From (9), $\lambda = \sqrt{2} * \varphi^{-1}\,[(1 + LR)/2] \quad\dots\dots\dots\dots\dots(10)$

where φ^{-1} = Ordinate of the standard normal curve,

The aggregate mean per capita consumption in rural and urban areas are decomposed into poor and non-poor group of population within each area using (11) and (12) in the following way.

Average per capita consumption for people below the poverty line, i.e., for poor group of the population is estimated from (11).

$$\overline{x}_p = \overline{x}\;\varphi\,(y^* - \lambda)/\varphi\,(y^*) \quad\dots\dots\dots (11)$$

where $\overline{x}_p$ = per capita consumption of people below the poverty line (x^*)

Average per capita consumption of people above the poverty line, i.e., for non-poor group of population is estimated from (12).

$$\overline{x}_{np} = \overline{x}\,[\,1 - \varphi\,(y^* - \lambda)\,]/\,[\,1 - \varphi\,(y^*)\,] \quad\dots\dots\dots(12)$$

where $\overline{x}_{np}$ = per capita consumption of people above the poverty line, i.e., for non-poor group of population.

By definition,

$$\overline{x} = \overline{x}_p\,\varphi\,(y^*) + \overline{x}_{np}\,[\,1 - \varphi\,(y^*)\,] \quad\dots\dots(13)$$

In general, the per capita consumption of a range of population (i,j) is estimated from the lognormal distribution specified in (5) as:

$$x_{ij} = \frac{\overline{x}\,[\varphi\,(y_j^* - \lambda) - \varphi\,(y_i^* - \lambda)]}{[\varphi\,(y_j^*) - \varphi\,(y_i^*)]} \quad\dots\dots(14)$$

where,

$$y_i^* = (\log y_i - \mu)/\lambda \quad \text{and}$$

$$y_j^* = (\log y_j - \mu)/\lambda$$

The sectoral private consumption demand for people below and above the poverty line within each area are estimated separately. The estimation is carried out in two stages. First, the sectoral consumption demand is derived for people

below and above the poverty line, in rural and urban areas on the basis of a Linear Expenditure System (LES) comprising 11 groups of commodities and services. The LES parameteres are estimated separately for poor and non-poor group of population within rural and urban areas.Then in the second stage, a set of consumer demand functions estimated from National Sample Survey data on consumer expenditure are utilised to obtain the consumer demand for different commodities and services each for people below and above the poverty line in rural and urban areas. The independent estimates of sectoral consumption demand obtained from consumer demand functions and LES are found to differ. The difference in the consumption between the two sets of estimates are closed by adjusting the consumption demand obtained from consumer demand functions, pro-rata, to that obtained from the Linear Expenditure System within each LES group. The adjusted sectoral consumption demand for people below and above the poverty line in rural and urban areas are added to obtain the sectoral consumption demand at the aggregate level. This estimate of sectoral consumption demand which is at purchasers prices, are converted into market prices after netting trade and transport margins from it. The sectoral consumption demand at market prices estimated from consumer demand functions and linear expenditure system are mapped into 60 sectors of the input-output model.

Consumer Demand Functions

The consumer demand functions are obtained by estimating Engel curves on application of single equation weighted least squares method, weights being proportion of population in each expenditure class, for commodities or commodity groups for which cross section household consumption expenditure data are available from National Sample Survey for the year 1983. The functional form is determined by relating per capita consumption expenditure of a commodity or commodity group to the aggregate per capita expenditure. In all, six forms of functions are tested to locate the best fit. The six forms are:

(a) Double Log : $\text{Log } C_i = a + b \text{ log } C$

(b) Semi Log : $C_i = a + b \text{ log } C$

(c) Log Log inverse : $\text{Log } C_i = a + b \text{ log } C + d/C$

(d) Log Inverse : $\text{Log } C_i = a + b/C$

(e) Linear : $C_i = a + b C$

(f) Hyperbola : $C_i = a + b/C$

where,

C_i : monthly per capita expenditure of the i-th commodity.

C : monthly per capita expenditure for all commodities.

The best fitting Engel curves among these are chosen separately for each commodity and population group on the basis of their coefficient of determination adjusted for degrees of freedom and the form of function. In case of commodities for which data were too inadequate to estimate a demand function, aggregate consumption proportions have been used so that in such cases the demand is estimated from the relation,

$C_i = bC$.

The Engel curves are estimated separately in rural and urban areas and within each area, separately for people below and above the poverty line.

Linear Expenditure System (LES)

Linear expenditure system is a complete demand system which is derived from the additive utility function. The utility function may be specified as :

$$U(q) = \Sigma \, b_i \log (q_i - c_i) \qquad ....(15)$$

such that $\quad \Sigma \, b_i = 1$

and $\quad q_i > c_i$

Here, q_i represents quantity consumed of the i-th commodity and b_i are marginal budget shares. c's are sometimes interpreted as committed quantities. This interpretation is only suggestive and fails when, any c_i is negative. A negative c_i is, however, not inconsistent with theory.

Maximising (15) subject to budget constraint

$$C = \Sigma \, p_i \, q_i \qquad ......(16)$$

where p_i is the price of i-th commodity and C is the monthly per capita total expenditure incurred on various commodities or commodity groups.

The complete demand system (LES) obtained from above can be specified as:

$$C_i = p_i q_i = c_i p_i + b_i(C - \Sigma \, c_i p_i) \quad ....(17)$$

$$i = 1, ...n$$

The fulfilment of the second order condition of utility maximisation requires

$$b_i > 0 \text{ for all } i$$

which means absence of inferior commodities and

$$C > \Sigma \, c_i p_i$$

where C_i= Monthly per capita expenditure on i-th commodity. As the LES can be derived from a utility function, it satisifies all the theoretical properties namely, adding up, homogeneity and symmetry of Slutsky substitution matrix.

By incorporating random disturbances in (12) LES can be specified as

$$p_{it} q_{it} = c_i p_{it} + b_i (C_t - \Sigma_k c_k \, p_{kt}) + e_{it} \quad .....(18)$$

$$t = 1, ...,n$$

such that

$$E(e) = 0$$

$$E(ee') = \Omega(+)1$$

Since the adding up property implies that $I\Omega = 0$, Ω becomes singular and poses estimation problem. This is overcome by deleting one equation from the system. Without loss of generality we delete the last equation and formulate the likelihood function. Denoting the truncated residuals as $\bar{e}_t$, $\bar{b}$ and $\bar{\Omega}$ for e_t, b and Ω respectively, the likelihood function in logarithmic form can be written as,

$$\mathrm{L_nL} = -\frac{1}{2}\ m(n-1)\mathrm{ln}2\pi\ -m/2\mathrm{ln}(\det \bar{\Omega}) - \frac{1}{2} \Sigma\, t(e'_t \bar{\Omega}^{-1}\ e_t) \quad \ldots\ldots\ldots(19)$$

The first order conditions of the maximum likelihood function entails non-linear equation in parameters and the estimates can be obtained only by applying iterative methods such as Gauss Newton, Newton Raphson methods. The solution vector does not yield the estimate for the last b, i.e. b_n, which is obtained from the relation.

$$\Sigma b_i = 1$$

The performance of the model is judged by computing

$$R_i^2 = 1 - \Sigma\, e_{it}^2\ /\ \Sigma\, t\, (\mathrm{V'_i - \overline{Vi}})^2 \quad \ldots\ldots(20)$$

Where, V_i is average expenditure of i-th commodity. It can also be judged by using Thiel's average information inaccuracy given by,

$$\pi = 1/m\ \Sigma_i \Sigma_t\ W_{it}\ \mathrm{l_n}\ (\hat{W}_{it}\ /\ W_{it}) \quad \ldots\ldots\ldots(21)$$

The LES parameters have been estimated from the time series of cross section data generated from the National Sample Survey on consumer expenditure relating to the rounds 24th (1969-70) through 28th (1973-74), 32nd (1977-78) and 38th (1983) using Gauss Newton maximum likelihood procedure. Commodity group price indices with 1969-70 as base have been compiled from the wholesale price indices available from the Office of the Economic Adviser, Ministry of Industry. Separate weights, based on the NSS 32nd round consumer expenditure data, have been used for rural and urban areas.

Adjustment of Parameters of LES and Engel/Demand Functions

The estimated parameters of LES and of Engel/Demand functions are adjusted in such a way that the private consumption vector for 60 sector input-output table of the base year (1991-92) generated by these functions agree with the one independently estimated by commodity flow approach, i.e., that obtained from National Accounts Statistics. The procedure adopted is:

(i) The aggregate private consumption of the base year of the plan (1991-92) is first bifurcated into rural and urban components using (1) to (4) and then each into two parts, for people below and above the poverty line, using (5) to (10). This, inter-alia, assumes that monthly per capita private consumption in 1991-92 follows a lognormal distribution with the mean consumption as derived from the macro

model and the inequality parameter as estimated from the NSS data on consumer expenditure of 43rd round (1987-88).

(ii) Using the monthly per capita total consumption in rural and urban areas and within each area for people below and above the poverty line, obtained from (i) and the adjusted LES and consumer demand functions, the sectoral private consumption is estimated.

(iii) The coefficients of demand functions/Engel curves derived from NSS data of an earlier year are used for projection of consumption demand after updating the same to the prices prevailing in the base year (1991-92) of the Eighth Plan, for use in the consumption model. The parameter estimates based on the NSS data have been updated for 1991-92 prices using the relations outlined in (a) to (f) below.

(a) Double Log

$$a' = a - b \, (\log PC) + \log PC_i$$

$$b' = b'$$

(b) Semi Log

$$a' = aPC_i - b.PC_i \, (\log PC)$$

$$b' = b.PC_i$$

(c) Linear and Proportion

$$a' = a \, PC_i$$

$$b' = b.PC_i/PC$$

(d) Log Inverse

$$a' = \log PC_i + a$$

$$b' = PC \cdot b$$

(e) Log log Inverse

$$a' = \log PC_i - b \log PC + a$$

$$b' = b$$

$$d' = PC \cdot d$$

(f) Hyperbola

$$a' = a \, PC_i$$

$$b' = b.PC_iPC$$

a' b' and *d'* : Parameters at 1991-92 prices

a b and d : Parameters at 1983 prices

PC_i = Price relative of commodity i for 1991-92 vis-a-vis 1983

PC : Overall Consumer Price Index in 1991-92 vis-a-vis 1983

(iv) Using the monthly per capita total consumption obtained as in (i) and the LES demand function, the LES estimate of the total private consumption for eleven groups of commodities are estimated.

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(v) The private consumption of various commodities and services belonging to each LES group are estimated by their respective consumer demand functions. These estimates are pro-rata adjusted to the corresponding consumption demands estimated by LES in (iv). The sectoral estimate of private consumption is then grouped into 60 sectors of the input-output model. The sectoral estimates of private consumption are compared with those estimated by the commodity-flow method and are suitably adjusted so that the percentage difference of the two sets of estimates does not generally exceed 10 to 15 per cent. The private consumption vector of 60 sectors obtained in this way, is used for the base year input-output table. It is also used to adjust the parameters of LES and demand functions. For this purpose, private consumption of the 60 sectors of input-output table are first aggregated to 11 LES groups. Using these final estimates of LES groups as row control and the aggregate rural and urban private consumption derived from the macro model as column controls, estimates of rural and urban consumption of the 11 LES groups are adjusted by RAS method. This yields the balanced rural and urban consumption vector of LES groups. A similar iterative procedure is used to balance the consumption for people below and above the poverty line within rural and urban areas, using the balanced consumption of these areas obtained earlier. The balanced sectoral consumption obtained for rural and urban areas and within each area for people below and above the poverty line, are used to adjust the parameters of the Linear Expenditure System in the following way.

(a) The parameter a_i is adjusted to :

$$\overline{a_i} = a_i\overline{C_i}/C_i$$

where C_i = original estimates of consumption by LES and

$\overline{C_i}$ = Adjusted estimate

(b) The parameter b_i is adjusted to

$$\overline{b_i} = (\overline{C_i} - \overline{a_i})/ \Sigma (\overline{C_i} - \overline{a_i})$$

where $\Sigma C_i = \Sigma\overline{C_i} = C$

$\overline{a_i}$ and $\overline{b_i}$ are the adjusted a_i and b_i respectively

(vi) The parameter estimates of consumer demand functions for rural and urban areas and within each area for people below and above the poverty line have been adjusted in a similar way. The estimates of consumption demand for rural and urban areas obtained by the respective consumer demand functions for different sectors comprising each LES group have been first adjusted by RAS method using the sectoral private consumption as row control totals and rural-urban totals of the particular LES group as column control totals. RAS method has been used to ensure consistency in the aggregate private consumption obtained through LES with that obtained independently from commodity flow approach. A similar approach has been followed to work out sectoral demand estimates within a LES group for people below and above the poverty line separately for rural and urban areas.

Using these adjusted demand for each commodity, the corresponding parameters of the Engel curves of the commodity have been adjusted in the following way.

Using C_i as the original estimates and $\overline{C}_i$ as the adjusted estimate of demand of the commodity, the parameters of consumer demand functions are adjusted in the following way.

(a) Double Log, Log Inverse and Log Log Inverse:

$a' = a + \log (\ \overline{C}_i / C_i)$

$b' = b$

and $d' = d$ in case of log log inverse.

(b) Other functions

$a' = a\ \overline{C}_i / C_i$

and $b' = b\ (\overline{C}_i / C_i)$

where a', b' and d' are adjusted parameters.

These adjusted demand function parameters in (VI) and LES parameters in (v) are utilised to project the commodity demand for terminal year (1996-97).

The Facets of Consumption

The consumption model besides depicting the consumption behaviour of different sections of the population, quantifies the extent of the improvement in level of living as a result of increase in per capita consumption expenditure and reduction in the disparity of consumption expenditure between different income classes of the population. The model sets the pattern of consumption in rural and urban areas and within each area, for people below and above the poverty line, as well as for different fractiles of the population.

The model uses an exogenously determined poverty line (expressed in terms of monthly per capita consumption expenditure of the population) to delineate two groups in population, i.e, the poor and the non-poor. The inequality in the distribution of consumption among different expenditure groups in rural and urban areas used in the model are assessed from the NSS data on consumption expenditure distribution. The poverty line and inequality parameters used in the model are given in Table-7.1. The poverty ratios expressed as percentage of people in poverty to total

population in rural and urban areas as well as for the country as a whole, for base and terminal year of the plan are estimated on the assumption of lognormality in the distribution of per capita consumption. These are given in Table-7.2. The monthly per capita consumption for poor and non-poor group of population in rural and urban areas for base and terminal year of the plan are given in Table-7.3. The changes in consumption expenditure during the plan period suggest a relatively higher growth in per capita terms in rural areas as compared to urban areas. The eighth plan projects a relatively higher growth in per capita consumption by 3.61% per year in rural areas as compared to 2.54% per year in urban areas. This will help in closing, however marginally, the per capita consumption expenditure differential between rural and urban segments of the population. Per capita consumption for the country as a whole is projected to increase by 3.42% per year in the Eighth Plan. The increase in per capita consumption of non- poor group of population during the plan period is marginally higher as compared to the poor group as the incidence of poverty reduces from 21% in the base year to 10% in the terminal year of the plan at the background of relatively higher growth in consumption of those in the second decile.

The trend in the share of consumption for different deciles of the population separately for rural and urban areas are estimated in Table-7.4. It shows that : (a) the consumption shares in the lower deciles have increased while that in upper deciles have reduced, (b) the rising or falling trend in the consumption shares has been much sharper after mid-1970s, and (c) inter-temporal changes in the consumption shares have largely been witnessed in rural areas since the mid-1970s whereas the urban areas have remained insulated from such changes. These trends in the fractile-wise share of consumption are reflected in the trend of the quantitative index of inequality in consumption distribution estimated in Table-7.5. It shows significant decline in the overall index of inequality in the consumption expenditure distribution in rural areas since the mid-1970s. The above decline in inequality in consumption expenditure distribution in rural areas may be associated with public intervention programmes in the area of rural poverty alleviation.

Keeping the above in view, the Eighth Plan proposes to raise the share of consumption for lower deciles of the population in both rural and urban areas. The decile-wise share of consumption in base and terminal year of the plan are given in Table-7.6. It shows increase in the share of consumption for people upto the seventh decile in both rural and urban areas during the plan period. It also shows that the rate of increase in the consumption shares are relatively higher in lower deciles.

The per capita consumption of different deciles of the population in base and terminal year of the plan and its growth during the plan period are given in Table-7.7. The increase in per capita consumption of different groups of population during the plan period shows a faster rise for the people in lower deciles as compared to those in the upper deciles. For example, the per capita consumption expenditure of bottom 30% of the population in rural areas is projected to increase at a rate of 5.38% per year during the plan period as compared to 2.71% per year for the top 30% of the population. Similarly, in urban areas, the per capita consumption of bottom 30% of the population is projected to increase by 4.75% per year as compared to 1.57% per year in case of top 30% of the population. This will reduce the disparity in consumption between the poorer segment of the population and the rest.

The structure of consumption for different groups of population in rural and urban areas of the country in base and terminal year of the plan are presented in Table-7.8 and Table-7.9 respectively. The changes in the structure of consumption between base and terminal year of the plan generally shows a shift from food to non-food items. It also shows a reduction in the share of foodgrain in food consumption, particularly of the poorer group of the population in rural areas.

A comparison of the per capita consumption of poor 30% of the population with the total population in base and terminal year of the plan has been made . It

is because the poor 30% of the population generally lead a life which is not considered desirable from the point of view of adequacy and minimum level of living. The consumption scenario in the plan, particularly of the poor 30% of the population in rural and urban areas, in a way, reflect the effectiveness of the plan strategy to benefit the relatively weaker sections of the society.

The assumption of lognormality in the distribution of per capita consumption in rural and urban areas, coupled with the exogenously determined poverty line shows that 21% of the total population are poor in 1991-92. The same assumption in the background of a little reduction in the inequality in expenditure distribution between base and terminal year of the plan coupled with the projected growth in average per capita consumption in the plan shows that the poverty ratio defined as a percentage of poor in total population will be 10% in 1996-97. However, the estimate of poverty ratio in 1996-97 and the consequent reduction in the incidence of poverty between the base and terminal year of the plan is based on two critical assumptions. These are: (a) the assumption of lognormality in the distribution of per capita consumption in rural and urban areas continue to remain valid until 1996-97 and (b) the extent of reduction in inequality in consumption expenditure distribution of the population between 1991-92 and 1996-97. The assumption of lognormality in monthly per capita consumption has been tested from the NSS consumption expenditure data of 43rd round which relates to the year 1987- 88. Since then, it has not been possible to trace the nature of movement of per capita consumption expenditure and its consequent impact on consumption inequality. The increase in per capita consumption between 1987-88 and 1991-92, i.e., between 1987-88 and the base year of the plan and also the increase between the base and terminal year of the plan, i.e., between 1991-92 and 1996-97 may or may not be associated with distributional changes. It is rational to presume that high rate of growth of consumption would improve the distribution of consumption by reducing the disparity in per capita consumption between the poor and the non-poor. Besides, the Government intervention programmes in poverty alleviation which are specifically designed to increase the incomes of the poor through generation of productive assets are likely to act positively towards improvement of the consumption distribution pattern. It is because these incomes are supposed to accrue specifically to the poor group of the population and thereby will have a major impact on the improvement of income distribution. The extent of actual shift that takes place in the distribution as a result of increase in per capita consumption and of public redistributive programmes can only be known with the availability of NSS consumption expenditure data of a later year.

The changes in the distribution of income as a result of both growth and redistributive process may or may not allow the distribution of per capita consumption to remain a lognormal one. The heart of the matter is that the consumption growth in conjunction with income redistributive programmes such as, the Integrated Rural Development Programme (IRDP) and wage employment programmes, such as Jawahar Rojgar Yojana (JRY), etc. may change the pattern of distribution of consumption. It is not certain that the resultant distribution will remain lognormal. This prevents determination of the extent of inequality in the distribution of consumption in terminal year of the plan with enough precision. However, a general reduction in inequality in consumption expenditure is more likely to be the consequence of growth in per capita consumption due to general growth process and growth in per capita consumption of the poor as a result of the redistributive process. It is equally true that quantification of the extent of reduction in inequality and the pattern of distribution of consumption concommittant with reduction in inequality is extremely difficult, if not impossible. The problem is confronted here by assuming a ten per cent reduction in the inequality in distribution of per capita consumption in the terminal year of the plan as compared to the base year. For these reasons, the estimate of poverty in 1996-97 as 10% should be treated with caution. Attempts have been made in the earlier plans to assess the distributional impact of the public intervention programmes for poverty alleviation. But, these efforts have posed more questions than they have answered. It is for this reason no attempt has been made in the Eighth Plan to separate the influence of income growth and distributional changes on the pattern of distribution of consumption of the population

and on the estimate of poverty. An indirect way to test the validity of the assumption of lognormality in the terminal year of the plan may be to compare the poverty ratio estimated from the lognormal distribution function with the poverty ratio estimated from a calibrated distribution of consumption expenditure of the NSSO. For this, NSSO Consumer Expenditure distribution of 1987-88 have been jacked up, pro- rata, by the increase in per capita consumption until 1996- 97. This, inter-alia, assumes identical increase in the per capita consumption of different fractiles of the population. The closeness in the two sets of estimates of poverty, i.e., from the calibrated NSS consumption distribution and lognormal distribution function conform the validity of the assumption of lognormality in the distribution of per capita expenditure in 1996-97. On the other hand, discrepancy in the two sets of estimates may put the assumption of lognormality into test. There are differences in the two estimates as can be seen from Table-7.10 which gives the poverty ratio from the two approaches. Moreover, this discrepancy will widen in case the impact of income redistributive measures arising from public intervention programmes in the area of poverty alleviation are taken into account. It is because the investment in IRDP generates income for the poor group of population. Besides, the rise in income as a result of wage employment programmes will affect the consumption expenditure distribution. Since wage employment pro-grammes generate income for that particular year and not on sustainable basis, the increase in income between 1987-88 and 1991-92 and between 1991-92 and 1996-97 as a result of these programmes will impact on the consumption distribution exactly in the same way as the investment in IRDP.

The increase in consumption of the poor due to public intervention will have a far reaching impact on the consumption distribution pattern. The aggregate impact of public intervention programmes in the area of poverty alleviation is increase in per capita income of the poor. This is certain to change the pattern of expenditure distribution in the terminal year of the plan.

Table-7.1
Poverty Line and Inequality

S.No.		Rural	Urban
0	1	2	3
1.	Poverty Line	192.20	221.80
	(Rs. at 1991-92 prices)		
2.	Lorenz Ratio		
	a) 1991-92	0.29826	0.35369
	b) 1996-97	0.26966	0.32040
3.	Inequality Parameter		
	of Log Normal Distribution		
	a) 1991-92	0.54160	0.64898
	b) 1996-97	0.48744	0.58408

N.B.: The inequality parameters in 1991-92 are based on the NSS data on household consumer expenditure distribution, 43rd Round, July 1987 to June 1988.

Table-7.2
Poverty Ratio

(Percent)

S.No.	Year	Rural	Urban	Total
0	1	2	3	4
1.	1991-92	23.25	15.98	21.38
		(147.44)	(35.09)	(182.53)
2.	1996-97	10.88	8.24	10.15
		(73.55)	(21.27)	(94.82)

N.B.:1. Based on the assumption of lognormality in the distribution of per capita consumption expenditure.

2. Figures in the parenthesis indicate number of persons (million) below poverty line.

Table-7.3
Monthly Per Capita Consumption Expenditure

(Rs. Monthly at 1991-92 prices)

S.No.		Rural	Urban	Total
0	1	2	3	4
1. 1991-92				
a)	Poor	144.53	163.63	148.2
b)	Non-Poor	386.97	590.56	442.93
c)	Total	330.6	522.35	379.92
2. 1996-97				
a)	Poor	154.88	174.17	159.2
		(1.39)	(1.26)	(1.44)
b)	Non-Poor	424.1	629.75	482.15
		(1.85)	(1.29)	(1.71)
c)	Total	394.83	592.24	449.39
		(3.61)	(2.54)	(3.42)

Note: Figures in the parenthesis indicate annual
average increase in per capita consumption
during plan period.

Table-7.4

Consumption Share : Growth Rates

(percent per year)

S.No.	Population Group	Rural			Urban		
		1958-73	1977-91	1958-91	1958-73	1977-91	1958-91
0	1	2	3	4	5	6	7
1.	1st Decile	0.72	1.28	0.42	1.07	–	0.21
2.	2nd Decile	0.97	0.98	0.31	0.69	–	–
3.	3rd Decile	0.75	0.50	0.21	0.39	–	–
4.	4th Decile	–	0.62	–	–	–	–
5.	5th Decile	–	0.48	–	0.47	–	–
6.	6th Decile	–	0.40	–	–	–	–
7.	7th Decile	0.41	0.51	–	–	–	–
8.	8th Decile	–	–	–	–	-0.64	–
9.	9th Decile	–	–	-0.12	–	–	–
10.	10th Decile	-0.70	-1.10	–	-1.13	–	–
11.	Bottom 30%	0.81	0.86	0.30	0.66	–	–
12.	Middle 40%	0.24	0.50	–	0.25	–	–
13.	Top 30%	-0.39	-0.57	-0.09	-0.32	–	–
14.	Bottom 50%	0.46	0.70	0.15	0.53	–	–
15.	Top 50%	-0.12	-0.30	-0.07	-0.20	–	–

N.B.: '–' indicates stagnancy.

Table-7.5

Consumption Inequality : Growth Rates

(Percent per year)

S.No.	Period	Rural	Urban
0	1	2	3
1.	1958-73	-0.83	-0.75
2.	1977-91	-1.33	–
3.	1958-91	-0.25	–

N.B.: Based on Lorenz Ratio estimated from NSS consumer expenditure distribution of various rounds.

Table-7.6
Decile-wise Share of Consumption

(percent)

S.No.	Decile Group	Rural 1991-92	Rural 1996-97	Urban 1991-92	Urban 1996-97
0	1	2	3	4	5
1.	0-10	3.41	3.84	2.68	3.11
2.	10-20	4.92	5.35	4.13	4.59
3.	20-30	5.99	6.39	5.23	5.69
4.	30-40	7.01	7.36	6.31	6.73
5.	40-50	8.07	8.36	7.47	7.84
6.	50-60	9.25	9.45	8.80	9.08
7.	60-70	10.66	10.73	10.42	10.58
8.	70-80	12.48	12.36	12.60	12.54
9.	80-90	15.24	14.80	16.01	15.56
10.	90-100	22.97	21.36	26.35	24.28

Table-7.7
Fractile-Wise Per Capita Consumption and its Growth

(Rs. monthly at 1991-92 prices)

S.No.	Decile	Rural 1991-92	Rural 1996-97	Urban 1991-92	Urban 1996-97	Growth Rate (%) Rural	Growth Rate (%) Urban
0	1	2	3	4	5	6	7
1.	Ist Decile	112.87	151.81	139.84	183.90	6.11	5.63
2.	2nd Decile	162.52	211.10	215.53	272.06	5.37	4.77
3.	3rd Decile	198.07	252.26	273.12	336.74	4.96	4.28
4.	4th Decile	231.78	290.61	329.70	398.93	4.63	3.89
5.	5th Decile	266.88	329.92	390.37	464.43	4.33	3.54
6.	6th Decile	305.90	373.04	459.73	538.07	4.05	3.20
7.	7th Decile	352.29	423.59	544.50	626.57	3.76	2.85
8.	8th Decile	412.52	488.23	657.90	742.86	3.43	2.46
9.	9th Decile	503.89	584.48	836.34	921.81	3.01	1.97
10.	10th Decile	759.27	843.21	1376.42	1437.90	2.12	0.88
11.	Bottom 30%	157.81	205.06	209.50	264.23	5.38	4.75
12.	Middle 40%	289.19	354.29	431.08	507.00	4.14	3.30
13.	Top 30%	558.60	638.64	956.89	1034.19	2.71	1.57
14.	All Population	330.60	394.82	522.35	592.24	3.61	2.54

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Table-7.8

Structure of Consumption : 1991-92

(Percent)

S.No.	Commodities	Rural		Urban		All
		Bottom 30%	Total	Bottom 30%	Total	India
0	1	2	3	4	5	6
1.	Foodgrains	34.18	18.97	23.86	10.48	15.94
2.	Fruits, Vegetable & Spices	12.57	9.50	11.29	5.86	8.20
3.	Milk & Milk Products	7.98	8.97	8.71	9.80	9.26
4.	Sugar & Gur	1.28	1.99	2.84	2.16	2.05
5.	Oil & Beverages	8.80	7.53	10.14	14.76	10.10
	Total: Food	64.81	46.96	56.84	43.06	45.55
6.	Clothing	3.01	9.68	1.68	9.99	9.79
7.	Consumer Non-durables	11.55	6.45	4.04	4.28	5.69
8.	Consumer Durables	0.26	4.65	0.80	3.07	4.09
9.	Services	20.37	32.26	36.64	39.60	34.88
	Total: Non-Food	35.19	53.04	43.16	56.94	54.45
	Total	100.00	100.00	100.00	100.00	100.00

Table-7.9

Structure of Consumption : 1996-97

(Percent)

S.No.	Commodities	Rural		Urban		All
		Bottom 30%	Total	Bottom 30%	Total	India
0	1	2	3	4	5	6
1.	Foodgrains	32.79	17.41	22.88	9.63	14.58
2.	Fruits, Vegetable & Spices	14.08	10.15	12.69	6.44	8.80
3.	Milk & Milk Products	8.58	8.81	9.16	9.63	9.11
4.	Sugar & Gur	1.37	1.90	2.73	1.94	1.91
5.	Oil & Beverages	7.68	6.44	8.95	12.65	8.70
	Total: Food	64.50	44.71	56.41	40.29	43.10
6.	Clothing	2.87	9.75	1.54	10.05	9.86
7.	Consumer Non-durables	12.76	6.86	3.55	4.04	5.83
8.	Consumer Durables	0.21	4.54	0.58	3.60	4.20
9.	Services	19.66	34.14	37.92	42.02	37.01
	Total: Non-Food	35.50	55.29	43.59	59.71	56.90
	Total	100.00	100.00	100.00	100.00	100.00

Table-7.10
Poverty Ratio from NSS Consumption Distribution and Lognormal Distribution

1	Poverty Ratio (%)		Difference between (a) and (b) (%)	
	Rural	Urban	Rural	Urban
	2	3	4	5
1. 1987-88				
a) NSS Distribution	27.3	17.0	-	-
b) Lognormal Distribution	28.7	19.6	5.1	15.3
2. 1991-92				
a) NSS Distribution	20.6	12.3	-	-
b) Lognormal Distribution	23.0	15.7	11.7	27.6
3. 1996-97				
a) NSS Distribution	11.0	7.5	-	-
b) Lognormal Distribution	14.3	11.6	30.0	54.7

Note:The observed consumption expenditure distribution of NSS for the year 1987-88 has been adjusted to total private consumption expenditure for 1987-88, estimated by CSO in National Accounts Statistics.

CHAPTER - 8

FUTURE TASK

Indian planning process is at crossroads. The economic reforms initiated in June, 1991 aiming at allowing a greater play for markets replacing the different agents of the Government as dominant decision makers are intended to withdraw the Government from certain key areas of economic decision making and allowing it to refocus its policy intervention. The withdrawal of the Government from detailed licensing and controls of production and investment and trade, warrants a change in the role and the use of formal models in capturing the complex intricacies of the planning process. In the present circumstances, as the role and the shape of planning changes, it is necessary to capture these in a formal quantitative model frame. How and to what extent formal economic models can be used to describe the new scenario is the heart of the question. This requires outlining of:

        (a) the existing planning process,

        (b) the likely changes in the economic scenario and consequently in the planning process as a result of the reform programmes,

        (c) the role of formal quantitative models to capture the existing planning process, and

        (d) the extent and the manner and method in which the new scenario can be captured through the use of formal economic modelling.

Existing Planning Process

The existing planning process basically involves:

        (a) Spelling out the paradigms of development,

        (b) Outlining the strategies for development and the supporting policy environment,

        (c) Working out the macro-parameters for growth and its sectoral pattern,

        (d) Resource allocation between Centre and States and between sectors,

        (e) Detailed allocation of budgetary support, and

        (f) Consideration of specific projects, programmes and schemes in the public sector.

The planning process described above covers a wide area and involves various organisations and institutions both within and outside the Government. It involves the Central Ministries, the Reserve Bank of India, the State Governments alongwith grassroot level of administration and the political leadership, besides the Planning Commission. The preparation of Five Year Plan begins with the formulation of an Approach Paper outlining the macro economic dimensions, strategies and objectives of the plan. The Approach Paper is discussed in the Planning Commission and presented to the National Development Council for its consideration and approval. Then it is circulated among the States and the Central Ministries. The State Governments and the Central Ministries, in turn, prepare their respective plans based on the

parameters postulated in the Approach Paper. These plans and programmes are reviewed by the Planning Commission. As a result, a detailed plan is evolved which is presented to the Planning Commission and the National Development Council. The Five Year Plan Document is then prepared, keeping in view the objectives, the plan orientation, development perspective, macro-economic dimension, the policy framework, financing and sectoral profiles.

The Five Year Plans thus framed set out the dimensions of economic growth and development in the country and postulate the macro-economic aggregates, such as resources, savings, investment, income and several broader economic and social requirements. It boils down to laying out an investment profile in terms of economic activities to steer the economy in the desired direction. The Five Year Plan is implemented through Annual Plans which involve allocation of resources between Centre and States and between sectors and more particularly the allocation of budgetary resources. It also involves detailed consideration of projects, programmes and schemes. Sanction of Government expenditure is effected through annual budgets. The allocation of Government resources and expenditure in the annual budgets is made keeping Five Year Plans in view.

The objective of the Central Plan is to strengthen and support the State Plan and also to implement some of the key priorities. The Central plans basically is complimentary to the state plans as it caters the areas where the States are unable to invest due to resource constraint or an area which is not the State's direct concern. The separate plans of the Central and the State Governments constitute the public sector plan. The Planning Commission brings them together through a process of discussions and reviews at various levels and thereby plays a coordinating role between the Centre and the State.

The Planning Commission estimates the size of national resources. The balance of payments situation is assessed from a detailed calculation of exports and imports. The incremental capital output ratio (ICOR) is quantified. The sectoral material and social requirements are worked out at sectoral level. The material requirements are related to targeted growth rates and are worked out from the input-output based consistency-cum-investment model. The social requirements are assessed more in a normative manner keeping in view the resource constraint. The overall growth rate is set matching the demand and supply of resources. The sectoral targets of growth are made consistent with the overall rate of growth.

The plan sets out a projection of investment for both public and private sector. The public sector planning involves charting out the details of output and investment while the targets for private sector mostly are indicative in nature. The public sector investment cateres mostly the infrastructure sectors, such as energy, communication, transport and social sectors such as education, health, basic needs etc. In case of private sector, the Government frames policies and packages of incentives and controls in order to realise the growth rates. An example is foodgrains which are produced in private sector by millions of farmers. The plan target for foodgrain production is achieved by building up of irrigation infrastructure, supply of fertiliser, support prices, and research and extension facilities which is exclusively in public sector.

However, all these factors are not entirely captured by the quantitative framework of the model that is presently in use in the Planning Commission as some of them involve a multi-stage decision making process. The use of formal model is only a part of the planning methodology and the quantitative framework of the plan captures only a part of the entire planning process.

The New Economic Scenario

The economic reforms pursued by the Government since June, 1991 basically consist of:

(a) Short-term stabilisation policies in order to correct the balance of payments disequilibrium through adjustment in the exchange rate, ensuring macro-economic balances through curtailment of Government expenditure, monetary liquidity and market liberalisation through elimination of subsidies and price controls; and

(b) long-term economic reforms under structural adjustment programmes covering deregulation of industry, liberalisation of trade, elimination of protective tariff barriers, privatisation of financial institutions and public enterprises, streamlining of the State sector, privatisation of social programmes and rationalisation of the tax structure.

A series of reforms were undertaken in the above direction since June, 1991. The exchange rate of rupee was adjusted downwards. Foreign trade regime was liberalised. Tariffs were lowered. Policies in respect of trans-border capital flows were liberalised. Industrial licensing was largely dispensed with. Some of the earlier forbidden areas were opened to private enterprise and steps were initiated towards financial sector reforms. The Government particularly concentrated on fiscal reforms.

The reform process thus aims at dismantling of controls and regulatory measures and seeks to redefine the role of Government and, hence, planning. In the new scenario, the role of planning has to be redefined. The planning process will have to undergo a change in the essential sense that the main responsibility of the Government in the context of development may be restricted to infrastructure and social investment and in those activities where private initiative may not be forthcoming. The Government will have to continue to implement programmes for the poor and the weaker sections. Programmes for social welfare, population control, environmental protection, health and education, at least at the primary level, will continue to be the responsibility of the Government for quite sometime to come.

The market system has brought bountiful benefits since the days of Adam Smith. But this system at every turn in history has created large scale disruption, wreaked havoc on the lives of millions of people and been the subject of constant legal and regulatory correction. Keeping this in view, the State will have to intervene for expansion of the market and to make it operate more freely, competitively and with accessibility.

The market needs prospective information beyond those accompanying the price. Here indicative planning has the gap filling role. Expanding the scope of the market and making it freely accessible to all will require supportive and congenial legal framework which makes contractual transactions easy and secure. This will include laws relating to transactions in land, real estate, smoother and more secure working of stock exchange and financial intermediaries including removal of obstacles in the free movement of goods and perhaps consumer protection. Regulation of monopolies will be one of the important functions of the Government.

The strong point of market is efficiency. It's weak point is that it has only a short-term view. The market prices are more influenced by available supplies and demand in a limited time horizon. As such, the price-mechanism is inadequate to protect environment and ecology which have long-term consequences. This necessitates state intervention and planning. Some of the long-term costs can be built into current costs and prices, but that is also possible only through intervention. Thus, in whichever area society has to take a long-term view, state intervention and planning become necessary. Planning here means taking a long-term view, setting goals and

devising strategies to achieve these goals within the accepted paradigms. There is a complementarity between market as an efficiency promoting device and planning as an instrument of establishing behavioural pattern appropriate for achieving the targets set out in the plan.

The reform process will require imaginative Governmental design and management. The Government will have to have a strong interventionist policy in the area of fiscal and monetary management, trade, education, health and in bilateral negotiations to assure market access. It will also have a direct role in the formulation of Science and Technology policy, financial sector regulation, advancement of environmental protection and in the areas that cannot be left entirely to the market place.

. So long as there is a Government and an elected Government, it will be there to do things. So, Government interference will be there. At what stage or level this is the question and that is what is required to be decided and settled. The Government will not abandon its role in the economy and planning, it will suitably refocus it to make it more effective. The role of planning will be to devise the best and most productive strategy applying the least but the most effective interventions and not relying only on efficiency and growth.

Models in Indian Plans

A brief outline of the coverage of formal quantitative models in successive five year plans of India may be worthwhile.

The first five year plan (1951-56) did not have any formal planning model. The basic frame was based on the a single sector growth model of Harrod-Domar, which stressed investment for capital accumulation. Production required capital which could be accumulated through investment and to which the growth rate was directly related.

The model though highly aggregative in nature, underlined the problem of raising the per capita income in the economy. However, it concealed structural aspects of the problem of a steady rate of growth which prevented its use as a tool in detailed quantitative policy making.

The development strategy during the second plan (1956-61) was articulated through Mahalanobis model on the premise that development could be achieved by establishment of a modern industrial sector supported by capital investments and infrastructure building. It was a model of economic growth generated by capital accumulation based on domestic savings and foreign capital. The aggregate investment multiplied by aggregate marginal capital-output ratio produced increases in aggregate output from which an even greater proportion was saved and invested for re-generation of the growth process. The aggregate and sectoral investment allocation was formally related through a four sector model in the Second Plan.

The Third Plan (1961-66) and Fourth plan (1969-74) were based on static multi-sectoral input-output system ensuring terminal year consistency.

The Fifth Plan (1974-79) model was a Leontief static open model ensuring terminal year consistency among sectoral output. It consisted of a macro economic model, an input-output model and a consumption model. The macro economic model provided the projection for income which is consistent with total investment. The input-output model consisted of an inter-industry model where each sector is viewed as producers of outputs and user of inputs from other sectors. The consumption model was used to generate demand for consumption expenditure considering the minimum requirement of poor group of population. The Fifth Plan endogenised private consumption and import and worked out a detailed methodology for mobilisation of

financial resources and financing of the plan. It also explicitly brought poverty alleviation in the plan model. In the Sixth Plan (1980-85), an investment planning model was integrated with the input-output approach.

The model system presently used in the Planning Commission integrated the various features developed since the Fifth Plan and made investment consistent with a long term perspective plan. The existing quantitative model described above thus requires to be adapted in the light of the changes in policy.

The Existing Model

The existing plan model is a multi-sectoral static input-output model, where consumption, export and import are treated as final demand and inter-industry transactions are interpreted as intermediate demands. The output level in each industry necessary to satisfy the total demand, i.e., final as well as intermediate, for the commodity, is decided in the plan model. Thus, the principal objective of the multi-sectoral plan model that is in use, is to derive mutually consistent sectoral output targets and corresponding sectoral investment demands.

The plan model sets out the aggregate growth rate of the economy. The aggregate growth rate is determined from an assessment of the macro economic aggregates such as consumption, savings, investment and net inflow from the rest of the world.

The magnitude of the above macro-economic variables are determined by balancing income and expenditure for a number of alternative growth rate in income and the set which is consistent with resource availability and domestic production supply possibilities is adopted.

A set of income and expenditure identities in combination with input-output model determines investment in the terminal year endogenously. The resources available for investment is also calculated as the growth in Gross Domestic Product, savings, consumption and certain other exogenous variables are known.

Sectoral output is determined by final demand in conjunction with the input-output matrix (Leontief inverse). The final demands are determined exogenously. The Leontief inverse is obtained by endogenising import, consumption and investment. Sectoral imports are derived on the basis of input demand for import, adjusted for import substitution and the assumed import content of consumption and investment. Aggregate demand consists of consumption (public and private), investment (public and private), exports and intermediate goods. The output levels necessary to satisfy these demands are calculated with the help of a 60-sector input-output model. This ensures inter-sectoral consistency in output. The feasibility of the output structure requires a matching with their supply. A family of sub-models are used to estimate the supply potentials of different sectors. The sub-models estimate the supply potentialities of different sectors vis-a-vis investment made in earlier plans, rate of completion of existing projects and capacity utilisation. In effect, the sub-models are used to assess the impact of those variables which are not adequately captured in the input-output frame.

The sectoral disaggregation of final demand of each variable is effected mainly from the sub-models. Sectoral private consumption is obtained from consumption sub-model which estimates the demand for different goods and services at the background of growth pattern of the economy postulated in the plan, a projected growth in population and its rural-urban composition and the existing inequality in the consumption distribution. Subsequently, the consumption patterns are adjusted in the light of likely changes in consumption distribution resulting from specified redistributive policies proposed in the Plan.

In the consumption model, the private consumption is divided into four segments - rural and urban separately for below and above the poverty line. A very detailed modelling is done for assessment of the poverty cut-off point and the pattern of distribution of consumption below and above the poverty line. The consumption basket estimated in the consumption sub-model is dovetailed with the main model to ensure supply-demand balances.

The estimates of exports are based on a simulation model whose parameters are basically obtained from econometric estimation procedure. An almost similar method is followed in case of imports although sectoral import requirements are partly estimated in the input-output model aided by help of an import coefficient matrix.

The model estimates the investment needs for a desired level of output. Sectoral allocation of investment is determined by postulating investment function. ICORs are estimated for each sector on the basis of past data. These ICORs are used to determine the secotral investment necessary to generate a desired level of output. Investment by destination are converted into investment by source, i.e., by production activities with the help of capital coefficient matrix. The potential effect of alternate allocation of investment by destination on sectoral growth rate is measured. Then, these are dovetailed into the input-output model to check their consistency. The model treats public and private investments separately as allocation of investment in public sector is a target while that in private sector is an indicative forecast.

Finally, the model checks the consistency of output requirements with long term objectives and match the growth potentials of the Plan. The Plan model provides a mutually consistent sectoral output and corresponding sectoral investment. This way, the model is capable of ensuring inter-industry consistency. However, social optimality is not ensured under the above frame of multi-sectoral consistency.

Economic Modelling in New Scenario

The existing model frame would require necessary changes in view of the changed economic environment in which (a) market will predominate (b) private sector will expand (c) public sector will be more autonomous and be subjected to market forces as the private sector (d) trade with the rest of the world will expand in an environment in which global economic trends and compulsions will have larger impact on the domestic economy and (e) the role of the Government will be confined in the creation suitable environment for growth and development rather than directly taking part in production and trade.

Within market economies, economic planning has two main functions. These are :

(a) it must look into the future and announce its likely feature, (b) it must define strategies, evaluate public projects and control their realisation. It is because neither the Government nor the private sector feel that markets convey all the information required for sound decision with long or medium term implication.

The estimates of resources and investment in the Plan is made at constant prices on the tacit assumption that income expenditure equilibrium at constant prices would automatically ensure similar eq .ilibrium at current prices because of identical price elasticity of income and expenditure and similarity in prices of commodities, particularly of consumption and capi⁺₃l goods. The actual experience is that price elasticity of expenditure is more than that of income and increase in price of capital goods is faster than that of consumption goods. Thus the realised real investment tends to be lower than the targetted plan investments. The existing model thus ignores the real effect of prices, whereas such effects may be significant and may distort the consistency as well as the efficiency of allocations.

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In regard to prices, a detailed analysis of commodity and factor prices, inflation rate, relation between absolute and relative prices and its impact on different sections of the population, factors causing inflation, role of money supply in inflation and impact of changes in administered price policy including dual-price system, is essential particularly for its short-run implications. Capturing these in a quantitative framework would mean a shift away from the existing fix-price model to a flex price mechanism.

In the new policy regime, the trade sector is characterised by decanalisation of imports and exports, liberalisation of import in key areas particularly of raw materials and capital goods, and for export promotion. It would be necessary to develop econometric models to determine the demand for imports and exports for building up the model for balance of payments.

In a liberalised regime for private investment, analysis of private investment behaviour becomes important. Such analysis has to be carried out separately for critical sectors of the economy treating distinctly the private foreign investment. Investment behaviour in the short run will impact upon financial sector savings and balance of payments accounts. In the medium and long-run, investment behaviour will determine the production possibility frontiers. Thus analysis of investment behaviour will be at the core of the modelling effort in future.

An element of forecasting may be introduced in the model so that critical variables are monitored in the short-run. The feasibility of placketing each of the issues mentioned above into a model structure may be studied from the point of view of data availability and stability. Once these issues are embedded in the existing multi-sectoral input-output model and integrated with the perspective plan, forecasting may be made for short term (one or two years), medium term (five years) and for the longer period (ten to fifteen years) by fixing the horizon in terms of key variables such as land, water, energy, food, housing, population and environment.

Planning has crucial role to play in giving expression to what constitutes the socially desirable objective. Planning has played this role in many countries where free market operates. Planning is needed to create social infrastructure for human development, protection of ecology and regeneration of environment and natural resources, protecting the weak and achieving a certain degree of regional balance in growth. Market cannot probably perform these roles on its own. Planning interventions are required for gently guiding the market for achieving some of the societal objectives to which market being guided by short-term considerations is not very sensitive.

A Perspective on Energy Use Efficiency

Energy is an essential input in all the sectors of economy. Input of energy is a function of technology, structure of the industry, type of feedstock and population of machinaries. Better the technology lesser would be the specific consumption of energy. Demand for different sources of energy like electricity, coal and petroleum products for 1996-97 was projected keeping in view the conservation measures, change in the technology, structure of the industries, population of the machineries such as number of vehicles in road transport, number of engines in railways and number of tractors and pumpsets in agriculture. All these variables change the specific consumption of the energy input and have a bearing on demand for energy. Assessing the expected changes in technology, structure, type of feedstocks and population of machineries during the Eighth Plan, change in energy input coefficients for specific industries in 1996-97 with respect to 1991-92 have been worked out.

(1) ELECTRICITY

a) Agriculture

Electricity consumption in agriculture will increase with increase in irrigated areas, replacement of diesel pumpsets by electric pumps, lowering of water table and increase in the number of older type pumpsets. Consumption of electricity in future will depend mainly on projected population of irrigation pumpsets (Annexure-5.1)

b) Aluminium

The newly set up National Aluminium Co. (NALCO) plant has the lowest specific consumption of electricity among all Indian aluminium plants (about 16000 kwh/T). Remaining aluminium plants are also showing gradual decline in specific electricity consumption. With rising share of NALCO output and technological improvements in other plants, there will be overall reduction of specific electricity consumption in future. Several studies including the one conducted by the National Productivity council (NPC) show that Indian aluminium industry has conservation potential of 8-10 per cent in existing plants. For plants other than NALCO, 5 per cent conservation effect is assumed while deriving the aggregate norms (Annexure-5.2).

c) Iron & Steel

Iron and steel industry has witnessed increase in overall electricity consumption with increasing share of production from mini steel plants. Also specific electricity consumption in integrated steel plants has not declined in view of increasing output of flat products. The possibility of a reversal of this trend in near future is remote. In mini steel plants specific consumption is high due to their process technology (Electric Arc Furnace) (EAF). The mini steel plants in view of the envisaged use of sponge iron as raw material are expected to arrest the increasing norm to some extent. Some Integrated Steel Plants (ISPs) have already undertaken modernisation programme. Studies show that there is conservation potential of 8-10 per cent in ISPs. With full capacity utilisation of Vizag plant and improvement\modernisation in other plants the overall norm of consumption for steel industry is envisaged to go down to some extent in future (Annexure-5.3).

d) Cement

The dry process is overall energy efficient, although it is electricity intensive and there is rise in share of production from dry process. However, specific electricity consumption in cement manufacture has witnessed gradual decrease since the late 1980s as a result of technological improvements viz. adoption of vertical roller mills, high efficiency separators, high efficiency fans, variable speed system etc. The study by the National Council of Cement and Building Materials (NCB) indicate that

there is still scope to reduce the electricity consumption in this industry. This has been taken as guideline in assessing future energy conservation potential in working out the norm of specific electricity consumption (Annexure-5.4).

e) Railways

Indian railways have undergone significant changes in the traction front during last three decades. Till early 1950s, steam locomotives dominated 99 per cent of freight traffic and 93 per cent of passenger traffic. However, dieselisation and electrification have replaced the conventional steam locomotives in a big way since the 1960s because of better traffic potential. At present, about 56 per cent of freight traffic is moved by diesel and about 43 per cent by electric traction leaving insignificant traffic being moved by steam locomotives. In case of passenger services, 87 per cent of traffic is handled by diesel/electric traction and the remaining 13 per cent by steam traction.

Diesel and electric locomotives are comparatively more efficient in terms of energy consumption than steam locomotives. They also provide greater hauling capacity, have sharper acceleration and deceleration and are capable of attaining high speeds. They have less servicing needs and, therefore, their availability for traffic is comparatively more leading to optimisation of line capacity. It has been decided to phase out steam locomotives by the year 2000 A.D. Among the electric and diesel, preference will be given for electrification of more tracks to reduce the draft on petroleum products. These envisage a rise in the input coefficient of electricity in the coming years (Annexure 5.5 and 5.6).

f) Electricity Generation

There is continuous rise in transmission and distribution losses over the years although the rate has been arrested to some extent during the Seventh Plan. The transmission and distribution (T&D) losses can be either due to technical reasons such as energy dissipation in the transmission and distributionn lines, transformers and other equipments used in the system or due to administrative reasons which can be attributed to the meter-reading errors, defective meters, unmetered supplies and pilferage of energy. The increased share of electricity consumption in agriculture and domestic sectors also show some relationship with increase in losses. With various system improvement schemes that are already under implementation, the T&D losses are envisaged to reduce (Annexure 5.7 and 5.8).

g) Fertilizer

Total electricity consumption in fertiliser industry is fast decreasing since last few years due to structural changes. Electricity requirement for fertilizer production depends mainly upon the feedstock used. Gas, as a feedstock, is very energy efficient. After the discovery of natural gas at Bombay high, many of the new plants are based on natrual gas. Change in share of capacities based on different feedstocks is given in (Annexure-5.9). With optimum utilisation of proper feedstocks, the rate in fall of specific electricity consumption in coming years is expected to be high (Annnexure-5.10).

h) Cotton

The input coefficient of electricity in cotton textile industry has remained more or less stable during last few years. It would have shown an increasing trend in view of growing share of production from mill sector. But because of adoption of various efficiency measures in the mill sector, the aggregate specific consumption of electricity for cotton textile industry is envisaged to remain at the same level (Annexure-5.11).

i) Paper

Energy consumption in paper industry depends on various factors such as production process, product mix, type of raw material, capacity utilisation, type, size and design of equipment, degree of integration etc. Small units have comparatively low level of energy consumption due to high percentage of waste paper use and the absence of soda recovery unit. In view of the growing demand, setting up of small units was encouraged upto the Sixth Plan. Small units, however, may not sustain the competition in future due to their higher cost of production on account of use of large scale imported machinery that too which is obsolete. It is unlikely that specific consumption norm will further decline with dominance of bigger units in future. Energy consumption in paper mills in India is much higher than those in the advanced countries like North America, Scandinavia, Germany and Japan. However, different studies by the National Productivity Council (NPC), Bureau of Industrial Costs and Prices (BICP) etc. show that there is scope of about 20-25 per cent overall saving in energy in paper industry. Since electricity energy constitute about 19 per cent of total energy, 5 per cent reduction in specific electricity consumption is assumed for the Eighth Plan (Annexure-5.12).

(2) COAL
(a) Electricity Generation

So far there has been consistent increase in the thermal generation. However, with a view to achieve optimal hydro-thermal mix, it has been decided to increase the share of hydel capacity from Eighth Plan onwards. To maximise the use of natural gas and due to other benefits of gas based units, share of gas based electricity generation within thermal generation will have higher growth in the Eighth Plan. Although there has been increase in specific coal consumption in coal based plants, the efficiency at power plants and likely improvement in coal quality to be supplied to plants may bring down the norm. Hence input coefficient of coal in overall electricity generation is envisaged to decline (Annexure-5.13).

(b) Iron and Steel

The Working Group on Coal constituted by the Planning Commission for the Eighth Plan has projected lower coke rates for integrated steel plants envisaging improvement in coking coal quality and better blast furnaces and equipment in new/modernised plants. In view of the liberalised policy by way of delicencing and decontrol of prices and increasing demand for steel, share of mini steel plants is expected to rise in future. In case of sponge iron, there will be more gas based production. The input coefficient of coal in steel industry, hence, is expected to go down in future (Annexure-5.14).

(c) Cement

Dry process consumes less coal and as all new plants will be based on dry process, the input coefficient of coal in cement industry will decline. The NPC, BICP and other studies show considerable potential for conservation in the cement industry (Annexure-5.15).

(d) Rail Transport

Share of steam locomotives in rolling stock of railways is declining. Hence, the use of coal is decreasing fast and it will be very negligible by the turn of the century. Coal input coefficient for rail transport will further decline in Eighth Plan (Annexure-5.6).

(3) PETROLEUM PRODUCTS
(a) Agriculture

Although diesel pumpsets are being replaced by electric ones, increase in agricultural activitiy has led to increase in number of tractors which is likely to result in an increase in input coefficient of diesel in agricultural sector (Annexure-5.1).

(b) Fertilizer

Increase in share of fertilizer production from gas based plants and consequent decline in share of naphtha and furnace oil based plants in the Eighth Plan is likely to reduce the input coefficient of petroleum products in fertilizer industry (Annexure-5.16).

(c) Iron and Steel

In steel industry, petroleum products are used mainly for (i) flame stabilisation in blast furnace; (ii) calcining and (iii) local transport within the steel plant. The offtake of petroleum products is mainly by the integrated steel plants. Naphtha, high speed diesel and minor quantities of LDO and LSHS/FO are the various petroleum products used in steel industry. Naphtha is used only in Bhilai steel plant. Its consumption which averaged about 25 thousand tonnes in the last few years is likely to remain unchanged during the Eighth Plan. In Visakhapatnam steel plant, the electricity generation (captive) is through steam turbine utilising blast furnace gases. Upgradation of technology facilitating automatic transport of material from blast furnace to steel shop floor would result in reduction in specific consumption of petroleum products. Modified skid system in reheating furnaces would also result in saving of fuel consumption in steel industry (Annexure-5.17).

(d) Electricity Generation

Specific consumption of oil in thermal generation is on the decline due to improvement in technical efficiency of the plants and overall improvement in the Plant Load Factor (PLF). With increasing share of power generation from gas based plants, the use of petroleum products in total power generation would reduce as they are required only in steam plants for flame support at initial start-up. This is likely to result in a decline in the input coefficient of petroleum products in total electricity generation (Annexure-5.18).

(e) Other transport services

This sector includes mainly road transport services whose physical output at macro level is rather difficult to quantify. Value added in this sector does not reflect much change in input coefficient of petroleum products. Hence a reduction in fuel consumption is possible with replacement of old stock of vehicles with those of fuel efficient ones, betterment of roads, better design of engines, rationalisation of long distance traffic between road and rail etc. Since this is a highly dispersed industry, intensive policy support to achieve conservation is called for (Annexure-5.19).

(4) CRUDE OIL
Petroleum Refineries:

Various measures have been adopted by the petroleum refining industry to contain the refinery losses as a result of which refinery losses are showing declining trend. However, in view of setting up of three new grassroot refineries, the declining trend is likely to be arrested to some extent. Presently, the losses are around 6 per cent (Annexure-5.20).

(5) NATRUAL GAS
(a) Fertilizer

Natrual gas, naphtha, fuel oil and coal for process feed, fuel and steam raising are the principal forms of energy consumption in fertilizer industry. Over the years there has been a change in process technology. While the old fertilizer plants were based on feedstocks like coke, lignite and coke oven gases, with the development of catalytic steam reforming technology, preference was given to light hydrocarbons like naphtha and natural gas for production of ammonia. Due to indigenous availability of large quantity of associated natrual gas in the later half of 1970s, the feedstock policy was reviewed. It was decided to separate lower fractions of associated gas which could be used as feedstock for fertilizer plants. Hence, the share of gas based nitrogenous fertilizer production which was about 20 per cent of the total fertilizer production in 1983-84 is envisaged to rise to 55 per cent in 1996-97. This will increase the input coefficient of gas in fertilizer industry (Annexure-5.16).

(b) Electricity

The generation of electricity from gas based plants which was less than one per cent until the eighties increased to around 4 per cent in 1990. Due to abundance of natural gas and eco-friendly nature of gas based thermal power plants, it is envisaged that gas based plants would play significant role in electricity generation in Eighth Plan. As per capacity addition programme envisaged for the Plan, the gas based generation is likely to be around 26.13 billion Kwh representing about 6 per cent of total electricity generation (Annexure-5.21).

(c) Sponge Iron

Earlier, most of the mini steel plants were based on cent per cent scrap based EAF process technology. Since large quantity of scrap are required to be imported, an alternative route of EAF process based on definite ratios of scrap and sponge iron are being set up. The sponge iron can be produced either with natural gas or coal as a feedstock. Since sponge iron produced with natrual gas as a feedstock is relatively less energy intensive, the policy directions are towards setting up of gas based sponge iron plants. It is, therefore, envisaged that input coefficient of natural gas in steel industry will be increasing in future (Annexure-5.22).

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COMMODITY BY INDUSTRY TABLE

SN	COMMODITY SECTOR	INDUSTRIES									
		1	2	3	4	5	6	7	8	9	10
1	PADDY	0.090127	0.000162	0.000000	0.000582	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	WHEAT	0.000026	0.112303	0.000000	0.000103	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3	OTHER CEREALS	0.000038	0.000052	0.009878	0.000007	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	PULSES	0.000177	0.002113	0.000000	0.126389	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.054435	0.000000	0.000000	0.000000	0.000000	0.000000
6	JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.008364	0.000000	0.000000	0.000000
8	TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	OTHER CROPS	0.000612	0.000348	0.000000	0.009553	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	ANIMAL HUSBANDRY	0.054830	0.041076	0.097620	0.069319	0.014130	0.053394	0.071503	0.034273	0.109526	0.000000
13	FORESTRY & LOGGING	0.000011	0.000004	0.000000	0.000016	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	COAL & LIGNITE	0.000366	0.001540	0.000000	0.000022	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	OTHER FOOD & BEVERAGE	0.000004	0.000040	0.000000	0.000215	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	COTTON TEXTILES	0.000159	0.000014	0.000000	0.000099	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27	JUTE,HEMP,MESTA TEXTILES	0.001239	0.000641	0.000000	0.000822	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28	OTHER TEXTILES	0.000047	0.000045	0.000001	0.000022	0.000002	0.000000	0.000004	0.000000	0.000000	0.000000
29	WOOD & WOOD PRODUCTS	0.000011	0.000009	0.000000	0.000074	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	PAPER & PAPER PRODUCTS	0.000079	0.000110	0.000016	0.000178	0.000028	0.000000	0.000046	0.000000	0.000000	0.000000
31	LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32	RUBBER PRODUCTS	0.000025	0.000036	0.000008	0.000012	0.000015	0.000000	0.000025	0.000000	0.000000	0.000000
33	PLASTIC PRODUCTS	0.000072	0.000048	0.000000	0.000495	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34	PETROLEUM PRODUCTS	0.018222	0.019026	0.018886	0.018041	0.009803	0.000000	0.021734	0.000000	0.000000	0.000000
35	COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36	FERTILIZERS	0.068295	0.087166	0.049142	0.020643	0.066876	0.024048	0.115853	0.026961	0.000000	0.102306
37	PESTICIDES	0.005024	0.003177	0.000546	0.009385	0.000795	0.001707	0.079738	0.006038	0.067067	0.067405
38	SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39	OTHER CHEMICALS	0.000001	0.000001	0.000000	0.000254	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
40	CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

INPUT OUTPUT COEFFICIENTS 1991-92

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES 1	2	3	4	5	6	7	8	9	10
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000000	0.000020	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42 IRON & STEEL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.006720	0.006750	0.012645	0.012928	0.003679	0.002280	0.009321	0.000000	0.050587	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.000887	0.003482	0.000034	0.000307	0.000063	0.000000	0.000100	0.000000	0.000000	0.000000
47 ELECTRICAL MACHINERY	0.000032	0.000047	0.000011	0.000015	0.000020	0.000000	0.000032	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000049	0.000070	0.000016	0.000023	0.000030	0.000000	0.000048	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000835	0.001230	0.003056	0.002347	0.000727	0.000534	0.002014	0.000000	0.008354	0.000000
53 OTHER MANUFACTURING	0.000453	0.000283	0.000005	0.000400	0.000010	0.000000	0.000015	0.000000	0.000000	0.000000
54 CONSTRUCTION	0.018511	0.019067	0.032806	0.033567	0.010186	0.005701	0.025058	0.000000	0.118648	0.000000
55 ELECTRICITY ETC.	0.009748	0.039330	0.003802	0.006952	0.011098	0.000000	0.014835	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.006252	0.009091	0.003723	0.003501	0.004786	0.001534	0.008054	0.001812	0.000552	0.006351
57 OTHER TRANSPORT SERVICE	0.007345	0.007320	0.004613	0.005768	0.004403	0.002484	0.011026	0.005126	0.014031	0.006498
58 COMMUNICATION	0.000482	0.000665	0.000086	0.000409	0.000159	0.000000	0.000254	0.000000	0.000000	0.000000
59 TRADE	0.033295	0.034045	0.016420	0.027074	0.030555	0.006832	0.037069	0.011851	0.032357	0.023496
60 OTHER SERVICES	0.012639	0.010269	0.011371	0.010665	0.011999	0.010119	0.010161	0.016935	0.011103	0.013667
61 TOTAL	0.336616	0.399563	0.264686	0.360208	0.223799	0.108633	0.415256	0.102998	0.412225	0.219723
62 NET INDIRECT TAX	-0.028673	-0.041225	-0.015374	-0.006539	-0.024214	-0.009165	-0.043323	-0.010377	-0.000256	-0.041760
63 GROSS VALUE ADDED	0.692057	0.641662	0.750687	0.646331	0.800415	0.900532	0.628068	0.907379	0.588031	0.822037
64 GROSS OUTPUT	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

INPUT OUTPUT COEFFICIENTS 1991-92

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	11	12	13	14	15	16	17	18	19	20
1 PADDY	0.000092	0.004817	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2 WHEAT	0.000652	0.008964	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000286	0.008698	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000136	0.014152	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.000000	0.002232	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.425167
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.043310	0.325474	0.000116	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000149
12 ANIMAL HUSBANDRY	0.045788	0.000300	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 FORESTRY & LOGGING	0.000001	0.000000	0.001637	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004152
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.000354	0.000000	0.000000	0.000000	0.004754	0.000000	0.000194	0.000457	0.000070	0.001453
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000041
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.006332	0.000000	0.000000	0.000000	0.000000	0.013018
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001178
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000476
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.000001	0.042457	0.000000	0.002348	0.000000	0.000000	0.000000	0.000000	0.000000	0.000060
24 COTTON TEXTILES	0.000124	0.012458	0.000028	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000344
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000076	0.000000	0.000031	0.000000	0.000009	0.000000	0.000000	0.000000	0.000313	0.026004
28 OTHER TEXTILES	0.000040	0.000000	0.000946	0.039159	0.000000	0.000000	0.000000	0.000117	0.000000	0.000318
29 WOOD & WOOD PRODUCTS	0.000004	0.000000	0.000332	0.000261	0.000824	0.000000	0.000094	0.011105	0.000568	0.000113
30 PAPER & PAPER PRODUCTS	0.000033	0.000000	0.002117	0.000000	0.004141	0.000000	0.000336	0.000525	0.000526	0.000611
31 LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.000012	0.000000	0.002328	0.000000	0.000241	0.000000	0.000099	0.000374	0.000037	0.000000
33 PLASTIC PRODUCTS	0.000036	0.000000	0.000151	0.000000	0.000010	0.000000	0.000000	0.000000	0.000325	0.000605
34 PETROLEUM PRODUCTS	0.015113	0.000000	0.008097	0.027140	0.019409	0.025891	0.054395	0.036003	0.034895	0.009050
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000822	0.000228	0.001071	0.001127
36 FERTILIZERS	0.045343	0.000000	0.000025	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.005693	0.000000	0.000036	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003
39 OTHER CHEMICALS	0.000028	0.004122	0.000001	0.000792	0.023793	0.000717	0.018691	0.020846	0.015326	0.006259
40 CEMENT	0.000000	0.000000	0.000001	0.000000	0.000000	0.008843	0.000000	0.000000	0.000000	0.000000

ANNEXURE : 1.1

INPUT OUTPUT COEFFICIENTS 1991-92

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES									
SN	COMMODITY SECTOR	11	12	13	14	15	16	17	18	19	20
41	OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000008	0.000000	0.000000	0.012664	0.000000	0.000000	0.000000	0.003809
42	IRON & STEEL	0.000000	0.000000	0.000216	0.000808	0.000003	0.000000	0.000000	0.000000	0.000096	0.000000
43	NON FERROUS METALS	0.000000	0.000000	0.000000	0.000144	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44	TRACTORS & OTH.AGRI.MACH.	0.005582	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45	MACHINE TOOLS	0.000000	0.000000	0.000143	0.000000	0.003652	0.000000	0.000000	0.000000	0.000000	0.000000
46	OTH.NON ELECTRICAL MACH.	0.000199	0.000000	0.000351	0.000000	0.090357	0.039020	0.010311	0.041801	0.019652	0.004805
47	ELECTRICAL MACHINERY	0.000016	0.000000	0.000638	0.000000	0.000000	0.000000	0.000030	0.000113	0.000012	0.000000
48	COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000003	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49	ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000040	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50	RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51	MOTOR VEHICLES	0.000024	0.000000	0.004534	0.000000	0.006149	0.000000	0.000193	0.000727	0.000073	0.000000
52	OTHER TRANSPORT EQUIPMENT	0.001439	0.000000	0.000172	0.016901	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53	OTHER MANUFACTURING	0.000032	0.001342	0.003243	0.000026	0.014892	0.000000	0.000927	0.011218	0.012994	0.008025
54	CONSTRUCTION	0.014750	0.000763	0.003114	0.000000	0.002723	0.029984	0.002722	0.002946	0.000034	0.006865
55	ELECTRICITY ETC.	0.004783	0.000000	0.000565	0.000000	0.061506	0.004792	0.055889	0.103322	0.016892	0.004636
56	RAIL TRANSPORT SERVICE	0.003630	0.001880	0.003762	0.000908	0.021161	0.001882	0.002927	0.003513	0.001416	0.004398
57	OTHER TRANSPORT SERVICE	0.005148	0.008871	0.036608	0.003033	0.007374	0.001735	0.003269	0.020140	0.009615	0.034161
58	COMMUNICATION	0.000149	0.000000	0.002360	0.000000	0.001144	0.000000	0.004364	0.001302	0.000182	0.001896
59	TRADE	0.022021	0.096216	0.002898	0.007770	0.018393	0.007448	0.009767	0.014380	0.010505	0.140912
60	OTHER SERVICES	0.011961	0.003540	0.019381	0.004317	0.030089	0.060341	0.021025	0.030110	0.010013	0.091374
61	TOTAL	0.226859	0.536287	0.093883	0.103608	0.316958	0.193317	0.186057	0.299229	0.134634	0.791011
62	NET INDIRECT TAX	-0.015026	0.007141	0.005408	0.010135	0.025921	0.014740	0.015573	0.022876	0.013228	0.006284
63	GROSS VALUE ADDED	0.788167	0.456572	0.900709	0.886257	0.657121	0.791943	0.798370	0.677895	0.852138	0.202705
64	GROSS OUTPUT	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

ANNEXURE : 1.1

INPUT OUTPUT COEFFICIENTS 1991-92

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	21	22	23	24	25	26	27	28	29	30
1 PADDY	0.000005	0.000000	0.005023	0.000032	0.000262	0.000000	0.000000	0.000220	0.000000	0.000000
2 WHEAT	0.000000	0.000000	0.013813	0.000060	0.000012	0.000006	0.000000	0.000008	0.000000	0.000039
3 OTHER CEREALS	0.000000	0.000000	0.002533	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.014510	0.001940	0.000027	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.316112	0.000000	0.000044	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.005898	0.002152	0.231964	0.001622	0.000070	0.000000
7 COTTON	0.000000	0.000000	0.000858	0.099751	0.000000	0.000000	0.000000	0.000137	0.000000	0.000000
8 TEA	0.000000	0.000000	0.035871	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.005136	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000144	0.000000	0.000000
11 OTHER CROPS	0.000101	0.008548	0.255308	0.000105	0.000000	0.000020	0.002733	0.000171	0.000285	0.001343
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.053064	0.000001	0.045404	0.012586	0.000000	0.000499	0.000000	0.000010
13 FORESTRY & LOGGING	0.006437	0.000553	0.001531	0.000508	0.000820	0.000264	0.000064	0.000064	0.402001	0.020787
14 FISHING	0.000000	0.000000	0.008449	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.005255	0.006066	0.003776	0.005321	0.005490	0.001951	0.003780	0.001591	0.000714	0.013938
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000215	0.000000	0.000129	0.000000	0.000000	0.000002	0.000005	0.000033
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.016743	0.000000	0.000123	0.000094	0.000000	0.000000	0.000000	0.000055	0.000082	0.011058
20 SUGAR	0.026214	0.000000	0.007132	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21 KHANDSARI BOORA	0.020724	0.000000	0.032548	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000006	0.000000	0.002977	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.001237	0.346558	0.079510	0.001818	0.000081	0.000200	0.001409	0.000016	0.000076	0.001951
24 COTTON TEXTILES	0.000962	0.019372	0.001446	0.194868	0.004725	0.049154	0.001287	0.110432	0.000628	0.002521
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000012	0.000249	0.202445	0.000103	0.000000	0.010764	0.000004	0.000022
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000003	0.008294	0.033879	0.221753	0.001190	0.026469	0.000079	0.000267
27 JUTE,HEMP,MESTA TEXTILES	0.011369	0.001032	0.003019	0.009861	0.015032	0.006380	0.125320	0.006931	0.000214	0.003876
28 OTHER TEXTILES	0.000002	0.000000	0.000178	0.001946	0.001531	0.006009	0.019505	0.067985	0.000851	0.002695
29 WOOD & WOOD PRODUCTS	0.000356	0.000257	0.003595	0.000720	0.001373	0.001301	0.000055	0.006728	0.049632	0.000798
30 PAPER & PAPER PRODUCTS	0.000681	0.001700	0.009063	0.002717	0.000864	0.005585	0.001682	0.002640	0.000510	0.258733
31 LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000004	0.000330	0.000000	0.000000	0.000000	0.000039	0.000232	0.000167
32 RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000	0.000380	0.000355	0.000296
33 PLASTIC PRODUCTS	0.002572	0.006802	0.006726	0.001899	0.002177	0.002603	0.002694	0.008162	0.002545	0.003832
34 PETROLEUM PRODUCTS	0.048878	0.004138	0.009932	0.014154	0.010887	0.009930	0.017498	0.004751	0.002655	0.012232
35 COAL TAR PRODUCTS	0.000045	0.000062	0.000085	0.000343	0.000113	0.000876	0.000103	0.000003	0.000171	0.000057
36 FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000016	0.000029	0.005363	0.050171	0.204380	0.001975	0.009631	0.000976	0.001012
39 OTHER CHEMICALS	0.006852	0.161064	0.009184	0.023913	0.026050	0.019046	0.014479	0.002418	0.002901	0.047235
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Contd....

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INPUT OUTPUT COEFFICIENTS 1991-92

COMMODITY BY INDUSTRY TABLE

| | | | | | INDUSTRIES | | | | | |
SN COMMODITY SECTOR	21	22	23	24	25	26	27	28	29	30
41 OTH.NON MET.MINERAL PRODS.	0.003420	0.000168	0.006903	0.000005	0.000000	0.000000	0.000000	0.000037	0.000380	0.000919
42 IRON & STEEL	0.000000	0.009182	0.000484	0.000791	0.000163	0.000066	0.004852	0.000214	0.001178	0.001090
43 NON FERROUS METALS	0.000000	0.000000	0.000566	0.000031	0.000655	0.000654	0.000000	0.002883	0.000127	0.015342
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.006374	0.001327	0.005135	0.008486	0.004396	0.002883	0.003644	0.003845	0.002333	0.006648
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.004414	0.038757	0.016698	0.005752	0.007504	0.005276	0.007163	0.004511	0.003821	0.010882
54 CONSTRUCTION	0.001863	0.000739	0.004017	0.001662	0.001708	0.001020	0.001740	0.003178	0.002257	0.002052
55 ELECTRICITY ETC.	0.024557	0.017733	0.011198	0.037534	0.020446	0.067775	0.033653	0.010400	0.006898	0.042786
56 RAIL TRANSPORT SERVICE	0.007002	0.006421	0.004105	0.003258	0.003198	0.001551	0.004523	0.001184	0.003975	0.009565
57 OTHER TRANSPORT SERVICE	0.014589	0.014805	0.024273	0.024231	0.029290	0.019877	0.038173	0.013891	0.019154	0.017184
58 COMMUNICATION	0.001442	0.002225	0.001649	0.001626	0.003194	0.001509	0.001940	0.001409	0.000966	0.005172
59 TRADE	0.123143	0.104458	0.108251	0.093971	0.079415	0.050979	0.094996	0.041407	0.076866	0.060139
60 OTHER SERVICES	0.051901	0.018796	0.037799	0.047235	0.114687	0.043983	0.039521	0.042143	0.017932	0.064041
61 TOTAL	0.703257	0.785288	0.774208	0.596961	0.672001	0.739873	0.655944	0.386968	0.600877	0.618722
62 NET INDIRECT TAX	0.014383	0.131257	0.030816	0.037695	0.018130	0.046508	0.029782	0.016199	0.025271	0.051195
63 GROSS VALUE ADDED	0.282360	0.083454	0.194976	0.365344	0.309869	0.213618	0.314273	0.596834	0.373852	0.330083
64 GROSS OUTPUT	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

COMMODITY BY INDUSTRY TABLE

SN	COMMODITY SECTOR	INDUSTRIES									
		31	32	33	34	35	36	37	38	39	40
1	PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.007264	0.000000
2	WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000148	0.000000
3	OTHER CEREALS	0.000000	0.000000	0.000000	0.0000	0.000000	0.000000	0.000000	0.00000	0.000009	0.000000
4	PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	RUBBER	0.006178	0.073091	0.000119	0.000000	0.000000	0.000000	0.000000	0.000419	0.000000	0.000000
11	OTHER CROPS	0.000066	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.013828	0.000000
12	ANIMAL HUSBANDRY	0.060686	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000307	0.000000
13	FORESTRY & LOGGING	0.012587	0.000344	0.000084	0.000389	0.001520	0.000308	0.000084	0.007478	0.004693	0.000088
14	FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
15	COAL & LIGNITE	0.001045	0.001304	0.000276	0.000011	0.313306	0.014055	0.000083	0.006809	0.001973	0.048128
16	CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.467209	0.000000	0.014856	0.000000	0.000047	0.000133	0.000000
17	IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000058	0.000000
19	NON MET.& MINOR MINERALS	0.000001	0.004824	0.000000	0.000002	0.003775	0.071892	0.017062	0.008724	0.012986	0.161822
20	SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000408	0.000964	0.000000
21	KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000061	0.000000
22	HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000080	0.000000	0.000000	0.000000	0.000000	0.000550	0.000000
23	OTHER FOOD & BEVERAGE	0.005406	0.000000	0.000010	0.000000	0.000000	0.000216	0.000000	0.007566	0.016754	0.000000
24	COTTON TEXTILES	0.002417	0.006477	0.003896	0.000401	0.000231	0.000230	0.001208	0.000777	0.018814	0.000043
25	WOOLLEN TEXTILES	0.000195	0.000006	0.000000	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	ART SILK & SYNTHETIC FIBRE	0.001469	0.030051	0.001911	0.000002	0.000000	0.000000	0.000000	0.000000	0.000146	0.000000
27	JUTE,HEMP,MESTA TEXTILES	0.002341	0.001316	0.000691	0.000405	0.001541	0.022628	0.006564	0.001833	0.003271	0.075894
28	OTHER TEXTILES	0.011757	0.007968	0.001512	0.000008	0.000003	0.000000	0.000012	0.000128	0.000283	0.000000
29	WOOD & WOOD PRODUCTS	0.003283	0.000736	0.001306	0.000302	0.000200	0.000175	0.002327	0.001060	0.003874	0.000168
30	PAPER & PAPER PRODUCTS	0.004137	0.002568	0.003844	0.000649	0.000834	0.000793	0.006290	0.048037	0.014890	0.000066
31	LEATHER & LEATHER PRODUCTS	0.190931	0.000452	0.000048	0.000000	0.000000	0.000000	0.000000	0.000000	0.000014	0.000000
32	RUBBER PRODUCTS	0.056743	0.113551	0.002307	0.000000	0.000000	0.000000	0.000000	0.000070	0.000560	0.000000
33	PLASTIC PRODUCTS	0.003492	0.002593	0.052182	0.001989	0.001158	0.006204	0.012387	0.007010	0.011208	0.000511
34	PETROLEUM PRODUCTS	0.004247	0.010415	0.009192	0.097832	0.025351	0.130892	0.010416	0.040801	0.032681	0.013869
35	COAL TAR PRODUCTS	0.000007	0.000052	0.000164	0.000001	0.052542	0.000259	0.000036	0.000010	0.003124	0.000522
36	FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.076728	0.000000	0.000000	0.000000	0.000000
37	PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000041	0.110485	0.000000	0.000001	0.000000
38	SYNTHETIC FIBRE & RESIN	0.003815	0.012030	0.299381	0.000010	0.000052	0.000138	0.000000	0.048838	0.001304	0.000000
39	OTHER CHEMICALS	0.041050	0.140512	0.030375	0.019563	0.030304	0.134281	0.164547	0.161783	0.233199	0.000452
40	CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000219	0.000266

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	31	32	33	34	35	36	37	38	39	40
41 OTH.NON MET.MINERAL PRODS.	0.001158	0.002283	0.003850	0.000000	0.000432	0.000212	0.006474	0.000005	0.009267	0.007158
42 IRON & STEEL	0.000061	0.004043	0.002274	0.000000	0.000294	0.000000	0.000066	0.000198	0.000814	0.017127
43 NON FERROUS METALS	0.000268	0.001072	0.004660	0.000022	0.000000	0.000348	0.002860	0.000642	0.009965	0.000865
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.001985	0.001292	0.001640	0.000342	0.002120	0.003647	0.002348	0.003121	0.003693	0.008570
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.005832	0.011218	0.007192	0.006547	0.010015	0.006003	0.084177	0.010204	0.021062	0.014385
54 CONSTRUCTION	0.002819	0.003143	0.002402	0.000881	0.003782	0.002284	0.002316	0.001758	0.002067	0.004206
55 ELECTRICITY ETC.	0.007493	0.007987	0.023585	0.004466	0.049267	0.076740	0.016939	0.039709	0.032190	0.079662
56 RAIL TRANSPORT SERVICE	0.001411	0.001654	0.000769	0.003054	0.132662	0.016400	0.002052	0.005140	0.004016	0.032349
57 OTHER TRANSPORT SERVICE	0.025740	0.016454	0.021756	0.008336	0.056500	0.020464	0.018586	0.016809	0.020399	0.016029
58 COMMUNICATION	0.002351	0.003556	0.003963	0.000453	0.000874	0.001600	0.004184	0.002963	0.003759	0.001586
59 TRADE	0.112259	0.095920	0.045826	0.049103	0.177252	0.091111	0.056463	0.047999	0.071130	0.082064
60 OTHER SERVICES	0.044650	0.029639	0.039036	0.016279	0.052381	0.046610	0.098842	0.028536	0.041745	0.047493
61 TOTAL	0.617883	0.586552	0.564251	0.678339	0.916398	0.739118	0.626809	0.498882	0.603422	0.613325
62 NET INDIRECT TAX	0.044652	0.132851	0.201173	0.267140	0.021155	0.037934	0.062424	0.262538	0.093802	0.038812
63 GROSS VALUE ADDED	0.337465	0.280596	0.234575	0.054521	0.062447	0.222948	0.310767	0.238580	0.302776	0.347862
64 GROSS OUTPUT	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

ANNEXURE : 1.1

INPUT OUTPUT COEFFICIENTS 1991-92

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	41	42	43	44	45	46	47	48	49	50
1 PADDY	0.000308	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2 WHEAT	0.000121	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000045	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000076	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12 ANIMAL HUSBANDRY	0.000054	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 FORESTRY & LOGGING	0.005176	0.001323	0.000619	0.000463	0.001862	0.003370	0.000163	0.000488	0.000010	0.004926
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.023163	0.023504	0.003638	0.002901	0.000393	0.000552	0.000402	0.000049	0.000069	0.000931
16 CRUDE PETROLEUM & N.GAS	0.000474	0.000208	0.000460	0.000001	0.000003	0.000038	0.000058	0.000150	0.000011	0.000045
17 IRON ORE	0.000000	0.004986	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.001814	0.109014	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.086017	0.023924	0.003692	0.000000	0.000005	0.000071	0.000000	0.000000	0.000885	0.000000
20 SUGAR	0.000158	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21 KHANDSARI BOORA	0.000000	000.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.000021	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24 COTTON TEXTILES	0.000903	0.000048	0.000091	0.000162	0.000170	0.000468	0.000522	0.000309	0.000283	0.000055
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000004	0.000000	0.000004	0.000000	0.000000	0.000089	0.000009	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.001818	0.000666	0.000812	0.000105	0.000270	0.000439	0.000472	0.000205	0.000254	0.000441
28 OTHER TEXTILES	0.000119	0.000001	0.000000	0.000000	0.000000	0.000012	0.000055	0.000002	0.000000	0.000000
29 WOOD & WOOD PRODUCTS	0.001881	0.000205	0.000765	0.001165	0.002014	0.002732	0.004466	0.004518	0.000682	0.000410
30 PAPER & PAPER PRODUCTS	0.003066	0.000079	0.000302	0.000454	0.001014	0.001147	0.006066	0.005721	0.003123	0.000081
31 LEATHER & LEATHER PRODUCTS	0.000004	0.000000	0.000012	0.000129	0.000230	0.000048	0.000003	0.000000	0.000070	0.000000
32 RUBBER PRODUCTS	0.000573	0.000000	0.000028	0.027853	0.000114	0.002268	0.002068	0.000262	0.000029	0.001881
33 PLASTIC PRODUCTS	0.002240	0.000245	0.001144	0.000802	0.001076	0.000896	0.002220	0.007352	0.001953	0.000398
34 PETROLEUM PRODUCTS	0.047389	0.025572	0.065733	0.010699	0.006733	0.007409	0.009829	0.003710	0.002241	0.00898/
35 COAL TAR PRODUCTS	0.001304	0.015078	0.000686	0.001318	0.000919	0.000978	0.000139	0.000389	0.000011	0.001583
36 FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38 SYNTHETIC FIBRE & RESIN	0.000506	0.000000	0.000006	0.000069	0.000036	0.000284	0.008942	0.003123	0.000555	0.000004
39 OTHER CHEMICALS	0.014001	0.007368	0.031918	0.021612	0.003980	0.005670	0.019005	0.006110	0.004091	0.020754
40 CEMENT	0.037683	0.000000	0.000000	0.000000	0.000000	0.000000	0.000027	0.000000	0.000000	0.000000

INPUT OUTPUT COEFFICIENTS 1991-92

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	41	42	43	44	45	46	47	48	49	50
41 OTH.NON MET.MINERAL PRODS.	0.043102	0.004370	0.000177	0.000011	0.000526	0.000347	0.005340	0.003548	0.002143	0.000001
42 IRON & STEEL	0.015932	0.272356	0.034633	0.202923	0.201200	0.188860	0.096280	0.030911	0.007363	0.070328
43 NON FERROUS METALS	0.003772	0.034255	0.172046	0.009609	0.020087	0.023802	0.099597	0.016965	0.008117	0.024321
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.216342	0.000000	0.001848	0.000053	0.000000	0.000000	0.001193
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.025878	0.000125	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.003101	0.003873	0.001676	0.032155	0.017611	0.139800	0.003492	0.000083	0.000012	0.005157
47 ELECTRICAL MACHINERY	0.000382	0.000634	0.006210	0.003066	0.022994	0.019198	0.114536	0.154310	0.256540	0.018763
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000400	0.002282	0.119603	0.153520	0.000427
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.003237	0.000032	0.000428	0.004410	0.008368	0.043558	0.005881
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.239779
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.011285	0.000001	0.001330	0.000342	0.000000	0.000000	0.000498
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.001276	0.000000	0.000000	0.000002	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.007198	0.062392	0.013813	0.009738	0.038072	0.024067	0.031047	0.024980	0.022113	0.010765
54 CONSTRUCTION	0.004032	0.006560	0.003203	0.002695	0.003789	0.003861	0.002900	0.004379	0.001845	0.001011
55 ELECTRICITY ETC.	0.017875	0.045210	0.133626	0.011540	0.017578	0.013116	0.011385	0.009442	0.005483	0.011259
56 RAIL TRANSPORT SERVICE	0.019123	0.024494	0.008972	0.007432	0.006115	0.006779	0.004719	0.001673	0.001218	0.003083
57 OTHER TRANSPORT SERVICE	0.025049	0.017472	0.021811	0.014840	0.010948	0.011786	0.012308	0.011151	0.006916	0.005455
58 COMMUNICATION	0.002537	0.002212	0.002552	0.002656	0.005656	0.005886	0.003905	0.005625	0.005681	0.000773
59 TRADE	0.067841	0.073263	0.059221	0.052796	0.031551	0.040726	0.043099	0.040395	0.032152	0.020136
60 OTHER SERVICES	0.025365	0.036820	0.055980	0.047277	0.058428	0.084307	0.047122	0.053268	0.048171	0.012751
61 TOTAL	0.462420	0.688934	0.732850	0.696611	0.479290	0.593140	0.537266	0.517091	0.609098	0.472078
62 NET INDIRECT TAX	0.046814	0.071269	0.105162	0.037184	0.054660	0.081690	0.140463	0.070400	0.055428	0.047375
63 GROSS VALUE ADDED	0.490766	0.239796	0.161988	0.266205	0.466050	0.325170	0.322272	0.412509	0.335474	0.480547
64 GROSS OUTPUT	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

INPUT OUTPUT COEFFICIENTS 1991-92

COMMODITY BY INDUSTRY TABLE

					INDUSTRIES					
SN COMMODITY SECTOR	51	52	53	54	55	56	57	58	59	60
1 PADDY	0.000000	0.000000	0.000006	0.000000	0.000000	0.000000	0.000125	0.000000	0.000000	0.005961
2 WHEAT	0.000000	0.000000	0.000005	0.000000	0.000000	0.000000	0.000232	0.000000	0.000000	0.003724
3 OTHER CEREALS	0.000000	0.000000	0.000002	0.000000	0.000000	0.000000	0.000002	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000792	0.000000	0.000000	0.001460
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000000	0.000000	0.000288	0.005178	0.000000	0.000000	0.000274	0.000000	0.000000	0.005707
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.000446	0.000409	0.000518	0.000000	0.000000	0.000000	0.000000	0.006067
13 FORESTRY & LOGGING	0.000762	0.001599	0.001536	0.019024	0.000000	0.000088	0.000000	0.000000	0.000000	0.000274
14 FISHING	0.000000	0.000000	0.000030	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001974
15 COAL & LIGNITE	0.000036	0.001345	0.002920	0.000000	0.078627	0.009588	0.000440	0.000000	0.000000	0.001844
16 CRUDE PETROLEUM & N.GAS	0.000011	0.000004	0.000004	0.000000	0.001408	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000078	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000386	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.000174	0.061292	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001158
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000006	0.000000	0.000000	0.000000	0.000054	0.000000	0.000000	0.000733
23 OTHER FOOD & BEVERAGE	0.000124	0.000000	0.000154	0.000000	0.000000	0.000000	0.002191	0.000000	0.000000	0.006148
24 COTTON TEXTILES	0.000174	0.000152	0.001026	0.000000	0.000000	0.000000	0.000701	0.000238	0.000000	0.000256
25 WOOLLEN TEXTILES	0.000014	0.000000	0.000032	0.000000	0.000000	0.000000	0.000198	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000028	0.000031	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000186	0.000261	0.002202	0.001483	0.000000	0.000000	0.000000	0.000000	0.002712	0.000024
28 OTHER TEXTILES	0.000506	0.000552	0.000421	0.000029	0.000197	0.000091	0.000852	0.000313	0.000000	0.000554
29 WOOD & WOOD PRODUCTS	0.000882	0.001823	0.003954	0.035279	0.001765	0.000638	0.000025	0.000131	0.004492	0.001328
30 PAPER & PAPER PRODUCTS	0.004689	0.001036	0.004875	0.001053	0.000943	0.001281	0.006345	0.020920	0.005902	0.010350
31 LEATHER & LEATHER PRODUCTS	0.000248	0.000457	0.000372	0.000000	0.000000	0.000000	0.000096	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.041242	0.032834	0.002041	0.000431	0.000119	0.000038	0.029175	0.000266	0.000029	0.000067
33 PLASTIC PRODUCTS	0.003059	0.002132	0.001667	0.000000	0.000000	0.000810	0.000808	0.000000	0.002820	0.000037
34 PETROLEUM PRODUCTS	0.011584	0.010708	0.008187	0.001004	0.016857	0.038223	0.150894	0.003543	0.000905	0.001106
35 COAL TAR PRODUCTS	0.000000	0.000114	0.000188	0.009572	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36 FERTILIZERS	0.000000	0.000000	0.000088	0.000674	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.000000	0.000000	0.000000	0.000519	0.000000	0.000008	0.000001	0.000000	0.000000	0.000027
38 SYNTHETIC FIBRE & RESIN	0.000727	0.000228	0.000315	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39 OTHER CHEMICALS	0.006874	0.016871	0.016510	0.016096	0.001140	0.000104	0.000490	0.000016	0.000000	0.031638
40 CEMENT	0.000000	0.000000	0.000000	0.052564	0.000000	0.000000	0.000000	0.000000	0.000000	0.000005

Contd....

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INPUT OUTPUT COEFFICIENTS 1991-92

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	51	52	53	54	55	56	57	58	59	60
41 OTH.NON MET.MINERAL PRODS.	0.003360	0.000334	0.007946	0.049420	0.001705	0.002371	0.000149	0.000003	0.000000	0.000509
42 IRON & STEEL	0.193279	0.091116	0.142153	0.128278	0.003524	0.008896	0.000103	0.000000	0.000830	0.000004
43 NON FERROUS METALS	0.023223	0.009316	0.045136	0.000000	0.000100	0.000000	0.000000	0.000000	0.000000	0.000004
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000351	0.000034	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.001705	0.004416	0.000008	0.000000	0.000000	0.000063	0.001387	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.020372	0.005725	0.001990	0.001842	0.014926	0.001309	0.003156	0.001079	0.000106	0.000702
47 ELECTRICAL MACHINERY	0.011533	0.006130	0.008756	0.033058	0.025646	0.011517	0.005129	0.000158	0.000009	0.000513
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000132	0.004777	0.000000	0.000061	0.001541	0.000555	0.036707	0.000000	0.000548
49 ELECTRONIC EQUIPMENT	0.000000	0.000001	0.000294	0.000000	0.000003	0.000104	0.000094	0.000031	0.000000	0.000038
50 RAIL EQUIPMENT	0.000000	0.000093	0.019280	0.000000	0.000000	0.317861	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.080641	0.006759	0.000155	0.000809	0.000292	0.000222	0.045612	0.000514	0.000056	0.000264
52 OTHER TRANSPORT EQUIPMENT	0.000612	0.140675	0.003531	0.000000	0.000001	0.000000	0.009040	0.000002	0.000000	0.001166
53 OTHER MANUFACTURING	0.027783	0.012152	0.045713	0.001223	0.010047	0.011628	0.006246	0.000388	0.004705	0.012148
54 CONSTRUCTION	0.005026	0.001793	0.002213	0.000070	0.011910	0.036154	0.004418	0.024808	0.003350	0.020870
55 ELECTRICITY ETC.	0.013977	0.011076	0.017897	0.015119	0.243350	0.024039	0.008589	0.011805	0.011635	0.006930
56 RAIL TRANSPORT SERVICE	0.005387	0.004635	0.006792	0.013451	0.033705	0.006280	0.007078	0.008890	0.004380	0.001760
57 OTHER TRANSPORT SERVICE	0.011968	0.007978	0.010925	0.019516	0.010427	0.007535	0.073616	0.016119	0.099255	0.007414
58 COMMUNICATION	0.003397	0.002777	0.007649	0.001940	0.002544	0.001188	0.007516	0.000000	0.008421	0.007752
59 TRADE	0.046323	0.034948	0.034435	0.085677	0.040872	0.012730	0.029073	0.006073	0.022124	0.018198
60 OTHER SERVICES	0.046994	0.060612	0.044218	0.023279	0.008584	0.032694	0.058117	0.016582	0.092047	0.031057
61 TOTAL	0.566702	0.471167	0.451854	0.578291	0.509335	0.529036	0.451725	0.148347	0.263775	0.190315
62 NET INDIRECT TAX	0.101398	0.059363	0.081262	0.044108	0.022716	0.019184	0.054821	0.004566	0.006449	0.017810
63 GROSS VALUE ADDED	0.331900	0.469470	0.466884	0.377601	0.467949	0.451780	0.493453	0.847087	0.729776	0.791875
64 GROSS OUTPUT	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

INPUT OUTPUT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	/		I N D U S T R I E S							
	1	2	3	4	5	6	7	8	9	10
1 PADDY	0.089717	0.000162	0.000000	0.000582	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2 WHEAT	0.000026	0.104873	0.000000	0.000103	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000038	0.000052	0.011913	0.000007	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000177	0.002113	0.000000	0.125940	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.076017	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.029487	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000612	0.000348	0.000000	0.009553	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12 ANIMAL HUSBANDRY	0.060962	0.034461	0.151370	0.080127	0.014130	0.065713	0.063617	0.051921	0.074494	0.000000
13 FORESTRY & LOGGING	0.000011	0.000004	0.000000	0.000016	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.000280	0.001176	0.000000	0.000016	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 CRUDE PETROLEUM & N.GAS	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.000004	0.000040	0.000000	0.000215	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24 COTTON TEXTILES	0.000159	0.000014	0.000000	0.000099	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.001239	0.000641	0.000000	0.000822	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28 OTHER TEXTILES	0.000047	0.000045	0.000001	0.000022	0.000002	0.000000	0.000004	0.000000	0.000000	0.000000
29 WOOD & WOOD PRODUCTS	0.000011	0.000009	0.000000	0.000074	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30 PAPER & PAPER PRODUCTS	0.000079	0.000110	0.000016	0.000178	0.000028	0.000000	0.000046	0.000000	0.000000	0.000000
31 LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.000025	0.000036	0.000008	0.000012	0.000015	0.000000	0.000025	0.000000	0.000000	0.000000
33 PLASTIC PRODUCTS	0.000072	0.000048	0.000000	0.000495	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34 PETROLEUM PRODUCTS	0.018022	0.018817	0.018678	0.017843	0.009695	0.000000	0.021495	0.000000	0.000000	0.000000
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36 FERTILIZERS	0.074106	0.094582	0.053323	0.022399	0.072566	0.026094	0.125710	0.029255	0.000000	0.111010
37 PESTICIDES	0.005416	0.003177	0.000546	0.009385	0.000795	0.001707	0.089679	0.006038	0.089109	0.087886
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39 OTHER CHEMICALS	0.000001	0.000001	0.000000	0.000254	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Contd.

INPUT OUTPUT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR					INDUSTRIES					
	1	2	3	4	5	6	7	8	9	10
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000000	0.000020	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42 IRON & STEEL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.020771	0.006750	0.020645	0.012928	0.003679	0.002280	0.009321	0.000000	0.050587	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.000799	0.003134	0.000031	0.000276	0.000056	0.000000	0.000090	0.000000	0.000000	0.000000
47 ELECTRICAL MACHINERY	0.000029	0.000042	0.000010	0.000014	0.000018	0.000000	0.000029	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000049	0.000070	0.000016	0.000023	0.000030	0.000000	0.000048	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000835	0.001230	0.003056	0.002347	0.000727	0.000534	0.002014	0.000000	0.008354	0.000000
53 OTHER MANUFACTURING	0.000453	0.000283	0.000005	0.000400	0.000010	0.000000	0.000015	0.000000	0.000000	0.000000
54 CONSTRUCTION	0.019511	0.020406	0.032806	0.033567	0.010186	0.005701	0.025058	0.000000	0.171113	0.000000
55 ELECTRICITY ETC.	0.010801	0.043578	0.004213	0.007703	0.012297	0.000000	0.016437	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.006252	0.010091	0.003723	0.003501	0.004786	0.001534	0.008054	0.001812	0.000552	0.006351
57 OTHER TRANSPORT SERVICE	0.007712	0.007686	0.004843	0.006056	0.004623	0.002608	0.011578	0.005382	0.014732	0.006823
58 COMMUNICATION	0.000482	0.000665	0.000086	0.000409	0.000159	0.000000	0.000254	0.000000	0.000000	0.000000
59 TRADE	0.055035	0.034045	0.016420	0.027074	0.028800	0.006832	0.037069	0.011851	0.032357	0.023496
60 OTHER SERVICES	0.012639	0.038269	0.011371	0.010665	0.011999	0.010119	0.010161	0.016935	0.011103	0.013667
61 TOTAL	0.386375	0.426959	0.333082	0.373128	0.250619	0.123123	0.450191	0.123195	0.452401	0.249234
62 NET INDIRECT TAX	-0.032894	-0.047846	-0.018777	-0.008035	-0.029570	-0.011164	-0.053547	-0.012604	-0.001694	-0.051070
63 GROSS VALUE ADDED	0.646520	0.620887	0.685695	0.634907	0.778951	0.888042	0.603356	0.889408	0.549292	0.801836
64 GROSS OUTPUT	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

ANNEXURE : 1.2

INPUT OUTPUT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR					I N D U S T R I E S					
	11	12	13	14	15	16	17	18	19	20
1 PADDY	0.000092	0.004817	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2 WHEAT	0.000652	0.008964	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000286	0.009600	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000136	0.017312	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.000000	0.002409	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.474419
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.030057	0.259459	0.000116	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000149
12 ANIMAL HUSBANDRY	0.050920	0.000300	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 FORESTRY & LOGGING	0.000001	0.000000	0.001637	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004152
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.000270	0.000000	0.000000	0.000000	0.003632	0.000000	0.000148	0.000349	0.000053	0.001110
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000793
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.006136	0.000000	0.000000	0.000000	0.000000	0.012615
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001178
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000951
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.000001	0.040889	0.000000	0.005448	0.000000	0.000000	0.000000	0.000000	0.000000	0.000060
24 COTTON TEXTILES	0.000124	0.008833	0.000028	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000344
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000076	0.000000	0.000031	0.000000	0.000009	0.000000	0.000000	0.000000	0.000313	0.026004
28 OTHER TEXTILES	0.000040	0.000000	0.000946	0.007016	0.000000	0.000000	0.000000	0.000117	0.000000	0.000318
29 WOOD & WOOD PRODUCTS	0.000004	0.000000	0.000332	0.000261	0.000824	0.000000	0.000094	0.011105	0.000588	0.000113
30 PAPER & PAPER PRODUCTS	0.000033	0.000000	0.002117	0.000000	0.004141	0.000000	0.000336	0.000525	0.000526	0.000611
31 LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.000012	0.000000	0.002328	0.000000	0.000241	0.000000	0.000099	0.000374	0.000037	0.000000
33 PLASTIC PRODUCTS	0.000036	0.000000	0.000151	0.000000	0.000010	0.000000	0.000000	0.000000	0.000325	0.000605
34 PETROLEUM PRODUCTS	0.022996	0.000000	0.011138	0.110749	0.026698	0.025114	0.071474	0.063766	0.070231	0.012449
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000822	0.000228	0.001071	0.001127
36 FERTILIZERS	0.049201	0.000000	0.000078	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.005628	0.000000	0.000036	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003
39 OTHER CHEMICALS	0.000028	0.004122	0.000001	0.000792	0.023793	0.000717	0.018691	0.020846	0.015326	0.006259
40 CEMENT	0.000000	0.000000	0.000001	0.000000	0.000000	0.008843	0.000000	0.000000	0.000000	0.000000

Contd.

INPUT OUTPUT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	11	12	13	14	15	16	17	18	19	20
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000008	0.000000	0.000000	0.012664	0.000000	0.000000	0.000000	0.003809
42 IRON & STEEL	0.000000	0.000000	0.000227	0.000850	0.000003	0.000000	0.000000	0.000000	0.000100	0.000000
43 NON FERROUS METALS	0.000000	0.000000	0.000000	0.000144	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.005029	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000146	0.000000	0.000815	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.000017	0.000000	0.000316	0.000000	0.147087	0.146518	0.009280	0.036565	0.017686	0.004325
47 ELECTRICAL MACHINERY	0.000014	0.000000	0.000574	0.000000	0.000000	0.000000	0.000027	0.000102	0.000010	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000003	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000040	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000024	0.000000	0.004534	0.000000	0.006149	0.000000	0.000193	0.000727	0.000073	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.001439	0.000000	0.000172	0.010829	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000032	0.001342	0.003243	0.000026	0.014892	0.000000	0.000927	0.011218	0.012994	0.008025
54 CONSTRUCTION	0.014750	0.000763	0.003114	0.000000	0.002923	0.014817	0.002722	0.003146	0.000034	0.006865
55 ELECTRICITY ETC.	0.005456	0.000000	0.000527	0.000000	0.019076	0.004464	0.070468	0.116304	0.032615	0.004318
56 RAIL TRANSPORT SERVICE	0.003630	0.001880	0.003762	0.000908	0.021161	0.001882	0.002927	0.003513	0.001416	0.004398
57 OTHER TRANSPORT SERVICE	0.005406	0.009314	0.038195	0.003185	0.007743	0.001822	0.003433	0.034793	0.010096	0.035869
58 COMMUNICATION	0.000149	0.000000	0.002360	0.000000	0.001144	0.000000	0.004364	0.001302	0.000182	0.001896
59 TRADE	0.030715	0.202771	0.002898	0.007770	0.018393	0.007448	0.009767	0.014380	0.010505	0.119192
60 OTHER SERVICES	0.011961	0.003540	0.019852	0.004317	0.026269	0.031681	0.021025	0.030110	0.010013	0.091374
61 TOTAL	0.239379	0.576316	0.098912	0.152295	0.331140	0.255971	0.216799	0.349471	0.184196	0.823332
62 NET INDIRECT TAX	-0.013333	0.000092	0.005904	0.023262	0.016144	0.010938	0.019924	0.025987	0.019406	0.005500
63 GROSS VALUE ADDED	0.773954	0.423593	0.895184	0.824443	0.652716	0.733091	0.763277	0.624542	0.796398	0.171167
64 GROSS OUTPUT	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Contd.

INPUT OUTPUT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

SN	COMMODITY SECTOR	INDUSTRIES									
		21	22	23	24	25	26	27	28	29	30
1	PADDY	0.000005	0.000000	0.005023	0.000032	0.000262	0.000000	0.000000	0.000220	0.000000	0.000000
2	WHEAT	0.000000	0.000000	0.013597	0.000060	0.000012	0.000006	0.000000	0.000008	0.000000	0.000039
3	OTHER CEREALS	0.000000	0.000000	0.002071	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	PULSES	0.000000	0.014510	0.001940	0.000027	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	SUGARCANE	0.338441	0.000000	0.000044	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	JUTE	0.000000	0.000000	0.000000	0.000000	0.004778	0.000539	0.163461	0.002323	0.000248	0.000000
7	COTTON	0.000000	0.000000	0.000858	0.097513	0.000000	0.000000	0.000000	0.000137	0.000000	0.000000
8	TEA	0.000000	0.000000	0.039568	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	COFFEE	0.000000	0.000000	0.016467	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000144	0.000000	0.000000
11	OTHER CROPS	0.000101	0.008548	0.132843	0.000105	0.000000	0.000020	0.002733	0.000171	0.000285	0.001343
12	ANIMAL HUSBANDRY	0.000000	0.000000	0.050112	0.000001	0.028665	0.012586	0.000000	0.000499	0.000000	0.000010
13	FORESTRY & LOGGING	0.006437	0.000553	0.002230	0.000508	0.000820	0.000264	0.000064	0.000064	0.384184	0.020787
14	FISHING	0.000000	0.000000	0.008823	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	COAL & LIGNITE	0.004015	0.004634	0.002885	0.004065	0.004194	0.001490	0.002887	0.001216	0.000546	0.010647
16	CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.004151	0.000000	0.002496	0.000000	0.000006	0.000031	0.000106	0.000634
17	IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	NON MET.& MINOR MINERALS	0.016224	0.000000	0.000120	0.000091	0.000000	0.000000	0.000000	0.000053	0.000079	0.010715
20	SUGAR	0.051408	0.000000	0.024947	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	KHANDSARI BOORA	0.011268	0.000000	0.029339	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	HYDROGENATED OIL	0.000006	0.000000	0.002144	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	OTHER FOOD & BEVERAGE	0.001237	0.319538	0.032152	0.001818	0.000081	0.000200	0.001409	0.000016	0.000076	0.001951
24	COTTON TEXTILES	0.000962	0.019372	0.001446	0.226420	0.004725	0.000882	0.001287	0.140626	0.000628	0.002521
25	WOOLLEN TEXTILES	0.000000	0.000000	0.000012	0.000249	0.219772	0.000103	0.000000	0.011626	0.000004	0.000022
26	ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.019294	0.023879	0.163525	0.001190	0.062979	0.000079	0.000267
27	JUTE,HEMP,MESTA TEXTILES	0.011058	0.001032	0.003019	0.014531	0.019478	0.000126	0.229411	0.006931	0.000214	0.003876
28	OTHER TEXTILES	0.000002	0.000000	0.000178	0.001946	0.001531	0.001953	0.019505	0.004388	0.000851	0.002695
29	WOOD & WOOD PRODUCTS	0.000356	0.000257	0.003595	0.000720	0.001373	0.001301	0.000055	0.006728	0.095192	0.000798
30	PAPER & PAPER PRODUCTS	0.000681	0.001700	0.009063	0.006717	0.000864	0.005585	0.001682	0.002640	0.000510	0.261817
31	LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000004	0.000193	0.000000	0.000000	0.000000	0.000039	0.000232	0.000167
32	RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000	0.000330	0.000355	0.000296
33	PLASTIC PRODUCTS	0.002572	0.006802	0.006726	0.001899	0.002177	0.002603	0.002694	0.008162	0.002545	0.003832
34	PETROLEUM PRODUCTS	0.067233	0.005692	0.013662	0.011926	0.014975	0.014713	0.024069	0.014117	0.003653	0.016826
35	COAL TAR PRODUCTS	0.000045	0.000062	0.000085	0.000343	0.000113	0.000876	0.000103	0.000003	0.000171	0.000057
36	FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37	PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38	SYNTHETIC FIBRE & RESIN	0.000000	0.000016	0.001760	0.023010	0.110763	0.068448	0.001975	0.029988	0.000976	0.001012
39	OTHER CHEMICALS	0.006852	0.236713	0.009184	0.016253	0.016311	0.181473	0.014479	0.002418	0.002901	0.047235
40	CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Contd.

INPUT OUTPUT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR					INDUSTRIES					
	21	22	23	24	25	26	27	28	29	30
41 OTH.NON MET.MINERAL PRODS.	0.003420	0.000168	0.006903	0.000005	0.000000	0.000000	0.000000	0.000037	0.000380	0.000919
42 IRON & STEEL	0.000000	0.009664	0.000510	0.000833	0.000171	0.000069	0.005107	0.000225	0.001240	0.001147
43 NON FERROUS METALS	0.000000	0.000000	0.000566	0.000031	0.000655	0.000654	0.000000	0.002883	0.000127	0.015342
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.005737	0.001195	0.061108	0.026598	0.003957	0.002595	0.003280	0.003460	0.002100	0.005984
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.004414	0.038757	0.033726	0.005752	0.007504	0.005276	0.007163	0.004511	0.003821	0.010882
54 CONSTRUCTION	0.001863	0.000739	0.004017	0.002662	0.001708	0.001020	0.001740	0.003178	0.002257	0.002052
55 ELECTRICITY ETC.	0.022876	0.016520	0.010432	0.042526	0.009690	0.000693	0.031350	0.009688	0.006426	0.040005
56 RAIL TRANSPORT SERVICE	0.007002	0.006421	0.004105	0.003258	0.003198	0.001551	0.004523	0.001184	0.003975	0.009565
57 OTHER TRANSPORT SERVICE	0.015318	0.015545	0.041840	0.025374	0.013178	0.267972	0.040082	0.014586	0.020112	0.018043
58 COMMUNICATION	0.001442	0.002225	0.001649	0.001626	0.003194	0.001509	0.001940	0.001409	0.000966	0.005172
59 TRADE	0.099940	0.104458	0.140410	0.027323	0.048706	0.000382	0.094996	0.014750	0.049754	0.060139
60 OTHER SERVICES	0.048901	0.018796	0.063969	0.022389	0.047259	0.000370	0.039521	0.016849	0.017932	0.070712
61 TOTAL	0.729819	0.833916	0.787286	0.586100	0.596491	0.738785	0.696714	0.368672	0.602927	0.627509
62 NET INDIRECT TAX	0.018245	0.091422	0.025861	0.062927	0.151542	0.072534	0.035162	0.058603	0.025153	0.049379
63 GROSS VALUE ADDED	0.251936	0.074662	0.186852	0.350973	0.251967	0.188681	0.268124	0.572725	0.371920	0.323112
64 GROSS OUTPUT	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Contd.

INPUT OUTPUT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

	INDUSTRIES									
SN COMMODITY SECTOR	31	32	33	34	35	36	37	38	39	40
1 PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.007264	0.000000
2 WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000148	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000009	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.002636	0.063276	0.000119	0.000000	0.000000	0.000000	0.000000	0.000419	0.000000	0.000000
11 OTHER CROPS	0.000066	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.013828	0.000000
12 ANIMAL HUSBANDRY	0.034782	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000307	0.000000
13 FORESTRY & LOGGING	0.012587	0.000344	0.000084	0.000389	0.001520	0.000308	0.000084	0.007478	0.004693	0.000088
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
15 COAL & LIGNITE	0.000798	0.000996	0.000210	0.000008	0.245713	0.010737	0.000064	0.005202	0.001507	0.034315
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000010	0.428898	0.000000	0.016293	0.000000	0.000903	0.002562	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000058	0.000000
19 NON MET.& MINOR MINERALS	0.000001	0.004674	0.000000	0.000002	0.003658	0.073846	0.016534	0.008453	0.009676	0.185737
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000408	0.000964	0.000000
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000122	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000080	0.000000	0.000000	0.000000	0.000000	0.000425	0.000000
23 OTHER FOOD & BEVERAGE	0.005406	0.000000	0.000010	0.000000	0.000000	0.000216	0.000000	0.007566	0.016754	0.000000
24 COTTON TEXTILES	0.002417	0.006477	0.003896	0.000401	0.000231	0.000230	0.001208	0.000777	0.008814	0.000043
25 WOOLLEN TEXTILES	0.000195	0.000006	0.000000	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.001469	0.030051	0.001911	0.000002	0.000000	0.000000	0.000000	0.000000	0.000146	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.002341	0.001316	0.000691	0.000405	0.001541	0.022628	0.006564	0.001833	0.003271	0.055596
28 OTHER TEXTILES	0.000422	0.007968	0.001512	0.000008	0.000003	0.000000	0.000012	0.000128	0.000283	0.000000
29 WOOD & WOOD PRODUCTS	0.003283	0.000736	0.001306	0.000302	0.000200	0.000175	0.002327	0.001060	0.003874	0.000168
30 PAPER & PAPER PRODUCTS	0.004137	0.002568	0.003844	0.000649	0.000834	0.000793	0.006290	0.048037	0.014890	0.000066
31 LEATHER & LEATHER PRODUCTS	0.263414	0.000452	0.000048	0.000000	0.000000	0.000000	0.000000	0.000000	0.000014	0.000000
32 RUBBER PRODUCTS	0.056743	0.041458	0.002307	0.000000	0.000000	0.000000	0.000000	0.000070	0.000560	0.000000
33 PLASTIC PRODUCTS	0.003492	0.002593	0.024674	0.001989	0.001158	0.006204	0.039945	0.007010	0.027363	0.000511
34 PETROLEUM PRODUCTS	0.005842	0.014326	0.012644	0.091962	0.034872	0.104844	0.014327	0.056124	0.056686	0.019078
35 COAL TAR PRODUCTS	0.000007	0.000052	0.000164	0.000001	0.072346	0.000259	0.000036	0.000010	0.003124	0.000522
36 FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.083256	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000041	0.124385	0.000000	0.000001	0.000000
38 SYNTHETIC FIBRE & RESIN	0.003815	0.124375	0.365307	0.000010	0.000052	0.000138	0.000000	0.142074	0.001304	0.000000
39 OTHER CHEMICALS	0.035302	0.019793	0.030375	0.056563	0.030304	0.126920	0.147226	0.020502	0.157893	0.000452
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000219	0.001024

INPUT OUTPUT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	31	32	33	34	35	36	37	38	39	40
41 OTH.NON MET.MINERAL PRODS.	0.001158	0.002283	0.003850	0.000000	0.000432	0.000212	0.006474	0.000005	0.010987	0.007158
42 IRON & STEEL	0.000064	0.004255	0.002394	0.000000	0.000310	0.000000	0.000070	C.000209	0.000857	0.021028
43 NON FERROUS METALS	0.000268	0.001072	0.004660	0.000022	0.000000	0.000348	0.002860	0.000642	0.009965	0.000865
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.001787	0.001163	0.001476	0.000308	0.001908	0.006283	0.002114	0.002809	0.003323	0.007713
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.005832	0.011218	0.007192	0.014547	0.010015	0.006003	0.084177	0.010204	0.021062	0.014385
54 CONSTRUCTION	0.002819	0.003143	0.002402	0.001881	0.003782	0.002284	0.002316	0.001758	0.002067	0.004206
55 ELECTRICITY ETC.	0.006980	0.007441	0.021971	0.006160	0.045896	0.068375	0.015779	0.036992	0.053570	0.073687
56 RAIL TRANSPORT SERVICE	0.001411	0.001654	0.000769	0.006054	0.024965	0.016400	0.002052	0.005140	0.004016	0.032349
57 OTHER TRANSPORT SERVICE	0.027027	0.017277	0.022844	0.009753	0.089325	0.021487	0.019515	0.017649	0.021419	0.016830
58 COMMUNICATION	0.002351	0.003556	0.003963	0.001453	0.000874	0.001600	0.004184	0.002963	0.003759	0.001586
59 TRADE	0.093769	0.030487	0.035826	0.144494	0.262583	0.108983	0.056463	0.037925	0.078181	0.090620
60 OTHER SERVICES	0.044650	0.020639	0.029036	0.033279	0.092381	0.075177	0.098842	0.028536	0.057807	0.047493
61 TOTAL	0.627273	0.425649	0.585494	0.799623	0.924904	0.754042	0.653848	0.452886	0.603773	0.615521
62 NET INDIRECT TAX	0.038553	0.304869	0.226128	0.149136	0.023447	0.030254	0.072244	0.336353	0.094660	0.031857
63 GROSS VALUE ADDED	0.334174	0.269482	0.188377	0.051240	0.051648	0.215704	0.273909	0.210761	0.301566	0.352622
64 GROSS OUTPUT	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Contd.

17—13/PC/ND/95

COMMODITY BY INDUSTRY TABLE

		I N D U S T R I E S									
SN	COMMODITY SECTOR	41	42	43	44	45	46	47	48	49	50
1	PADDY	0.000308	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	WHEAT	0.000121	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3	OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	RUBBER	0.000045	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	OTHER CROPS	0.000076	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	ANIMAL HUSBANDRY	0.000054	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	FORESTRY & LOGGING	0.005176	0.001323	0.000619	0.000463	0.001862	0.003370	0.000163	0.000488	0.000010	0.004926
14	FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	COAL & LIGNITE	0.017695	0.022352	0.002779	0.002216	0.000300	0.000422	0.000307	0.000038	0.000053	0.000711
16	CRUDE PETROLEUM & N.GAS	0.009151	0.000243	0.008892	0.000028	0.000055	0.000744	0.001126	0.002904	0.000205	0.000875
17	IRON ORE	0.000000	0.003464	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	OTHER METALLIC MINERALS	0.000000	0.001822	0.100390	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000
19	NON MET.& MINOR MINERALS	0.084400	0.027125	0.003578	0.000000	0.000004	0.000069	0.000000	0.000000	0.000858	0.000000
20	SUGAR	0.000158	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	OTHER FOOD & BEVERAGE	0.000021	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	COTTON TEXTILES	0.000903	0.000048	0.000091	0.000162	0.000170	0.000468	0.000522	0.000309	0.000283	0.000055
25	WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	ART SILK & SYNTHETIC FIBRE	0.000004	0.000000	0.000004	0.000000	0.000000	0.000089	0.000009	0.000000	0.000000	0.000000
27	JUTE,HEMP,MESTA TEXTILES	0.001818	0.000666	0.000812	0.000105	0.000270	0.000439	0.000472	0.000205	0.000254	0.000441
28	OTHER TEXTILES	0.000119	0.000001	0.000000	0.000000	0.000000	0.000012	0.000055	0.000002	0.000000	0.000000
29	WOOD & WOOD PRODUCTS	0.001881	0.000205	0.000765	0.001165	0.002014	0.002732	0.004466	0.004518	0.000682	0.000410
30	PAPER & PAPER PRODUCTS	0.003066	0.000079	0.000302	0.000454	0.001014	0.001147	0.006066	0.005721	0.003123	0.000081
31	LEATHER & LEATHER PRODUCTS	0.000004	0.000000	0.000012	0.000129	0.000230	0.000048	0.000003	0.000000	0.000070	0.000000
32	RUBBER PRODUCTS	0.000573	0.000000	0.000028	0.027853	0.000114	0.002268	0.002068	0.000262	0.000029	0.001881
33	PLASTIC PRODUCTS	0.002240	0.000245	0.001144	0.000802	0.001076	0.000896	0.002220	0.007352	0.001953	0.000398
34	PETROLEUM PRODUCTS	0.065186	0.022069	0.090418	0.014717	0.009261	0.010191	0.013521	0.005103	0.003082	0.012362
35	COAL TAR PRODUCTS	0.001304	0.016008	0.000686	0.001318	0.000919	0.000978	0.000139	0.000389	0.000011	0.001583
36	FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37	PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38	SYNTHETIC FIBRE & RESIN	0.000506	0.000000	0.000006	0.000069	0.000036	0.000284	0.063672	0.003123	0.000555	0.000004
39	OTHER CHEMICALS	0.014001	0.007368	0.028918	0.021612	0.003980	0.005670	0.015005	0.006110	0.004091	0.020754
40	CEMENT	0.051316	0.000000	0.000000	0.000000	0.000000	0.000000	0.000027	0.000000	0.000000	0.000000

Contd.

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	41	42	43	44	45	46	47	48	49	50
41 OTH.NON MET.MINERAL PRODS.	0.054723	0.004370	0.000177	0.000011	0.000526	0.000347	0.005340	0.003548	0.002143	0.000001
42 IRON & STEEL	0.012678	0.379736	0.036453	0.257962	0.166999	0.204339	0.014414	0.032535	0.007750	0.121422
43 NON FERROUS METALS	0.003772	0.051162	0.187489	0.009609	0.020087	0.033802	0.029085	0.016965	0.008117	0.024321
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.210744	0.000000	0.001848	0.000053	0.000000	0.000000	0.001193
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.120198	0.000127	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.002791	0.003486	0.001509	0.021940	0.015850	0.170582	0.003143	0.000075	0.000010	0.004642
47 ELECTRICAL MACHINERY	0.000344	0.000570	0.005589	0.002759	0.020694	0.017278	0.190212	0.020245	0.016642	0.016887
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.001596	0.002602	0.363660	0.295943	0.000486
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.003237	0.000032	0.001428	0.085985	0.008368	0.266463	0.005881
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.195641
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.011285	0.000001	0.003330	0.000342	0.000000	0.000000	0.000498
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.001276	0.000000	0.000000	0.000002	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.007198	0.015510	0.013813	0.009738	0.038072	0.043067	0.021683	0.024980	0.022113	0.010765
54 CONSTRUCTION	0.004032	0.006560	0.002503	0.002695	0.003789	0.003861	0.002900	0.004379	0.001845	0.001011
55 ELECTRICITY ETC.	0.016652	0.044545	0.131889	0.010750	0.016376	0.012218	0.010606	0.008796	0.005108	0.010489
56 RAIL TRANSPORT SERVICE	0.015022	0.003107	0.008972	0.007432	0.006115	0.006779	0.004719	0.001673	0.001218	0.003083
57 OTHER TRANSPORT SERVICE	0.026302	0.016369	0.022902	0.015582	0.011495	0.012375	0.012923	0.011708	0.007262	0.005728
58 COMMUNICATION	0.002537	0.002212	0.002552	0.002656	0.005656	0.005886	0.003905	0.005625	0.005681	0.000773
59 TRADE	0.031114	0.046761	0.059221	0.052796	0.031551	0.012757	0.008585	0.040395	0.032152	0.020136
60 OTHER SERVICES	0.017195	0.029608	0.055980	0.047277	0.041553	0.074054	0.011511	0.066540	0.048171	0.012751
61 TOTAL	0.454490	0.707017	0.768497	0.738843	0.520305	0.635504	0.517849	0.646019	0.735877	0.480189
62 NET INDIRECT TAX	0.060384	0.061419	0.083779	0.028951	0.057818	0.055614	0.191418	0.059202	0.028917	0.040964
63 GROSS VALUE ADDED	0.485126	0.231564	0.147725	0.232206	0.421876	0.308881	0.290733	0.294779	0.235206	0.478846
64 GROSS OUTPUT	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Contd.

INPUT OUTPUT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	51	52	53	54	55	56	57	58	59	60
1 PADDY	0.000000	0.000000	0.000006	0.000000	0.000000	0.000000	0.000125	0.000000	0.000000	0.004254
2 WHEAT	0.000000	0.000000	0.000005	0.000000	0.000000	0.000000	0.000232	0.000000	0.000000	0.003724
3 OTHER CEREALS	0.000000	0.000000	0.000002	0.000000	0.000000	0.000000	0.000002	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000792	0.000000	0.000000	0.001460
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000000	0.000000	0.000288	0.005999	0.000000	0.000000	0.000274	0.000000	0.000000	0.007814
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.000446	0.000409	0.000518	0.000000	0.000000	0.000000	0.000000	0.004836
13 FORESTRY & LOGGING	0.000762	0.001599	0.001536	0.011678	0.000000	0.000088	0.000000	0.000000	0.000000	0.000374
14 FISHING	0.000000	0.000000	0.000030	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001819
15 COAL & LIGNITE	0.000028	0.001028	0.002231	0.000000	0.075089	0.006807	0.000336	0.000000	0.000000	0.000798
16 CRUDE PETROLEUM & N.GAS	0.000216	0.000084	0.000072	0.000000	0.005358	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000031	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000393	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.189672	0.062216	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001208
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000006	0.000000	0.000000	0.000000	0.000054	0.000000	0.000000	0.000506
23 OTHER FOOD & BEVERAGE	0.000124	0.000000	0.000154	0.000000	0.000000	0.000000	0.002191	0.000000	0.000000	0.003222
24 COTTON TEXTILES	0.000174	0.000152	0.001026	0.000000	0.000000	0.000701	0.000238	0.000000	0.000000	0.000256
25 WOOLLEN TEXTILES	0.000014	0.000000	0.000032	0.000000	0.000000	0.000000	0.000474	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000028	0.000031	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000186	0.000261	0.002202	0.001483	0.000000	0.000000	0.000000	0.000000	0.002712	0.000024
28 OTHER TEXTILES	0.000506	0.000552	0.000421	0.000029	0.000197	0.000091	0.000852	0.000313	0.000000	0.000505
29 WOOD & WOOD PRODUCTS	0.000882	0.001823	0.003954	0.040175	0.001765	0.000638	0.000025	0.000131	0.004885	0.001328
30 PAPER & PAPER PRODUCTS	0.004689	0.001036	0.004875	0.001053	0.000943	0.001281	0.006345	0.024458	0.005902	0.012998
31 LEATHER & LEATHER PRODUCTS	0.000248	0.000457	0.000372	0.000000	0.000000	0.000000	0.000096	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.045730	0.032834	0.002041	0.000431	0.000119	0.000038	0.037983	0.000266	0.000029	0.000067
33 PLASTIC PRODUCTS	0.003059	0.002132	0.001667	0.000000	0.000000	0.000810	0.000808	0.000000	0.005508	0.000037
34 PETROLEUM PRODUCTS	0.015934	0.014730	0.011261	0.001381	0.013604	0.036044	0.132938	0.004874	0.001245	0.001521
35 COAL TAR PRODUCTS	0.000000	0.000114	0.000188	0.008565	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36 FERTILIZERS	0.000000	0.000000	0.000278	0.002116	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.000000	0.000000	0.000000	0.000519	0.000000	0.000000	0.000008	0.000001	0.000000	0.000027
38 SYNTHETIC FIBRE & RESIN	0.000727	0.000228	0.000315	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39 OTHER CHEMICALS	0.006874	0.016871	0.016510	0.007208	0.001140	0.000104	0.000490	0.000016	0.000000	0.023279
40 CEMENT	0.000000	0.000000	0.000000	0.060307	0.000000	0.000000	0.000000	0.000000	0.000000	0.000005

Contd.

INPUT OUTPUT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES								
SN COMMODITY SECTOR	51	52	53	54	55	56	57	58	59	60
41 OTH.NON MET.MINERAL PRODS.	0.003360	0.000334	0.007946	0.065242	0.001705	0.002371	0.000149	0.000003	0.000000	0.000509
42 IRON & STEEL	0.204754	0.084092	0.068950	0.132778	0.003710	0.009364	0.000108	0.000000	0.000873	0.000004
43 NON FERROUS METALS	0.023???	0.0???16	0.049866	0.000000	0.000100	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000???	0.000??1	0.000034	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.002829	0.001836	0.000008	0.000000	0.000064	0.001415	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.087826	0.005153	0.001791	0.001658	0.050790	0.001178	0.001420	0.000971	0.000096	0.000416
47 ELECTRICAL MACHINERY	0.010380	0.005517	0.007881	0.086945	0.075971	0.010365	0.003616	0.000142	0.000008	0.000231
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000151	0.005446	0.000000	0.000069	0.001757	0.000633	0.086163	0.000000	0.000312
49 ELECTRONIC EQUIPMENT	0.000000	0.000001	0.001094	0.000000	0.000003	0.000104	0.000094	0.000031	0.000000	0.000782
50 RAIL EQUIPMENT	0.000000	0.000093	0.039280	0.000000	0.000000	0.375480	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.077740	0.006759	0.000155	0.000809	0.000292	0.000222	0.100191	0.000514	0.000056	0.000264
52 OTHER TRANSPORT EQUIPMENT	0.000612	0.176789	0.003531	0.000000	0.000001	0.000008	0.028367	0.000002	0.000000	0.001166
53 OTHER MANUFACTURING	0.022882	0.012152	0.009573	0.001223	0.006047	0.010479	0.006246	0.000388	0.004705	0.003007
54 CONSTRUCTION	0.005026	0.001793	0.002213	0.003970	0.011910	0.025055	0.004418	0.000157	0.003350	0.015275
55 ELECTRICITY ETC.	0.013021	0.010318	0.016673	0.009490	0.223152	0.026611	0.008001	0.010997	0.015492	0.012434
56 RAIL TRANSPORT SERVICE	0.005387	0.004635	0.006792	0.001651	0.004414	0.007280	0.006488	0.008890	0.004050	0.001760
57 OTHER TRANSPORT SERVICE	0.012566	0.008377	0.011471	0.008383	0.010948	0.006912	0.066041	0.016924	0.112010	0.011275
58 COMMUNICATION	0.003397	0.002777	0.007649	0.001940	0.002544	0.001188	0.007516	0.000000	0.007739	0.009600
59 TRADE	0.019111	0.034948	0.014317	0.048478	0.008595	0.012730	0.017941	0.006073	0.019456	0.021565
60 OTHER SERVICES	0.017918	0.060612	0.020922	0.015788	0.008584	0.005694	0.018257	0.016582	0.101984	0.060367
61 TOTAL	0.590186	0.499935	0.506642	0.581925	0.507634	0.544823	0.453745	0.177896	0.290099	0.209028
62 NET INDIRECT TAX	0.089939	0.058619	0.069872	0.050939	0.019633	0.020447	0.070424	0.007482	0.008733	0.014762
63 GROSS VALUE ADDED	0.319875	0.441446	0.423486	0.367135	0.472733	0.434730	0.475832	0.814622	0.701168	0.776210
64 GROSS OUTPUT	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES								
SN COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
1 PADDY	37522.3	37.3	0.0	69.8	0.0	0.0	0.0	0.0	0.0	0.0
2 WHEAT	10.8	25827.1	0.0	12.4	0.0	0.0	0.0	0.0	0.0	0.0
3 OTHER CEREALS	16.0	12.0	1320.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
4 PULSES	73.6	485.9	0.0	15162.6	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	0.0	0.C	0.0	0.0	5047.4	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 COTTON	0.0	0.0	0.0	0.0	0.0	0.0	388.5	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER CROPS	255.0	80.0	0.0	1146.1	0.0	0.0	0.0	0.0	0.0	0.0
12 ANIMAL HUSBANDRY	22827.1	9446.6	13046.1	8316.1	1310.2	494.0	3321.4	488.0	722.9	0.0
13 FORESTRY & LOGGING	4.5	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
14 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 COAL & LIGNITE	152.5	354.1	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22 HYDROGENATED OIL	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
23 OTHER FOOD & BEVERAGE	1.5	9.1	0.0	25.8	0.0	0.0	0.0	0.0	0.0	0.0
24 COTTON TEXTILES	66.2	3.3	0.0	11.9	0.0	0.0	0.0	0.0	0.0	0.0
25 WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	000.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 JUTE,HEMP,MESTA TEXTILES	516.0	147.5	0.0	98.7	0.0	0.0	0.0	0.0	0.0	0.0
28 OTHER TEXTILES	19.4	10.4	0.2	2.6	0.2	0.0	0.2	0.0	0.0	0.0
29 WOOD & WOOD PRODUCTS	4.7	2.0	0.0	8.9	0.0	0.0	0.0	0.0	0.0	0.0
30 PAPER & PAPER PRODUCTS	33.0	25.3	2.1	21.3	2.6	0.0	2.1	0.0	0.0	0.0
31 LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 RUBBER PRODUCTS	10.4	8.2	1.1	1.4	1.4	0.0	1.1	0.0	0.0	0.0
33 PLASTIC PRODUCTS	29.8	11.0	0.0	59.4	0.0	0.0	0.0	0.0	0.0	0.0
34 PETROLEUM PRODUCTS	7586.4	4375.6	2523.9	2164.3	909.0	0.0	1009.6	0.0	0.0	0.0
35 COAL TAR PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36 FERTILIZERS	28433.0	20046.0	6567.4	2476.5	6201.0	222.5	5381.6	383.9	0.0	612.8
37 PESTICIDES	2091.6	730.7	73.0	1125.9	73.7	15.8	3704.0	88.0	442.6	403.8
38 SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 OTHER CHEMICALS	0.4	0.1	0.0	30.4	0.0	0.0	0.0	0.0	0.0	0.0
40 CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
41 OTH.NON MET.MINERAL PRODS.	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
42 IRON & STEEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43 NON FERROUS METALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	2797.7	1552.4	1690.0	1550.9	341.1	21.1	433.0	0.0	·333.9	0.0
45 MACHINE TOO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	369.4	800.9	4.6	36.8	5.8	0.0	4.7	0.0	0.0	0.0
47 ELECTRICAL MACHINERY	13.6	10.8	1.5	1.8	1.9	0.0	1.5	0.0	0.0	0.0
48 COMMUNICATION EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	20.3	16.1	2.2	2.8	2.8	0.0	2.2	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	347.7	282.9	408.5	281.6	67.4	4.9	93.6	0.0	55.1	0.0
53 OTHER MANUFACTURING	188.6	65.0	0.7	48.0	0.9	0.0	0.7	0.0	0.0	0.0
54 CONSTRUCTION	7706.5	4385.0	4384.2	4027.0	944.5	52.7	1164.0	0.0	783.1	0.0
55 ELECTRICITY ETC.	4058.5	9045.0	508.1	834.0	1029.0	0.0	689.1	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	2602.8	2090.8	497.6	420.1	443.8	14.2	374.1	25.8	3.6	38.0
57 OTHER TRANSPORT SERVICE	3057.9	1683.4	616.4	692.0	408.3	23.0	512.2	73.0	92.6	38.9
58 COMMUNICATION	200.8	153.0	11.6	49.1	14.7	0.0	11.8	0.0	0.0	0.0
59 TRADE	13861.6	7829.5	2194.3	3248.0	2833.2	63.2	1721.9	168.8	213.6	140.7
60 OTHER SERVICES	5262.1	2361.7	1519.7	1279.4	1112.6	93.6	472.0	241.2	73.3	81.9
61 TOTAL	140142.2	91889.9	35373.1	43213.4	20751.6	1005.0	19289.4	1466.7	2720.7	1316.1
62 NET INDIRECT TAX	-11937.2	-9480.8	-2054.6	-784.5	-2245.2	-84.8	-2012.4	-147.8	-1.7	-250.1
63 GROSS VALUE ADDED	288122.0	147567.0	100323.0	77539.0	74218.0	8331.0	29175.0	12921.0	3881.0	4924.0
64 GROSS OUTPUT	416327.0	229976.1	133641.5	119968.0	92724.4	9251.2	46452.0	14239.9	6600.0	5990.0

INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	11	12	13	14	15	16	17	18	19	20
1 PADDY	42.0	2165.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 WHEAT	296.5	4030.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 OTHER CEREALS	129.8	3910.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 PULSES	61.7	6363.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	0.0	1003.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33597.2
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER CROPS	19690.5	146338.4	10.8	0.0	0.0	0.0	0.0	0.0	0.0	11.8
12 ANIMAL HUSBANDRY	20817.3	134.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 FORESTRY & LOGGING	0.3	0.0	151.8	0.0	0.0	0.0	0.0	0.0	0.0	328.1
14 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 COAL & LIGNITE	160.8	0.0	0.0	0.0	273.1	0.0	1.1	3.5	0.8	114.8
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	0.0	0.0	0.0	0.0	363.7	0.0	0.0	0.0	0.0	1028.7
20 SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.1
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.6
22 HYDROGENATED OIL	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23 OTHER FOOD & BEVERAGE	0.4	19089.4	0.0	115.0	0.0	0.0	0.0	0.0	0.0	4.8
24 COTTON TEXTILES	56.4	5601.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	27.2
25 WOOLLEN TEXTILE	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 JUTE,HEMP,MESTA	34.5	0.0	2.9	0.0	0.5	0.0	0.0	0.0	3.6	2054.9
28 OTHER TEXTILES	18.3	0.0	87.7	1917.6	0.0	0.0	0.0	0.9	0.0	25.1
29 WOOD & WOOD PROD	2.0	0.0	30.8	12.8	47.3	0.0	0.5	84.4	6.8	8.9
30 PAPER & PAPER PRODUCTS	14.8	0.0	196.3	0.0	237.8	0.0	1.8	4.0	6.1	48.2
31 LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 RUBBER PRODUCTS	5.6	0.0	215.9	0.0	13.8	0.0	0.5	2.8	0.4	0.0
33 PLASTIC PRODUCTS	16.6	0.0	14.0	0.0	0.6	0.0	0.0	0.0	3.8	47.8
34 PETROLEUM PRODUCTS	6871.2	0.0	750.8	1329.0	1114.9	1600.0	300.2	273.6	404.7	715.1
35 COAL TAR PRODUCTS	0.1	0.0	0.0	0.0	0.0	0.0	4.5	1.7	12.4	89.1
36 FERTILIZERS	20615.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37 PESTICIDES	2588.5	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38 SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
39 OTHER CHEMICALS	12.7	1853.2	0.1	38.8	1366.7	44.3	103.2	158.4	177.8	494.6
40 CEMENT	0.0	0.0	0.1	0.0	0.0	546.5	0.0	0.0	0.0	0.0

Contd....

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ANNEXURE 1.3

INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES								
SN COMMODITY SECTOR	11	12	13	14	15	16	17	18	19	20
41 OTH.NON MET.MINERAL PRODS.	0.0	0.0	0.7	0.0	0.0	782.6	0.0	0.0	0.0	301.0
42 IRON & STEEL	0.0	0.0	20.0	39.6	0.2	0.0	0.0	0.0	1.1	0.0
43 NON FERROUS METALS	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	2537.9	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	13.2	0.0	209.8	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	90.6	0.0	32.5	0.0	5190.1	2411.4	56.9	317.7	227.9	379.7
47 ELECTRICAL MACHINERY	7.3	0.0	59.2	0.0	0.0	0.0	0.2	0.9	0.1	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B										
51 MOTOR VEHICLES	10.9	0.0	420.4	0.0	353.2	0.0	1.1	5.5	0.8	0.0
52 OTHER TRANSPORT EQUIPMENT	654.4	0.0	15.9	827.6	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	14.4	603.3	300.7	1.3	855.4	0.0	5.1	85.2	150.7	634.2
54 CONSTRUCTION	6706.1	343.1	288.8	0.0	156.4	1853.0	15.0	22.4	0.4	542.5
55 ELECTRICITY ETC.	2174.6	0.0	52.4	0.0	3532.9	296.2	308.5	785.2	195.9	366.3
56 RAIL TRANSPORT SERVICE	1650.2	845.5	348.8	44.4	1215.5	116.3	16.2	26.7	16.4	347.5
57 OTHER TRANSPORT SERVICE	2340.7	3988.5	3394.6	148.5	423.6	107.2	18.0	153.1	111.5	2699.5
58 COMMUNICATION	67.9	0.0	218.8	0.0	65.7	0.0	24.1	9.9	2.1	149.8
59 TRADE	10011.8	43260.2	268.7	380.5	1056.5	460.3	53.9	109.3	121.8	11135.1
60 OTHER SERVICES	5438.2	1591.8	1797.2	211.4	1728.3	3729.1	116.1	228.8	116.1	7220.5
61 TOTAL	103140.4	241123.6	8705.5	5073.7	18206.0	11947.0	1027.0	2274.1	1561.6	62506.7
62 NET INDIRECT TAX	-6831.6	3210.7	501.5	496.3	1488.9	910.9	86.0	173.8	153.4	496.6
63 GROSS VALUE ADDED	358337.0	205282.0	83520.0	43400.0	37745.0	48942.0	4407.0	5152.0	9884.0	16018.0
64 GROSS OUTPUT	454645.8	449616.2	92726.9	48970.0	57440.0	61799.9	5520.0	7600.0	11599.0	79021.2

ANNEXURE 1.3

INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	21	22	23	24	25	26	27	28	29	30
1 PADDY	0.1	0.0	1994.2	11.9	5.3	0.0	0.0	40.1	0.0	00.0
2 WHEAT	0.0	0.0	5483.5	22.8	0.2	1.0	0.0	1.4	0.0	3.4
3 OTHER CEREALS	0.0	0.0	1005.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0
4 PULSES	0.0	527.0	770.2	10.2	0.0	0.0	0.0	0.0	000.0	0.0
5 SUGARCANE	5818.2	0.0	17.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	00.0	120.3	353.9	7587.6	295.6	3.6	0.0
7 COTTON	0.0	0.0	340.8	37634.5	0.0	0.0	0.0	25.0	0.0	0.0
8 TEA	0.0	0.0	14240.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	2039.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.2	00.0	0.0
11 OTHER CROPS	1.8	310.5	101351.7	39.8	0.0	3.4	89.4	31.2	14.6	118.0
12 ANIMAL HUSBANDRY	0.0	0.0	21065.2	0.4	926.2	2069.6	0.0	90.9	0.0	0.9
13 FORESTRY & LOGGING	118.5	20.1	607.6	191.9	16.7	43.5	2.1	11.7	20561.8	1826.8
14 FISHING	0.0	0.0	3354.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 COAL & LIGNITE	96.7	220.3	1499.1	2007.4	112.0	320.8	123.6	290.0	36.5	1224.9
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	85.3	0.0	2.6	0.0	00.0	0.3	0.3	2.9
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	308.2	0.0	49.0	35.4	0.0	0.0	0.0	10.0	4.2	971.8
20 SUGAR	482.5	0.0	2831.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 KHANDSARI BOORA	381.4	0.0	12921.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22 HYDROGENATED OIL	0.1	0.0	1181.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0
23 OTHER FOOD & BEVERAGE	22.8	12586.7	31563.6	686.0	1.6	32.8	46.1	2.9	3.9	171.5
24 COTTON TEXTILES	17.7	703.6	574.2	73520.8	96.4	8082.6	42.1	20129.1	32.1	221.6
25 WOOLLEN TEXTILES	0.0	0.0	4.9	93.9	4129.7	17.0	0.0	1962.1	0.2	2.0
26 ART SILK & SYNTHETIC FIBRE	0.0	0.0	1.2	3129.1	691.1	36463.6	38.9	4824.8	4.0	23.4
27 JUTE,HEMP,MESTA TEXTILES	209.2	37.5	1198.4	3720.5	306.6	1049.2	4099.2	1263.4	11.0	340.6
28 OTHER TEXTILES ▲	0.0	0.0	70.5	734.2	31.2	988.1	638.0	12392.0	43.5	236.8
29 WOOD & WOOD PRODUCTS	6.5	9.3	1427.3	271.6	28.0	213.9	1.8	1226.3	2538.6	70.1
30 PAPER & PAPER PRODUCTS	12.5	61.7	3597.8	1025.2	17.6	918.3	55.0	481.2	26.1	22737.7
31 LEATHER & LEATHER PRODUCTS	0.0	0.0	1.7	124.7	0.0	0.0	0.0	7.2	11.9	14.7
32 RUBBER PRODUCTS	0.0	0.0	00.0	0.1	0.0	0.1	0.0	69.4	18.2	26.0
33 PLASTIC PRODUCTS	47.3	247.0	2670.0	716.6	44.4	428.0	88.1	1487.8	130.2	336.7
34 PETROLEUM PRODUCTS	899.6	150.3	3942.8	5340.0	222.1	1632.9	572.4	866.0	135.8	1075 0
35 COAL TAR PRODUCTS	0.8	2.2	33.6	129.4	2.3	144.0	3.4	0.6	8.7	5.0
36 FERTILIZERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37 PESTICIDES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38 SYNTHETIC FIBRE & RESIN	0.0	0.6	11.4	2023.6	1023.4	33606.9	64.6	1755.4	49.9	88.9
39 OTHER CHEMICALS	126.1	5849.7	3645.8	9022.2	531.4	3131.8	473.6	440.7	148.4	4151.1
40 CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	21	22	23	24	25	26	27	28	29	30
41 OTH.NON MET.MINERAL PRODS.	63.0	6.1	2740.2	1.9	0.0	0.0	0.0	6.8	19.4	80.8
42 IRON & STEEL	0.0	333.5	192.2	298.5	3.3	10.8	158.7	39.0	60.3	95.8
43 NON FERROUS METALS	0.0	0.0	224.9	11.7	13.4	107.5	0.0	525.6	6.5	1348.3
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	117.3	48.2	2038.5	3201.7	89.7	474.1	119.2	700.8	119.3	584.3
47 ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00.0	0.0
53 OTHER MANUFACTURING	81.2	1407.6	6628.8	2170.1	153.1	867.6	234.3	822.2	195.4	956.3
54 CONSTRUCTION	34.3	26.8	1594.6	627.1	34.8	167.6	56.9	579.3	115.4	180.3
55 ELECTRICITY ETC.	452.0	644.0	4445.6	14161.0	417.1	11144.5	1100.8	1895.6	352.8	3760.1
56 RAIL TRANSPORT SERVICE	128.9	233.2	1629.7	1229.3	65.2	255.1	148.0	215.8	203.3	840.6
57 OTHER TRANSPORT SERVICE	268.5	537.7	9635.9	9142.1	597.5	3268.4	1248.6	2532.1	979.7	1510.2
58 COMMUNICATION	26.5	80.8	654.6	613.6	65.2	248.1	63.4	256.8	49.4	454.5
59 TRADE	2266.5	3793.8	42973.1	35453.9	1620.0	8382.7	3107.4	7547.5	3931.6	5285.0
60 OTHER SERVICES	955.3	682.6	15005.2	17821.1	2339.5	7232.2	1292.7	7681.8	917.2	5628.0
61 TOTAL	12943.8	28521.0	307343.3	225224.7	13708.1	121660.1	21456.2	70535.3	30734.0	54373.9
62 NET INDIRECT TAX	264.7	4767.1	12233.2	14221.9	369.8	7647.6	974.2	2952.6	1292.6	4499.1
63 GROSS VALUE ADDED	5197.0	3031.0	77401.0	137839.0	6321.0	35126.0	10280.0	108789.0	19122.0	29008.0
64 GROSS OUTPUT	18405.6	36319.2	396977.5	377285.6	20399.0	164433.7	32710.4	182276.9	51148.5	87881.0

INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

					INDUSTRIES					
SN COMMODITY SECTOR	31	32	33	34	35	36	37	38	39	40
1 PADDY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1856.6	0.0
2 WHEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.8	0.0
3 OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0
4 PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00.0	0.0
7 COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 TEA	0.0	0.0	C.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	396.1	5608.2	4.0	0.0	0.0	0.0	0.0	17.8	0.0	0.0
11 OTHER CROPS	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3534.5	0.0
12 ANIMAL HUSBANDRY	3891.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.4	0.0
13 FORESTRY & LOGGING	807.0	26.4	2.8	97.5	28.3	25.3	1.2	318.3	1199.6	3.9
14 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
15 COAL & LIGNITE	67.0	100.0	9.4	2.7	5829.9	1151.9	1.2	289.8	504.3	2123.0
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	117108.8	0.0	1217.5	0.0	2.0	33.9	0.0
17 IRON ORE	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.9	0.0
19 NON MET.& MINOR MINERALS	0.1	370.1	00.0	0.4	70.2	5891.7	237.8	371.3	3319.4	7138.3
20 SUGAR	0.0	0.0	0.0	00.0	0.0	0.0	0.0	17.4	246.4	0.0
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.7	0.0
22 HYDROGENATED OIL	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	140.6	0.0
23 OTHER FOOD & BEVERAGE	346.6	0.0	0.3	0.3	0.0	17.7	0.0	322.0	4282.5	0.0
24 COTTON TEXTILES	155.0	497.0	132.4	100.6	4.3	18.9	16.8	33.1	4809.0	1.9
25 WOOLLEN TEXTILES	12.5	0.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	94.2	2305.8	64.9	0.4	0.0	0.0	0.0	0.0	37.4	0.0
27 JUTE,HEMP,MESTA TEXTILES	150.1	101.0	23.5	101.5	28.7	1854.4	91.5	78.0	836.1	3347.9
28 OTHER TEXTILES	753.8	611.4	51.4	2.0	0.1	0.0	0.2	5.4	72.2	0.0
29 WOOD & WOOD PRODUCTS	210.5	56.5	44.4	75.6	3.7	14.4	32.4	45.1	990.1	7.4
30 PAPER & PAPER PRODUCTS	265.2	197.1	130.6	162.8	15.5	65.0	87.7	2044.4	3806.1	2.9
31 LEATHER & LEATHER PRODUCTS	12241.8	34.6	1.6	0.0	0.0	0.0	0.0	0.0	3.5	0.0
32 RUBBER PRODUCTS	3638.2	8712.7	78.4	0.0	0.0	0.0	0.0	3.0	143.2	0.0
33 PLASTIC PRODUCTS	223.9	199.0	1773.6	498.6	21.5	508.5	172.7	298.3	2864.9	22.5
34 PETROLEUM PRODUCTS	272.3	799.1	312.4	24522.2	471.7	10726.8	145.2	1736.5	8353.5	611.8
35 COAL TAR PRODUCTS	0.5	4.0	5.6	0.2	977.7	21.2	0.5	0.4	798.4	23.0
36 FERTILIZERS	0.0	0.0	0.0	0.0	0.0	6288.0	0.0	0.0	0.0	0.0
37 PESTICIDES	0.0	0.0	0.0	0.0	0.0	3.4	1540.1	0.0	0.3	0.0
38 SYNTHETIC FIBRE & RESIN	244.6	923.1	10175.7	2.6	1.0	11.3	0.0	2078.5	333.2	0.0
39 OTHER CHEMICALS	2632.0	10781.4	1032.4	4903.5	563.9	11004.6	2293.7	6885.5	59607.8	19.9
40 CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0	11.7

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INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	31	32	33	34	35	36	37	38	39	40
41 OTH.NON MET.MINERAL PRODS.	74.3	175.2	130.8	00.0	8.0	17.4	90.2	0.2	2368.6	315.8
42 IRON & STEEL	3.9	310.2	77.3	0.0	5.5	0.0	0.9	8.4	208.2	755.5
43 NON FERROUS METALS	17.2	82.2	158.4	5.6	0.0	28.5	39.9	27.3	2547.2	38.2
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	127.3	99.2	55.7	85.8	39.4	298.9	32.7	132.8	943.9	378.0
47 ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	373.9	860.8	244.4	1641.1	186.4	491.9	1173.4	434.3	5383.6	634.6
54 CONSTRUCTION	180.8	241.2	81.6	220.8	70.4	187.2	32.3	74.8	528.4	185.5
55 ELECTRICITY ETC.	480.4	612.9	801.6	1119.4	916.8	6289.0	236.1	1690.0	8228.0	3514.0
56 RAIL TRANSPORT SERVICE	90.4	126.9	26.1	765.4	2468.5	1344.0	28.6	218.8	1026.4	1427.0
57 OTHER TRANSPORT SERVICE	1650.4	1262.5	739.5	2089.4	1051.3	1677.1	259.1	715.4	5214.1	707.1
58 COMMUNICATION	150.7	272.8	134.7	113.6	16.3	131.1	58.3	126.1	960.9	70.0
59 TRADE	7197.6	7359.9	1557.6	12307.9	3298.3	7466.7	787.1	2042.8	18181.3	3620.0
60 OTHER SERVICES	2862.8	2274.2	1326.8	4080.5	974.7	3819.8	1377.8	1214.5	10670.3	2095.0
61 TOTAL	39616.3	45005.8	19178.4	170029.8	17052.2	60572.2	8737.5	21232.5	154239.8	27055.2
62 NET INDIRECT TAX	2862.9	10193.6	6837.7	66960.2	393.6	3108.8	870.2	11173.6	23976.6	1712.1
63 GROSS VALUE ADDED	21637.0	21530.0	7973.0	13666.0	1162.0	18271.0	4332.0	10154.0	77392.0	15345.0
64 GROSS OUTPUT	64116.2	76729.4	33989.0	250656.0	18607.8	81952.0	13939.7	42560.1	255608.4	44112.3

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES									
SN	COMMODITY SECTOR	41	42	43	44	45	46	47	48	49	50
1	PADDY	24.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	WHEAT	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	JUTE	00.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	RUBBER	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	OTHER CROPS	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	ANIMAL HUSBANDRY	4.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
13	FORESTRY & LOGGING	410.8	426.7	32.9	17.6	52.8	573.8	30.3	18.4	0.3	276.1
14	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	COAL & LIGNITE	1838.1	7581.5	193.5	110.3	11.2	94.0	74.8	1.9	2.1	52.2
16	CRUDE PETROLEUM & N.GAS	37.6	67.1	24.5	0.1	0.1	6.6	10.8	5.7	0.3	2.5
17	IRON ORE	0.0	1608.3	000.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	OTHER METALLIC MINERALS	0.0	585.1	5798.3	0.0	0.0	0.2	0.0	0.0	0.0	0.0
19	NON MET.& MINOR MINERALS	6825.8	7716.9	196.4	0.0	0.1	12.2	0.0	0.0	27.2	0.0
20	SUGAR	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	KHANDSARI BOORA	00.0	000.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	HYDROGENATED OIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	OTHER FOOD & BEVERAGE	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	COTTON TEXTILES	71.6	15.6	4.8	6.2	4.8	79.7	97.1	11.7	8.7	3.1
25	WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	ART SILK & SYNTHETIC FIBRE	0.4	0.0	0.2	0.0	0.0	15.1	1.7	0.0	0.0	0.0
27	JUTE,HEMP,MESTA TEXTILES	144.3	214.9	43.2	4.0	7.7	74.8	87.8	7.7	7.8	24.7
28	OTHER TEXTILES	9.4	0.4	0.0	0.0	0.0	2.1	10.2	0.1	00.0	0.0
29	WOOD & WOOD PRODUCTS	149.2	66.2	40.7	44.3	57.2	465.1	831.3	170.4	21.0	23.0
30	PAPER & PAPER PRODUCTS	243.3	25.6	16.1	17.3	28.8	195.3	1129.0	215.8	96.1	4.5
31	LEATHER & LEATHER PRODUCTS	0.3	0.0	0.6	4.9	6.5	8.1	0.5	0.0	2.1	0.0
32	RUBBER PRODUCTS	45.5	0.1	1.5	1059.2	3.2	386.1	384.9	9.9	0.9	105.4
33	PLASTIC PRODUCTS	177.7	79.2	60.9	30.5	30.6	152.5	413.1	277.3	60.1	22.3
34	PETROLEUM PRODUCTS	3760.5	8248.7	3496.2	406.9	191.1	1261.6	1829.5	139.9	69.0	503.8
35	COAL TAR PRODUCTS	103.5	4863.7	36.5	50.1	26.1	166.6	25.8	14.6	0.4	88.7
36	FERTILIZERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	PESTICIDES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	SYNTHETIC FIBRE & RESIN	40.1	0.0	0.3	2.6	1.0	48.4	1664.3	117.8	17.1	0.2
39	OTHER CHEMICALS	1111.0	2376.6	1697.7	821.8	113.0	965.5	3537.3	230.4	125.9	1163.5
40	CEMENT	2990.3	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0

INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	41	42	43	44	45	46	47	48	49	50
41 OTH.NON MET.MINERAL PRODS.	3420.3	1409.6	9.4	0.4	14.9	59.1	993.9	133.8	66.0	0.1
42 IRON & STEEL	1264.3	87852.6	1842.1	7716.6	5709.8	32158.0	17920.2	1165.7	226.6	3942.5
43 NON FERROUS METALS	299.3	11049.5	9151.0	365.4	570.0	4052.8	18537.6	639.8	249.8	1363.4
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	8226.9	0.0	314.7	9.8	0.0	0.0	66.9
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	734.4	21.2	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	246.1	1249.2	89.2	1222.8	499.8	23804.3	649.9	3.1	0.4	289.1
47 ELECTRICAL MACHINERY	30.3	204.4	330.3	116.6	652.5	3268.8	21318.0	5819.5	7896.4	1051.8
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	68.0	424.8	4510.6	4725.4	23.9
49 ELECTRONIC EQUIPMENT	0.0	00.0	0.0	123.1	0.9	72.8	820.8	315.6	1340.7	329.7
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13441.8
51 MOTOR VEHICLES	0.0	0.0	0.0	429.1	0.0	226.5	63.7	0.0	0.0	27.9
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	48.5	0.0	0.0	0.3	0.0	0.0	0.0
53 OTHER MANUFACTURING	571.2	20125.6	734.7	370.3	1080.4	4098.0	5778.7	942.1	680.6	603.5
54 CONSTRUCTION	320.0	2116.2	170.4	102.5	107.5	657.4	539.8	165.1	56.8	56.7
55 ELECTRICITY ETC.	1418.5	14583.1	7107.4	438.8	498.8	2233.3	2119.1	356.1	168.8	631.2
56 RAIL TRANSPORT SERVICE	1517.5	7901.0	477.2	282.6	173.5	1154.2	878.3	63.1	37.5	172.8
57 OTHER TRANSPORT SERVICE	1987.7	5636.0	1160.1	564.3	310.7	2006.9	2290.8	420.5	212.9	305.8
58 COMMUNICATION	201.3	713.6	135.8	101.0	160.5	1002.3	726.9	212.1	174.9	43.3
59 TRADE	5383.4	23632.0	3149.9	2007.7	895.4	6934.6	8021.9	1523.4	989.6	1128.8
60 OTHER SERVICES	2012.8	11876.8	2977.5	1797.8	1658.1	14355.3	8770.6	2008.9	1482.7	714.8
61 TOTAL	36694.6	222226.3	38979.6	26490.1	13601.8	100996.3	99998.9	19501.1	18748.3	26464.2
62 NET INDIRECT TAX	3714.9	22989.0	5593.5	1414.0	1551.2	13909.8	26143.7	2655.0	1706.1	2655.8
63 GROSS VALUE ADDED	38944.0	77350.0	8616.0	10123.0	13226.0	55368.0	59983.0	15557.0	10326.0	26939.0
64 GROSS OUTPUT	79353.5	322565.4	53189.1	38027.1	28378.9	170274.1	186125.6	37713.1	30780.4	56059.0

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	51	52	53	54	55	56	57	58	59	60
1 PADDY	0.0	0.0	1.3	0.0	0.0	0.0	57.8	0.0	0.0	8392.7
2 WHEAT	0.0	0.0	1.0	0.0	0.0	0.0	107.6	0.0	0.0	5243.9
3 OTHER CEREALS	0.0	0.0	0.4	0.0	0.0	0.0	1.2	0.0	0.0	0.0
4 PULSES	0.0	0.0	0.0	0.0	0.0	0.0	366.7	0.0	0.0	2055.8
5 SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 COTTON	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER CROPS	0.0	0.0	57.8	3656.0	0.0	0.0	126.9	0.0	0.0	8035.4
12 ANIMAL HUSBANDRY	0.0	0.0	89.4	288.6	138.4	0.0	0.0	0.0	0.0	8543.0
13 FORESTRY & LOGGING	83.1	107.7	307.8	13431.2	0.0	15.5	0.0	0.0	0.0	385.8
14 FISHING	0.0	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	2780.0
15 COAL & LIGNITE	4.0	90.6	585.2	0.0	20989.7	1695.1	204.0	0.0	0.0	2596.5
16 CRUDE PETROLEUM & N.GAS	1.2	0.3	0.7	0.0	375.9	0.0	0.0	0.0	0.0	0.0
17 IRON ORE	0.0	0.0	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	77.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	0.0	0.0	34.8	43273.2	0.0	0.0	0.0	0.0	0.0	0.0
20 SUGAR	0.0	000.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1630.0
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22 HYDROGENATED OIL	0.0	0.0	1.2	0.0	0.0	0.0	25.0	0.0	0.0	1032.7
23 OTHER FOOD & BEVERAGE	13.5	0.0	31.0	0.0	0.0	0.0	1014.7	0.0	0.0	8657.2
24 COTTON TEXTILES	19.0	10.3	205.5	0.0	0.0	123.9	110.4	0.0	0.0	360.3
25 WOOLLEN TEXTILES	1.6	0.0	6.5	0.0	0.0	0.0	91.8	0.0	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	0.0	1.9	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 JUTE,HEMP,MESTA TEXTILES	20.4	17.6	441.4	1046.8	0.0	0.0	0.0	0.0	2454.6	33.3
28 OTHER TEXTILES	55.2	37.2	84.4	20.4	52.6	16.1	394.7	22.4	0.0	779.7
29 WOOD & WOOD PRODUCTS	96.2	122.7	792.5	24907.3	471.2	112.8	11.4	9.4	4065.0	1869.6
30 PAPER & PAPER PRODUCTS	511.6	69.8	977.0	743.4	251.8	226.4	2938.8	1499.6	5341.1	14572.1
31 LEATHER & LEATHER PRODUCTS	27.1	30.8	74.6	0.0	0.0	0.0	44.4	0.0	0.0	0.0
32 RUBBER PRODUCTS	4499.4	2210.9	409.0	304.2	31.8	6.7	13512.7	19.0	26.1	94.3
33 PLASTIC PRODUCTS	333.8	143.6	334.1	0.0	00.0	143.3	374.4	0.0	2552.0	51.5
34 PETROLEUM PRODUCTS	1263.8	721.0	1640.6	709.0	4500.0	6757.5	69888.6	254.0	819.2	1556.9
35 COAL TAR PRODUCTS	0.0	7.7	37.8	6758.0	0.0	0.0	0.0	0.0	0.0	0.0
36 FERTILIZERS	0.0	0.0	17.7	476.0	0.0	0.0	0.1	0.0	0.0	0.0
37 PESTICIDES	0.0	0.0	0.0	366.7	0.0	1.4	0.4	0.0	0.0	38.3
38 SYNTHETIC FIBRE & RESIN	79.4	15.3	63.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 OTHER CHEMICALS	749.9	1136.0	3308.6	11363.9	304.2	18.4	227.1	1.1	0.0	44546.3
40 CEMENT	0.0	0.0	0.0	37110.9	0.0	0.0	0.0	0.0	0.0	6.5

ANNEXURE 1.3
INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES								
SN	COMMODITY SECTOR	51	52	53	54	55	56	57	58	59	60
41	OTH.NON MET.MINERAL PRODS.	366.6	22.5	1592.4	34891.0	455.2	419.2	69.1	0.2	0.0	716.5
42	IRON & STEEL	21086.0	6135.3	28487.3	90565.5	940.8	1572.8	47.6	0.0	750.8	5.3
43	NON FERROUS METALS	2533.6	627.3	9045.3	0.0	26.7	0.0	0.0	0.0	0.0	0.0
44	TRACTORS & OTH.AGRI.MACH.	0.0	23.6	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	MACHINE TOOLS	186.0	297.3	1.6	0.0	16.9	245.3	0.0	0.0	0.0	00.0
46	OTH.NON ELECTRICAL MACH.	2222.5	385.5	398.9	1300.9	3984.5	231.4	1461.8	77.4	96.1	988.6
47	ELECTRICAL MACHINERY	1258.2	412.8	1754.8	23339.0	6846.2	2036.0	2375.6	11.4	7.9	722.4
48	COMMUNICATIONS EQUIPMENT	0.0	8.9	957.3	0.0	16.3	272.5	257.2	2631.2	0.0	771.3
49	ELECTRONIC EQUIPMENT	0.0	0.1	59.0	0.0	0.8	18.4	43.6	2.2	0.0	53.3
50	RAIL EQUIPMENT	0.0	6.2	3863.8	0.0	0.0	56194.6	0.0	0.0	0.0	0.0
51	MOTOR VEHICLES	8797.6	455.1	31.0	570.9	78.1	39.2	21125.9	36.8	50.8	371.3
52	OTHER TRANSPORT EQUIPMENT	66.8	9472.4	707.6	0.0	0.2	1.4	4187.0	0.1	0.0	1641.3
53	OTHER MANUFACTURING	3031.0	818.2	9160.8	863.5	2682.0	2055.7	2892.8	27.8	4258.2	17105.2
54	CONSTRUCTION	548.3	120.7	443.4	49.5	3179.5	6391.6	2046.5	1778.2	3031.5	29385.6
55	ELECTRICITY ETC.	1524.8	745.8	3586.6	10673.9	64962.7	4249.9	3978.0	846.2	10529.8	9757.6
56	RAIL TRANSPORT SERVICE	587.7	312.1	1361.2	9496.5	8997.5	1110.2	3278.1	637.2	3963.6	2478.0
57	OTHER TRANSPORT SERVICE	1305.6	537.2	2189.3	13778.4	2783.4	1332.1	34096.2	1155.4	89828.7	10439.7
58	COMMUNICATION	370.6	187.0	1532.8	1370.0	679.0	210.0	3481.1	0.0	7621.1	10914.7
59	TRADE	5053.7	2353.3	6900.7	60488.9	10911.0	2250.6	13465.8	435.3	20022.9	25623.0
60	OTHER SERVICES	5126.8	4081.4	8861.3	16435.4	2291.5	5780.0	26917.9	1188.6	83305.2	43728.0
61	TOTAL	61824.9	31726.3	90551.0	408279.1	135968.1	93528.2	209223.1	10633.6	238724.8	267964.1
62	NET INDIRECT TAX	11062.1	3997.2	16284.8	31140.8	6064.0	3391.6	25391.3	327.3	5836.5	25076.0
63	GROSS VALUE ADDED	36209.0	31612.0	93563.0	266590.0	124920.0	79870.0	228550.0	60720.0	660470.0	1114960.0
64	GROSS OUTPUT	109096.0	67335.6	200398.8	706010.0	266952.1	176789.8	463164.4	71681.0	905031.6	1408000.0

INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

		I.USE	PVT.CONS.	PUB.CONS.	G.F.INV	CH.IN STK.	EXPORTS	IMPORTS	T.F.USE	G.OUTPUT
1	PADDY	52221.9	310925.3	389.8	0.0	-998.0	4815.0	349.0	314783.1	367005.0
2	WHEAT	41089.6	154541.4	381.0	0.0	-3032.0	27.0	216.0	151701.4	192791.0
3	OTHER CEREALS	6399.3	90634.7	0.0	0.0	194.0	27.0	3.0	90852.7	97252.0
4	PULSES	25876.9	93364.6	198.5	0.0	274.0	0.0	4720.0	89117.1	114994.0
5	SUGARCANE	45483.8	40845.1	0.0	0.0	16.0	0.0	0.0	40861.1	86345.0
6	JUTE	8361.0	0.0	0.0	0.0	139.0	0.0	111.0	28.0	8389.0
7	COTTON	38389.0	0.0	0.0	0.0	8.0	8189.0	1664.0	6533.0	44922.0
8	TEA	14240.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14240.0
9	COFFEE	2039.0	0.0	0.0	0.0	0.0	4561.0	0.0	4561.0	6600.0
10	RUBBER	6056.0	0.0	0.0	0.0	24.0	0.0	90.0	-66.0	5990.0
11	OTHER CROPS	284913.7	273532.3	311.8	0.0	5541.0	24642.0	2821.0	301206.2	586119.9
12	ANIMAL HUSBANDRY	118110.6	320273.1	367.8	9592.4	4454.0	1745.0	4593.0	331839.3	449949.9
13	FORESTRY & LOGGING	42569.4	55775.6	160.0	0.0	436.0	0.0	6214.0	50157.6	92727.0
14	FISHING	6140.5	30657.5	3.0	0.0	0.0	12209.0	40.0	42829.5	48970.0
15	COAL & LIGNITE	53198.7	12656.6	94.7	0.0	-4791.0	199.0	3918.0	4241.2	57440.0
16	CRUDE PETROLEUM & N.GAS	118990.2	0.0	0.0	0.0	809.0	0.0	58000.0	-57191.0	61799.2
17	IRON ORE	1624.0	0.0	0.0	0.0	30.0	3866.0	0.0	3896.0	5520.0
18	OTHER METALLIC MINERALS	6476.0	0.0	0.0	0.0	0.0	2293.0	1169.0	1124.0	7600.0
19	NON MET.& MINOR MINERALS	78257.0	0.0	0.0	0.0	1590.0	1312.0	69334.0	-66432.0	11825.0
20	SUGAR	5313.2	69644.8	0.0	0.0	1141.0	418.0	104.0	71099.8	76413.0
21	KHANDSARI BOORA	13355.7	5492.3	0.0	0.0	23.0	0.0	0.0	5515.3	18871.0
22	HYDROGENATED OIL	2402.3	27570.7	0.0	0.0	653.0	0.0	161.0	28062.7	30465.0
23	OTHER FOOD & BEVERAGE	79051.2	288818.8	269.9	0.0	9055.0	16033.0	6500.0	307676.7	386728.0
24	COTTON TEXTILES	116091.1	192008.6	89.2	0.0	7191.0	26762.0	700.0	225350.8	341442.0
25	WOOLLEN TEXTILES	6323.2	13998.8	0.0	0.0	39.0	361.0	1000.0	13398.8	19722.0
26	ART SILK & SYNTHETIC FIBRE	47704.5	106089.5	0.0	0.0	13987.0	7434.0	3200.0	124310.5	172015.0
27	JUTE,HEMP,MESTA TEXTILES	26337.8	0.0	13.1	0.0	535.0	3160.0	100.0	3608.1	29946.0
28	OTHER TEXTILES	20198.8	49524.1	876.7	548.4	805.0	60777.0	2400.0	110131.2	130330.0
29	WOOD & WOOD PRODUCTS	41809.6	3312.6	397.1	337.6	989.0	225.0	532.0	4729.4	46539.0
30	PAPER & PAPER PRODUCTS	65409.9	13640.5	13836.5	0.0	3389.0	396.0	11227.0	20035.0	85445.0
31	LEATHER & LEATHER PRODUCTS	12641.6	14779.5	1.9	0.0	305.0	33703.0	676.0	48113.4	60755.0
32	RUBBER PRODUCTS	36063.1	11622.4	546.5	18116.0	588.0	10825.0	952.0	40745.9	76809.0
33	PLASTIC PRODUCTS	18199.6	3541.9	1.5	0.0	9492.0	2333.0	1054.0	14314.4	32514.0
34	PETROLEUM PRODUCTS	202735.1	64223.1	15155.5	0.0	2153.0	10940.0	48572.0	43899.6	246634.7
35	COAL TAR PRODUCTS	14449.0	0.0	0.0	0.0	1237.0	12.0	840.0	409.0	14858.0
36	FERTILIZERS	97723.9	0.0	397.0	0.0	376.0	29.0	18593.0	-17791.0	79932.9
37	PESTICIDES	13289.7	0.0	8.3	0.0	1562.0	1196.0	1401.0	1365.3	14655.0
38	SYNTHETIC FIBRE & RESIN	54445.0	0.0	0.0	0.0	30616.0	1175.0	45860.0	-14069.0	40376.0
39	OTHER CHEMICALS	205324.9	56214.6	2088.3	0.0	2323.0	27250.0	32242.0	55634.0	260958.8
40	CEMENT	40727.0	0.0	0.0	0.0	3409.0	0.0	40.0	3369.0	44096.0

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INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

	I.USE	PVT.CONS.	PUB.CONS.	G.F.INV	CH.IN STK.	EXPORTS	IMPORTS	T.F.USE	G.OUTPUT
41 OTH.NON MET.MINERAL PRODS.	51826.0	18686.4	1.8	531.8	3473.0	3930.0	2481.0	24142.0	75968.0
42 IRON & STEEL	312012.8	0.0	0.0	19653.1	1038.0	3350.0	24500.0	-458.9	311553.9
43 NON FERROUS METALS	63700.9	0.0	0.0	0.0	3292.0	1449.0	12980.0	-8239.0	55461.9
44 TRACTORS & OTH.AGRI.MACH.	19906.7	0.0	184.2	17983.1	269.0	272.0	100.0	18608.3	38515.0
45 MACHINE TOOLS	1725.8	0.0	0.0	22626.1	425.0	3472.0	4936.0	21587.1	23313.0
46 OTH.NON ELECTRICAL MACH.	58817.7	3986.3	6951.9	196079.1	11491.0	13577.0	125162.0	106923.3	165741.0
47 ELECTRICAL MACHINERY	79551.7	15802.3	647.3	96888.7	2868.0	7163.0	20941.0	102428.3	181980.0
48 COMMUNICATIONS EQUIPMENT	14667.6	9995.8	704.6	22320.9	50.0	248.0	6510.0	26809.4	41477.0
49 ELECTRONIC EQUIPMENT	3185.3	31748.6	50.2	11806.9	1739.0	4766.0	25882.0	24228.7	27414.0
50 RAIL EQUIPMENT	73506.4	0.0	0.0	28738.6	9200.0	368.0	2501.0	35805.6	109312.0
51 MOTOR VEHICLES	33142.3	15425.4	12184.3	44374.0	126.0	5491.0	6500.0	71100.6	104243.0
52 OTHER TRANSPORT EQUIPMENT	19165.5	20445.6	63.0	28603.9	8033.0	4092.0	25962.0	35275.4	54441.0
53 OTHER MANUFACTURING	105776.1	29247.1	23320.7	15558.1	2374.0	55714.0	35599.0	90614.8	196390.9
54 CONSTRUCTION	89862.2	0.0	36109.9	580037.8	0.0	0.0	0.0	616147.8	706010.0
55 ELECTRICITY ETC.	226548.3	21487.5	24787.1	0.0	0.0	90.0	0.0	46364.6	272912.8
56 RAIL TRANSPORT SERVICE	68489.6	40118.1	5811.3	1671.9	0.0	6799.0	0.0	54400.3	122890.0
57 OTHER TRANSPORT SERVICE	238011.4	235587.6	14600.5	6091.4	0.0	31489.0	62615.0	225153.5	463164.8
58 COMMUNICATION	35365.0	30520.0	7197.0	0.0	0.0	1134.0	2535.0	36316.0	71681.0
59 TRADE	478485.8	326944.9	15332.8	42544.2	0.0	60703.0	0.0	445524.9	924010.7
60 OTHER SERVICES	370298.5	651659.5	486456.7	0.0	0.0	86145.0	39880.0	1184381.2	1554679.8
61 TOTAL	4414078.0	3755344.0	669991.4	1164104.0	138940.0	557166.0	728480.0	5557065.0	9971145.0
62 NET INDIRECT TAX	359904.6	136766.3	28838.6	100436.0	0.0	454.0	0.0	266494.9	626399.5
63 GROSS VALUE ADDED	5197160.0								
64 GROSS OUTPUT	9971143.0								

INTERMEDIATE USE AND FINAL DEMAND FOR 60   SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
1 PADDY	45361.6	44.3	0.0	84.8	0.0	0.0	0.0	0.0	0.0	0.0
2 WHEAT	13.1	28638.2	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0
3 OTHER CEREALS	19.4	14.3	2035.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0
4 PULSES	89.4	577.0	0.0	18370.0	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	0.0	0.0	0.0	0.0	8268.4	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 COTTON	0.0	0.0	0.0	0.0	0.0	0.0	1820.8	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER CROPS	309.7	95.0	0.0	1393.5	0.0	0.0	0.0	0.0	0.0	0.0
12 ANIMAL HUSBANDRY	30822.9	9410.4	25860.6	11687.6	1536.9	662.9	3928.3	952.2	774.4	0.0
13 FORESTRY & LOGGING	5.5	1.1	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0
14 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 COAL & LIGNITE	141.5	321.2	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0
16 CRUDE PETROLEUM & N.GAS	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22 HYDROGENATED OIL	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
23 OTHER FOOD & BEVERAGE	1.8	10.8	0.0	31.3	0.0	0.0	0.0	0.0	0.0	0.0
24 COTTON TEXTILES	80.4	3.9	0.0	14.4	0.0	0.0	0.0	0.0	0.0	0.0
25 WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 JUTE,HEMP,MESTA TEXTILES	626.7	175.1	0.0	120.0	0.0	0.0	0.0	0.0	0.0	0.0
28 OTHER TEXTILES	23.6	12.4	0.2	3.2	0.2	0.0	0.2	0.0	0.0	0.0
29 WOOD & WOOD PRODUCTS	5.7	2.4	0.0	10.8	0.0	0.0	0.0	0.0	0.0	0.0
30 PAPER & PAPER PRODUCTS	40.0	30.0	2.6	25.9	3.1	0.0	2.8	0.0	0.0	0.0
31 LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 RUBBER PRODUCTS	12.6	9.8	1.4	1.7	1.7	0.0	1.5	0.0	0.0	0.0
33 PLASTIC PRODUCTS	36.2	13.1	0.0	72.2	0.0	0.0	0.0	0.0	0.0	0.0
34 PETROLEUM PRODUCTS	9112.1	5138.4	3191.0	2602.6	1054.5	0.0	1327.3	0.0	0.0	0.0
35 COAL TAR PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36 FERTILIZERS	37468.4	25828.0	9109.9	3267.2	7893.0	263.2	7762.4	536.5	0.0	899.5
37 PESTICIDES	2738.4	867.6	93.3	1369.0	86.4	17.2	5537.6	110.7	926.4	712.1
38 SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 OTHER CHEMICALS	0.5	0.2	0.0	37.0	0.0	0.0	0.0	0.0	0.0	0.0
40 CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

INTERMEDIATE USE AND FINAL DEMAND FOR 60   SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES								
SN COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
41 OTH.NON MET.MINERAL PRODS.	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
42 IRON & STEEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43 NON FERROUS METALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	10502.0	1843.3	3527.1	1885.6	400.1	23.0	575.6	0.0	525.9	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	403.8	855.8	5.3	40.3	6.1	0.0	5.6	0.0	0.0	0.0
47 ELECTRICAL MACHINERY	14.8	11.5	1.7	2.0	2.0	0.0	1.8	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	24.7	19.1	2.8	3.3	3.3	0.0	3.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	422.3	336.0	522.2	342.3	79.1	5.4	124.4	0.0	86.8	0.0
53 OTHER MANUFACTURING	229.1	77.2	0.9	58.4	1.0	0.0	1.0	0.0	0.0	0.0
54 CONSTRUCTION	9864.9	5572.4	5604.7	4896.2	1108.0	57.5	1547.3	0.0	1778.9	0.0
55 ELECTRICITY ETC.	5461.1	11900.1	719.8	1123.6	1337.5	0.0	1015.0	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	3161.0	2755.6	636.1	510.7	520.6	15.5	497.3	33.2	5.7	51.4
57 OTHER TRANSPORT SERVICE	3899.4	2098.8	827.5	883.4	502.9	26.3	714.9	98.7	153.2	55.3
58 COMMUNICATION	243.8	181.6	14.8	59.7	17.2	0.0	15.7	0.0	0.0	0.0
59 TRADE	27826.1	9296.8	2805.2	3949.6	3132.6	68.9	2289.0	217.3	336.4	190.4
60 OTHER SERVICES	6390.6	10450.3	1942.7	1555.6	1305.1	102.1	627.4	310.6	115.4	110.7
61 TOTAL	195354.2	116592.0	56905.0	54425.6	27259.8	1242.0	27798.8	2259.2	4703.2	2019.5
62 NET INDIRECT TAX	-16631.7	-13065.6	-3208.0	-1172.0	-3216.4	-112.6	-3306.5	-231.1	-17.6	-413.8
63 GROSS VALUE ADDED	326885.4	169548.8	117146.6	92609.6	84726.4	8958.2	37256.6	16310.6	5710.5	6497.2
64 GROSS OUTPUT	505607.9	273075.1	170843.6	145863.3	108769.9	10087.6	61749.0	18338.7	10396.0	8102.9

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	11	12	13	14	15	16	17	18	19	20
1 PADDY	51.1	2774.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 WHEAT	360.8	5162.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 OTHER CEREALS	158.0	5529.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 PULSES	75.0	9970.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	0.0	1387.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48385.8
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER CROPS	16626.3	149431.5	10.2	0.0	0.0	0.0	0.0	0.0	0.0	15.2
12 ANIMAL HUSBANDRY	28166.8	172.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 FORESTRY & LOGGING	0.4	0.0	143.5	0.0	0.0	0.0	0.0	0.0	0.0	423.5
14 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 COAL & LIGNITE	149.4	0.0	0.0	0.0	280.3	0.0	1.1	4.4	1.2	113.2
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.9
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	0.0	0.0	0.0	0.0	473.5	0.0	0.0	0.0	0.0	1286.6
20 SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	120.2
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.0
22 HYDROGENATED OIL	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23 OTHER FOOD & BEVERAGE	0.6	23549.4	0.0	374.2	0.0	0.0	0.0	0.0	0.0	6.2
24 COTTON TEXTILES	68.7	5087.2	2.5	0.0	0.0	0.0	0.0	0.0	0.0	35.0
25 WOOLLEN TEXTILES	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 JUTE,HEMP,MESTA TEXTILES	41.9	0.0	2.7	0.0	0.7	0.0	0.0	0.0	6.8	2652.1
28 OTHER TEXTILES	22.3	0.0	82.9	481.9	0.0	0.0	0.0	1.5	0.0	32.4
29 WOOD & WOOD PRODUCTS	2.5	0.0	29.1	17.9	63.6	0.0	0.7	138.8	12.9	11.5
30 PAPER & PAPER PRODUCTS	18.1	0.0	185.7	0.0	319.6	0.0	2.4	6.6	11.5	62.3
31 LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 RUBBER PRODUCTS	6.8	0.0	204.2	0.0	18.6	0.0	0.7	4.7	0.8	0.0
33 PLASTIC PRODUCTS	20.2	0.0	13.2	0.0	0.7	0.0	0.0	0.0	7.1	61.7
34 PETROLEUM PRODUCTS	12720.4	0.0	976.8	7606.8	2060.6	2553.9	512.9	797.2	1536.2	1269.6
35 COAL TAR PRODUCTS	0.2	0.0	0.0	0.0	0.0	0.0	5.9	2.8	23.4	115.0
36 FERTILIZERS	27215.8	0.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37 PESTICIDES	3113.2	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38 SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 OTHER CHEMICALS	15.5	2373.8	0.1	54.4	1836.3	72.9	134.1	260.6	335.2	638.4
40 CEMENT	0.0	0.0	0.1	0.0	0.0	899.3	0.0	0.0	0.0	0.0

ANNEXURE 1.4
INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	11	12	13	14	15	16	17	18	19	20
41 OTH.NON MET.MINERAL PRODS.	0.0	0.0	0.7	0.0	0.0	1287.8	0.0	0.0	0.0	388.5
42 IRON & STEEL	0.0	0.0	19.9	58.4	0.2	0.0	0.0	0.0	2.2	0.0
43 NON FERROUS METALS	0.0	0.0	0.0	9.9	0.0	0.0	0.0	0.0	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	2781.8	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	12.8	0 0	62.9	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	99.2	0.0	27.7	0.0	11352.2	14899.6	66.6	457.1	386.9	441.1
47 ELECTRICAL MACHINERY	8.0	0.0	50.4	0.0	0.0	0.0	0.2	1.3	0.2	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	13.2	0.0	397.6	0.0	474.6	0.0	1.4	9.1	1.6	0.0
52 OTHER TRANSPORT EQUIPMENT	796.2	0.0	15.0	743.8	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	17.6	772.8	284.4	1.8	1149.4	0.0	6.6	140.2	284.2	818.5
54 CONSTRUCTION	8159.1	439.6	273.1	0.0	225.6	1506.8	19.5	39.3	0.7	700.2
55 ELECTRICITY ETC.	3018.0	0.0	46.2	0.0	1472.3	454.0	505.6	1454.0	713.4	440.4
56 RAIL TRANSPORT SERVICE	2007.7	1083.1	329.9	62.3	1633.2	191.3	21.0	43.9	31.0	448.5
57 OTHER TRANSPORT SERVICE	2990.2	5364.5	3349.6	218.7	597.6	185.2	24.6	435.0	220.8	3658.3
58 COMMUNICATION	82.6	0.0	207.0	0.0	88.3	0.0	31.3	16.3	4.0	193.3
59 TRADE	16990.2	116782.9	254.1	533.7	1419.6	757.4	70.1	179.8	229.8	12156.4
60 OTHER SERVICES	6616.5	2039.0	1741.0	296.5	2027.4	3221.7	150.9	376.4	219.0	9319.2
61 TOTAL	132414.7	331920.3	8674.5	10460.3	25557.5	26030.1	1555.7	4369.0	4029.1	83971.4
62 NET INDIRECT TAX	-7375.5	52.7	517.8	1597.8	1246.0	1112.3	143.0	324.9	424.5	561.0
63 GROSS VALUE ADDED	428119.1	243961.8	78507.1	56626.6	50376.8	74549.1	5477.1	7807.9	17420.2	17457.3
64 GROSS OUTPUT	553158.2	575934.8	87699.4	68684.6	77180.4	101691.6	7175.7	12501.9	21873.8	101989.7

Contd....

ANNEXURE 1.4
INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

					INDUSTRIES					
SN COMMODITY SECTOR	21	22	23	24	25	26	27	28	29	30
1 PADDY	0.1	0.0	2328.2	16.2	7.9	0.0	0.0	58.1	0.0	0.0
2 WHEAT	0.0	0.0	6301.9	31.0	0.4	1.5	0.0	2.1	0.0	4.9
3 OTHER CEREALS	0.0	0.0	959.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0
4 PULSES	0.0	667.4	899.2	13.9	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	7400.2	0.0	20.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	00.0	143.8	127.6	8186.7	612.6	19.5	0.0
7 COTTON	0.0	0.0	397.8	50049.8	0.0	0.0	0.0	36.2	0.0	0.0
8 TEA	0.0	0.0	18338.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	7632.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.8	00.0	0.0
11 OTHER CROPS	2.2	393.2	61569.4	54.1	0.0	4.8	136.9	45.1	22.4	167.3
12 ANIMAL HUSBANDRY	0.0	0.0	23225.7	0.5	862.9	2978.9	0.0	131.5	0.0	1.2
13 FORESTRY & LOGGING	140.7	25.4	1033.5	261.0	24.7	62.6	3.2	16.9	30213.6	2590.2
14 FISHING	0.0	0.0	4089.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 COAL & LIGNITE	87.8	213.2	1337.1	2086.2	126.2	352.8	144.6	320.5	42.9	1326.7
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	1923.8	0.0	75.1	0.0	0.3	8.2	8.3	79.0
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	354.8	0.0	55.4	46.6	0.0	0.0	0.0	14.0	6.2	1335.2
20 SUGAR	1124.1	0.0	11562.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 KHANDSARI BOORA	246.4	0.0	13597.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22 HYDROGENATED OIL	0.1	0.0	993.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0
23 OTHER FOOD & BEVERAGE	27.0	14698.4	14901.6	933.2	2.4	47.2	70.6	4.2	6.0	243.1
24 COTTON TEXTILES	21.0	891.1	670.4	116212.9	142.2	208.8	64.4	37082.4	49.4	314.2
25 WOOLLEN TEXTILES	0.0	0.0	5.7	127.8	6616.0	24.4	0.0	3065.7	0.3	2.8
26 ART SILK & SYNTHETIC FIBRE	0.0	0.0	1.4	9902.9	718.8	38704.0	59.6	16607.3	6.2	33.2
27 JUTE,HEMP,MESTA TEXTILES	241.8	47.5	1399.2	7458.2	586.4	29.8	11489.7	1827.8	16.8	482.9
28 OTHER TEXTILES	0.0	0.0	82.3	998.9	46.1	462.2	976.9	1157.1	66.9	335.8
29 WOOD & WOOD PRODUCTS	7.8	11.8	1666.4	369.5	41.3	307.9	2.8	1774.1	7486.2	99.4
30 PAPER & PAPER PRODUCTS	14.9	78.2	4200.5	3447.6	26.0	1321.9	84.3	696.2	40.1	32623.9
31 LEATHER & LEATHER PRODUCTS	0.0	0.0	2.0	99.0	0.0	0.0	0.0	10.4	18.3	20.8
32 RUBBER PRODUCTS	0.0	0.0	00.0	0.1	0.0	0.2	0.0	100.4	27.9	36.9
33 PLASTIC PRODUCTS	56.2	312.9	3117.2	974.8	65.5	616.1	134.9	2152.3	200.2	477.4
34 PETROLEUM PRODUCTS	1470.1	261.8	6332.0	6121.2	450.8	3482.4	1205.4	3722.6	287.2	2096.6
35 COAL TAR PRODUCTS	1.0	2.8	39.3	176.0	3.4	207.2	5.2	0.8	13.4	7.1
36 FERTILIZERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37 PESTICIDES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38 SYNTHETIC FIBRE & RESIN	0.0	0.8	815.7	11810.2	3334.4	16200.7	98.9	7907.7	76.8	126.1
39 OTHER CHEMICALS	149.8	10888.6	4256.6	8342.0	491.0	42952.1	725.2	637.6	228.1	8385.8
40 CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ANNEXURE 1.4

INTERMEDIATE USE AND FINAL DEMAND FOR 60   SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	21	22	23	24	25	26	27	28	29	30
41 OTH.NON MET.MINERAL PRODS.	74.8	7.7	3199.2	2.6	0.0	0.0	0.0	9.8	29.9	114.6
42 IRON & STEEL	0.0	444.6	236.2	427.4	5.2	16.4	255.8	59.4	97.5	142.9
43 NON FERROUS METALS	0.0	0.0	262.5	15.9	19.7	154.7	0.0	760.3	10.0	1911.7
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	125.4	55.0	28322.1	13651.6	119.1	614.2	164.2	912.5	165.2	745.6
47 ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00.0	00.0	0.0
53 OTHER MANUFACTURING	96.5	1782.8	15631.2	2952.2	225.9	1248.8	358.8	1189.5	300.5	1355.9
54 CONSTRUCTION	40.7	34.0	1861.6	1366.3	51.4	241.3	87.2	838.1	177.5	255.7
55 ELECTRICITY ETC.	500.2	759.9	4835.1	21827.0	291.7	164.0	1570.1	2554.6	505.4	4984.8
56 RAIL TRANSPORT SERVICE	153.1	295.3	1902.7	1672.3	96.3	367.2	226.5	312.2	312.6	1191.9
57 OTHER TRANSPORT SERVICE	334.9	715.0	19392.0	13023.5	396.7	63425.0	2007.4	3846.3	1581.7	2248.3
58 COMMUNICATION	31.5	102.3	764.2	834.7	96.2	357.1	97.2	371.6	75.9	644.4
59 TRADE	2185.2	4805.0	65076.5	14023.9	1466.2	90.4	4757.7	3889.5	3912.8	7493.6
60 OTHER SERVICES	1069.2	864.6	29648.0	11491.4	1422.7	87.6	1979.3	4443.0	1410.3	8811.1
61 TOTAL	15957.9	38359.3	364887.7	300823.5	17956.8	174859.9	34893.9	97217.1	47416.4	78191.2
62 NET INDIRECT TAX	398.9	4205.3	11985.8	32297.9	4562.0	17167.8	1761.0	15453.3	1978.1	6152.9
63 GROSS VALUE ADDED	5508.7	3434.4	86601.5	180141.2	7585.2	44658.0	13428.6	151025.1	29249.2	40261.6
64 GROSS OUTPUT	21865.5	45999.0	463475.1	513262.6	30104.1	236685.8	50083.6	263695.5	78643.7	124605.7

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INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	31	32	33	34	35	36	37	38	39	40
1 PADDY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2732.1	0.0
2 WHEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.6	0.0
3 OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0
4 PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00.0	0.0
7 COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	459.5	7635.6	6.0	0.0	0.0	0.0	0.0	32.3	0.0	0.0
11 OTHER CROPS	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5201.2	0.0
12 ANIMAL HUSBANDRY	6063.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	115.3	0.0
13 FORESTRY & LOGGING	2194.2	41.5	4.2	122.7	37.7	33.2	1.5	576.1	1765.2	5.6
14 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
15 COAL & LIGNITE	139.2	120.2	10.7	2.6	6089.3	1156.2	1.2	400.7	566.9	2163.6
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	0.5	135323.5	0.0	1754.5	0.0	69.6	963.9	0.0
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0
19 NON MET.& MINOR MINERALS	0.1	564.0	0.0	0.6	90.6	7952.2	305.1	651.2	3639.7	11711.1
20 SUGAR	0.0	0.0	0.0	00.0	0.0	0.0	0.0	31.5	362.5	0.0
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.0	0.0
22 HYDROGENATED OIL	0.0	0.0	0.0	25.2	0.0	0.0	0.0	0.0	159.8	0.0
23 OTHER FOOD & BEVERAGE	942.4	0.0	0.5	0.0	0.0	23.3	0.0	582.9	6301.9	0.0
24 COTTON TEXTILES	421.3	781.6	197.8	126.7	5.7	24.8	22.3	59.8	3315.3	2.7
25 WOOLLEN TEXTILES	34.0	0.7	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	256.0	3626.3	97.0	0.5	0.0	0.0	0.0	0.0	55.0	0.0
27 JUTE,HEMP,MESTA TEXTILES	408.2	158.8	35.1	127.7	38.2	2436.8	121.1	141.2	1230.3	3505.4
28 OTHER TEXTILES	73.6	961.5	76.8	2.4	0.1	0.0	0.2	9.9	106.3	0.0
29 WOOD & WOOD PRODUCTS	572.3	88.9	66.3	95.2	5.0	18.9	42.9	81.7	1457.0	10.6
30 PAPER & PAPER PRODUCTS	721.1	309.9	195.1	204.9	20.7	85.4	116.0	3700.7	5600.9	4.1
31 LEATHER & LEATHER PRODUCTS	45918.6	54.5	2.5	0.0	0.0	0.0	0.0	0.0	5.2	0.0
32 RUBBER PRODUCTS	9891.6	5002.8	117.1	0.0	0.0	0.0	0.0	5.4	210.7	0.0
33 PLASTIC PRODUCTS	608.7	312.9	1252.5	627.7	28.7	668.1	737.0	540.0	10292.3	32.2
34 PETROLEUM PRODUCTS	1018.4	1728.8	641.8	29015.3	864.2	11290.3	264.4	4323.7	21321.8	1202.9
35 COAL TAR PRODUCTS	1.3	6.2	8.3	0.2	1792.9	27.9	0.7	0.8	1174.9	32.9
36 FERTILIZERS	0.0	0.0	0.0	0.0	0.0	8965.6	0.0	0.0	0.0	0.0
37 PESTICIDES	0.0	0.0	0.0	0.0	0.0	4.5	2295.0	0.0	0.4	0.0
38 SYNTHETIC FIBRE & RESIN	665.0	15008.5	18544.4	3.3	1.3	14.8	0.0	10945.2	490.4	0.0
39 OTHER CHEMICALS	6153.9	2388.4	1542.0	17846.4	751.0	13667.6	2716.5	1579.4	59389.6	28.5
40 CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.3	64.6

Contd....

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COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	31	32	33	34	35	36	37	38	39	40
41 OTH.NON MET.MINERAL PRODS.	201.9	275.4	195.4	00.0	10.7	22.8	119.4	0.4	4132.6	451.3
42 IRON & STEEL	11.1	513.5	121.5	0.0	7.7	0.0	1.3	16.1	322.5	1325.9
43 NON FERROUS METALS	46.7	129.4	236.5	7.1	0.0	37.5	52.8	49.4	3748.3	54.6
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	311.5	140.4	74.9	97.2	47.3	676.6	39.0	216.4	1250.0	486.3
47 ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00.0	0.0
53 OTHER MANUFACTURING	1016.6	1353.7	365.1	4589.8	248.2	646.4	1553.2	786.1	7922.2	907.0
54 CONSTRUCTION	491.4	379.3	121.9	593.5	93.7	246.0	42.7	135.4	777.5	265.2
55 ELECTRICITY ETC.	1216.8	897.9	1115.3	1943.6	1137.4	7363.1	291.1	2849.8	20149.7	4646.1
56 RAIL TRANSPORT SERVICE	245.9	199.5	39.0	1910.1	618.7	1766.0	37.9	396.0	1510.4	2039.7
57 OTHER TRANSPORT SERVICE	4711.4	2084.8	1159.6	3077.2	2213.7	2313.9	360.1	1359.7	8056.4	1061.2
58 COMMUNICATION	409.8	429.0	201.2	458.4	21.7	172.3	77.2	228.3	1414.0	100.0
59 TRADE	16345.9	3678.9	1818.7	45589.9	6507.4	11736.0	1041.8	2921.7	29406.9	5713.8
60 OTHER SERVICES	7783.4	2490.5	1474.0	10500.0	2289.4	8095.6	1823.7	2198.4	21743.4	2994.5
61 TOTAL	109346.8	51363.6	29721.9	252292.7	22921.1	81200.3	12064.1	34889.7	227102.3	38809.9
62 NET INDIRECT TAX	6720.6	36788.9	11479.1	47054.5	581.1	3257.9	1333.0	25912.2	35605.5	2008.6
63 GROSS VALUE ADDED	58253.6	32518.6	9562.8	16167.1	1280.0	23228.4	5053.9	16236.8	113430.7	22233.6
64 GROSS OUTPUT	174321.0	120671.1	50763.8	315514.4	24782.2	107686.6	18451.0	77038.6	376138.5	63052.1

INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES									
SN	COMMODITY SECTOR	41	42	43	44	45	46	47	48	49	50
1	PADDY	37.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	WHEAT	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	COFFEE	C.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	RUBBER	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	OTHER CROPS	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	ANIMAL HUSBANDRY	6.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
13	FORESTRY & LOGGING	631.9	668.4	44.8	27.2	73.0	839.6	48.6	47.2	0.8	349.4
14	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	COAL & LIGNITE	2160.0	11293.1	201.0	130.3	11.8	105.1	91.7	3.6	4.5	50.5
16	CRUDE PETROLEUM & N.GAS	1117.1	122.8	643.1	1.6	2.2	185.4	336.2	280.8	17.5	62.1
17	IRON ORE	0.0	1750.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	OTHER METALLIC MINERALS	0.0	920.5	7261.4	00.0	0.0	0.3	0.0	0.0	0.0	0.0
19	NON MET.& MINOR MINERALS	10302.4	13704.7	258.8	0.0	0.2	17.3	0.0	0.0	73.1	0.0
20	SUGAR	19.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	KHANDSARI BOORA	0.0	00.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	HYDROGENATED OIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	OTHER FOOD & BEVERAGE	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	COTTON TEXTILES	110.2	24.4	6.6	9.6	6.6	116.7	155.8	29.9	24.1	3.9
25	WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	ART SILK & SYNTHETIC FIBRE	0.5	0.0	0.3	0.0	0.0	22.1	2.8	0.1	0.0	0.0
27	JUTE,HEMP,MESTA TEXTILES	222.0	336.6	58.8	6.2	10.6	109.5	140.9	19.8	21.7	31.3
28	OTHER TEXTILES	14.5	0.7	0.0	0.0	0.0	3.1	16.4	0.2	0.0	0.0
29	WOOD & WOOD PRODUCTS	229.6	103.7	55.3	68.5	78.9	680.6	1334.0	436.8	58.1	29.1
30	PAPER & PAPER PRODUCTS	374.3	40.2	21.9	26.7	39.7	285.8	1811.7	553.1	266.1	5.7
31	LEATHER & LEATHER PRODUCTS	0.4	0.0	0.8	7.6	9.0	11.8	0.8	0.0	5.9	0.0
32	RUBBER PRODUCTS	70.0	0.2	2.0	1638.3	4.5	565.0	617.6	25.3	2.5	133.4
33	PLASTIC PRODUCTS	273.4	124.0	82.8	47.2	42.2	223.2	663.0	710.8	166.4	28.2
34	PETROLEUM PRODUCTS	7957.0	11150.1	4540.1	865.6	362.8	2539.4	4038.2	493.3	262.7	877.0
35	COAL TAR PRODUCTS	159.2	8087.9	49.6	77.5	36.0	243.7	41.4	37.6	1.0	112.3
36	FERTILIZERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	PESTICIDES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	SYNTHETIC FIBRE & RESIN	61.8	0.0	0.0	4.1	1.4	70.9	19016.8	301.9	47.3	0.3
39	OTHER CHEMICALS	1709.0	3722.6	2091.7	1271.2	155.9	1412.9	4481.5	590.7	348.6	1472.4
40	CEMENT	6264.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0

Contd.....

INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	41	42	43	44	45	46	47	48	49	50
41 OTH.NON MET.MINERAL PRODS.	6679.9	2207.9	12.8	0.6	20.6	86.5	1594.9	343.0	182.6	0.1
42 IRON & STEEL ,	1547.6	191857.5	2636.7	15172.7	6542.6	50914.5	4304.9	3145.4	660.5	8614.0
43 NON FERROUS METALS	460.4	25849.0	13561.5	565.2	787.0	8422.3	8686.8	1640.1	691.8	1725.4
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	12395.5	0.0	460.4	15.8	0.0	0.0	84.7
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	4709.1	31.7	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	340.7	1761.0	109.1	1290.4	621.0	42503.4	938.6	7.2	0.9	329.3
47 ELECTRICAL MACHINERY	41.9	288.1	404.2	162.3	810.8	4305.0	56810.2	1957.3	1418.3	1198.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	397.7	777.0	35157.6	25221.4	34.5
49 ELECTRONIC EQUIPMENT	0.0	00.0	0.0	190.4	1.3	355.8	25681.0	809.0	22709.0	417.2
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13879.4
51 MOTOR VEHICLES	0.0	0.0	0.0	663.8	0.0	829.7	102.2	0.0	0.0	35.3
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	75.0	0.0	0.0	0.5	0.0	0.0	0.0
53 OTHER MANUFACTURING	878.6	7836.2	999.1	572.8	1491.6	10730.9	6476.0	2415.0	1884.5	763.7
54 CONSTRUCTION	492.2	3314.6	181.0	158.5	148.4	962.0	866.2	423.3	157.2	71.7
55 ELECTRICITY ETC.	2032.7	22505.9	9539.8	632.3	641.6	3044.5	3167.7	850.4	435.3	744.1
56 RAIL TRANSPORT SERVICE	1833.7	1569.8	649.0	437.1	239.6	1689.0	1409.4	161.7	103.8	218.7
57 OTHER TRANSPORT SERVICE	3210.6	8270.2	1656.5	916.5	450.3	3083.5	3859.8	1131.9	618.9	406.4
58 COMMUNICATION	309.7	1117.8	184.6	156.2	221.6	1466.7	1166.4	543.8	484.2	54.8
59 TRADE	3798.0	23625.5	4283.6	3105.3	1236.1	3178.6	2564.1	3905.2	2740.1	1428.5
60 OTHER SERVICES	2098.9	14959.1	4049.2	2780.7	1627.9	18451.8	3438.0	6432.9	4105.3	904.6
61 TOTAL	55478.2	357212.7	55587.1	43457.0	20384.3	158346.6	154664.9	62455.2	62714.2	34066.1
62 NET INDIRECT TAX	7370.9	31031.2	6059.9	1702.8	2265.2	13857.3	57170.6	5723.4	2464.4	2906.1
63 GROSS VALUE ADDED	59217.8	116995.2	10685.2	13657.8	16528.1	76962.9	86832.6	28498.4	20045.2	33970.9
64 GROSS OUTPUT	122067.0	505239.1	72332.2	58817.6	39177.6	249166.8	298668.1	96677.0	85223.8	70943.2

INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	51	52	53	54	55	56	57	58	59	60
1 PADDY	0.0	0.0	2.1	0.0	0.0	0.0	86.9	0.0	0.0	8361.4
2 WHEAT	0.0	0.0	1.8	0.0	0.0	0.0	161.7	0.0	0.0	7320.4
3 OTHER CEREALS	0.0	0.0	0.6	0.0	0.0	0.0	1.8	0.0	0.0	0.0
4 PULSES	0.0	0.0	0.0	0.0	0.0	0.0	551.0	0.0	0.0	2869.9
5 SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 COTTON	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER CROPS	0.0	0.0	96.7	5481.4	0.0	0.0	190.7	0.0	0.0	15358.7
12 ANIMAL HUSBANDRY	0.0	0.0	149.8	373.5	199.8	0.0	0.0	0.0	0.0	9505.4
13 FORESTRY & LOGGING	154.8	163.8	515.6	10670.4	0.0	19.1	0.0	0.0	0.0	735.1
14 FISHING	0.0	0.0	10.2	0.0	0.0	0.0	0.0	0.0	0.0	3575.3
15 COAL & LIGNITE	5.7	105.2	748.8	0.0	28929.1	1484.3	234.2	0.0	0.0	1567.6
16 CRUDE PETROLEUM & N.GAS	43.8	8.6	24.2	0.0	2064.2	0.0	0.0	0.0	0.0	0.0
17 IRON ORE	0.0	0.0	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.1	00.0	131.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	0.0	0.0	63663.8	56848.2	0.0	0.0	0.0	0.0	0.0	0.0
20 SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2374.4
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22 HYDROGENATED OIL	0.0	0.0	2.0	0.0	0.0	0.0	37.6	0.0	0.0	994.6
23 OTHER FOOD & BEVERAGE	25.1	0.0	51.9	0.0	0.0	0.0	1524.8	0.0	0.0	6333.0
24 COTTON TEXTILES	35.4	15.6	344.2	0.0	0.0	152.8	165.8	0.0	0.0	503.0
25 WOOLLEN TEXTILES	2.9	0.0	10.9	0.0	0.0	0.0	329.9	0.0	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	0.0	2.8	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 JUTE,HEMP,MESTA TEXTILES	37.9	26.7	739.2	1354.7	0.0	0.0	0.0	0.0	3297.8	46.5
28 OTHER TEXTILES	102.8	56.5	141.3	26.4	75.9	19.8	593.1	31.4	0.0	992.6
29 WOOD & WOOD PRODUCTS	179.3	186.7	1327.3	36708.5	680.1	139.2	17.2	13.1	5939.9	2609.9
30 PAPER & PAPER PRODUCTS	953.1	106.2	1636.4	962.1	363.4	279.3	4416.1	2450.1	7176.0	25548.1
31 LEATHER & LEATHER PRODUCTS	50.5	46.8	124.9	0.0	0.0	0.0	66.7	0.0	0.0	0.0
32 RUBBER PRODUCTS	9294.7	3362.8	685.1	393.7	45.8	8.3	26435.8	26.6	35.0	131.6
33 PLASTIC PRODUCTS	621.8	218.4	559.6	0.0	00.0	176.7	562.6	0.0	6697.4	72.0
34 PETROLEUM PRODUCTS	3238.6	1508.5	3779.8	1262.2	5241.1	7859.7	92523.7	488.2	1514.0	2989.7
35 COAL TAR PRODUCTS	0.0	11.7	63.3	7826.0	0.0	0.0	0.0	0.0	0.0	0.0
36 FERTILIZERS	0.0	0.0	93.3	1933.5	0.0	0.0	0.3	0.0	0.0	0.0
37 PESTICIDES	0.0	0.0	0.0	474.6	00.0	1.8	0.6	0.0	0.0	53.5
38 SYNTHETIC FIBRE & RESIN	147.9	23.3	105.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 OTHER CHEMICALS	1397.1	1727.9	5541.7	6586.0	439.1	22.7	341.2	1.6	0.0	45755.8
40 CEMENT	0.0	0.0	0.0	55103.4	0.0	0.0	0.0	0.0	0.0	9.1

INTERMEDIATE USE AND FINAL DEMAND FOR 60   SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

				I N D U S T R I E S						
SN COMMODITY SECTOR	51	52	53	54	55	56	57	58	59	60
41 OTH.NON MET.MINERAL PRODS.	683.0	34.2	2667.1	59612.5	656.9	517.1	103.9	0.3	0.0	1000.2
42 IRON & STEEL	41616.6	8612.3	23143.1	121321.1	1429.2	2041.9	75.3	0.0	1061.8	7.8
43 NON FERROUS METALS	4720.2	954.1	13716.8	0.0	38.5	0.0	0.0	0.0	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	0.0	36.0	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	575.1	188.0	2.8	0.0	24.8	308.6	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	17850.7	527.7	601.3	1515.2	19567.6	256.8	988.3	97.3	116.2	817.7
47 ELECTRICAL MACHINERY	2109.7	565.0	2645.2	79442.9	29268.9	2260.2	2516.7	14.3	9.6	454.0
48 COMMUNICATIONS EQUIPMENT	0.0	15.4	1827.9	0.0	26.8	383.2	440.6	8631.5	0.0	613.2
49 ELECTRONIC EQUIPMENT	0.0	0.1	367.2	0.0	1.2	22.7	65.6	3.1	0.0	1537.0
50 RAIL EQUIPMENT	0.0	9.5	13184.4	0.0	0.0	81877.1	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	15800.8	692.2	51.9	738.8	112.7	48.4	69732.1	51.5	68.3	518.4
52 OTHER TRANSPORT EQUIPMENT	124.5	18105.9	1185.2	0.0	0.4	1.8	19743.2	0.2	0.0	2291.2
53 OTHER MANUFACTURING	4650.8	1244.5	3213.2	1117.5	2329.7	2285.0	4347.0	38.8	5721.0	5910.4
54 CONSTRUCTION	1021.6	183.6	742.7	3627.4	4588.6	5463.5	3075.3	15.7	4072.9	30023.6
55 ELECTRICITY ETC.	2646.5	1056.8	5596.2	8671.0	85972.5	5802.8	5568.6	1101.7	18837.3	24440.7
56 RAIL TRANSPORT SERVICE	1095.0	474.7	2279.8	1508.5	1700.6	1587.5	4515.6	890.5	4924.6	3459.2
57 OTHER TRANSPORT SERVICE	2554.1	857.9	3850.3	7659.8	4217.9	1507.2	45963.8	1695.4	136197.1	22161.3
58 COMMUNICATION	690.4	284.4	2567.3	1773.0	980.0	259.0	5231.0	0.0	9410.2	18869.2
59 TRADE	3884.3	3579.2	4805.5	44295.0	3311.3	2776.0	12486.8	608.4	23657.3	42386.9
60 OTHER SERVICES	3641.9	6207.6	7022.5	14425.7	3307.1	1241.6	12706.7	1661.2	124006.4	118653.8
61 TOTAL	119956.5	51201.1	170055.4	531713.4	195573.2	118804.1	315802.6	17820.9	352742.8	410852.4
62 NET INDIRECT TAX	18280.2	6003.5	23452.7	46544.0	7563.8	4458.6	49014.2	749.6	10619.1	29016.0
63 GROSS VALUE ADDED	65015.1	45210.9	142143.9	335456.7	182127.3	94797.1	331174.9	81605.5	852577.6	1525672.6
64 GROSS OUTPUT	203251.8	102415.5	335652.1	913714.1	385264.3	218059.8	695991.6	100176.0	1215939.5	1965542.1

INTERMEDIATE USE AND FINAL DEMAND FOR 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

	I.USE	PVT.CONS.	PUB.CONS.	G.F.INV	CH.IN STK	EXPORTS	IMPORTS	T.F.USE	G.OUTPUT
1 PADDY	61946.9	372180.4	555.0	0.0	3398.3	7755.0	449.2	383439.5	445386.3
2 WHEAT	48085.7	177225.3	545.3	0.0	1184.4	310.0	215.6	179049.4	227135.0
3 OTHER CEREALS	8723.0	117362.8	0.0	0.0	456.5	33.0	3.0	117849.3	126572.3
4 PULSES	34083.4	111040.5	281.3	0.0	384.1	0.0	6023.8	105682.1	139765.4
5 SUGARCANE	65462.0	35546.2	0.0	0.0	0.0	0.0	0.0	35546.2	101008.3
6 JUTE	9090.2	0.0	0.0	0.0	102.2	0.0	153.8	-51.6	9038.7
7 COTTON	52304.9	0.0	0.0	0.0	0.0	9849.0	2266.0	7583.0	59887.6
8 TEA	18338.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18338.8
9 COFFEE	7632.0	0.0	0.0	0.0	0.0	2764.0	0.0	2764.0	10396.0
10 RUBBER	8176.8	0.0	0.0	0.0	16.4	0.0	90.1	-73.8	8102.9
11 OTHER CROPS	256626.4	404177.3	441.4	0.0	12677.6	42422.6	3273.0	456445.9	713072.1
12 ANIMAL HUSBANDRY	157590.1	406122.7	520.6	11254.0	5716.0	2225.9	7066.8	418772.4	576362.3
13 FORESTRY & LOGGING	54720.2	42105.5	225.2	0.0	-18.7	0.0	9333.7	32978.4	87699.4
14 FISHING	7675.0	43077.6	4.2	0.0	0.0	18010.6	82.8	61009.6	68684.7
15 COAL & LIGNITE	64829.9	13102.3	133.8	0.0	644.1	199.0	1729.5	12349.8	77180.4
16 CRUDE PETROLEUM & N.GAS	145198.4	0.0	0.0	0.0	373.6	0.0	43881.9	-43508.3	101691.7
17 IRON ORE	1760.6	0.0	0.0	0.0	0.0	5415.1	0.0	5415.1	7175.7
18 OTHER METALLIC MINERALS	8336.2	0.0	0.0	0.0	1368.3	4576.0	1778.8	4165.4	12501.9
19 NON MET.& MINOR MINERALS	173355.5	0.0	0.0	0.0	1274.8	1651.4	153986.4	-151060.2	22299.9
20 SUGAR	15594.2	82717.8	0.0	0.0	8.3	840.0	500.0	83066.1	98660.3
21 KHANDSARI BOORA	13987.3	8354.0	0.0	0.0	0.2	0.0	0.0	8354.2	22341.5
22 HYDROGENATED OIL	2213.9	35451.7	0.0	0.0	234.7	0.0	227.8	35458.6	37672.5
23 OTHER FOOD & BEVERAGE	70696.7	367349.4	438.7	0.0	2531.7	18967.1	12245.6	377041.3	447737.9
24 COTTON TEXTILES	167612.0	233558.4	126.5	0.0	12322.9	49309.0	1076.7	294240.1	461851.3
25 WOOLLEN TEXTILES	10221.9	19906.3	0.0	0.0	29.4	581.0	1551.1	18965.6	29187.5
26 ART SILK & SYNTHETIC FIBRE	70107.5	169428.7	0.0	0.0	1737.8	11972.0	4888.3	178250.3	248357.6
27 JUTE,HEMP,MESTA TEXTILES	41869.2	0.0	18.5	0.0	1210.4	3170.0	195.1	4203.7	46073.2
28 OTHER TEXTILES	8092.9	51589.8	1232.7	638.6	4612.1	129310.0	3693.4	183689.8	191782.7
29 WOOD & WOOD PRODUCTS	65377.6	4280.1	560.6	394.8	2209.3	287.0	856.3	6875.4	72255.8
30 PAPER & PAPER PRODUCTS	101519.1	14760.5	19380.7	0.0	3740.3	506.0	18717.7	19669.8	121189.2
31 LEATHER & LEATHER PRODUCTS	46456.6	29693.3	2.6	0.0	27109.7	67788.0	1292.4	123301.3	169756.0
32 RUBBER PRODUCTS	59136.2	16994.4	940.8	26582.3	5000.5	13809.0	1429.3	61897.6	121033.7
33 PLASTIC PRODUCTS	34702.0	10088.7	2.1	0.0	1180.1	2977.0	1068.2	13179.7	47881.7
34 PETROLEUM PRODUCTS	305054.4	69942.5	21009.2	0.0	1367.3	10940.0	99057.9	4201.0	309256.4
35 COAL TAR PRODUCTS	20396.9	0.0	0.0	0.0	809.2	28.0	1484.0	-646.7	19751.0
36 FERTILIZERS	131243.6	0.0	614.8	0.0	0.0	47.0	27199.6	-26537.8	104705.9
37 PESTICIDES	18405.5	0.0	11.8	0.0	331.1	2678.0	2076.1	944.8	19350.4
38 SYNTHETIC FIBRE & RESIN	105826.2	0.0	0.0	0.0	2268.0	2633.0	35527.3	-30626.3	75200.0
39 OTHER CHEMICALS	265448.9	83776.3	2893.2	0.0	13631.5	61033.0	41450.2	119883.8	385333.2
40 CEMENT	62430.7	0.0	0.0	0.0	492.9	543.0	498.9	537.0	62971.9

ANNEXURE 1.4

INTERMEDIATE USE AND FINAL DEMAND FOR 60   SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

	I.USE	PVT.CONS.	PUB.CONS.	G.F.INV	CH.IN STK.	EXPORTS	IMPORTS	T.F.USE	G.OUTPUT
41 OTH.NON MET.MINERAL PRODS.	86933.2	27860.2	2.5	615.9	383.4	3931.0	2556.8	30236.1	117174.0
42 IRON & STEEL	488791.1	0.0	0.0	22974.6	8659.2	4431.0	37061.3	-996.5	487808.0
43 NON FERROUS METALS	89326.2	0.0	0.0	0.0	316.8	2119.0	16580.8	-14144.9	75181.4
44 TRACTORS & OTH.AGRI.MACH.	35068.2	0.0	259.9	21015.6	2972.5	404.0	101.4	24550.5	59618.4
45 MACHINE TOOLS	5915.8	0.0	0.0	25482.7	690.2	5149.0	6554.9	24767.0	30682.8
46 OTH.NON ELECTRICAL MACH.	167502.7	6104.5	10260.7	222109.5	9490.0	23113.0	196721.8	74356.0	241859.0
47 ELECTRICAL MACHINERY	186776.6	19667.4	990.7	105857.1	7238.1	11051.0	39415.0	105389.3	292172.2
48 COMMUNICATIONS EQUIPMENT	73527.1	14759.5	994.2	26169.0	0.0	302.0	8584.3	33640.4	107167.5
49 ELECTRONIC EQUIPMENT	52164.8	34200.3	76.4	14887.4	4484.6	33275.0	60140.5	26783.1	78947.6
50 RAIL EQUIPMENT	108950.4	0.0	0.0	32418.2	89.2	544.0	3930.2	29121.2	138071.5
51 MOTOR VEHICLES	90399.7	29450.2	16817.7	50934.6	9211.6	8106.0	8260.6	106259.5	196659.2
52 OTHER TRANSPORT EQUIPMENT	45001.4	30283.3	88.3	33258.2	3184.1	7149.0	35764.3	38198.6	83200.0
53 OTHER MANUFACTURING	113280.1	43661.6	37225.4	17722.4	12203.5	138982.0	29958.6	219836.3	333116.6
54 CONSTRUCTION	109484.5	0.0	51121.4	753107.8	0.0	0.0	0.0	804229.2	913714.1
55 ELECTRICITY ETC.	312553.2	46811.8	34956.3	0.0	0.0	89.0	500.0	81357.1	393911.0
56 RAIL TRANSPORT SERVICE	60080.5	59326.5	8240.4	1963.8	0.0	20368.0	0.0	89898.7	149979.2
57 OTHER TRANSPORT SERVICE	409943.7	337470.6	20615.5	7120.2	0.0	37019.0	116176.8	286048.6	695992.6
58 COMMUNICATION	53813.3	39752.0	10182.0	0.0	0.0	1130.0	4701.3	46362.7	100176.0
59 TRADE	623603.6	373287.2	21693.9	49860.2	0.0	172994.0	0.0	617835.2	1241438.8
60 OTHER SERVICES	523261.4	953493.1	687493.0	0.0	0.0	80088.0	74032.2	1647042.0	2170303.5
61 TOTAL	6436706.5	4935960.5	950957.7	1424366.9	167328.2	1022873.6	1126411.2	7375075.0	13811824.0
62 NET INDIRECT TAX	550187.4	104039.0	37715.8	129834.9	0.0	786.3	0.0	272376.0	822563.4
63 GROSS VALUE ADDED	6824988.0								
64 GROSS OUTPUT	13811881.0								

INTERMEDIATE USE AND FINAL DEMAND FOR 11 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES									
SN	COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
1	AGRICULTURE	352424.9	10.8	0.0	0.0	253731.2	3944.6	138.4	0.0	660.2	0.0
2	FORESTRY & LOGGING	7.8	151.8	0.0	0.0	28577.4	13431.2	0.0	15.5	0.0	0.0
3	FISHING	0.0	0.0	0.0	0.0	3360.4	0.0	0.0	0.0	0.0	0.0
4	MINING & QUARRYING	670.1	0.0	0.0	642.1	188099.2	43273.2	21365.6	1695.1	204.0	0.0
5	MANUFACTURING	171378.3	2173.7	4288.8	17181.1	1191354.9	235337.5	20659.4	70493.2	121095.3	4592.6
6	ELECTRICITY ETC.	30496.3	288.8	0.0	2047.2	11167.5	49.5	3179.5	6391.6	2046.5	1778.2
7	CONSTRUCTION	18338.4	52.4	0.0	5118.8	98040.6	10673.9	64962.7	4249.9	3978.0	846.2
8	RAILWAY TRANSPORT	9006.5	348.8	44.4	1391.1	27737.5	9496.5	8997.5	1110.2	3278.1	637.2
9	OTHER TRANSPORT	13526.9	3394.6	148.5	813.4	66713.9	13778.4	2783.4	1332.1	34096.2	1155.4
10	COMMUNICATIONS	508.9	218.8	0.0	101.8	10259.5	1370.0	679.0	210.0	3481.1	0.0
11	OTHER SERVICES	105074.2	2065.9	591.9	7720.2	420488.0	76924.3	13202.5	8030.6	40383.7	1624.0
12	TOTAL	701432.2	8705.5	5073.7	35015.8	2299530.2	408279.1	135968.1	93528.2	209223.1	10633.6
13	INDIRECT TAX	-32620.1	501.5	496.3	2813.1	291486.0	31140.8	6064.0	3391.6	25391.3	327.3
14	GROSS VALUE ADDED	1310620.0	83520.0	43400.0	106130.0	1117410.0	266590.0	124920.0	79870.0	228550.0	60720.0
15	GROSS OUTPUT	1979432.0	92726.9	48970.0	143958.9	3708425.5	706010.0	266952.1	176789.8	463164.4	71681.0

INTERMEDIATE USE AND FINAL DEMAND FOR 11 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	11	I.USE	PVT.CONS.	PUB.CONS.	G.F.INV	CH.IN STK.	EXPORTS	IMPORTS	T.F.USE	G.OUTPUT
1 AGRICULTURE	32270.8	643180.9	1284116.5	1649.0	9592.4	6620.0	44006.0	14567.0	1331416.9	1974597.8
2 FORESTRY & LOGGING	385.8	42569.4	55775.6	160.0	0.0	436.0	0.0	6214.0	50157.6	92727.0
3 FISHING	2780.0	6140.5	30657.47	3.0	0	0	12209.0	40.0	42829.5	48970.0
4 MINING & QUARRYING	2596.5	258545.8	12656.6	94.7	0.0	-2362.0	7670.0	132421.0	-114361.8	144184.0
5 MANUFACTURING	118026.2	1956580.9	1065819.8	77789.6	524166.3	134246.0	306921.0	470208.0	1638734.6	3595315.5
6 ELECTRICITY ETC.	32417.1	89862.2	0.0	36109.9	580037.8	0.0	0.0	0.0	616147.7	706009.9
7 CONSTRUCTION	20287.4	226548.3	21487.5	24787.1	0.0	0.0	90.0	0.0	46364.6	272912.9
8 RAILWAY TRANSPORT	6441.6	68489.6	40118.1	5811.0	1671.9	0.0	6799.0	0.0	54400.1	122889.7
9 OTHER TRANSPORT	100268.4	238011.4	235587.6	14600.5	6091.4	0.0	31489.0	62615.0	225153.5	463164.9
10 COMMUNICATIONS	18535.9	35365.0	30520.0	7197.0	0.0	0.0	1134.0	2535.0	36316.0	71681.0
11 OTHER SERVICES	172679.0	848784.3	978604.4	501789.5	42544.2	0.0	146848.0	39880.0	1629906.1	2478690.4
12 TOTAL	506688.9	4414078.5	3755343.5	669991.2	1164104.0	138940.0	557166.0	728480.0	5557064.7	9971143.0
13 INDIRECT TAX	30912.8	359904.6	136766.3	28838.6	100436.0	0.0	454.0	0.0	266494.0	626399.5
14 GROSS VALUE ADDED	1775430.0	5197160.0								
15 GROSS OUTPUT	2313031.5	9971142.0								

INTERMEDIATE USE AND FINAL DEMAND FOR 11 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES								
SN COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
1 AGRICULTURE	412652.8	10.2	0.0	0.0	264934.6	5854.9	199.8	0.0	992.0	0.0
2 FORESTRY & LOGGING	9.4	143.5	0.0	0.0	43142.7	10670.4	0.0	19.1	0.0	0.0
3 FISHING	0.0	0.0	0.0	0.0	4099.7	0.0	0.0	0.0	0.0	0.0
4 MINING & QUARRYING	615.6	0.0	0.0	760.4	300976.9	56848.2	30993.4	1484.3	234.2	0.0
5 MANUFACTURING	231053.4	2319.8	9349.0	42213.8	1969672.2	376379.3	60302.1	98663.1	225028.5	11847.9
6 ELECTRICITY ETC.	39028.5	273.1	0.0	1792.0	17523.8	3627.4	4588.6	5463.5	3075.3	15.7
7 CONSTRUCTION	24575.0	46.2	0.0	4599.3	132937.9	8671.0	85972.5	5802.8	5568.6	1101.7
8 RAILWAY TRANSPORT	11278.0	329.9	62.3	1920.5	27903.2	1508.5	1700.6	1587.5	4515.6	890.5
9 OTHER TRANSPORT	17615.0	3349.6	218.7	1463.3	167894.3	7659.8	4217.9	1507.2	45963.8	1695.4
10 COMMUNICATIONS	615.6	207.0	0.0	139.9	16328.5	1773.0	980.0	259.0	5231.0	0.0
11 OTHER SERVICES	215450.9	1995.1	830.2	8652.1	514412.4	58720.8	6618.5	4017.6	25193.5	2269.5
12 TOTAL	952894.4	8674.5	10460.3	61541.4	3459826.5	531713.4	195573.2	118804.1	315802.6	17820.9
13 INDIRECT TAX	-48698.1	517.8	1597.8	3250.7	445553.9	46544.0	7563.8	4458.6	49014.2	749.6
14 GROSS VALUE ADDED	1537730.9	78507.1	56626.6	155631.2	1593080.5	335456.7	182127.3	94797.1	331174.9	81605.5
15 GROSS OUTPUT	2441927.2	87699.4	68684.6	220423.3	5498462.0	913714.1	385264.3	218059.8	695991.6	100176.0

INTERMEDIATE USE AND FINAL DEMAND FOR 11 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	11	I.USE	PVT CONS	PUB CONS	G.F.INV	CH.IN STK	EXPORTS	IMPORTS	T.F.USE	G.OUTPUT
1 AGRICULTURE	43415.8	728060.2	1623655.2	2343.7	11254.0	23935.4	65359.5	19541.4	1707006.5	2435065.8
2 FORESTRY & LOGGING	735.1	54720.2	42105.5	225.2	0.0	-18.7	0.0	9333.7	32978.4	87699.4
3 FISHING	3575.3	7675.0	43077.6	4.2	0.0	0.0	18010.6	82.8	61009.6	68684.7
4 MINING & QUARRYING	1567.6	393480.7	13102.3	133.8	0.0	3660.9	11841.5	201376.6	-172638.1	220849.6
5 MANUFACTURING	133200.8	3160029.8	1403878.8	113948.1	601060.8	139750.6	615974.1	700666.5	2173946.0	5334008.0
6 ELECTRICITY ETC.	34096.5	109484.5	0.0	51121.4	753107.8	0.0	0.0	0.0	804229.2	913714.1
7 CONSTRUCTION	43278.0	312553.2	46811.8	34956.3	0.0	0.0	89.0	500.0	81357.1	393911.0
8 RAILWAY TRANSPORT	8383.8	60080.5	59326.5	8240.4	1963.8	0.0	20368.0	0.0	89898.7	149979.2
9 OTHER TRANSPORT	158358.4	409943.6	337470.6	20615.5	7120.2	0.0	37019.0	116176.8	286048.6	695992.6
10 COMMUNICATIONS	28279.4	53813.3	39752.0	10182.0	0.0	0.0	1130.0	4701.3	46362.7	100176.0
11 OTHER SERVICES	308704.4	1146865.0	1326780.2	709186.9	49860.2	0.0	253082.0	74032.2	2264877.2	3411742.2
12 TOTAL	763595.1	6436706.0	4935961.0	950957.7	1424366.9	167328.2	1022873.7	1126411.2	7375076.0	13811823.0
13 INDIRECT TAX	39635.1	550187.4	104039.0	37715.8	129834.9	0.0	786.3	0.0	272376.0	822563.4
14 GROSS VALUE ADDED	2378250.2	6824988.0								
15 GROSS OUTPUT	3181480.5	13811882.0								

ANNEXURE : 1.7

IMPORT COEFFICIENTS : 1991-92

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES									
SN	COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
1	PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3	OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	COTTON TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27	JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28	OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29	WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31	LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32	RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33	PLASTIC PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34	PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35	COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36	FERTILIZERS	0.013963	0.017821	0.010047	0.004220	0.013673	0.004917	0.023687	0.005512	0.000000	0.020917
37	PESTICIDES	0.000621	0.000393	0.000068	0.001160	0.000098	0.000211	0.009855	0.000746	0.008289	0.008331
38	SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39	OTHER CHEMICALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
40	CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

ANNEXURE : 1.7

IMPORT COEFFICIENTS : 1991-92

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42 IRON & STEEL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000018	0.000018	0.000035	0.000036	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

IMPORT COEFFICIENTS : 1991-92

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES								
SN COMMODITY SECTOR	11	12	13	14	15	16	17	18	19	20
1 PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2 WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24 COTTON TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28 OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29 WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30 PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31 LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33 PLASTIC PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34 PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36 FERTILIZERS	0.009270	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.000704	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39 OTHER CHEMICALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000099	0.000000	0.0028E7	0.000000	0.000000
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	11	12	13	14	15	16	17	18	19	20
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42 IRON & STEEL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000015	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000749	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

I—13/PCND/95

IMPORT COEFFICIENTS : 1991-92

COMMODITY BY INDUSTRY TABLE

SN	COMMODITY SECTOR	21	22	23	24	25	26	27	28	29	30
1	PADDY	0.000000	0.000000	0.000006	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	WHEAT	0.000000	0.000000	0.000019	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3	OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	PULSES	0.000000	0.000000	0.000097	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.003393	0.000000	0.000000	0.000000
7	COTTON	0.000000	0.000000	0.000000	0.004410	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	OTHER CROPS	0.000000	0.000000	0.001921	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	ANIMAL HUSBANDRY	0.000000	0.000000	0.000688	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.121489	0.000000
14	FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	SUGAR	0.000000	0.000000	0.000010	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	HYDROGENATED OIL	0.000000	0.000000	0.000017	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	OTHER FOOD & BEVERAGE	0.000000	0.000000	0.001546	0.000035	0.000002	0.000004	0.000000	0.000000	0.000000	0.000000
24	COTTON TEXTILES	0.000000	0.000000	0.000000	0.000514	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.010077	0.000000	0.000000	0.000536	0.000000	0.000000
26	ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000176	0.000000	0.004715	0.000000	0.000563	0.000000	0.000000
27	JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002807	0.000000	0.000005	0.000087
28	OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000912	0.000000	0.000040	0.000126
29	WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000877	0.000000
30	PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000136	0.000000
31	LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32	RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33	PLASTIC PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34	PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35	COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36	FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37	PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38	SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.049157	0.200249	0.000000	0.009436	0.000000	0.000000
39	OTHER CHEMICALS	0.000000	0.022303	0.001272	0.003311	0.000000	0.002637	0.000000	0.000335	0.000402	0.006541
40	CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Contd....

IMPORT COEFFICIENTS : 1991-92

COMMODITY BY INDUSTRY TABLE

				I N D U S T R I E S						
SN COMMODITY SECTOR	21	22	23	24	25	26	27	28	29	30
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000272	0.000000	0.000000	0.000000	0.000000	0.000000	0.000015	0.000000
42 IRON & STEEL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.003471
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

ANNEXURE : 1.7

IMPORT COEFFICIENTS : 1991-92

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	31	32	33	34	35	36	37	38	39	40
1 PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2 WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000000	0.000000	0.000000	000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.001173	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12 ANIMAL HUSBANDRY	0.000787	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000004	0.000000
13 FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.231393	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.083994	0.000000	0.000000	0.015172	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000326	0.000000
24 COTTON TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28 OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29 WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30 PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31 LEATHER & LEATHER PRODUCTS	0.010543	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.000000	0.002517	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33 PLASTIC PRODUCTS	0.000000	0.000000	0.008849	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34 PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.009299	0.000000
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36 FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38 SYNTHETIC FIBRE & RESIN	0.003738	0.000000	0.293329	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39 OTHER CHEMICALS	0.005684	0.019457	0.004206	0.000000	0.000000	0.018594	0.022785	0.000000	0.032292	0.000000
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Contd....

IMPORT COEFFICIENTS : 1991-92

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	31	32	33	34	35	36	37	38	39	40
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42 IRON & STEEL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002765	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.001036	0.000675	0.000856	0.000179	0.001107	0.001904	0.001226	0.001629	0.001928	0.004474
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES									
SN	COMMODITY SECTOR	41	42	43	44	45	46	47	48	49	50
1	PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3	OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	COAL & LIGNITE	0.000000	0.012146	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	OTHER METALLIC MINERALS	0.000000	0.000332	0.019964	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	NON MET.& MINOR MINERALS	0.100496	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	COTTON TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27	JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28	OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29	WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000831	0.000000
31	LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32	RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000300	0.000000	0.000000	0.000000	0.000000	0.000000
33	PLASTIC PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000152	0.000376	0.000000	0.000000	0.000000
34	PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002797	0.000000	0.000000	0.000000
35	COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36	FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37	PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38	SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39	OTHER CHEMICALS	0.001939	0.001020	0.004420	0.000000	0.000000	0.000785	0.002632	0.000000	0.000000	0.002874
40	CEMENT	0.000504	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

IMPORT COEFFICIENTS : 1991-92

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	41	42	43	44	45	46	47	48	49	50
41 OTH.NON MET.MINERAL PRODS.	0.001701	0.000000	0.000000	0.000000	0.000000	0.000000	0.000211	0.000000	0.000000	0.000000
42 IRON & STEEL	0.000000	0.032823	0.000000	0.000000	0.024248	0.022761	0.011603	0.000000	0.000000	0.008476
43 NON FERROUS METALS	0.001046	0.000000	0.047710	0.000000	0.000000	0.006600	0.027619	0.004704	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000595	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.005305	0.000026	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.001619	0.002022	0.000000	0.000000	0.000000	0.072985	0.001823	0.000043	0.000006	0.000000
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.015954	0.021495	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000382	0.020008	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002471	0.004689	0.024404	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.014217
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.008136	0.000000
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	51	52	53	54	55	56	57	58	59	60
1 PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2 WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000079
13 FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002
15 COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.000203	0.071610	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000120
24 COTTON TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28 OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29 WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000070	0.000623	0.000000	0.000000	0.000000	0.000000	0.000000	0.000023
30 PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002755
31 LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.000914	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33 PLASTIC PRODUCTS	0.000000	0.000000	0.000283	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34 PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.004796	0.010876	0.042934	0.000000	0.000000	0.000000
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.001190	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36 FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39 OTHER CHEMICALS	0.000952	0.002336	0.002286	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004381
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	I N D U S T R I E S									
	51	52	53	54	55	56	57	58	59	60
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000314	0.001950	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42 IRON & STEEL	0.023293	0.010981	0.017132	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.006440	0.000000	0.012517	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000350	0.000905	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.010636	0.002989	0.001039	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000366
47 ELECTRICAL MACHINERY	0.001606	0.000000	0.001220	0.000000	0.003572	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000799	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000165	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000021
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.006489	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.095759	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000000	0.004471	0.016819	0.000450	0.000000	0.000000	0.000000	0.000000	0.000000	0.004470
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.016214	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004714	0.001590

13/PC/ND/95

ANNEXURE 1.8
IMPORT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
1 PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2 WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24 COTTON TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28 OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29 WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30 PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31 LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33 PLASTIC PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34 PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36 FERTILIZERS	0.015837	0.017821	0.010047	0.004220	0.013673	0.004917	0.023687	0.005512	0.000000	0.020917
37 PESTICIDES	0.000621	0.000393	0.000068	0.001160	0.000098	0.000211	0.009855	0.000746	0.008289	0.008331
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39 OTHER CHEMICALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR					INDUSTRIES					
	1	2	3	4	5	6	7	8	9	10
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42 IRON & STEEL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000018	0.000018	0.000035	0.000036	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

ANNEXURE 1.8

IMPORT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

						INDUSTRIES					
SN	COMMODITY SECTOR	11	12	13	14	15	16	17	18	19	20
1	PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3	OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.008672
20	SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	COTTON TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27	JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28	OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29	WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31	LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32	RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33	PLASTIC PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34	PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35	COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36	FERTILIZERS	0.015771	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37	PESTICIDES	0.001239	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38	SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39	OTHER CHEMICALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000099	0.000000	0.002887	0.000000	0.000000
40	CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

IMPORT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

					INDUSTRIES					
SN COMMODITY SECTOR	11	12	13	14	15	16	17	18	19	20
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42 IRON & STEEL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000015	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000749	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES								
SN COMMODITY SECTOR	21	22	23	24	25	26	27	28	29	30
1 PADDY	0.000000	0.000000	0.000006	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2 WHEAT	0.000000	0.000000	0.000019	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000006	0.000000
4 PULSES	0.000000	0.000000	0.000097	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.003070	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.004415	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000000	0.000000	0.002031	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.000624	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.118683	0.000000
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.015100	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.010576
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000017	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.000000	0.000000	0.001546	0.000035	0.000002	0.000004	0.000000	0.000000	0.000000	0.000000
24 COTTON TEXTILES	0.000000	0.000000	0.000000	0.000514	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.011724	0.000000	0.000000	0.000536	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000176	0.000000	0.003958	0.000000	0.000563	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.003664	0.000000	0.000005	0.000087
28 OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000912	0.000000	0.000040	0.000126
29 WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002776	0.000000
30 PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000352	0.000000
31 LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33 PLASTIC PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34 PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36 FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.049157	0.065458	0.000000	0.009436	0.000000	0.000000
39 OTHER CHEMICALS	0.000000	0.022303	0.001272	0.003311	0.000000	0.002637	0.000000	0.000335	0.000402	0.006541
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Contd....

COMMODITY BY INDUSTRY TABLE

SN	COMMODITY SECTOR	INDUSTRIES									
		21	22	23	24	25	26	27	28	29	30
41	OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000272	0.000000	0.000000	0.000000	0.000000	0.000000	0.000015	0.000000
42	IRON & STEEL	0.000000	0.000000	0.000000	0.000000	0.000000	0.0000C0	0.000000	0.000000	0.000000	0.000000
43	NON FERROUS METALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00b000	0.000000	0.000000	0.000000
44	TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45	MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46	OTH.NON ELECTRICAL MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.003471
47	ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48	COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49	ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50	RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51	MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52	OTHER TRANSPORT EQUIPMENT	0.00C000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53	OTHER MANUFACTURING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54	CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55	ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56	RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57	OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58	COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59	TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60	OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

IMPORT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES									
SN	COMMODITY SECTOR	31	32	33	34	35	36	37	38	39	40
1	PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3	OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	RUBBER	0.000000	0.000747	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	ANIMAL HUSBANDRY	0.000787	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000004	0.000000
13	FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.139079	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	NON MET.& MINOR MINERALS	0.000000	0.003242	0.000000	0.000000	0.000000	0.069392	0.015500	0.006912	0.009586	0.120491
20	SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000326	0.000000
24	COTTON TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27	JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28	OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29	WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31	LEATHER & LEATHER PRODUCTS	0.007414	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32	RUBBER PRODUCTS	0.000000	0.002160	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33	PLASTIC PRODUCTS	0.000000	0.000000	0.006637	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34	PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.009687	0.000000
35	COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36	FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37	PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38	SYNTHETIC FIBRE & RESIN	0.003738	0.000000	0.293329	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39	OTHER CHEMICALS	0.005684	0.019457	0.004206	0.000000	0.000000	0.018867	0.022785	0.000000	0.032894	0.000000
40	CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Contd....

ANNEXURE 1.8

IMPORT COEFFICIENTS 1996-97

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	31	32	33	34	35	36	37	38	39	40
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42 IRON & STEEL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004481	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.001036	0.000675	0.000856	0.000179	0.001107	0.001904	0.001226	0.001629	0.001928	0.004474
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

OMMODITY BY INDUSTRY TABLE

N COMMODITY SECTOR	41	42	43	44	45	46	47	48	49	50
1 PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2 WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.000000	0.003423	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000332	0.022273	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.080017	0.011735	0.002900	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24 COTTON TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28 OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29 WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30 PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000831	0.000000
31 LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33 PLASTIC PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000109	0.000292	0.000000	0.000000
34 PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.006135	0.000000	0.000000	0.000000
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36 FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001755	0.000000	0.000000	0.000000
39 OTHER CHEMICALS	0.001939	0.001020	0.004420	0.000000	0.000000	0.000785	0.002632	0.000000	0.000000	0.002874
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	41	42	43	44	45	46	47	48	49	50
41 OTH.NON MET.MINERAL PRODS.	0.002118	0.000000	0.000000	0.000000	0.000000	0.000000	0.000211	0.000000	0.000000	0.000000
42 IRON & STEEL	0.000000	0.029221	0.000000	0.000000	0.024248	0.022761	0.011603	0.000000	0.000000	0.008476
43 NON FERROUS METALS	0.001046	0.000000	0.032263	0.000000	0.000000	0.002618	0.019421	0.004704	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000143	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.005305	0.000026	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.001619	0.002022	0.000000	0.000000	0.000000	0.020855	0.001823	0.000043	0.000006	0.000000
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.007546	0.020195	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000382	0.010811	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.002988	0.000000	0.000379	0.004032	0.007591	0.076380	0.004838
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.011619
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.008136	0.000000
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Contd....

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	51	52	53	54	55	56	57	58	59	60
1 PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2 WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000079
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002
15 COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.180451	0.060292	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24 COTTON TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000120
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28 OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29 WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000070	0.000623	0.000000	0.000000	0.000000	0.000000	0.000000	0.000023
30 PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002755
31 LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.000914	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33 PLASTIC PRODUCTS	0.000000	0.000000	0.000208	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34 PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.005890	0.013275	0.029507	0.000000	0.000000	0.000000
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.001624	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36 FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39 OTHER CHEMICALS	0.000952	0.002336	0.002286	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004381
40 CEMENT	0.000000	0.000000	0.000000	0.000546	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Contd....

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	51	52	53	54	55	56	57	58	59	60
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000314	0.001816	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42 IRON & STEEL	0.023293	0.010981	0.017132	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.006440	0.000000	0.012565	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000350	0.000905	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.010636	0.002989	0.001039	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000366
47 ELECTRICAL MACHINERY	0.001606	0.000000	0.001220	0.000000	0.003572	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000799	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000989	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000750
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.003912	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.078532	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000000	0.004471	0.009173	0.000450	0.000000	0.000000	0.000000	0.000000	0.000000	0.002951
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.016295	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004714	0.001590

IMPORT TRANSACTIONS AT 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

SN	COMMODITY SECTOR	INDUSTRIES									
		1	2	3	4	5	6	7	8	9	10
1	PADDY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	WHEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	OTHER CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	ANIMAL HUSBANDRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	FORESTRY & LOGGING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	COAL & LIGNITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	NON MET.& MINOR MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	HYDROGENATED OIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	OTHER FOOD & BEVERAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	COTTON TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	JUTE,HEMP,MESTA TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	OTHER TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	WOOD & WOOD PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	PAPER & PAPER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	RUBBER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	PLASTIC PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	PETROLEUM PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	COAL TAR PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	FERTILIZERS	5813.2	4098.5	1342.7	506.3	1267.8	45.5	1100.3	78.5	0.0	125.3
37	PESTICIDES	258.5	90.3	9.0	139.2	9.1	2.0	457.8	10.6	54.7	49.9
38	SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	OTHER CHEMICALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

COMMODITY BY INDUSTRY TABLE

					INDUSTRIES					
SN COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
41 OTH.NON MET.MINERAL PRODS.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42 IRON & STEEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43 NON FERROUS METALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	7.7	4.3	4.6	4.3	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47 ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57 OTHER TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58 COMMUNICATION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59 TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61 TOTAL	6079.4	4193.1	1356.4	649.8	1276.9	47.4	1558.1	89.1	54.7	175.2

IMPORT TRANSACTIONS AT 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES								
SN COMMODITY SECTOR	11	12	13	14	15	16	17	18	19	20
1 PADDY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 WHEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 ANIMAL HUSBANDRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 FORESTRY & LOGGING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 COAL & LIGNITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22 HYDROGENATED OIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23 OTHER FOOD & BEVERAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24 COTTON TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25 WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 JUTE,HEMP,MESTA TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28 OTHER TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 WOOD & WOOD PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 PAPER & PAPER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31 LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 RUBBER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33 PLASTIC PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 PETROLEUM PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35 COAL TAR PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36 FERTILIZERS	4214.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37 PESTICIDES	319.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38 SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 OTHER CHEMICALS	0.0	0.0	0.0	0.0	0.0	6.1	0.0	21.9	0.0	0.0
40 CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Ccntd....

ANNEXURE 1.9
IMPORT TRANSACTIONS AT 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	11	12	13	14	15	16	17	18	19	20
41 OTH.NON MET.MINERAL PRODS.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42 IRON & STEEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43 NON FERROUS METALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	43.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47 ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57 OTHER TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58 COMMUNICATION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59 TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61 TOTAL	4541.7	0.0	0.0	0.0	43.0	6.1	0.0	21.9	0.0	0.0

COMMODITY BY INDUSTRY TABLE

						I N D U S T R I E S					
SN COMMODITY SECTOR	21	22	23	24	25	26	27	28	29	30
1 PADDY	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 WHEAT	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 PULSES	0.0	0.0	38.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	111.0	0.0	0.0	0.0
7 COTTON	0.0	0.0	0.0	1664.0	0.0	0.0	0.0	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER CROPS	0.0	0.0	762.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 ANIMAL HUSBANDRY	0.0	0.0	273.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 FORESTRY & LOGGING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6214.0	0.0
14 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 COAL & LIGNITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 SUGAR	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22 HYDROGENATED OIL	0.0	0.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23 OTHER FOOD & BEVERAGE	0.0	0.0	613.7	13.3	0.0	0.6	0.0	0.1	0.0	0.0
24 COTTON TEXTILES	0.0	0.0	0.0	193.8	0.0	0.0	0.0	0.0	0.0	0.0
25 WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	205.6	0.0	0.0	97.7	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	66.5	0.0	775.3	0.0	102.6	0.0	0.0
27 JUTE,HEMP,MESTA TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	91.8	0.0	0.2	7.6
28 OTHER TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	29.8	0.0	2.0	11.1
29 WOOD & WOOD PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.8	0.0
30 PAPER & PAPER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	0.0
31 LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 RUBBER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33 PLASTIC PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 PETROLEUM PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35 COAL TAR PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36 FERTILIZERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37 PESTICIDES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38 SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	1002.8	32927.6	0.0	1720.0	0.0	0.0
39 OTHER CHEMICALS	0.0	810.0	504.8	1249.3	0.0	433.7	0.0	61.0	20.5	574.8
40 CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	21	22	23	24	25	26	27	28	29	30
41 OTH.NON MET.MINERAL PRODS.	0.0	0.0	108.1	0.0	0.0	0.0	0.0	0.0	0.8	0.0
42 IRON & STEEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43 NON FERROUS METALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	305.0
47 ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57 OTHER TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58 COMMUNICATION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59 TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61 TOTAL	0.0	810.0	2321.4	3187.0	1208.3	34137.2	232.7	1981.3	6289.4	898.5

IMPORT TRANSACTIONS AT 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES								
SN COMMODITY SECTOR	31	32	33	34	35	36	37	38	39	40
1 PADDY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 WHEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 ANIMAL HUSBANDRY	50.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
13 FORESTRY & LOGGING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 COAL & LIGNITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	58000.0	0.0	0.0	0.0	0.0	0.0	0.0
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	0.0	0.0	0.0	0.0	0.0	6883.4	0.0	0.0	3878.1	0.0
20 SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22 HYDROGENATED OIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23 OTHER FOOD & BEVERAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.3	0.0
24 COTTON TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25 WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 JUTE,HEMP,MESTA TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28 OTHER TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 WOOD & WOOD PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 PAPER & PAPER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31 LEATHER & LEATHER PRODUCTS	676.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 RUBBER PRODUCTS	0.0	193.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33 PLASTIC PRODUCTS	0.0	0.0	300.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 PETROLEUM PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2376.8	0.0
35 COAL TAR PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36 FERTILIZERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37 PESTICIDES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38 SYNTHETIC FIBRE & RESIN	239.6	0.0	9970.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 OTHER CHEMICALS	364.4	1492.9	143.0	0.0	0.0	1523.8	317.6	0.0	8254.0	0.0
40 CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ANNEXURE 1.9
IMPORT TRANSACTIONS AT 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	31	32	33	34	35	36	37	38	39	40
41 OTH.NON MET.MINERAL PRODS.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42 IRON & STEEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43 NON FERROUS METALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	706.4	0.0
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	66.5	51.8	29.1	44.8	20.6	156.0	17.1	69.3	492.8	197.4
47 ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57 OTHER TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58 COMMUNICATION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59 TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61 TOTAL	1397.0	1827.8	10442.8	58044.8	20.6	8563.3	334.7	69.3	15792.4	197.4

Contd....

enabled

enabled

IMPORT TRANSACTIONS AT 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

SN	COMMODITY SECTOR	INDUSTRIES									
		41	42	43	44	45	46	47	48	49	50
1	PADDY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	WHEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	OTHER CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	ANIMAL HUSBANDRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	FORESTRY & LOGGING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	COAL & LIGNITE	0.0	3918.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	OTHER METALLIC MINERALS	0.0	107.1	1061.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	NON MET.& MINOR MINERALS	7974.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	HYDROGENATED OIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	OTHER FOOD & BEVERAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	COTTON TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	JUTE,HEMP,MESTA .TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	OTHER TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	WOOD & WOOD PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	PAPER & PAPER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.6	0.0
31	LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	RUBBER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	PLASTIC PRODUCTS	0.0	0.0	0.0	0.0	0.0	25.9	70.1	0.0	0.0	0.0
34	PETROLEUM PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	520.6	0.0	0.0	0.0
35	COAL TAR PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	FERTILIZERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	PESTICIDES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	OTHER CHEMICALS	153.8	329.1	235.1	0.0	0.0	133.7	489.8	0.0	0.0	161.1
40	CEMENT	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Contd....

ANNEXURE 1.9
IMPORT TRANSACTIONS AT 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR					INDUSTRIES					
	41	42	43	44	45	46	47	48	49	50
41 OTH.NON MET.MINERAL PRODS.	135.0	0.0	0.0	0.0	0.0	0.0	39.2	0.0	0.0	0.0
42 IRON & STEEL	0.0	10587.7	0.0	0.0	688.1	3875.6	2159.7	0.0	0.0	475.1
43 NON FERROUS METALS	83.0	0.0	2537.7	0.0	0.0	1123.9	5140.7	177.4	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	22.6	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	150.6	4.4	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	128.5	652.2	0.0	0.0	0.0	12427.4	339.3	1.6	0.2	0.0
47 ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	2969.5	810.6	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	71.0	754.6	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	459.9	176.8	751.2	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	797.0
51 MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	250.4	0.0
54 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57 OTHER TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58 COMMUNICATION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59 TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61 TOTAL	8515.0	15594.1	3834.6	22.6	838.7	17590.8	12259.8	1921.1	1027.4	1433.2

IMPORT TRANSACTIONS AT 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	51	52	53	54	55	56	57	58	59	60
1 PADDY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 WHEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 ANIMAL HUSBANDRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	110.8
13 FORESTRY & LOGGING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
15 COAL & LIGNITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	0.0	0.0	40.6	50557.1	0.0	0.0	0.0	0.0	0.0	0.0
20 SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22 HYDROGENATED OIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23 OTHER FOOD & BEVERAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	168.3
24 COTTON TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25 WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 JUTE,HEMP,MESTA TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28 OTHER TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 WOOD & WOOD PRODUCTS	0.0	0.0	14.0	440.1	0.0	0.0	0.0	0.0	0.0	33.0
30 PAPER & PAPER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3879.4
31 LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 RUBBER PRODUCTS	99.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33 PLASTIC PRODUCTS	0.0	0.0	56.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 PETROLEUM PRODUCTS	0.0	0.0	0.0	0.0	1280.4	1922.7	19885.6	0.0	0.0	0.0
35 COAL TAR PRODUCTS	0.0	0.0	0.0	840.0	0.0	0.0	0.0	0.0	0.0	0.0
36 FERTILIZERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37 PESTICIDES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38 SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 OTHER CHEMICALS	103.8	157.3	458.2	0.0	0.0	0.0	0.0	0.0	0.0	6168.4
40 CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ANNEXURE 1.9

IMPORT TRANSACTIONS AT 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	51	52	53	54	55	56	57	58	59	60
41 OTH.NON MET.MINERAL PRODS.	0.0	0.0	62.8	1376.8	0.0	0.0	0.0	0.0	0.0	0.0
42 IRON & STEEL	2541.2	739.4	3433.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43 NON FERROUS METALS	702.6	0.0	2508.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	38.1	61.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	1160.3	201.3	208.2	0.0	0.0	0.0	0.0	0.0	0.0	516.1
47 ELECTRICAL MACHINERY	175.3	0.0	244.4	0.0	953.6	0.0	0.0	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	160.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	33.1	0.0	0.0	0.0	0.0	0.0	0.0	29.8
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	707.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	6448.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	0.0	301.0	3370.6	317.7	0.0	0.0	0.0	0.0	0.0	6293.6
54 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57 OTHER TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	7509.9	0.0	0.0	0.0
58 COMMUNICATION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59 TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4266.4	2239.5
61 TOTAL	5529.0	7908.0	10590.6	53531.6	2234.0	1922.7	27395.5	0.0	4266.4	19442.3

IMPORT TRANSACTIONS AT 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

		I.USE	PVT. CONS	PUB. CONS	G.F.INV	TOTAL
1	PADDY	2.2	346.7	0.0	0.0	349.0
2	WHEAT	7.4	208.6	0.0	0.0	216.0
3	OTHER CEREALS	0.0	2.9	0.0	0.0	3.0
4	PULSES	38.6	4681.3	0.0	0.0	4720.0
5	SUGARCANE	0.0	0.0	0.0	0.0	0.0
6	JUTE	111.0	0.0	0.0	0.0	111.0
7	COTTON	1664.0	0.0	0.0	0.0	1664.0
8	TEA	0.0	0.0	0.0	0.0	0.0
9	COFFEE	0.0	0.0	0.0	0.0	0.0
10	RUBBER	90.0	0.0	0.0	0.0	90.0
11	OTHER CROPS	762.7	2058.3	0.0	0.0	2821.0
12	ANIMAL HUSBANDRY	435.4	4152.8	4.7	0.0	4593.0
13	FORESTRY & LOGGING	6214.0	0.0	0.0	0.0	6214.0
14	FISHING	3.3	36.6	0.0	0.0	40.0
15	COAL & LIGNITE	3918.0	0.0	0.0	0.0	3918.0
16	CRUDE PETROLEUM & N.GAS	58000.0	0.0	0.0	0.0	58000.0
17	IRON ORE	0.0	0.0	0.0	0.0	0.0
18	OTHER METALLIC MINERALS	1169.0	0.0	0.0	0.0	1169.0
19	NON MET.& MINOR MINERALS	69334.0	0.0	0.0	0.0	69334.0
20	SUGAR	4.1	99.9	0.0	0.0	104.0
21	KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0
22	HYDROGENATED OIL	6.6	154.3	0.0	0.0	161.0
23	OTHER FOOD & BEVERAGE	879.3	5615.4	5.2	0.0	6500.0
24	COTTON TEXTILES	193.8	506.1	0.0	0.0	700.0
25	WOOLLEN TEXTILES	303.2	696.7	0.0	0.0	1000.0
26	ART SILK & SYNTHETIC FIBRE	944.4	2255.6	0.0	0.0	3200.0
27	JUTE,HEMP,MESTA TEXTILES	99.7	0.0	0.2	0.0	100.0
28	OTHER TEXTILES	42.9	2316.0	41.0	0.0	2400.0
29	WOOD & WOOD PRODUCTS	532.0	0.0	0.0	0.0	532.0
30	PAPER & PAPER PRODUCTS	3912.0	3631.4	3683.6	0.0	11227.0
31	LEATHER & LEATHER PRODUCTS	676.0	0.0	0.0	0.0	676.0
32	RUBBER PRODUCTS	292.8	257.6	0.0	401.5	952.0
33	PLASTIC PRODUCTS	453.4	600.6	0.0	0.0	1054.0
34	PETROLEUM PRODUCTS	25986.2	18273.6	4312.2	0.0	48572.0
35	COAL TAR PRODUCTS	840.0	0.0	0.0	0.0	840.0
36	FERTILIZERS	18593.0	0.0	0.0	0.0	18593.0
37	PESTICIDES	1401.0	0.0	0.0	0.0	1401.0
38	SYNTHETIC FIBRE & RESIN	45860.0	0.0	0.0	0.0	45860.0
39	OTHER CHEMICALS	24168.6	7784.2	289.1	0.0	32242.0
40	CEMENT	40.0	0.0	0.0	0.0	40.0

IMPORT TRANSACTIONS AT 60 SECTORS : 1991-92

COMMODITY BY INDUSTRY TABLE

	I.USE	PVT. CONS	PUB. CONS	G.F.INV	TOTAL
41 OTH.NON MET.MINERAL PRODS.	1722.7	737.3	0.0	20.9	2481.0
42 IRON & STEEL	24500.0	0.0	0.0	0.0	24500.0
43 NON FERROUS METALS	12980.0	0.0	0.0	0.0	12980.0
44 TRACTORS & OTH.AGRI.MACH.	50.5	0.0	0.0	49.4	100.0
45 MACHINE TOOLS	297.4	0.0	0.0	4638.6	4936.0
46 OTH.NON ELECTRICAL MACH.	17085.5	2081.1	3629.3	102366.0	125162.0
47 ELECTRICAL MACHINERY	5153.5	2201.1	90.1	13496.1	20941.0
48 COMMUNICATIONS EQUIPMENT	985.8	1672.2	117.8	3734.1	6510.0
49 ELECTRONIC EQUIPMENT	1450.8	17787.9	26.1	6615.1	25882.0
50 RAIL EQUIPMENT	797.0	0.0	0.0	1704.0	2501.0
51 MOTOR VEHICLES	707.9	1241.1	980.4	3570.5	6500.0
52 OTHER TRANSPORT EQUIPMENT	6448.0	0.0	42.8	19471.0	25962.0
53 OTHER MANUFACTURING	10533.3	10760.9	8580.4	5724.3	35599.0
54 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0
55 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0
57 OTHER TRANSPORT SERVICE	7509.9	51869.3	3215.8	0.0	62615.0
58 COMMUNICATION	0.0	2051.2	483.7	0.0	2535.0
59 TRADE	0.0	0.0	0.0	0.0	0.0
60 OTHER SERVICES	6505.9	33374.1	0.0	0.0	39880.0
61 TOTAL	363706.8	177476.1	25505.0	161792.0	728480.0

IMPORT TRANSACTIONS AT 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES									
SN	COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
1	PADDY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	WHEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	OTHER CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	ANIMAL HUSBANDRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	FORESTRY & LOGGING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	COAL & LIGNITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	NON MET.& MINOR MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	HYDROGENATED OIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	OTHER FOOD & BEVERAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	COTTON TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	JUTE,HEMP,MESTA TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	OTHER TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	WOOD & WOOD PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	PAPER & PAPER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	RUBBER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	PLASTIC PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	PETROLEUM PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	COAL TAR PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	FERTILIZERS	8007.3	4866.5	1716.5	615.5	1487.2	49.6	1462.6	101.1	0.0	169.5
37	PESTICIDES	314.0	107.3	11.6	169.2	10.6	2.1	608.5	13.7	86.2	67.5
38	SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	OTHER CHEMICALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ANNEXURE 1.10
IMPORT TRANSACTIONS AT 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES									
SN	COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
41	OTH.NON MET.MINERAL PRODS.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	IRON & STEEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	NON FERROUS METALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	TRACTORS & OTH.AGRI.MACH.	9.1	4.9	6.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0
45	MACHINE TOOLS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	OTH.NON ELECTRICAL MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	OTHER MANUFACTURING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	OTHER TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	COMMUNICATION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	TOTAL	8330.4	4978.7	1734.1	790.0	1497.9	51.7	2071.2	114.8	86.2	237.0

ANNEXURE 1.10
IMPORT TRANSACTIONS AT 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

SN	COMMODITY SECTOR	11	12	13	14	15	16	17	18	19	20
							INDUSTRIES				
1	PADDY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	WHEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	OTHER CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	ANIMAL HUSBANDRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	FORESTRY & LOGGING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	COAL & LIGNITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	NON MET.& MINOR MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	884.4
20	SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	HYDROGENATED OIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	OTHER FOOD & BEVERAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	COTTON TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	JUTE,HEMP,MESTA TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	OTHER TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	WOOD & WOOD PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	PAPER & PAPER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	RUBBER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	PLASTIC PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	PETROLEUM PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	COAL TAR PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	FERTILIZERS	8723.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	PESTICIDES	685.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	OTHER CHEMICALS	0.0	0.0	0.0	0.0	0.0	10.1	0.0	36.1	0.0	0.0
40	CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

IMPORT TRANSACTIONS AT 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES									
SN COMMODITY SECTOR	11	12	13	14	15	16	17	18	19	20
41 OTH.NON MET.MINERAL PRODS.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42 IRON & STEEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43 NON FERROUS METALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	57.8	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47 ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57 OTHER TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58 COMMUNICATION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59 TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61 TOTAL	9417.5	0.0	0.0	0.0	57.8	10.1	0.0	36.1	0.0	884.4

IMPORT TRANSACTIONS AT 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	21	22	23	24	25	26	27	28	29	30
1 PADDY	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 WHEAT	0.0	0.0	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 PULSES	0.0	0.0	45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	153.8	0.0	0.0	0.0
7 COTTON	0.0	0.0	0.0	2266.0	0.0	0.0	0.0	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER CROPS	0.0	0.0	941.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 ANIMAL HUSBANDRY	0.0	0.0	289.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 FORESTRY & LOGGING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9333.7	0.0
14 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 COAL & LIGNITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	330.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1317.8
20 SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22 HYDROGENATED OIL	0.0	0.0	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23 OTHER FOOD & BEVERAGE	0.0	0.0	716.5	18.0	0.1	0.9	0.0	0.0	0.0	0.0
24 COTTON TEXTILES	0.0	0.0	0.0	263.8	0.0	0.0	0.0	0.0	0.0	0.0
25 WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	352.9	0.0	0.0	141.3	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	90.3	0.0	936.8	0.0	148.5	0.0	0.0
27 JUTE,HEMP,MESTA TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	183.5	0.0	0.4	10.8
28 OTHER TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	45.7	0.0	3.1	15.7
29 WOOD & WOOD PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	218.3	0.0
30 PAPER & PAPER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.7	0.0
31 LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 RUBBER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33 PLASTIC PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 PETROLEUM PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35 COAL TAR PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36 FERTILIZERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37 PESTICIDES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38 SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	1479.8	15493.0	0.0	2488.2	0.0	0.0
39 OTHER CHEMICALS	0.0	1025.9	589.5	1699.4	0.0	624.1	0.0	88.3	31.6	815.0
40 CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ANNEXURE 1.10

IMPORT TRANSACTIONS AT 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	21	22	23	24	25	26	27	28	29	30
41 OTH.NON MET.MINERAL PRODS.	0.0	0.0	126.1	0.0	0.0	0.0	0.0	0.0	1.2	0.0
42 IRON & STEEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43 NON FERROUS METALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	432.5
47 ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57 OTHER TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58 COMMUNICATION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59 TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61 TOTAL	330.2	1025.9	2727.1	4337.6	1832.8	17054.9	382.9	2866.4	9616.0	2591.9

Contd....

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	31	32	33	34	35	36	37	38	39	40
1 PADDY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 WHEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	90.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 ANIMAL HUSBANDRY	137.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0
13 FORESTRY & LOGGING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 COAL & LIGNITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	43881.4	0.0	0.0	0.0	0.0	0.0	0.0
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	0.0	391.2	0.0	0.0	0.0	7472.6	286.0	532.5	3605.7	7597.2
20 SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22 HYDROGENATED OIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23 OTHER FOOD & BEVERAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	122.6	0.0
24 COTTON TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25 WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 JUTE,HEMP,MESTA TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28 OTHER TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 WOOD & WOOD PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 PAPER & PAPER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31 LEATHER & LEATHER PRODUCTS	1292.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 RUBBER PRODUCTS	0.0	260.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33 PLASTIC PRODUCTS	0.0	0.0	336.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 PETROLEUM PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3643.6	0.0
35 COAL TAR PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36 FERTILIZERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37 PESTICIDES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38 SYNTHETIC FIBRE & RESIN	651.6	0.0	14890.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 OTHER CHEMICALS	990.8	2347.9	213.5	0.0	0.0	2031.7	420.4	0.0	12372.7	0.0
40 CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Contd....

IMPORT TRANSACTIONS AT 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

	I N D U S T R I E S									
SN COMMODITY SECTOR	31	32	33	34	35	36	37	38	39	40
41 OTH.NON MET.MINERAL PRODS.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42 IRON & STEEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43 NON FERROUS METALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1685.5	0.0
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	180.6	81.4	43.4	56.5	27.4	205.0	22.6	125.5	725.2	282.1
47 ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57 OTHER TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58 COMMUNICATION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59 TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61 TOTAL	3252.6	3171.4	15484.4	43937.9	27.4	9709.4	729.0	658.0	22156.8	7879.3

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES								
SN COMMODITY SECTOR	41	42	43	44	45	46	47	48	49	50
1 PADDY	0.C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 WHEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 ANIMAL HUSBANDRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 FORESTRY & LOGGING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 COAL & LIGNITE	0.0	1729.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16 CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17 IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OTHER METALLIC MINERALS	0.0	167.7	1611.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 NON MET.& MINOR MINERALS	9767.4	5929.0	209.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22 HYDROGENATED OIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23 OTHER FOOD & BEVERAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24 COTTON TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25 WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26 ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 JUTE,HEMP,MESTA TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28 OTHER TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 WOOD & WOOD PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 PAPER & PAPER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.8	0.0
31 LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 RUBBER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33 PLASTIC PRODUCTS	0.0	0.0	0.0	0.0	0.0	27.2	87.2	0.0	0.0	0.0
34 PETROLEUM PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	1832.3	0.0	0.0	0.0
35 COAL TAR PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36 FERTILIZERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37 PESTICIDES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38 SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	0.0	0.0	524.2	0.0	0.0	0.0
39 OTHER CHEMICALS	236.7	515.3	319.7	0.0	0.0	195.6	786.1	0.0	0.0	203.9
40 CEMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

IMPORT TRANSACTIONS AT 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	41	42	43	44	45	46	47	48	49	50
41 OTH.NON MET.MINERAL PRODS.	258.5	0.0	0.0	0.0	0.0	0.0	63.0	0.0	0.0	0.0
42 IRON & STEEL	0.0	14763.6	0.0	0.0	950.0	5671.3	3465.4	0.0	0.0	601.3
43 NON FERROUS METALS	127.7	0.0	2333.6	0.0	0.0	652.3	5800.4	454.8	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	8.4	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	0.0	0.0	0.0	0.0	207.8	6.5	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	197.6	1021.6	0.0	0.0	0.0	5196.4	544.5	4.2	0.5	0.0
47 ELECTRICAL MACHINERY	0.0	0.0	0.0	0.0	0.0	0.0	2253.7	1952.4	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	114.1	1045.2	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	0.0	175.7	0.0	94.4	1204.2	733.9	6509.4	343.2
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	824.3
51 MOTOR VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	693.4	0.0
54 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57 OTHER TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58 COMMUNICATION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59 TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61 TOTAL	10588.0	24126.7	4474.2	184.2	1157.8	11843.6	16675.2	4190.4	7274.1	1972.7

IMPORT TRANSACTIONS AT 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

SN	COMMODITY SECTOR	51	52	53	54	55	56	57	58	59	60
						INDUSTRIES					
1	PADDY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	WHEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	OTHER CEREALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	PULSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	SUGARCANE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	JUTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	COTTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	TEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	COFFEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	RUBBER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	OTHER CROPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	ANIMAL HUSBANDRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	155.3
13	FORESTRY & LOGGING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9
15	COAL & LIGNITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	CRUDE PETROLEUM & N.GAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	IRON ORE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	OTHER METALLIC MINERALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	NON MET.& MINOR MINERALS	0.0	0.0	60568.8	55089.6	0.0	0.0	0.0	0.0	0.0	0.0
20	SUGAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	HYDROGENATED OIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	OTHER FOOD & BEVERAGE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	235.9
24	COTTON TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	WOOLLEN TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	ART SILK & SYNTHETIC FIBRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	JUTE,HEMP,MESTA TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	OTHER TEXTILES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	WOOD & WOOD PRODUCTS	0.0	0.0	23.5	569.2	0.0	0.0	0.0	0.0	0.0	45.2
30	PAPER & PAPER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5415.1
31	LEATHER & LEATHER PRODUCTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	RUBBER PRODUCTS	185.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	PLASTIC PRODUCTS	0.0	0.0	69.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	PETROLEUM PRODUCTS	0.0	0.0	0.0	0.0	2269.2	2894.7	20536.6	0.0	0.0	0.0
35	COAL TAR PRODUCTS	0.0	0.0	0.0	1483.9	0.0	0.0	0.0	0.0	0.0	0.0
36	FERTILIZERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	PESTICIDES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	SYNTHETIC FIBRE & RESIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	OTHER CHEMICALS	193.5	239.2	767.3	0.0	0.0	0.0	0.0	0.0	0.0	8611.0
40	CEMENT	0.0	0.0	0.0	498.9	0.0	0.0	0.0	0.0	0.0	0.0

IMPORT TRANSACTIONS AT 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	51	52	53	54	55	56	57	58	59	60
41 OTH.NON MET.MINERAL PRODS.	0.0	0.0	105.4	1659.3	0.0	0.0	0.0	0.0	0.0	0.0
42 IRON & STEEL	4734.3	1124.6	5750.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43 NON FERROUS METALS	1308.9	0.0	4217.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44 TRACTORS & OTH.AGRI.MACH.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45 MACHINE TOOLS	71.1	92.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46 OTH.NON ELECTRICAL MACH.	2161.8	306.1	348.7	0.0	0.0	0.0	0.0	0.0	0.0	719.4
47 ELECTRICAL MACHINERY	326.4	0.0	409.5	0.0	1376.2	0.0	0.0	0.0	0.0	0.0
48 COMMUNICATIONS EQUIPMENT	0.0	0.0	268.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 ELECTRONIC EQUIPMENT	0.0	0.0	332.0	0.0	0.0	0.0	0.0	0.0	0.0	1474.2
50 RAIL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 MOTOR VEHICLES	795.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52 OTHER TRANSPORT EQUIPMENT	0.0	8042.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53 OTHER MANUFACTURING	0.0	457.9	3078.9	411.2	0.0	0.0	0.0	0.0	0.0	5800.3
54 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56 RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57 OTHER TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0	0.0	11341.2	0.0	0.0	0.0
58 COMMUNIC.TION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59 TRADE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5731.9	3125.2
61 TOTAL	9777.0	10263.5	75940.6	59712.1	3645.4	2894.7	31877.8	0.0	5731.9	25585.4

ANNEXURE 1.10

IMPORT TRANSACTIONS AT 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

		I.USE	PVT. CONS	PUB. CONS	G.F.INV	TOTAL
1	PADDY	2.8	446.4	0.0	0.0	449.1
2	WHEAT	8.8	206.8	0.0	0.0	215.6
3	OTHER CEREALS	0.0	3.0	0.0	0.0	3.0
4	PULSES	45.0	5978.9	0.0	0.0	6023.8
5	SUGARCANE	0.0	0.0	0.0	0.0	0.0
6	JUTE	153.8	0.0	0.0	0.0	153.7
7	COTTON	2266.0	0.0	0.0	0.0	2266.0
8	TEA	0.0	0.0	0.0	0.0	0.0
9	COFFEE	0.0	0.0	0.0	0.0	0.0
10	RUBBER	90.1	0.0	0.0	0.0	90.1
11	OTHER CROPS	941.3	2331.7	0.0	0.0	3273.0
12	ANIMAL HUSBANDRY	583.2	6476.9	6.7	0.0	7066.7
13	FORESTRY & LOGGING	9333.7	0.0	0.0	0.0	9333.6
14	FISHING	3.9	78.9	0.0	0.0	82.8
15	COAL & LIGNITE	1729.4	0.0	0.0	0.0	1729.4
16	CRUDE PETROLEUM & N.GAS	43881.4	0.0	0.0	0.0	43881.4
17	IRON ORE	0.0	0.0	0.0	0.0	0.0
18	OTHER METALLIC MINERALS	1778.8	0.0	0.0	0.0	1778.8
19	NON MET.& MINOR MINERALS	153982.2	0.0	0.0	0.0	153982.2
20	SUGAR	0.0	500.0	0.0	0.0	500.0
21	KHANDSARI BOORA	0.0	0.0	0.0	0.0	0.0
22	HYDROGENATED OIL	7.9	219.9	0.0	0.0	227.7
23	OTHER FOOD & BEVERAGE	1094.0	11144.2	7.4	0.0	12245.5
24	COTTON TEXTILES	263.8	812.9	0.0	0.0	1076.7
25	WOOLLEN TEXTILES	494.3	1056.8	0.0	0.0	1551.0
26	ART SILK & SYNTHETIC FIBRE	1175.6	3712.7	0.0	0.0	4888.3
27	JUTE,HEMP,MESTA TEXTILES	194.7	0.0	0.4	0.0	195.1
28	OTHER TEXTILES	64.5	3570.9	58.0	0.0	3693.4
29	WOOD & WOOD PRODUCTS	856.3	0.0	0.0	0.0	856.2
30	PAPER & PAPER PRODUCTS	5513.6	7992.7	5211.4	0.0	18717.6
31	LEATHER & LEATHER PRODUCTS	1292.4	0.0	0.0	0.0	1292.4
32	RUBBER PRODUCTS	446.4	549.9	0.0	433.0	1429.3
33	PLASTIC PRODUCTS	521.1	547.1	0.0	0.0	1068.2
34	PETROLEUM PRODUCTS	31176.6	61780.5	6100.8	0.0	99057.8
35	COAL TAR PRODUCTS	1483.9	0.0	0.0	0.0	1483.8
36	FERTILIZERS	27199.7	0.0	0.0	0.0	27199.6
37	PESTICIDES	2076.2	0.0	0.0	0.0	2076.1
38	SYNTHETIC FIBRE & RESIN	35527.3	0.0	0.0	0.0	35527.3
39	OTHER CHEMICALS	35365.6	5675.5	409.1	0.0	41450.2
40	CEMENT	498.9	0.0	0.0	0.0	498.8

ANNEXURE 1.10
IMPORT TRANSACTIONS AT 60 SECTORS : 1996-97

COMMODITY BY INDUSTRY TABLE

	I.USE	PVT. CONS	PUB. CONS	G.F.INV	TOTAL
41 OTH.NON MET.MINERAL PRODS.	2213.5	319.4	0.0	23.8	2556.7
42 IRON & STEEL	37061.0	0.0	0.0	0.0	37060.9
43 NON FERROUS METALS	16580.7	0.0	0.0	0.0	16580.7
44 TRACTORS & OTH.AGRI.MACH.	42.0	0.0	0.0	59.5	101.4
45 MACHINE TOOLS	436.6	0.0	0.0	6118.2	6554.9
46 OTH.NON ELECTRICAL MACH.	12683.1	700.1	5134.6	178203.9	196721.7
47 ELECTRICAL MACHINERY	6318.2	1487.4	127.6	31481.7	39414.9
48 COMMUNICATIONS EQUIPMENT	1427.4	483.4	166.8	6506.6	8584.3
49 ELECTRONIC EQUIPMENT	10867.0	42868.4	39.8	6365.3	60140.6
50 RAIL EQUIPMENT	824.3	0.0	0.0	3105.8	3930.1
51 MOTOR VEHICLES	795.1	2604.3	1387.0	3474.1	8260.6
52 OTHER TRANSPORT EQUIPMENT	8042.9	0.0	60.7	27660.7	35764.3
53 OTHER MANUFACTURING	10441.7	6550.9	6476.3	6489.6	29958.5
54 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0
55 ELECTRICITY ETC.	0.0	500.0	0.0	0.0	500.0
56 RAIL TRANSPORT SERVICE	0.0	0.0	0.0	0.0	0.0
57 OTHER TRANSPORT SERVICE	11341.2	100286.0	4549.6	0.0	116176.7
58 COMMUNICATION	0.0	4017.0	684.3	0.0	4701.3
59 TRADE	0.0	0.0	0.0	0.0	0.0
60 OTHER SERVICES	8857.1	65175.0	0.0	0.0	74032.1
61 TOTAL	487985.1	338077.6	30420.5	269922.7	1126405.8

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IMPORT TRANSACTIONS AT 11 SECTORS:1991-92

COMMODITY BY INDUSTRY TABLE

| | | | | | | I N D U S T R I E S | | | | | |
	SN COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
1	AGRICULTURE	0.0	0.0	0.0	0.0	3000.6	0.0	0.0	0.0	0.0	0.0
2	FORESTRY & LOGGING	0.0	0.0	0.0	0.0	6214.0	0.0	0.0	0.0	0.0	0.0
3	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	MINING & QUARRYING	0.0	0.0	0.0	0.0	81863.9	50557.1	0.0	0.0	0.0	0.0
5	MANUFACTURING	20021.9	0.0	0.0	71.1	143742.8	2974.6	2234.0	1922.7	19885.6	0.0
6	ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	RAILWAY TRANSPORT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	OTHER TRANSPORT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7509.9	0.0
10	COMMUNICATIONS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	TOTAL	20021.9	0.0	0.0	71.1	234821.2	53531.6	2234.0	1922.7	27395.5	0.0

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	11	I.USE	PVT. CONS	PUB. CONS	G.F.INV	TOTAL
1 AGRICULTURE	110.8	3111.3	11450.9	4.8	0.0	14567.0
2 FORESTRY & LOGGING	0.0	6214.0	0.0	0.0	0.0	6214.0
3 FISHING	3.3	3.3	36.7	0.0	0.0	40.0
4 MINING & QUARRYING	0.0	132421.0	0.0	0.0	0.0	132421.0
5 MANUFACTURING	17088.8	207941.4	78673.8	21800.8	161792.0	470208.0
6 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0
7 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0
8 RAILWAY TRANSPORT	0.0	0.0	0.0	0.0	0.0	0.0
9 OTHER TRANSPORT	0.0	7509.9	51889.3	3215.8	0.0	62615.0
10 COMMUNICATIONS	0.0	0.0	2051.3	483.7	0.0	2535.0
11 OTHER SERVICES	6505.9	6505.9	33374.1	0.0	0.0	39880.0
12 TOTAL	23708.7	363706.8	177476.1	25505.1	161792.0	728480.0

COMMODITY BY INDUSTRY TABLE

		INDUSTRIES								
SN COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
1 AGRICULTURE	0.0	0.0	0.0	0.0	3935.7	0.0	0.0	0.0	0.0	0.0
2 FORESTRY & LOGGING	0.0	0.0	0.0	0.0	9333.7	0.0	0.0	0.0	0.0	0.0
3 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 MINING & QUARRYING	0.0	0.0	0.0	0.0	146282.2	55089.6	0.0	0.0	0.0	0.0
5 MANUFACTURING	29309.4	0.0	0.0	104.0	169572.7	4622.5	3645.4	2894.7	20536.6	0.0
6 ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 CONSTRUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 RAILWAY TRANSPORT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 OTHER TRANSPORT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11341.2	0.0
10 COMMUNICATIONS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 OTHER SERVICES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 TOTAL	29309.4	0.0	0.0	104.0	329124.3	59712.1	3645.4	2894.7	31877.8	0.0

IMPORT TRANSACTIONS AT 11 SECTORS:1996-97

COMMODITY BY INDUSTRY TABLE

SN	COMMODITY SECTOR	11	I.USE	PVT. CONS	PUB. CONS	G.F.INV	TOTAL
1	AGRICULTURE	155.3	4091.0	15443.7	6.7	0.0	19541.4
2	FORESTRY & LOGGING	0.0	9333.7	0.0	0.0	0.0	9333.7
3	FISHING	3.9	3.9	78.9	0.0	0.0	82.8
4	MINING & QUARRYING	0.0	201371.8	0.0	0.0	0.0	201371.8
5	MANUFACTURING	22301.0	252986.4	152577.0	25179.9	269922.8	700666.1
6	ELECTRICITY ETC.	0.0	0.0	0.0	0.0	0.0	0.0
7	CONSTRUCTION	0.0	0.0	500.0	0.0	0.0	500.0
8	RAILWAY TRANSPORT	0.0	0.0	0.0	0.0	0.0	0.0
9	OTHER TRANSPORT	0.0	11341.2	100286.0	4549.6	0.0	116176.8
10	COMMUNICATIONS	0.0	0.0	4017.0	684.3	0.0	4701.3
11	OTHER SERVICES	8857.1	8857.1	65175.0	0.0	0.0	74032.1
12	TOTAL	31317.4	487985.2	338077.6	30420.5	269922.8	1126406.0

ANNEXURE 1.13

STRUCTURE OF IMPORTS : 1991-92

(Percent)

SN	SECTOR	INTER-MEDIATE USE	PRIVATE CONSUM-PTION	GROSS FIXED INVES-TMENT	PUBLIC CONSUM-PTION	TOTAL IMPORTS
1	PADDY	00.00	00.20	00.00	00.00	00.05
2	WHEAT	00.00	00.12	00.00	00.00	00.03
3	OTHER CEREALS	00.00	00.00	00.00	00.00	00.00
4	PULSES	00.01	02.64	00.00	00.00	00.65
5	SUGARCANE	00.00	00.00	00.00	00.00	00.00
6	JUTE	00.03	00.00	00.00	00.00	00.02
7	COTTON	00.46	00.00	00.00	00.00	00.23
8	TEA	00.00	00.00	00.00	00.00	00.00
9	COFFEE	00.00	00.00	00.00	00.00	00.00
10	RUBBER	00.02	00.00	00.00	00.00	00.01
11	OTHER CROPS	00.21	01.16	00.00	00.00	00.39
12	ANIMAL HUSBANDRY	00.12	02.34	00.00	00.02	00.63
13	FORESTRY & LOGGING	01.71	00.00	00.00	00.00	00.85
14	FISHING	00.00	00.02	00.00	00.00	00.00
15	COAL & LIGNITE	01.08	00.00	00.00	00.00	00.54
16	CRUDE PETROLEUM & N.GA	15.95	00.00	00.00	00.00	07.96
17	IRON ORE	00.00	00.00	00.00	00.00	00.00
18	OTHER METALLIC MINERAL	00.32	00.00	00.00	00.00	00.16
19	NON MET.& MINOR MINERA	19.06	00.00	00.00	00.00	09.52
20	SUGAR	00.00	00.06	00.00	00.00	00.01
21	KHANDSARI BOORA	00.00	00.00	00.00	00.00	00.00
22	HYDROGENATED OIL	00.00	00.09	00.00	00.00	00.02
23	OTHER FOOD & BEVERAGE	00.24	03.16	00.00	00.02	00.89
24	COTTON TEXTILES	00.05	00.28	00.00	00.00	00.10
25	WOOLLEN TEXTILES	00.08	00.39	00.00	00.00	00.14
26	ART SILK & SYNTHETIC F	00.26	01.27	00.00	00.00	00.44
27	JUTE,HEMP,MESTA TEXTIL	00.03	00.00	00.00	00.00	00.01
28	OTHER TEXTILES	00.01	01.30	00.00	00.16	00.33
29	WOOD & WOOD PRODUCTS	00.15	00.00	00.00	00.00	00.07
30	PAPER & PAPER PRODUCTS	01.08	02.05	00.00	14.44	01.54
31	LEATHER & LEATHER PROD	00.18	00.00	00.00	00.00	00.09
32	RUBBER PRODUCTS	00.08	00.14	00.25	00.00	00.13
33	PLASTIC PRODUCTS	00.12	00.34	00.00	00.00	00.14
34	PETROLEUM PRODUCTS	07.14	10.30	00.00	16.91	06.67
35	COAL TAR PRODUCTS	00.23	00.00	00.00	00.00	00.12
36	FERTILIZERS	05.11	00.00	00.00	00.00	02.55
37	PESTICIDES	00.38	00.00	00.00	00.00	00.19
38	SYNTHETIC FIBRE & RESI	12.61	00.00	00.00	00.00	06.30
39	OTHER CHEMICALS	06.64	04.39	00.00	01.13	04.42
40	CEMENT	00.01	00.00	00.00	00.00	00.00

Contd....

ANNEXURE 1.13

STRUCTURE OF IMPORTS : 1991-92

(Percent)

SN	SECTOR	INTER-MEDIATE USE	PRIVATE CONSUM-PTION	GROSS FIXED INVES-TMENT	PUBLIC CONSUM-PTION	TOTAL IMPORTS
41	OTH.NON MET.MINERAL PR	00.47	00.42	00.01	00.00	00.34
42	IRON & STEEL	06.74	00.00	00.00	00.00	03.36
43	NON FERROUS METALS	03.57	00.00	00.00	00.00	01.78
44	TRACTORS & OTH.AGRI.MA	00.01	00.00	00.03	00.00	00.01
45	MACHINE TOOLS	00.08	00.00	02.87	00.00	00.68
46	OTH.NON ELECTRICAL MAC	04.70	01.17	63.27	14.23	17.18
47	ELECTRICAL MACHINERY	01.42	01.24	08.34	00.35	02.87
48	COMMUNICATIONS EQUIPME	00.27	00.94	02.31	00.46	00.89
49	ELECTRONIC EQUIPMENT	00.40	10.02	04.09	00.11	03.55
50	RAIL EQUIPMENT	00.22	00.00	01.05	00.00	00.34
51	MOTOR VEHICLES	00.19	00.70	02.21	03.84	00.89
52	OTHER TRANSPORT EQUIPM	01.77	00.00	12.03	00.17	03.56
53	OTHER MANUFACTURING	02.90	06.06	03.54	33.64	04.89
54	CONSTRUCTION	00.00	00.00	00.00	00.00	00.00
55	ELECTRICITY ETC.	00.00	00.00	00.00	00.00	00.00
56	RAIL TRANSPORT SERVICE	00.00	00.00	00.00	00.00	00.00
57	OTHER TRANSPORT SERVIC	02.06	29.24	00.00	12.61	08.60
58	COMMUNICATION	00.00	01.16	00.00	01.90	00.35
59	TRADE	00.00	00.00	00.00	00.00	00.00
60	OTHER SERVICES	01.79	18.80	00.00	00.00	05.47
61	TOTAL	100.00	100.00	100.00	100.000	100.00

ANNEXURE 1.14

STRUCTURE OF IMPORTS : 1996-97

(Percent)

SN	SECTOR	INTER-MEDIATE USE	PRIVATE CONSUM-PTION	GROSS FIXED INVES-TMENT	PUBLIC CONSUM-PTION	TOTAL IMPORTS
1	PADDY	00.00	00.13	00.00	00.00	00.04
2	WHEAT	00.00	00.06	00.00	00.00	00.02
3	OTHER CEREALS	00.00	00.00	00.00	00.00	00.00
4	PULSES	00.01	01.77	00.00	00.00	00.53
5	SUGARCANE	00.00	00.00	00.00	00.00	00.00
6	JUTE	00.03	00.00	00.00	00.00	00.01
7	COTTON	00.46	00.00	00.00	00.00	00.20
8	TEA	00.00	00.00	00.00	00.00	00.00
9	COFFEE	00.00	00.00	00.00	00.00	00.00
10	RUBBER	00.02	00.00	00.00	00.00	00.01
11	OTHER CROPS	00.19	00.69	00.00	00.00	00.29
12	ANIMAL HUSBANDRY	00.12	01.92	00.00	00.02	00.63
13	FORESTRY & LOGGING	01.91	00.00	00.00	00.00	00.83
14	FISHING	00.00	00.02	00.00	00.00	00.01
15	COAL & LIGNITE	00.35	00.00	00.00	00.00	00.15
16	CRUDE PETROLEUM & N.GA	08.99	00.00	00.00	00.00	03.90
17	IRON ORE	00.00	00.00	00.00	00.00	00.00
18	OTHER METALLIC MINERAL	00.36	00.00	00.00	00.00	00.16
19	NON MET.& MINOR MINERA	31.55	00.00	00.00	00.00	13.67
20	SUGAR	00.00	00.15	00.00	00.00	00.04
21	KHANDSARI BOORA	00.00	00.00	00.00	00.00	00.00
22	HYDROGENATED OIL	00.00	00.06	00.00	00.00	00.02
23	OTHER FOOD & BEVERAGE	00.22	03.30	00.00	00.02	01.09
24	COTTON TEXTILES	00.05	00.24	00.00	00.00	00.10
25	WOOLLEN TEXTILES	00.10	00.31	00.00	00.00	00.14
26	ART SILK & SYNTHETIC F	00.24	01.10	00.00	00.00	00.43
27	JUTE,HEMP,MESTA TEXTIL	00.04	00.00	00.00	00.00	00.02
28	OTHER TEXTILES	00.01	01.06	00.00	00.19	00.33
29	WOOD & WOOD PRODUCTS	00.18	00.00	00.00	00.00	00.08
30	PAPER & PAPER PRODUCTS	01.13	02.36	00.00	17.13	01.66
31	LEATHER & LEATHER PROD	00.26	00.00	00.00	00.00	00.11
32	RUBBER PRODUCTS	00.09	00.16	00.16	00.00	00.13
33	PLASTIC PRODUCTS	00.11	00.16	00.00	00.00	00.09
34	PETROLEUM PRODUCTS	06.39	18.27	00.00	20.05	08.79
35	COAL TAR PRODUCTS	00.30	00.00	00.00	00.00	00.13
36	FERTILIZERS	05.57	00.00	00.00	00.00	02.41
37	PESTICIDES	00.42	00.00	00.00	00.00	00.18
38	SYNTHETIC FIBRE & RESI	07.28	00.00	00.00	00.00	03.15
39	OTHER CHEMICALS	07.25	01.68	00.00	01.34	03.68
40	CEMENT	00.10	00.00	00.00	00.00	00.04

Contd...

STRUCTURE OF IMPORTS : 1996-97

(Percent)

SN	SECTOR	INTER-MEDIATE USE	PRIVATE CONSUM-PTION	GROSS FIXED INVES-TMENT	PUBLIC CONSUM-PTION	TOTAL IMPORTS
41	OTH.NON MET.MINERAL PR	00.45	00.09	00.01	00.00	00.23
42	IRON & STEEL	07.59	00.00	00.00	0p.00	03.29
43	NON FERROUS METALS	03.40	00.00	00.00	00.00	01.47
44	TRACTORS & OTH.AGRI.MA	00.01	00.00	00.02	00.00	00.01
45	MACHINE TOOLS	00.09	00.00	02.27	00.00	00.58
46	OTH.NON ELECTRICAL MAC	02.60	00.21	66.02	16.88	17.46
47	ELECTRICAL MACHINERY	01.29	00.44	11.66	00.42	03.50
48	COMMUNICATIONS EQUIPME	00.29	00.14	02.41	00.55	00.76
49	ELECTRONIC EQUIPMENT	02.23	12.68	02.36	00.13	05.34
50	RAIL EQUIPMENT	00.17	00.00	01.15	00.00	00.35
51	MOTOR VEHICLES	00.16	00.77	01.29	04.56	00.73
52	OTHER TRANSPORT EQUIPM	01.65	00.00	10.25	00.20	03.18
53	OTHER MANUFACTURING	02.14	01.94	02.40	21.29	02.66
54	CONSTRUCTION	00.00	00.00	00.00	00.00	00.00
55	ELECTRICITY ETC.	00.00	00.15	00.00	00.00	00.04
56	RAIL TRANSPORT SERVICE	00.00	00.00	00.00	00.00	00.00
57	OTHER TRANSPORT SERVIC	02.32	29.66	00.00	14.96	10.31
58	COMMUNICATION	00.00	01.19	00.00	02.25	00.42
59	TRADE	00.00	00.00	00.00	00.00	00.00
60	OTHER SERVICES	01.82	19.28	00.00	00.00	06.57
61	TOTAL	100.00	100.00	100.00	100.00	100.00

ANNEXURE 1.15

STRUCTURE OF INDIRECT TAXES: 1991-92

(Percent)

SN	SECTOR	IMPORT DUTY	EXPORT DUTY	OTHER INDIRECT TAXES NET OF SUBSIDIES	TOTAL INDIRECT TAXES NET OF SUBSIDIES
1	PADDY	00.00	00.00	-06.63	-03.84
2	WHEAT	00.00	00.00	-06.10	-03.53
3	OTHER CEREALS	00.00	00.00	-00.36	-00.21
4	PULSES	00.00	00.00	-00.56	-00.32
5	SUGARCANE	00.00	00.00	-00.24	-00.14
6	JUTE	00.00	00.00	00.01	00.01
7	COTTON	00.00	00.00	-00.35	-00.20
8	TEA	00.00	00.00	00.25	00.15
9	COFFEE	00.00	00.00	00.00	00.00
10	RUBBER	00.00	00.00	00.00	00.00
11	OTHER CROPS	00.47	61.89	-00.91	-00.28
12	ANIMAL HUSBANDRY	01.26	03.96	-00.09	00.48
13	FORESTRY & LOGGING	00.00	00.00	01.44	00.83
14	FISHING	00.00	16.74	-00.02	00.00
15	COAL & LIGNITE	00.00	00.00	00.24	00.14
16	CRUDE PETROLEUM & N.GA	12.41	00.00	08.25	10.00
17	IRON ORE	00.00	06.61	00.01	00.01
18	OTHER METALLIC MINERAL	00.42	00.00	-00.14	00.10
19	NON MET.& MINOR MINERA	01.04	03.30	00.34	00.64
20	SUGAR	00.00	00.00	01.03	00.59
21	KHANDSARI BOORA	00.00	00.00	-00.16	-00.09
22	HYDROGENATED OIL	00.00	00.00	00.55	00.32
23	OTHER FOOD & BEVERAGE	01.27	07.49	22.78	13.71
24	COTTON TEXTILES	00.00	00.00	00.75	00.43
25	WOOLLEN TEXTILES	00.00	00.00	00.01	00.00
26	ART SILK & SYNTHETIC F	02.02	00.00	01.24	01.56
27	JUTE,HEMP,MESTA TEXTIL	00.00	00.00	00.48	00.28
28	OTHER TEXTILES	00.00	00.00	01.44	00.83
29	WOOD & WOOD PRODUCTS	00.00	00.00	00.31	00.18
30	PAPER & PAPER PRODUCTS	01.02	00.00	01.65	01.38
31	LEATHER & LEATHER PROD	00.00	00.00	00.52	00.30
32	RUBBER PRODUCTS	01.38	00.00	03.91	02.85
33	PLASTIC PRODUCTS	06.61	00.00	01.70	03.77
34	PETROLEUM PRODUCTS	03.98	00.00	10.37	07.67
35	COAL TAR PRODUCTS	00.00	00.00	00.30	00.17
36	FERTILIZERS	00.00	00.00	-10.67	-06.17
37	PESTICIDES	00.00	00.00	-00.13	-00.08
38	SYNTHETIC FIBRE & RESI	00.00	00.00	10.49	06.07
39	OTHER CHEMICALS	11.25	00.00	10.42	10.76
40	CEMENT	00.10	00.00	04.37	02.57

Contd....

ANNEXURE 1.15

STRUCTURE OF INDIRECT TAXES: 1991-92

(Percent)

SN	SECTOR	IMPORT DUTY	EXPORT DUTY	OTHER INDIRECT TAXES NET OF SUBSIDIES	TOTAL INDIRECT TAXES NET OF SUBSIDIES
41	OTH.NON MET.MINERAL PR	00.70	00.00	02.50	01.74
42	IRON & STEEL	10.28	00.00	02.33	05.67
43	NON FERROUS METALS	04.29	00.00	02.61	03.31
44	TRACTORS & OTH.AGRI.MA	00.00	00.00	00.33	00.19
45	MACHINE TOOLS	01.55	00.00	00.43	00.90
46	OTH.NON ELECTRICAL MAC	13.15	00.00	04.59	08.19
47	ELECTRICAL MACHINERY	07.89	00.00	05.21	06.33
48	COMMUNICATIONS EQUIPME	00.00	00.00	00.41	00.24
49	ELECTRONIC EQUIPMENT	00.00	00.00	01.00	00.58
50	RAIL EQUIPMENT	00.85	00.00	00.63	00.72
51	MOTOR VEHICLES	01.71	00.00	09.16	06.02
52	OTHER TRANSPORT EQUIPM	01.06	00.00	01.36	01.24
53	OTHER MANUFACTURING	15.27	00.00	04.52	09.04
54	CONSTRUCTION	00.00	00.00	-01.44	-00.83
55	ELECTRICITY ETC.	00.00	00.00	02.72	01.58
56	RAIL TRANSPORT SERVICE	00.00	00.00	-00.78	-00.45
57	OTHER TRANSPORT SERVIC	00.00	00.00	03.40	01.96
58	COMMUNICATION	00.00	00.00	00.00	00.00
59	TRADE	00.00	00.00	-00.21	-00.12
60	OTHER SERVICES	00.00	00.00	04.74	02.74
61	TOTAL	100.00	100.00	100.00	100.00

ANNEXURE 1.16
STRUCTURE OF INDIRECT TAXES: 1996-97

(Percent)

SN	SECTOR	IMPORT DUTY	EXPORT DUTY	OTHER INDIRECT TAXES NET OF SUBSIDIES	TOTAL INDIRECT TAXES NET OF SUBSIDIES
1	PADDY	0.00	0.00	-6.68	-3.81
2	WHEAT	0.00	0.00	-5.92	-3.38
3	OTHER CEREALS	0.00	0.00	-0.39	-0.22
4	PULSES	0.00	0.00	-0.57	-0.33
5	SUGARCANE	0.00	0.00	-0.24	-0.14
6	JUTE	0.00	0.00	0.01	0.00
7	COTTON	0.00	0.00	-0.40	-0.23
8	TEA	0.00	0.00	0.27	0.16
9	COFFEE	0.00	0.00	0.01	0.00
10	RUBBER	0.00	0.00	0.00	0.00
11	OTHER CROPS	0.44	67.20	-0.90	-0.26
12	ANIMAL HUSBANDRY	1.58	3.19	-0.23	0.55
13	FORESTRY & LOGGING	0.00	0.00	1.15	0.66
14	FISHING	0.00	15.57	-0.02	0.00
15	COAL & LIGNITE	0.00	0.00	0.24	0.14
16	CRUDE PETROLEUM & N.GA	4.95	0.00	4.71	4.81
17	IRON ORE	0.00	5.84	0.01	0.01
18	OTHER METALLIC MINERAL	0.53	0.00	-0.14	0.14
19	NON MET.& MINOR MINERA	1.89	2.62	0.62	1.17
20	SUGAR	0.00	0.00	1.13	0.64
21	KHANDSARI BOORA	0.00	0.00	-0.16	-0.09
22	HYDROGENATED OIL	0.00	0.00	0.22	0.12
23	OTHER FOOD & BEVERAGE	1.95	5.58	5.94	4.23
24	COTTON TEXTILES	0.00	0.00	0.54	0.31
25	WOOLLEN TEXTILES	0.00	0.00	0.00	0.00
26	ART SILK & SYNTHETIC F	2.06	0.00	1.62	1.81
27	JUTE,HEMP,MESTA TEXTIL	0.00	0.00	0.65	0.37
28	OTHER TEXTILES	0.00	0.00	1.02	0.58
29	WOOD & WOOD PRODUCTS	0.00	0.00	0.40	0.23
30	PAPER & PAPER PRODUCTS	1.39	0.00	1.98	1.73
31	LEATHER & LEATHER PROD	0.00	0.00	1.22	0.70
32	RUBBER PRODUCTS	0.89	0.00	0.00	0.38
33	PLASTIC PRODUCTS	0.70	0.00	3.15	2.10
34	PETROLEUM PRODUCTS	6.62	0.00	11.80	9.57
35	COAL TAR PRODUCTS	0.00	0.00	0.00	0.00
36	FERTILIZERS	0.00	0.00	-11.83	-6.75
37	PESTICIDES	0.00	0.00	-0.15	-0.09
38	SYNTHETIC FIBRE & RESI	1.10	0.00	32.69	19.12
39	OTHER CHEMICALS	11.81	0.00	11.78	11.78
40	CEMENT	1.04	0.00	5.60	3.64

ANNEXURE 1.16

STRUCTURE OF INDIRECT TAXES: 1996-97

(Percent)

SN	SECTOR	IMPORT DUTY	EXPORT DUTY	OTHER INDIRECT TAXES NET OF SUBSIDIES	TOTAL INDIRECT TAXES NET OF SUBSIDIES
41	OTH.NON MET.MINERAL PR	0.59	0.00	3.47	2.23
42	IRON & STEEL	12.69	0.00	3.04	7.17
43	NON FERROUS METALS	4.51	0.00	0.00	1.93
44	TRACTORS & OTH.AGRI.MA	0.00	0.00	0.41	0.23
45	MACHINE TOOLS	1.68	0.00	0.46	0.98
46	OTH.NON ELECTRICAL MAC	16.88	0.00	0.00	7.23
47	ELECTRICAL MACHINERY	12.12	0.00	0.00	5.19
48	COMMUNICATIONS EQUIPME	0.00	0.00	0.90	0.52
49	ELECTRONIC EQUIPMENT	0.00	0.00	0.00	0.00
50	RAIL EQUIPMENT	1.09	0.00	0.73	0.88
51	MOTOR VEHICLES	1.77	0.00	14.04	8.77
52	OTHER TRANSPORT EQUIPM	1.20	0.00	1.97	1.64
53	OTHER MANUFACTURING	10.49	0.00	5.01	7.36
54	CONSTRUCTION	0.00	0.00	-1.57	-0.90
55	ELECTRICITY ETC.	0.00	0.00	3.31	1.89
56	RAIL TRANSPORT SERVICE	0.00	0.00	-0.74	-0.42
57	OTHER TRANSPORT SERVIC	0.00	0.00	4.37	2.49
58	COMMUNICATION	0.00	0.00	0.00	0.00
59	TRADE	0.00	0.00	-0.22	-0.13
60	OTHER SERVICES	0.00	0.00	5.68	3.24
61	TOTAL	100.00	100.00	100.00	100.00

STRUCTURE OF FINAL DEMAND: 1991-92

(Percent)

SN	SECTOR	PRIVATE COSUMP-TION	PUBLIC COSUMP-TION	GROSS FIXED INVES-THENT	CHANGE IN STOCKS	EXPORTS	IMPORTS	TOTAL FINAL DEMAND
1	PADDY	07.46	00.05	00.00	-00.72	00.86	00.05	05.05
2	WHEAT	03.52	00.05	00.00	-02.18	00.00	00.03	02.30
3	OTHER CEREALS	02.30	00.00	00.00	00.14	00.00	00.00	01.54
4	PULSES	02.36	00.03	00.00	00.20	00.00	00.65	01.50
5	SUGARCANE	01.04	00.00	00.00	00.01	00.00	00.00	00.69
6	JUTE	00.00	00.00	00.00	00.10	00.00	00.02	00.00
7	COTTON	00.00	00.00	00.00	00.00	01.47	00.23	00.11
8	TEA	00.00	00.00	00.00	00.00	00.00	00.00	00.00
9	COFFEE	00.00	00.00	00.00	00.00	00.82	00.00	00.08
10	RUBBER	00.00	00.00	00.00	00.02	00.00	00.01	00.00
11	OTHER CROPS	07.01	00.04	00.00	03.99	04.47	00.39	05.16
12	ANIMAL HUSBANDRY	08.30	00.05	00.76	03.20	00.32	00.63	05.74
13	FORESTRY & LOGGING	01.51	00.02	00.00	00.31	00.00	00.85	00.92
14	FISHING	00.79	00.00	00.00	00.00	02.20	00.00	00.74
15	COAL & LIGNITE	00.33	00.01	00.00	-03.45	00.04	00.54	00.08
16	CRUDE PETROLEUM & N.GA	00.00	00.00	00.00	00.58	00.00	07.96	-00.98
17	IRON ORE	00.00	00.00	00.00	00.02	00.70	00.00	00.07
18	OTHER METALLIC MINERAL	00.00	00.00	00.00	00.00	00.41	00.16	00.02
19	NON MET.& MINOR .MINERA	00.00	00.00	00.00	01.14	00.24	09.52	-01.14
20	SUGAR	01.88	00.00	00.00	00.82	00.07	00.01	01.28
21	KHANDSARI BOORA	00.14	00.00	00.00	00.02	00.00	00.00	00.09
22	HYDROGENATED OIL	00.76	00.00	00.00	00.47	00.00	00.02	00.51
23	OTHER FOOD & BEVERAGE	09.16	00.05	00.00	06.52	02.88	00.89	06.44
24	COTTON TEXTILES	04.98	00.01	00.00	05.18	04.80	00.10	03.90
25	WOOLLEN TEXTILES	00.36	00.00	00.00	00.03	00.06	00.14	00.23
26	ART SILK & SYNTHETIC F	02.90	00.00	00.00	10.07	01.33	00.44	02.25
27	JUTE,HEMP,MESTA TEXTIL	00.00	00.00	00.00	00.38	00.57	00.01	00.06
28	OTHER TEXTILES	01.36	00.13	00.05	00.58	10.90	00.33	01.95
29	WOOD & WOOD PRODUCTS	00.09	00.06	00.03	00.71	00.04	00.07	00.08
30	PAPER & PAPER PRODUCTS	00.39	02.21	00.00	02.44	00.07	01.54	00.40
31	LEATHER & LEATHER PROD	00.41	00.00	00.00	00.22	06.04	00.09	00.84
32	RUBBER PRODUCTS	00.39	00.10	01.86	00.42	01.94	00.13	00.85
33	PLASTIC PRODUCTS	00.37	00.00	00.00	06.83	00.42	00.14	00.43
34	PETROLEUM PRODUCTS	01.94	02.55	00.00	01.55	01.96	06.67	00.99
35	COAL TAR PRODUCTS	00.00	00.00	00.00	00.89	00.00	00.12	00.01
36	FERTILIZERS	00.00	00.03	00.00	00.27	00.00	02.55	-00.31
37	PESTICIDES	00.00	00.00	00.00	01.12	00.21	00.19	00.02
38	SYNTHETIC FIBRE & RESI	00.00	00.00	00.00	22.04	00.21	06.30	-00.24
39	OTHER CHEMICALS	01.83	00.38	00.00	01.67	04.89	04.42	01.22
40	CEMENT	00.00	00.00	00.00	02.45	00.00	00.00	00.06

STRUCTURE OF FINAL DEMAND: 1991-92

(Percent)

SN	SECTOR	PRIVATE COSUMP-TION	PUBLIC COSUMP-TION	GROSS FIXED INVES-TMENT	CHANGE IN STOCKS	EXPORTS	IMPORTS	TOTAL FINAL DEMAND
41	OTH.NON MET.MINERAL PR	00.56	00.00	00.05	02.50	00.70	0u.34	00.47
42	IRON & STEEL	00.00	00.00	01.60	00.75	00.60	03.36	00.00
43	NON FERROUS METALS	00.00	00.00	00.00	02.37	00.26	01.78	-00.14
44	TRACTORS & OTH.AGRI.MA	00.00	00.03	01.47	00.19	00.05	00.01	00.33
45	MACHINE TOOLS	00.00	00.00	02.21	00.30	00.62	00.68	00.46
46	OTH.NON ELECTRICAL MAC	00.12	01.19	18.62	08.27	02.43	17.18	02.55
47	ELECTRICAL MACHINERY	00.50	00.11	09.45	02.06	01.28	02.87	02.21
48	COMMUNICATIONS EQUIPME	00.26	00.10	01.82	00.04	00.04	00.89	00.48
49	ELECTRONIC EQUIPMENT	00.68	00.01	01.00	01.25	00.85	03.55	00.47
50	RAIL EQUIPMENT	00.00	00.00	02.44	06.62	00.06	00.34	00.65
51	MOTOR VEHICLES	00.54	02.38	04.79	00.09	00.98	00.89	01.67
52	OTHER TRANSPORT EQUIPM	00.59	00.01	02.51	05.78	00.73	03.56	00.70
53	OTHER MANUFACTURING	01.12	04.96	01.83	01.71	09.99	04.89	02.13
54	CONSTRUCTION	00.00	05.13	45.53	00.00	00.00	00.00	10.50
55	ELECTRICITY ETC.	00.57	03.68	00.00	00.00	00.02	00.00	00.82
56	RAIL TRANSPORT SERVICE	01.00	00.81	00.13	00.00	01.22	00.00	00.91
57	OTHER TRANSPORT SERVIC	06.19	02.14	00.50	00.00	05.65	08.60	03.96
58	COMMUNICATION	00.78	01.03	00.00	00.00	00.20	00.35	00.62
59	TRADE	08.39	02.19	03.36	00.00	10.89	00.00	07.64
60	OTHER SERVICES	16.93	70.42	00.00	00.00	15.45	05.47	20.56
61	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00

STRUCTURE OF FINAL DEMAND: 1996-97

(Percent)

SN	SECTOR	PRIVATE COSUMP-TION	PUBLIC COSUMP-TION	GROSS FIXED INVES-TMENT	CHANGE IN STOCKS	EXPORTS	IMPORTS	TOTAL FINAL DEMAND
1	PADDY	06.85	00.05	00.00	02.03	00.76	00.04	04.66
2	WHEAT	03.08	00.05	00.00	00.71	00.03	00.02	02.06
3	OTHER CEREALS	02.29	00.00	00.60	00.27	00.00	00.00	01.52
4	PULSES	02.16	00.03	00.00	00.23	00.00	00.53	01.36
5	SUGARCANE	00.70	00.00	00.00	00.00	00.00	00.00	00.46
6	JUTE	00.00	00.00	00.00	00.06	00.00	00.01	00.00
7	COTTON	00.00	00.00	00.00	00.00	00.96	00.20	00.10
8	TEA	00.00	00.00	00.00	00.00	00.00	00.00	00.00
9	COFFEE	00.00	00.00	00.00	00.00	00.27	00.00	00.04
10	RUBBER	00.00	00.00	00.00	00.01	00.00	00.01	00.00
11	OTHER CROPS	07.99	00.04	00.00	07.58	04.20	00.29	05.96
12	ANIMAL HUSBANDRY	08.14	00.05	00.72	03.42	00.22	00.63	05.53
13	FORESTRY & LOGGING	00.89	00.02	00.00	-00.01	00.00	00.83	00.46
14	FISHING	00.85	00.00	00.00	00.00	01.77	00.01	00.80
15	COAL & LIGNITE	00.26	00.01	00.00	00.38	00.02	00.15	00.16
16	CRUDE PETROLEUM & N.GA	00.00	00.00	00.00	00.22	00.00	03.90	-00.57
17	IRON ORE	00.00	00.00	00.00	00.00	00.53	00.00	00.07
18	OTHER METALLIC MINERAL	00.00	00.00	00.00	00.82	00.45	00.16	00.05
19	NON MET.& MINOR MINERA	00.00	00.00	00.00	00.76	00.16	13.67	-01.98
20	SUGAR	01.73	00.00	00.00	00.00	00.08	00.04	01.14
21	KHANDSARI BOORA	00.16	00.00	00.00	00.00	00.00	00.00	00.10
22	HYDROGENATED OIL	00.72	00.00	00.00	00.14	00.00	00.02	00.48
23	OTHER FOOD & BEVERAGE	07.88	00.05	00.00	01.51	01.86	01.09	05.32
24	COTTON TEXTILES	04.66	00.01	00.00	07.36	04.82	00.10	03.87
25	WOOLLEN TEXTILES	00.39	00.00	00.00	00.02	00.06	00.14	00.25
26	ART SILK & SYNTHETIC F	03.58	00.00	00.00	01.04	01.17	00.43	02.47
27	JUTE,HEMP,MESTA TEXTIL	00.00	00.00	00.00	00.72	00.31	00.02	00.05
28	OTHER TEXTILES	01.10	00.13	00.04	02.76	12.63	00.33	02.46
29	WOOD & WOOD PRODUCTS	00.09	00.06	00.03	01.32	00.03	00.08	00.09
30	PAPER & PAPER PRODUCTS	00.34	02.21	00.00	02.24	00.05	01.66	00.32
31	LEATHER & LEATHER PROD	00.63	00.00	00.00	16.20	06.62	00.11	01.64
32	RUBBER PRODUCTS	00.36	00.10	01.77	02.99	01.35	00.13	00.84
33	PLASTIC PRODUCTS	00.29	00.00	00.00	00.70	00.29	00.09	00.23
34	PETROLEUM PRODUCTS	01.71	02.55	00.00	00.82	01.07	08.79	00.32
35	COAL TAR PRODUCTS	00.00	00.00	00.00	00.48	00.00	00.13	-00.01
36	FERTILIZERS	00.00	00.03	00.00	00.00	00.00	02.41	-00.35
37	PESTICIDES	00.00	00.00	00.00	00.20	00.26	00.18	00.01
38	SYNTHETIC FIBRE & RESI	00.00	00.00	00.00	01.36	00.26	03.15	-00.40
39	OTHER CHEMICALS	02.05	00.38	00.00	08.15	05.96	03.68	01.84
40	CEMENT	00.00	00.00	00.00	00.29	00.05	00.04	00.01

ANNEXURE 1.18

STRUCTURE OF FINAL DEMAND: 1996-97

(Percent)

SN	SECTOR	PRIVATE COSUMP-TION	PUBLIC COSUMP-TION	GROSS FIXED INVES-TMENT	CHANGE IN STOCKS	EXPORTS	IMPORTS	TOTAL FINAL DEMAND
41	OTH.NON MET.MINERAL PR	00.64	00.00	00.05	00.23	00.38	00.23	00.45
42	IRON & STEEL	00.00	00.00	01.52	05.17	00.43	03.29	00.00
43	NON FERROUS METALS	00.00	00.00	00.00	00.19	00.21	01.47	-00.18
44	TRACTORS & OTH.AGRI.MA	00.00	00.03	01.40	01.78	00.04	00.01	00.33
45	MACHINE TOOLS	00.00	00.00	02.10	00.41	00.50	00.58	00.42
46	OTH.NON ELECTRICAL MAC	00.12	01.19	17.76	05.67	02.26	17.46	01.70
47	ELECTRICAL MACHINERY	00.42	00.11	09.01	04.32	01.08	03.50	01.85
48	COMMUNICATIONS EQUIPME	00.30	00.10	01.73	00.00	00.03	00.76	00.46
49	ELECTRONIC EQUIPMENT	00.68	00.01	00.96	02.68	03.25	05.34	00.35
50	RAIL EQUIPMENT	00.00	00.00	02.33	00.05	00.05	00.35	00.43
51	MOTOR VEHICLES	00.82	02.38	04.57	05.50	00.79	00.73	01.89
52	OTHER TRANSPORT EQUIPM	00.68	00.01	02.40	01.90	00.70	03.18	00.60
53	OTHER MANUFACTURING	01.12	04.98	01.75	07.29	13.58	02.66	03.32
54	CONSTRUCTION	00.00	05.13	48.06	00.00	00.00	00.00	10.43
55	ELECTRICITY ETC.	00.96	03.68	00.00	00.00	00.01	00.04	01.10
56	RAIL TRANSPORT SERVICE	01.14	00.81	00.12	00.00	01.99	00.00	01.15
57	OTHER TRANSPORT SERVIC	06.84	02.14	00.47	00.00	03.62	10.31	03.85
58	COMMUNICATION	00.79	01.03	00.00	00.00	00.11	00.42	00.61
59	TRADE	07.40	02.19	03.20	00.00	16.90	00.00	08.07
60	OTHER SERVICES	19.14	70.42	00.00	00.00	07.82	06.57	21.80
61	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	1	2	3	4	5	6	7	8	9	10
1 PADDY	0.995038	0.000488	0.000000	0.000942	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2 WHEAT	0.002565	0.997178	0.000000	0.004358	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000000	0.000000	0.999999	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000565	0.000069	0.000001	0.993764	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.999908	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.999994	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.999998	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000
11 OTHER CROPS	0.000174	0.001882	0.000000	0.000346	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000091	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.001635	0.000360	0.000000	0.000588	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24 COTTON TEXTILES	0.000023	0.000022	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28 OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29 WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30 PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31 LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33 PLASTIC PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34 PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36 FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39 OTHER CHEMICALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

ANNEXURE 1.19

OUTPUT COEFFICIENTS

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	1	2	3	4	5	6	7	8	9	10
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42 IRON & STEEL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
61 TOTAL	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

SN	COMMODITY SECTOR	INDUSTRIES 11	12	13	14	15	16	17	18	19	20
1	PADDY	0.082969	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	WHEAT	0.055054	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3	OTHER CEREALS	0.062086	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	PULSES	0.008088	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	SUGARCANE	0.010898	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	JUTE	0.001471	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	COTTON	0.002610	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	OTHER CROPS	0.773354	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	ANIMAL HUSBANDRY	0.000000	0.999258	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	FORESTRY & LOGGING	0.000000	0.000000	0.999999	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	FISHING	0.000000	0.000000	0.000000	0.999999	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.999999	0.000000	0.000000	0.000000	0.000000	0.000000
16	CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.999998	0.000000	0.000000	0.000000	0.000000
17	IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000
18	OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000
19	NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.980892	0.000000
20	SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.992492
21	KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.007334
22	HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	OTHER FOOD & BEVERAGE	0.003469	0.000153	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000174
24	COTTON TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27	JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28	OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29	WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31	LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32	RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33	PLASTIC PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34	PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35	COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36	FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37	PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38	SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39	OTHER CHEMICALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
40	CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

OUTPUT COEFFICIENTS

COMMODITY BY INDUSTRY TABLE

INDUSTRIES

SN COMMODITY SECTOR	11	12	13	14	15	16	17	18	19	20
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.019105	0.000000
42 IRON & STEEL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53 OTHER MANUFACTURING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000588	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
61 TOTAL	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

COMMODITY BY INDUSTRY TABLE

SN	COMMODITY SECTOR	21	22	23	24	25	26	27	28	29	30
					INDUSTRIES						
1	PADDY	0.000000	0.000000	0.001975	0.000185	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	WHEAT	0.000000	0.000000	0.000447	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3	OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	PULSES	0.000000	0.000000	0.000912	0.000023	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	OTHER CROPS	0.000000	0.000000	0.001138	0.000124	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	SUGAR	0.041694	0.000000	0.002285	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	KHANDSARI BOORA	0.941024	0.000000	0.000017	0.000000	0.000000	0.000000	0.000000	0.000000	0.000005	0.000000
22	HYDROGENATED OIL	0.000000	0.974019	0.003800	0.000005	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	OTHER FOOD & BEVERAGE	0.017280	0.025981	0.978957	0.000568	0.000000	0.000000	0.000000	0.000000	0.000000	00.000000
24	COTTON TEXTILES	0.000000	0.000000	0.001343	0.976753	0.011008	0.096152	0.000056	0.039087	0.000030	0.000000
25	WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000081	0.972018	0.000867	0.000000	0.002244	0.000000	0.000000
26	ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.018712	0.000000	0.901822	0.000000	0.001272	0.000000	0.000000
27	JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000037	0.000000	0.000000	0.990773	0.019517	0.000000	0.000118
28	OTHER TEXTILES	0.000000	0.000000	0.000000	0.003453	0.016973	0.001159	0.004215	0.934602	0.002632	0.005075
29	WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000107	0.987724	0.001986
30	PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000009	0.000000	0.000000	0.002067	0.000070	0.000008	0.987286
31	LEATHER & LEATHER PRODUCTS	0.000000	0.000000	0.000000	0.000003	0.000000	0.000000	0.000000	0.000129	0.000136	0.000000
32	RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000933	0.000000	0.000000
33	PLASTIC PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000004	0.000000	0.000000
34	PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35	COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001468	0.000000	0.000000
36	FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37	PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38	SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39	OTHER CHEMICALS	0.000000	0.000000	0.008956	0.000000	0.000000	0.000000	0.000000	0.000000	0.001620	0.000593
40	CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

OUTPUT COEFFICIENTS

COMMODITY BY INDUSTRY TABLE

INDUSTRIES

SN COMMODITY SECTOR	21	22	23	24	25	26	27	28	29	30
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000028	0.000006	0.000000	0.000000	0.000000	0.000000	0.000282	0.000000
42 IRON & STEEL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 NON FERROUS METALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000050
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 RAIL EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
51 MOTOR VEHICLES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000819	0.000000
53 OTHER MANUFACTURING	0.000000	0.000000	0.000142	0.000040	0.000000	0.000000	0.002888	0.000567	0.006743	0.004885
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
61 TOTAL	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	31	32	33	34	35	36	37	38	39	40
1 PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000147	0.000000
2 WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000510	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000426	0.000000
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.018381	0.000000
23 OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000877	0.013338	0.000000
24 COTTON TEXTILES	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	00.000000	0.000000
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000272	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28 OTHER TEXTILES	0.000304	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29 WOOD & WOOD PRODUCTS	0.000000	0.000013	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	00.000000	0.000000
30 PAPER & PAPER PRODUCTS	0.000022	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000303	0.000000
31 LEATHER & LEATHER PRODUCTS	0.995346	0.018364	0.002404	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.002048	0.968534	0.001333	0.000000	0.000000	0.000000	0.000000	0.000422	0.000024	0.000000
33 PLASTIC PRODUCTS	0.000048	0.001711	0.958359	0.000707	0.000000	0.000000	0.000000	0.047564	0.000618	0.000000
34 PETROLEUM PRODUCTS	0.000000	0.000000	0.000027	0.990085	0.000000	0.000000	0.000000	0.000000	0.004132	0.000000
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.008793	0.999820	0.000000	0.000000	0.000361	0.004370	0.000000
36 FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.994023	0.010156	0.004566	0.003463	0.000000
37 PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000714	0.919606	0.000000	0.000830	0.000000
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.032778	0.000056	0.000000	0.000000	0.008272	0.915675	0.014753	0.000000
39 OTHER CHEMICALS	0.000000	0.000000	0.000000	0.000325	0.000179	0.004873	0.061966	0.027197	0.933657	0.000000
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.993132

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES 31	32	33	34	35	36	37	38	39	40
1 PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000147	0.000000
2 WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000510	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000426	0.000000
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.018381	0.000000
23 OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000877	0.013338	0.000000
24 COTTON TEXTILES	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	00.000000	0.000000
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000272	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28 OTHER TEXTILES	0.000304	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29 WOOD & WOOD PRODUCTS	0.000000	0.000013	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	00.000000	0.000000
30 PAPER & PAPER PRODUCTS	0.000022	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000303	0.000000
31 LEATHER & LEATHER PRODUCTS	0.995346	0.018364	0.002404	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.002048	0.968534	0.001333	0.000000	0.000000	0.000000	0.000000	0.000422	0.000024	0.000000
33 PLASTIC PRODUCTS	0.000048	0.001711	0.958359	0.000027	0.000000	0.000000	0.000000	0.047564	0.000618	0.000000
34 PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.990085	0.000000	0.000000	0.000000	0.000000	0.004132	0.000000
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.008793	0.999820	0.000000	0.000000	0.000361	0.004370	0.000000
36 FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.994023	0.010156	0.004566	0.003463	0.000000
37 PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000714	0.919606	0.000000	0.000830	0.000000
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.032778	0.000056	0.000000	0.000000	0.008272	0.915675	0.014753	0.000000
39 OTHER CHEMICALS	0.000000	0.000000	0.000000	0.000325	0.000179	0.004873	0.061966	0.027197	0.933657	0.000000
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.993132

ANNEXURE 1.19
OUTPUT COEFFICIENTS

COMMODITY BY INDUSTRY TABLE

					INDUSTRIES					
SN COMMODITY SECTOR	41	42	43	44	45	46	47	48	49	50
1 PADDY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2 WHEAT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3 OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23 OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24 COTTON TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25 WOOLLEN TEXTILES	0.000000	00.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 JUTE,HEMP,MESTA TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28 OTHER TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29 WOOD & WOOD PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30 PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000011	0.000000	0.000000	0.000000	0.000000
31 LEATHER & LEATHER PRODUCTS	0.000000	0.000019	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 RUBBER PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33 PLASTIC PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000006	0.000000	0.000000
34 PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36 FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37 PESTICIDES	0.000213	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39 OTHER CHEMICALS	0.000932	0.000000	0.000836	0.000000	0.000000	0.000000	0.000083	0.000000	0.000000	0.000000
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

ANNEXURE 1.19

OUTPUT COEFFICIENTS

COMMODITY BY INDUSTRY TABLE

SN COMMODITY SECTOR	INDUSTRIES									
	41	42	43	44	45	46	47	48	49	50
41 OTH.NON MET.MINERAL PRODS.	0.997373	0.000067	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42 IRON & STEEL	0.000000	0.974283	0.053010	0.000016	0.000000	0.000005	0.000000	0.000000	0.000002	0.000000
43 NON FERROUS METALS	0.000000	0.000026	0.927240	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 TRACTORS & OTH.AGRI.MACH.	0.000000	0.000000	0.000000	0.929290	0.000000	0.000971	0.000000	0.000000	0.000000	0.000000
45 MACHINE TOOLS	0.000000	0.000000	0.000000	0.000365	0.886493	0.021825	0.000024	0.000000	0.000000	0.000000
46 OTH.NON ELECTRICAL MACH.	0.000511	0.003887	0.000490	0.015574	0.112834	0.948813	0.004789	0.012945	0.000053	0.000000
47 ELECTRICAL MACHINERY	0.000000	0.000010	0.005452	0.000000	0.000000	0.002783	0.976435	0.022506	0.012143	0.000000
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.004381	0.841899	0.058296	0.000000
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000000	0.000000	0.000000	0.002165	0.003660	0.087754	0.928566	0.000000
50 RAIL EQUIPMENT	0.000000	0.000409	0.000000	0.000000	0.000000	0.001772	0.000014	0.000000	0.000000	0.505090
51 MOTOR VEHICLES	0.000000	0.000806	0.000000	0.003123	00.000000	0.018470	0.007559	0.000000	0.000183	0.000000
52 OTHER TRANSPORT EQUIPMENT	0.000000	0.002069	0.000249	0.000265	0.000000	0.000801	0.001173	0.000000	0.000000	0.001827
53 OTHER MANUFACTURING	0.000970	0.018421	0.012720	0.051347	0.000673	0.002383	0.001874	0.034896	0.000756	0.000000
54 CONSTRUCTION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.493083
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
61 TOTAL	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Contd....

OUTPUT COEFFICIENTS

COMMODITY BY INDUSTRY TABLE

					INDUSTRIES					
SN COMMODITY SECTOR	51	52	53	54	55	56	57	58	59	60
1 PADDY	0.000000	0.000000	0.000000	0.000000	0.000005	0.000000	0.000000	0.000000	0.000373	0.000707
2 WHEAT	0.000000	0.000000	0.000081	0.000000	0.000032	0.000000	0.000000	0.000000	0.000029	0.002440
3 OTHER CEREALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 PULSES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000213	0.000025
5 SUGARCANE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 JUTE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7 COTTON	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8 TEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9 COFFEE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10 RUBBER	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 OTHER CROPS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000070	0.000228
12 ANIMAL HUSBANDRY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 FORESTRY & LOGGING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 FISHING	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 COAL & LIGNITE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 CRUDE PETROLEUM & N.GAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17 IRON ORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 OTHER METALLIC MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19 NON MET.& MINOR MINERALS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20 SUGAR	0.000000	0.000000	0.000000	0.000000	0.000123	0.000000	0.000000	0.000000	0.000104	0.000817
21 KHANDSARI BOORA	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000006	0.000042
22 HYDROGENATED OIL	0.000000	0.000000	0.000000	0.000000	0.000007	0.000000	0.000000	0.000000	0.000180	0.000135
23 OTHER FOOD & BEVERAGE	0.000000	0.000000	0.000134	0.000000	0.000162	0.000000	0.000000	0.000000	0.002109	0.005588
24 COTTON TEXTILES	0.000000	0.000000	00.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000791	0.013292
25 WOOLLEN TEXTILES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000209	0.000364
26 ART SILK & SYNTHETIC FIBRE	0.000000	0.000000	0.000026	0.000000	0.000001	0.000000	0.000000	0.000000	0.000489	0.001430
27 JUTE,HEMP,MESTA TEXTILES	0.000000	0.000050	0.000000	0.000000	0.000176	0.000000	0.000000	0.000000	0.000076	0.000227
28 OTHER TEXTILES	0.000000	0.000000	0.000085	0.000000	0.000000	0.000000	0.000000	0.000000	0.000506	0.037031
29 WOOD & WOOD PRODUCTS	0.000000	0.000025	0.000705	0.000000	0.000711	0.000000	0.000000	0.000000	0.000278	0.002834
30 PAPER & PAPER PRODUCTS	0.000000	0.000000	0.000548	0.000000	0.000155	0.000000	0.000000	0.000000	0.000249	0.001920
31 LEATHER & LEATHER PRODUCTS	0.000000	0.000310	0.000284	0.000000	00.000000	0.000000	0.000000	0.000000	0.000286	0.001150
32 RUBBER PRODUCTS	0.000000	0.000005	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000246	0.001156
33 PLASTIC PRODUCTS	0.000000	0.000000	0.000317	0.000000	0.000001	0.000000	0.000000	0.000000	0.000082	0.000192
34 PETROLEUM PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.016709	0.000000	0.000000	0.000000	0.000120	0.000461
35 COAL TAR PRODUCTS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000181	0.000045
36 FERTILIZERS	0.000000	0.000000	0.000000	0.000000	0.000023	0.000000	0.000000	0.000000	0.000554	0.000477
37 PESTICIDES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000100	0.000052
38 SYNTHETIC FIBRE & RESIN	0.000000	0.000000	0.000000	0.000000	0.000130	0.000000	0.000000	0.000000	0.000097	0.000266
39 OTHER CHEMICALS	0.000000	0.000000	0.002899	0.000000	0.000221	0.000000	0.000000	0.000000	0.002095	0.002056
40 CEMENT	0.000000	0.000000	0.000000	0.000000	0.000006	0.000000	0.000000	0.000000	0.000000	0.000235

COMMODITY BY INDUSTRY TABLE

					I N D U S T R I E S					
SN COMMODITY SECTOR	51	52	53	54	55	56	57	58	59	60
41 OTH.NON MET.MINERAL PRODS.	0.000000	0.000000	0.000920	0.000000	0.001652	0.000000	0.000000	0.000000	0.000322	0.001232
42 IRON & STEEL	0.000000	0.000000	0.060745	0.000000	0.002520	0.000000	0.000000	0.000000	0.001654	0.001212
43 NON FERROUS METALS	0.000358	0.000000	0.001248	0.000000	0.000001	0.000000	0.000000	0.000000	0.000103	0.000309
44 TRACTORS & OTH.AGRI.MACH.	0.000007	0.000579	0.004907	0.000000	00.000000	0.000000	0.000000	0.000000	0.000205	0.000572
45 MACHINE TOOLS	0.000000	0.000000	0.016742	0.000000	0.000000	0.000000	0.000000	0.000000	0.000157	0.000414
46 OTH.NON ELECTRICAL MACH.	0.000146	0.000238	0.011539	0.000000	0.000097	0.000000	0.000000	0.000000	0.001953	0.001866
47 ELECTRICAL MACHINERY	0.000000	0.000000	0.001198	0.000000	0.000066	0.000000	0.000000	0.000000	0.001746	0.002915
48 COMMUNICATIONS EQUIPMENT	0.000000	0.000000	0.000385	0.000000	0.000000	0.000000	0.000000	0.000000	0.000171	0.000106
49 ELECTRONIC EQUIPMENT	0.000000	0.000000	0.000240	0.000000	0.000000	0.000000	0.000000	0.000000	0.000354	0.000184
50 RAIL EQUIPMENT	0.000000	0.000000	0.000005	0.000000	0.000002	0.000000	0.000000	0.000000	0.000379	0.000045
51 MOTOR VEHICLES	0.977570	0.007762	0.005612	0.000000	0.000007	0.000000	0.000000	0.000000	0.000540	0.000034
52 OTHER TRANSPORT EQUIPMENT	0.021291	0.990175	0.001206	0.000000	0.000000	0.000000	0.000000	0.000000	0.002609	0.004369
53 OTHER MANUFACTURING	0.000628	0.000861	0.890172	0.000000	0.000001	0.000000	0.000000	0.000000	0.000954	0.007899
54 CONSTRUCTION	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55 ELECTRICITY ETC.	0.000000	0.000000	0.000000	0.000000	0.977188	0.000000	0.000000	0.000000	0.000000	0.000000
56 RAIL TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.999999	0.000000	0.000000	0.000000	0.000000
57 OTHER TRANSPORT SERVICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.999999	0.000000	0.000000	0.000000
58 COMMUNICATION	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.999999	0.000000	0.000000
59 TRADE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.979460	0.000000
60 OTHER SERVICES	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.905653
61 TOTAL	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Capital Coefficient Matrix 1991-92

S.no	Sector	Construction	Machinery Equipment	Changes in Stocks
1	Agriculture	0.5879	0.3717	0.0404
2	Forestry & logging	0.9118	0.0704	0.0178
3	Fishing	0.0026	0.9974	0.0000
4	Mining and quarrying	0.4076	0.5206	0.0718
5	Manufacturing	0.2346	0.6114	0.1540
6	Construction	0.1374	0.7243	0.1383
7	Electricity	0.4410	0.5183	0.0407
8	Rail Transport	0.4868	0.5022	0.0110
9	Other Transport	0.1110	0.8528	0.0362
10	Communications	0.4844	0.4965	0.0191
11	Services	0.6473	0.1964	0.1563

Annexure:1.21
Trade, Railway, and Other Transport Margins

S.NO.	SECTOR	TRADE MR.	RLY.MR.	OTH.TP.MR.
1.	PADDY	0.0956	0.0036	0.0016
2.	WHEAT	0.0885	0.0098	0.0022
3.	OTHER CEREALS	0.0679	0.0016	0.0027
4.	PULSES	0.0642	0.0054	0.0011
5.	SUGARCANE	0.1537	0.0037	0.0100
6.	JUTE	0.2335	0.0007	0.0486
7.	COTTON	0.1944	0.0007	0.0750
8.	TEA	0.1323	0.0000	0.0253
9.	COFFEE	0.0561	0.0000	0.0104
10.	RUBBER	0.4021	0.0041	0.0047
11.	OTHER CROPS	0.0794	0.0028	0.0058
12.	ANIMAL HUSBANDRY	0.1187	0.0008	0.0030
13.	FORESTRY & LOGGING	0.2088	0.0252	0.0023
14.	FISHING	0.1864	0.0000	0.0053
15.	COAL & LIGNITE	0.2765	0.1735	0.0208
16.	CRUDE PETRODEUM & N. G	0.0796	0.0000	0.0507
17.	IRON ORE	0.3087	0.2859	0.0300
18.	OTHER METALLIC MINERAL	0.2600	0.0376	0.0052
19.	NON MET. & MINOR MINER	0.5493	0.0564	0.1063
20.	SUGAR	0.1213	0.0087	0.0510
21.	KHANDSARI BOORA	0.0566	0.0066	0.0011
22.	HYDROGENATED OIL	0.1358	0.0011	0.0066
23.	OTH. FOOD & BEVERAGE I	0.1214	0.0047	0.0090
24.	COTTON TEXTILES	0.1160	0.0012	0.0035
25.	WOLLEN TEXTILE	0.1073	0.0004	0.0063
26.	ART SILK & SYNTH. FIBR	0.0606	0.0002	0.0046
27.	JUTE. HEMP. MESTA TEXT	0.0944	0.0169	0.0059
28.	OTHER TEXTILES	0.1049	0.0005	0.0048
29.	WOOD & WOOD PRODUCTS	0.1610	0.0000	0.0203
30.	PAPER & PAPER PRODUCTS	0.1410	0.0064	0.0073
31.	LEATHER & LEATHER PROD	0.1142	0.0006	0.0029
32.	RUBBER PRODUCTS	0.1159	0.0023	0.0025
33.	PLASTIC PRODUCTS	0.2094	0.0000	0.0056
34.	PETROLEUM PRODUCTS	0.2015	0.0300	0.0073
35.	COAL TAR PRODUCTS	0.2856	0.0119	0.0268
36.	FERTILIZERS	0.2050	0.0621	0.0206

Contd.

Trade, Railway and Other Transport Margins

S.NO.	SECTOR	TRADE MR.	RLY.MR.	OTH.TP.MR.
37.	PESTICIDES	0.0681	0.0000	0.0132
38.	SYNTH.FIBRE & RESIN	0.1127	0.0000	0.0055
39.	OTHER CHEMICAL	0.1737	0.0018	0.0096
40.	CEMENT	0.2047	0.1074	0.0227
41.	OTHER.NON.MET.MINERAL	0.1349	0.0017	0.0145
42.	IRON & STEEL	0.1019	0.0295	0.0080
43.	NON FERROUS METALS	0.0826	0.0032	0.0048
44.	TRACTORS & OTH. AGRI.M	0.0981	0.0020	0.0044
45.	MACHINE TOOLS	0.0900	0.0080	0.0025
46.	OTH. NON. ELECTRICAL M	0.0760	0.0093	0.0028
47.	ELECTRICAL MACH.	0.1368	0.0027	0.0018
48.	COMMUNICATIONS EQUIP.	0.1542	0.0000	0.0019
49.	ELECTRONIC EQUIP.	0.1740	0.0000	0.0089
50.	RAIL EQUIPMENT	0.0071	0.0000	0.0000
51.	MOTOR VEHICLES	0.0895	0.0000	0.0022
52.	OTH. TRANSPORT EQUIP.	0.0655	0.0043	0.0053
53.	OTH. MANUFACTURING	0.1412	0.0125	0.0000
54.	CONSTRUCTION	0.0000	0.0000	0.0012
55.	ELECTRICITY ETC.	0.0021	0.0000	0.0003
56.	RAIL TRANSPORT SERVICE	0.0000	0.0000	0.0000
57.	OTH. TRANSPORT SERVICE	0.0000	0.0000	0.0000
58.	COMMUNICATION	0.0000	0.0000	0.0000
59.	TRADE	0.0000	0.0000	0.0000
60.	OTHER SERVICES	0.0000	0.0000	0.0000

Investment by Destination, 1996-97

SN	Sector	Change in Stocks	Gross Fixed Investment	Total
1	Agriculture	23935.4	11232.3	35167.7
2	Forestry & logging	-18.7	0.0	-18.7
3	Fishing	0.0	0.0	0.0
4	Mining and quarrying	3660.9	0.0	3660.9
5	Manufacturing	139750.6	736872.5	876623.1
6	Construction	0.0	747032.8	747032.8
7	Electricity	0.0	0.0	0.0
8	Rail Transport	0.0	1911.3	1911.3
9	Other Transport	0.0	7341.7	7341.7
10	Communications	0.0	0.0	0.0
11	Services	0.0	49811.3	49811.3
	Total	167328.2	1554201.9	1721530.1

Parameters of Investment Function

		ICOR	LAG	AUTO
1	AGRICULTURE	0.7953	5	72819
2	FORESTRY AND LOGGING	0.0376	6	5600
3	FISHING	1.2134	1	2117
4	MINING AND QUARRYING	1.9228	3	6270
5	MANUFACTURING	0.7259	4	21059
6	CONSTRUCTION	1.0230	2	7554
7	ELECTRICITY	1.7318	6	35372
8	RAILWAYS	2.2131	6	18589
9	OTHER TRANSPORT SERVICES	0.5177	6	10625
10	COMMUNICATION	2.8813	3	6247
11	OTHER SERVICES	0.7861	3	11440

Legend : 1. ICOR = Incremental Capital Output Ratio.
2. AUTO = Autonomous Investment.

Annexure:1.24
Sector Classification of Input-Output Table

S.NO.	SECTOR I/O	CSO CLASSIFICATION
1.	PADDY	1 PADDY
2.	WHEAT	2 WHEAT
3.	OTHER CEREALS	3 JOWAR 4. BAJRA 5. MAIZE
4.	PULSES	6 GRAM 7. PULSES
·5.	SUGARCANE	8 SUGARCANE
6.	JUTE	10 JUTE
7.	COTTON	11 COTTON
8.	TEA	12 TEA
9.	COFFEE	13 COFFEE
10.	RUBBER	14 RUBBER
11.	OTHER CROPS	9 GROUNDNUT 15. COCONUT 16. TOBACCO 17 OTHER CROPS
12.	ANIMAL HUSBANDRY	18 MILK & POWDER 19. ANIMAL SERVICES 20 OTHER LIVE STOCK SERVICES
13.	FORESTRY & LOGGING	21 FORESTRY & LOGGING
14.	FISHING	22 FISHING
15.	COAL & LIGNITE	23 COAL & LIGNITE
16.	CRUDE PETROLEUM NATURAL GAS	24 CRUDE PETROLEUM & NATURAL GAS
17.	IRON ORE	25 IRON ORE
18.	OTHER METALLIC MINERALS	26 MANGANESE ORE 27. BAUXITE 28 COPPER ORE 29. OTHER NON-METALLIC MINERALS
19.	NON METETALLIC MINOR MINERALS	30 LIME STONE 31 MICA 32 OTHER NON-METALLIC MINERALS
20.	SUGAR	33 SUGAR
21.	KHANDSARI BOORA	34 KHANDSARI BOORA
22.	HYDROGENATED OIL	35 HYDROGENATED OIL
23.	OTHER FOOD & BEVERAGE INDUSTRIES	36 EDIBLE OIL OTHER THAN VANASPATI 37 TEA AND COFFEE PROCESSING 38 MISC. FOOD PRODUCTS 39 BEVERAGES 40 TOBACCO PRODS.
24.	COTTON TEXTILES	41 KHADI TEXTILES 42 COTTON TEXTILES
25.	WOOLEN TEXTILES	43 WOOLEN TEXTILES
26.	ART SILK & SYNTHETIC FIBRES	44 SILK TEXTILES 45 ART SILK, SYNTHETIC FIBRES
27.	JUTE HEMP MESTA TEXTILES	46 JUTE, HEMP MESTA TEXTILES
28.	OTHER TEXTILES	47 CARPET WEAVING 48 READYMADE GARMENTS 49 MISCELLANEOUS TEXTILES PRODUCTS
29.	WOOD & WOOD PRODUCTS	50 FURNITURE & FIXTURES 51 WOOD AND WOOD BOARDS

Contd.

S.NO.	SECTOR I/O	CSO CLASSIFICATION	
30.	PAPER & PAPER PRODUCTS	52	PAPER & ITS PRODUCTS
		53	PRINTING, PUBLISHING & ALLIED ACTIVITIES
31.	LEATHER & LEATHER PRODUCTS	54	LEATHER FOOTWEAR
		55	LEATHER & LEATHER PRODUCTS EXCEPT FOOTWEAR
32.	RUBBER PRODUCTS	56	RUBBER PRODUCTS
33.	PLASTIC PRODUCTS	57	PLASTIC PRODUCTS
34.	PETROLEUM PRODUCTS	58	PETROLEUM PRODUCTS
35.	COAL TAR PRODUCTS	59	COAL TAR PRODUCTS
36.	FERTILIZERS	62	FERTILIZER
37.	PESTICIDES	63	PESTICIDES
38.	SYNTHETIC FIBRES & RESIN	67	SYNTHETIC FIBRE & RESIN
39.	OTHER CHEMICALS	60	INORGANIC HEAVY CHEMICALS
		61	ORGANIC HEAVY CHEMICALS
		64	PAINTS VARNISHES & LACQUER
		65	DRUGS & MEDICINES
		66	SOAPS & COSMETICS
		68	OTHER CHEMICALS
40.	CEMENT	70	CEMENT
41.	OTHER NON METALLIC MINERAL	69	STRUCTURAL CLAY PRODUCTS OTHER NON METALLIC MINERALS
42.	IRON & STEEL	72	IRON & STEEL FERRO ALLOYS
		73	IRON & STEEL CASTING ALLOYS
		74	IRON & STEEL FOUNDRIES
43.	NON FERROUS METALS	75	NON-FERROUS BASIC METALS
44.	TRACTORS & OTHER AGRICULTURAL MACHINARY	78	TRACTORS & OTHER AGRICULTURAL MACHINARY
45.	MACHINE TOOLS	81	MACHINE TOOLS
46.	OTHER NON ELECTRICAL MACHINARY	79	INDUSTRIAL MACHINARY- FOOD
		80	INDUSTRIAL MACHINARY- EXCLUDING.
		82	OFFICE COMP & ACE. EQUIPMENT
		83	OTHER NON-ELECTRICAL MACHINARY
47.	ELECTRICAL MACHINARY	84	ELECTRICAL INDUSTRIAL MACHINARY
		85	ELECTRICAL CABLES WIRE
		86	BATTERIES
		87	ELECTRICAL APPLIANCES
		89	OTHER ELECTRICAL APPLIANCES
48.	COMMUNICATIONS EQUIPMENT	88	COMMUNICATION EQUIPMENT
49.	ELECTRONIC EQUIPMENT	90	ELECTRONIC EQUIPMENT
50.	RAIL EQUIPMENT	92	RAIL EQUIPMENT
51.	MOTOR VEHICLES	93	MOTOR VEHICLES
52.	OTHER TRANSPORT EQUIPMENT	91	SHIPS & BOARDS
		94	MOTORCYCLE & SCOOTER
		95	BICYCLES
		96	OTHER TRANSPORT EQUIPMENT
53.	OTHER MANUFACTURING	76	HAND TOOLS
		77	MISCELLANEOUS METAL PRODUCTS
		97	WATCHES & CLOCKS
		98	MISCELLANEOUS MANUFACTURING

Contd.

Sector Classification of Input-Output Table

S.NO.	SECTOR I/O	CSO CLASSIFICATION
54.	CONSTRUCTION	99 CONSTRUCTION
55.	ELECTRICITY GAS WATER SUPPLY	100 ELECTRICITY
		101 GAS
		102 WATER SUPPLY
56.	RAIL TRANSPORT SERVICE	103 RAIL TRANSPORT SERVICES
57.	OTHER TRANSPORT SERVICE	104 OTHER TRANSPORT SERVICES
58.	COMMUNICATION	106 COMMUNICATION
59.	TRADE	107 TRADE
60.	OTHER SERVICES	105 STORAGE
		108 HOTELS RESTAURANTS
		109 BANKING
		110 INSURANCE
		111 OWN DWELLING
		112 EDUCATION & RESEARCH
		113 MEDICAL & HEALTH
		114 OTHER SERVICES
		115 PUBLIC ADMINISTRATION

SN COMMODITY	60 SECTORS
1. AGRICULTURE	1 TO 12
2. FORESTRY AND LOGGING	13
3. FISHING	14
4 MINING AND QUARRYING	15 TO 19
5. MANUFACTURING	20 TO 53
6. CONSTRUCTION	54
7. ELECTRICITY	55
8. RAIL TPT	56
9. OTHER TPT	57
10. COMMUNICATIONS	58
11. OTHER SEVICES	59,60

Annexure-3.1

Macroeconomic Identities in the Framework of National Accounts

1.	GNPMP	=	GDPMP	+ NFI			
2.	GNDI	=	GNPMP	+ OCT			
3.	GIG	=	GIEP	+ GRE			
4.	GCT	=	SUB	+ IPD	+ CTRE	+ CTRW	
5.	GDI	=	GIG	− GCT			
6.	GNS	=	GDI	− GCE			
7.	GS	=	GNS	+ DEPG			
8.	SPB	=	GS	+ SRC	+ SPE		
9.	PDI	=	GNDI	− GDI	− SRC	− SPE	
10.	HDI	=	PDI	− SPC			
11.	HS	=	HDI	− PCE			
12.	GNDI	=	GDI	+ HDI	+ SPC	+ SRC	+ SPE
13.	GDS	=	SPB	+ SPC	+ HS		

Symbols

1.	GNPMP	:	Gross National Product at market prices
2.	GDPMP	:	Gross Domestic Product at market prices
3.	NFI	:	Net factor income from abroad
4.	OCT	:	Other current transfers from abroad
5.	GNDI	:	Gross National Disposable Income
6.	GIEP	:	Income accruing to Government from entrepreneurship and property
7.	GRE	:	Tax and miscellaneous receipts of Government
8.	GIG	:	Gross Income of the Government
9.	GCT	:	Government current transfers to rest of the economy and the world
10.	SUB	:	Subsidies
11.	IPD	:	Interest on public debt
12.	CTRE	:	Current transfers to rest of the economy
13.	CTRW	:	Current transfers to rest of the world
14.	GDI	:	Government Disposable income
15.	GCE	:	Government Consumption expenditure
16.	GNS	:	Government net savings
17.	DEPG	:	Notional depreciation of the Government Sector
18.	GS	:	Government gross savings
19.	SRC	:	Savings of railways and communications
20.	SPE	:	Savings of non-departmental public enterprises
21.	SPB	:	Savings of public sector
22.	PDI	:	Private Disposable Income
23.	SPC	:	Savings of private corporate sector
24.	HDI	:	Household (personal) disposable income
25.	PCE	:	Private final consumption expenditure
26.	HS	:	Savings of household sector
27.	GDS	:	Gross Domestic Savings

Annexure-3.2

Regression Equations - Linear

S.No.	Dependent Variable	Intercept	Independent Variable						$\bar{R}^2$	DW
			GDPMP	WPI	WPR	HDI	GDPAGC	GDPAG		
0	1	2	3	4	5	6	7	8	9	10
1.	GDS	-5755.856 (-1.810)	0.22516 (19.978)	-	-	-	-	-	0.98	1.038
2.	GDS	51800.211 (1.899)	0.219788 (22.357)	-52970.1 (2.069)	-	-	-	-	0.98	1.508
3.	HHS	-11177.371 (-3.433)	-	-	-	0.246435 (17.116)	-	-	0.97	1.010
4.	PA	-5055.220 (-1.568)	-	-	-	0.123485 (8.659)	-	-	0.89	1.427
5.	HDI	5570.359 (4.172)	0.782786 (165.397)	-	-	-	-	-	0.99	1.763
6.	HFS	-6122.813 (-3.474)	-	-	-	0.12295 (15.779)	-	-	0.96	2.669
7.	HC	-1303.263 (-1.744)	0.01714 (6.449)	-	-	-	-	-	0.82	2.382
8.	HC	6246.984 (0.395)	0.04582 (1.705)	-110.55 (1.072)	-	-	-	-	0.82	2.826
9.	MSD	-12372.520 (-2.669)	-	-	-	0.020401 (5.926)	267.257 (2.123)	-	0.88	2.521
10.	LIF	3451.837 (3.056)	-	-64.1659 (8.762)	-	0.034103 (13.986)	-	-	0.99	2.524
11.	PF	-1659.312 (-4.966)	-	-	-	0.029907 (20.256)	-	-	0.98	1.151
12.	PF	3784.6 (0.710)	-	-81.8031 (2.368)	-	0.057002 (4.956)	-	-	0.99	2.465
13.	NCG	1401.054 (-3.271)	-	-	-	0.019898 (10.826)	-	-	0.93	1.991
14.	PES	-5034.758 (-20.553)	0.052979 (60.918)	-	-	-	-	-	0.99	2.232
15.	PCS	-17180.695 (-2.585)	0.034719 (9.418)	-	-	-	-	372.8399 (2.008)	0.94	1.680
16.	PCS	-7527.054 (-.526)	0.0725 (3.720)	-142.039 (1.723)	-	-	357.5475 (1.832)	-	0.97	2.340
17.	DD	-5343.354 (-4.554)	0.09575 (33.030)	-	-	-	-	-	0.98	1.359
18.	DD	-6031.596 (-5.166)	-	-	-	0.122355 (23.698)	-	-	0.98	1.416
19.	DD	19298.613 (1.162)	0.189293 (6.797)	-360.566 (3.330)	-	-	-	-	0.99	2.169
20.	DD	15952.772 (1.001)	-	-330.412 (3.198)	-	0.231796 (6.737)	-	-	0.99	2.060
21.	DD	-36899.133 (-3.420)	0.109899 (17.510)	-	-	-	-	765.125 (2.610)	0.99	1.962
21.	TD	-24866.5 (-11.991)	5.388112 (51.095)	-	-	-	-	-	0.99	0.787
22.	TD	-27591.959 (-11.926)	-	-	-	0.495651 (48.452)	-	-	0.99	0.941
23.	TD	15430.77 (0.443)	0.54108 (9.143)	-589.635 (2.597)	-	-	-	-	0.99	1.185

LEGEND

No.		
1.	GDS	Gross Domestic Saving
2.	HHS	Household Saving
3.	PA	Physical Assests
4.	HDI	Household Disposable Income
5.	HFS	Household Financial Savings
6.	HC	Savings in Currency
7.	HSD	Savings in Shares and Debentures
8.	LIF	Life Insurance Fund
9.	PF	Provident Fund
10.	NCG	Net Claims on Government
11.	PES	Savings of Public Enterprises
12.	PCS	Savings of Private Corporate Sector
13.	DD	Demand Deposits
14.	TD	Time Deposits
15.	GDPMP	Gross Domestic Product at Market Prices
16.	WPI	Wholesale Price Index
17.	WPR	Wholesale price ratio of primary to manufacturing items
18.	GDPAGC	Share of Agriculture and allied in GDP at constant prices
19.	GDPAG	Share of Agriculture and allied in GDP at current prices

N.B.:1. The regression are estimated using the time series data for the period 1980-81 to 1989-90.
2. Figures in parenthesis contain t-values.

Regression Equations - Log Linear

S.No.	Dependent Variable	Intercept	Independent Variable						$\bar{R}^2$	DW
			LGDPMP	LWPI	LWPR	LHDI	GDPAGC	GDPAG		
0	1	2	3	4	5	6	7	8	9	10
1.	LGDS	-2.084	1.0387 (18.904)	-	-	-	-	-	0.98	0.964
2.	LGDS	-1.847	1.024654 (23.167)	-	-1.0819 (2.361)	-	-	-	0.98	1.661
3.	LHHS	-3.9987	-	-	-	1.190442 (15.694)	-	-	0.96	1.025
4.	LPA	-3.6074	-	-	-	1.103822 (6.410)	-	-	0.82	1.295
5.	LHDI	0.177332	0.968455 (119.152)	-	-	-	-	-	0.99	1.444
6.	LHFS	-6.1365	-	-	-	1.30536 (19.727)	-	-	0.98	2.855
7.	LHSD	-15.5544	-	-	-	1.862544 (6.973)	-	-	0.84	2.617
8.	LHSD	-16.953	-	-	-	1.896581 (5.230)	-	6.216964 (1.890)	0.88	1.740
9.	LLIF	-8.871	-	-	-	1.336179 (21.486)	-	-	0.98	0.550
10.	LLIF	-13.715	-	-3.44027 (1.258)	-	3.11534 (2.201)	-	-	0.98	0.646
11.	LPF	-7.568	-	-	-	1.30369 (22.641)	-	-	0.98	1.429
12.	LPES	-12.6724	1.73786 (18.097)	-	-	-	-	-	0.97	0.643
14.	LPCS	-8.4669	1.3596 (14.322)	-	-	-	-	-	0.96	1.138
15.	LPCS	-18.518	1.599679 (10.445)	-	-	-	1.983235 (1.865)	-	0.97	1.590
16.	LDD	-5.4049	1.22421 (25.564)	-	-	-	-	-	0.99	1.571
17.	LDD	-5.6372	-	-	-	1.26475 (27.462)	-	-	0.99	1.748
18.	LDD	-10.9634	1.35698 (18.518)	-	-	-	1.0968 (2.155)	-	0.99	2.265
19.	LTD	-5.3854	1.33093 (63.627)	-	-	-	-	-	0.99	1.167
20.	LTD	-5.6177	-	-	-	1.37334 (53.625)	-	-	0.99	1.114

N.B.:1. Variable with prefix 'L' are logarithmic values of the variables in Annexure-3.2.
2. the regression are estimated using the time series data for the period 1980-81 to 1989-90.
3. Figures in parenthesis contain t-values.

---

1. $GDS_t = -8816.84 + 0.268124 \ GDPMP_{t-1}$ $\bar{R}^2 = 0.97$
   (15.454)

2. $HHS_t = -15536.96 + 0.300008 \ HDI_{t-1}$ $\bar{R}^2 = 0.97$
   (15.175)

3. $LGDS_t = -1.0827 + 1.082375 \ LGDPMP_{t-1}$ $\bar{R}^2 = 0.96$
   (13.553)

4. $LHHS_t = -2.21398 + 1.29232 \ LHDI_{t-1}$ $\bar{R}^2 = 0.97$
   (14.082)

N.B.:1. The variables used in the regression equations have been defined in Annexure-3.2 & 3.3.
   2. The regression are estimated using the time series data for the period 1980-81 to 1989-90.
   3. Figures in parenthesis contain t-values.

---

1. GCA $= -49.933 + 1.378$ NSA $+ 0.518$ GIA $\bar{R}^2 = 0.93$
                    (5.62)   (11.51)

2. GCA(Fg) $= 58.400 + 0.377$ GCA $\bar{R}^2 = 0.55$
                    (3.49)

3. GIA(Fg) $= 6.4172 + 0.6254$ GIA $\bar{R}^2 = 0.99$
                    (33.99)

4. Yield (Fg) $= 386.400 + 8.758$ FCPU(Fg) $+ 3.628$ RIND $\bar{R}^2 = 0.95$
                    (18.6)   (4.99)

LEGEND :

1. GCA   = Gross Cropped Area under All Crops
2. GIA   = Gross Irrigated area under All Crops
3. GCA(Fg) = Gross Cropped Area under Foodgrains
4. GIA(Fg) = Gross Irrigated area under Foodgrains
5. FCPU(Fg)= Fertiliser Consumption per unit of
               cropped area under foodgrains
6. RIND   = Rainfall Index
7. NSA   = Net Sown Area
8. YIELD(Fg)= Yield per unit of cropped area under foodgrains

N.B.:
    1. NSA in 1996–97 assumed at 141.0 million hectare
    2. GIA in 1996–97 assumed at 89.3 million hectare
    3. Estimates are based on data of 1970's and 1980's.
    4. Figures in the parentheses contain t-values.

Estimation of Gross Cropped Area and Output of Foodgrain Crops

----

I. Estimation of Gross Cropped Area:

1. GCAR = -14.80 + 0.4501 GCA (Fcg) $\overline{R}^2$ =0.61
                  (5.87)

2. GCAP = -9.35   + 0.2596 GCA(Fcg) $\overline{R}^2$ =0.74
                  (7.91)

II. Estimation of Output

1. P RICE = -68.35+2.3374 GCAR+7.11455 FCR+0.1017 RIND $\overline{R}^2$ = 0.97
                  (3.50)   (6.80)   (1.23)

2. P WHEAT = 24.30 + 2.302 GCAW + 7.092 FCW $\overline{R}^2$ = 0.93
                  (2.62)   (6.79)

3. P PULSE = -10.776+0.7112 GCAP+0.037 RIND+26.1517 FCP $\overline{R}^2$ = 0.84
                  (2.19)   (1.12)   (2.27)

4. POC = -49.57 + 1.52 GCAOC + 211.0 FCOC $\overline{R}^2$ = 0.51
                  (2.70)   (2.88)

LEGEND.

1. GCAR   = Gross Cropped Area under Rice
2. GCAW   = Gross Cropped Area under Wheat
3. GCAP   = Gross Cropped Area under Pulses
4. GCAOC   = Gross Cropped Area under Other Cereals
5. P RICE   = Production of Rice
6. P WHEAT = Production of Wheat
7. P PULSE = Prodution of Pulses
8. POC   = Production of Other Cereals
9. GCA(Fg) = Gross Cropped Area under Foodgrains
10. FCR   = Fertiliser Consumption under Rice
11. FCW   = Fertiliser Consumption under Wheat
12. FCP   = Fertiliser Consumption under Pulses
13. FCOC   = Fertiliser Consumption under Other Cereals
14. RIND   = Rainfall Index

N.B.:

1. Estimates are based on data from 1970's and 1980's

2. Figures in parentheses are t-values.

State	Statewise Foodgrain Production Equation

---

1 Andhra   Prod.(IFg)= -6591.66 + 4.2651 F.C. + 1.6202 GCA(fg) $\bar{R}^2$ =0.83
  Pradesh   (5.44)   (4.60)

2 Bihar   Prod.(Fcg)= -8966.76 + 7.2206 F.C. + 1.7251 GCA(fg) $\bar{R}^2$ =0.82
                           (4.81)   (2.61)

3 Gujarat Prod.(FFg)= -4787.89+ 1.9147 F.C.+ 1.8296 GCA(fg) $\bar{R}^2$ =0.32
                          (0.95)   (5.24)

4 Haryana   Prod.((Fg)= -1316.40+10.2123 F.C.+ 1.2244 GCA(fg) $\bar{R}^2$ =0.86
                         (6.33)   (2.39)

5 Kerala   Prod.(FFg)= 290.09   +1.2492 GCA(fg) $\bar{R}^2$ =0.93
                          (11.13)

6 Madhya   Prod.(FFg)= 12036.84 + 4.8007 F.C. $\bar{R}^2$ =0.43
  Pradesh   (2.48)

7 Maharastra Prodl.(Fg)= -76858.28+ 6.2006 GCA(fg) $\bar{R}^2$ =0.55
                              (3.09)

8 Orissa   Prod.(FFg)= -20467.49+ 6.6916 F.C. + 3.8080 GCA(fg) $\bar{R}^2$ =0.91
                            (0.99)   (3.07)

9 Punjab   Prod.(FFg)= 1009.50 +14.5378 F.C. $\bar{R}^2$ =0.91
                           (9.39)

10 Rajasthan Prod..(Fg)= -7203.61+14.8802 F.C.+ 0.9716 GCA(fg) $\bar{R}^2$ =0.68
                           (2.45)   (3.27)

11 Tamil Nadu Proxd.(Fg)= -1515.61+7.4408 F.C.+ 0.8399 GCA(fg) $\bar{R}^2$ =0.70
                           (3.95)   (1.44)

12 Uttar   Prod.(FFg)= 3177.79+10.6774 F.C.+ 0.4153 GCA(fg) $\bar{R}^2$ =0.95
   Pradesh   (11.37)   (0.58)

13 West   Prod.(FFg)= -33743.79+ 7.0280 GCA(fg) $\bar{R}^2$ =0.76
   Bengal   (5.06)

LEGEND:

1. Prod.(FG) = Prroduction of Foodgrains ('000 tonnes)

2. F.C.   = Feertilizer Consumption ('000 tonnes)
3. GCA (Fg) = Grross Croped Area under Foodgrains ('000 hectare)

N.B.:

1. Estimation is based on data of 1980's.

2. Figures in the parentheses contain t-values.

Area, Production and Yield of Rice : Growth Rates

(percent per year, compound)

Sl. No.	State	Area		Production		Yield	
		1971-74 to 1989-92	1981-84 to 1989-92	1971-74 to 1989-92	1981-84 to 1989-92	1971-74 to 1989-92	1981-84 to 1989-92
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Andhra Pradesh	1.46	0.53	3.95	2.31	2.45	1.76
2.	Assam	1.12	1.06	2.29	2.94	1.15	1.86
3.	Bihar	0.08	0.63	1.26	4.45	1.18	3.92
4.	Gujarat	1.49	1.67	4.01	1.89	2.48	0.21
5.	Haryana	4.49	2.95	7.18	4.23	2.57	1.24
6.	Himachal Pradesh	-0.67	-0.84	-0.07	0.96	0.60	1.81
7.	Jammu & Kashmir	1.36	0.78	2.37	0.50	1.00	-0.28
8.	Karnataka	0.55	0.52	1.30	1.57	0.83	1.04
9.	Kerala	-2.43	-5.39	-1.19	-2.66	1.27	2.88
10.	Madhya Pradesh	0.59	0.42	2.36	3.47	1.76	3.05
11.	Maharashtra	0.90	0.41	3.36	-0.21	2.43	-0.61
12.	Orissa	-0.21	0.76	2.32	5.35	2.54	4.55
13.	Punjab	8.23	4.98	10.98	6.11	2.54	1.07
14.	Rajasthan	-0.32	-1.22	0.78	-0.93	1.11	0.29
15.	Tamil Nadu	-1.63	-1.11	0.78	4.24	2.45	5.41
16.	Uttar Pradesh	1.03	0.39	5.53	5.80	4.46	5.39
17.	West Bengal	0.58	0.89	3.37	7.24	2.77	6.30
	All India	0.67	0.69	3.20	4.18	2.51	3.46

Annexure-4.5
Area, Production and Yield of Wheat: Growth Rates

(percent per year, compound)

Sl. No.	State	Area		Production		Yield	
		1971-74 to 1989-92	1981-84 to 1989-92	1971-74 to 1989-92	1981-84 to 1989-92	1971-74 to 1989-92	1981-84 to 1989-92
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Andhra Pradesh	-3.90	-6.95	-1.52	-4.91	2.48	2.09
2.	Assam	1.67	-2.00	0.59	-3.03	-1.06	-1.05
3.	Bihar	0.99	2.20	1.99	4.05	2.24	1.80
4.	Gujarat	0.97	-2.25	2.15	-2.97	1.17	-0.75
5.	Haryana	2.40	1.16	6.18	5.36	3.69	4.18
6.	Himachal Pradesh	0.85	0.33	2.86	4.86	1.99	4.51
7.	Jammu & Kashmir	1.51	1.99	3.11	4.64	1.58	2.60
8.	Karnataka	-2.33	-5.12	-2.43	-7.32	-0.10	-2.32
9.	Madhya Pradesh	0.04	-0.46	3.29	2.81	3.25	3.25
10.	Maharashtra	-0.62	-4.31	3.74	-2.22	4.39	2.19
11.	Orissa	-0.61	-7.56	-1.04	-9.96	-0.44	-2.60
12.	Punjab	1.81	0.91	4.55	3.61	2.70	2.68
13.	Rajasthan	0.75	-1.66	4.59	2.29	3.81	4.02
14.	Tamil Nadu	-13.64	-21.59	-9.47	-12.83	4.82	11.17
15.	Uttar Pradesh	1.95	0.58	5.64	3.07	3.61	2.48
16.	West Bengal	-1.09	-1.61	-1.68	-1.41	-0.60	-2.98
	All India	1.20	0.10	4.44	3.02	3.20	2.92

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Area, Production and 'Yield of Coarse Cereals: Growth Rates

(Percent per year, compound)

S.No.	State	Area		Production		Yield	
		1971-74 to 1989-92	1981-84 to 1989-92	1971-74 to 1989-92	1981-84 to 1989-92	1971-74 to 1989-92	1981-84 to 1989-92
0	1	2	3	4	5	6	7
1.	Andhra Pradesh	-4.13	-6.94	-0.94	-4.57	3.32	2.69
2.	Assam	2.22	0.96	2.93	1.56	0.69	0.60
3.	Bihar	-2.09	-2.42	2.86	4.24	5.05	6.81
4.	Gujarat	-1.97	-2.45	-0.60	-3.20	1.40	-0.77
5.	Haryana	-2.88	-4.07	-2.01	-2.01	0.89	2.13
6.	Himachal Pradesh	0.66	0.49	0.54	3.20	-0.10	2.69
7.	Jammu & Kashmir	0.74	1.83	1.94	3.51	1.19	1.65
8.	Karnataka	0.13	-0.75	1.16	0.16	1.02	0.92
9.	Kerala	-1.79	5.76	-2.29	6.35	-0.51	0.56
10.	Madhya Pradesh	-1.16	-2.08	1.12	-0.38	1.99	1.75
11.	Maharashtra	0.45	-0.50	5.29	1.81	4.82	2.32
12.	Orissa	0.79	-3.16	2.73	-1.48	1.93	1.35
13.	Punjab	-6.74	-7.32	-4.38	-5.73	2.06	1.73
14.	Rajasthan	-0.68	-0.64	1.25	1.03	1.95	1.70
15.	Tamil Nadu	-2.14	-2.96	-0.12	0.37	2.02	3.35
16.	Uttar Pradesh	-1.69	-2.41	0.06	2.06	2.53	3.81
17.	West Bengal	-2.05	-2.07	2.12	3.97	4.26	6.17
	All India	-1.10	-1.75	1.20	0.28	2.32	2.08

Annexure-4.7
Area, Production and Yield of Pulses: Growth Rates

Sl. No.	State	Area		Production		Yield	
		1971-74 to 1989-92	1981-84 to 1989-92	1971-74 to 1989-92	1981-84 to 1989-92	1971-74 to 1989-92	1981-84 to 1989-92
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Andhra Pradesh	0.95	1.28	4.07	3.93	3.09	2.59
2.	Assam	1.23	-0.90	1.62	0.73	0.39	1.67
3.	Bihar	—0.97	0.56	1.47	2.90	2.47	2.33
4.	Gujarat	4.34	2.38	7.43	1.81	2.96	-0.55
5.	Haryana	—3.08	-2.69	-1.30	3.95	1.83	6.83
6.	Himachal Pradesh	—3.01	-1.39	-5.46	1.10	-2.55	2.51
7.	Jammu & Kashmir	-1.20	-2.39	-0.46	-1.57	0.74	0.84
8.	Karnataka	1.47	0.39	1.77	-0.08	0.30	-0.46
9.	Kerala	—2.24	-2.96	2.28	-0.61	4.62	2.40
10.	Madhya Pradesh	0.15	-0.97	0.99	0.68	0.84	1.67
11.	Maharashtra	2.03	1.80	3.87	2.91	1.80	1.10
12.	Orissa	4.57	2.35	5.01	1.39	0.42	-0.95
13.	Punjab	-5.54	-6.39	-5.76	-2.97	-0.23	3.67
14.	Rajasthan	—0.56	-1.91	0.28	-2.90	0.84	-1.01
15.	Tamil Nadu	2.16	4.36	4.06	7.35	1.77	2.25
16.	Uttar Pradesh	—0.97	0.00	0.03	0.61	1.01	0.61
17.	West Bengal	-3.03	-1.73	-2.17	-0.73	0.88	1.01
	All India	0.55	0.12	1.33	1.02	0.97	0.91

Annexuure-4.8
Area, Production and Yield (of Foodgrains: Growth Rates

(percent per year, compound)

Sl. No.	State	Area		Production		Yield	
		1971-74 to 1989-92	19831-84 to 19899-92	1971-74 to 1989-92	1981-84 to 1989-92	1971-74 to 1989-92	1981-84 to 1989-92
(0)	(1)	(2)	((3)	(4)	(5)	(6)	(7)
1.	Andhra Pradesh	0.80	-11.93	2.81	1.01	3.64	3.00
2.	Assam	1.15	11.02	2.25	2.66	1.08	1.62
3.	Bihar	-0.17	0).57	1.67	4.17	1.85	3.57
4.	Gujarat	-0.39	-11.10	1.32	-1.86	1.71	-0.77
5.	Haryana	-0.05	-0).53	4.49	4.34	4.55	4.84
6.	Himachal Pradesh	0.35	0).19	2.12	3.64	1.76	3.44
7.	Jammu & Kashmir	1.01	11.33	2.27	2.26	1.25	0.92
8.	Karnataka	0.55	0).13	1.21	0.46	0.65	0.34
9.	Kerala	-2.42	-55.37	-1.15	-2.58	1.30	2.95
10.	Madhya Pradesh	0.59	-0).76	2.11	1.93	2.12	2.70
11.	Maharashtra	0.76	-0).18	4.55	1.16	3.78	1.34
12.	Orissa	0.88	0).77	2.64	3.92	1.73	3.12
13.	Punjab	1.90	11.35	5.16	3.99	3.19	2.61
14.	Rajasthan	-0.45	-11.15	2.30	0.87	2.76	2.06
15.	Tamil Nadu	-1.18	-0).75	0.72	3.57	1.92	4.36
16.	Uttar Pradesh	0.28	0).03	3.99	3.35	3.70	3.32
17.	West Bengal	0.17	0).96	2.82	6.42	2.64	5.41
	All India	0.15	-0).27	2.93	2.76	2.80	3.04

Annexure-4.9

Contribution of Area and Yield in Foodgrain Production during 1980's

	Growth Rates			Contribution of	
	Area	Prod.	Yield	Area	Yield
Andhra Pradesh	-31.93	1.01	3.00	2.23	97.77
Assam	31.02	2.66	1.62	63.78	36.22
Bihar	(0.57	4.17	3.57	265.29	-165.29
Gujarat	-31.10	-1.86	-0.77	4.12	95.88
Haryana	-(0.53	4.34	4.84	6.81	93.19
Himachal Pradesh	(0.19	3.64	3.44	50.88	49.12
Jammu & Kashmir	31.33	2.26	0.92	30.98	69.02
Karnataka	(0.13	0.46	0.34	47.79	52.21
Kerala	-55.37	-2.58	2.95	395.07	-295.07
Madhya Pradesh	-(0.76	1.93	2.70	24.37	75.63
Maharastra	-(0.18	1.16	1.34	15.66	84.34
Orissa	(0.77	3.92	3.12	58.74	41.26
Punjab	31.35	3.99	2.61	32.36	67.64
Rajasthan	-31.15	0.87	2.06	2.65	97.35
Tamil Nadu	-(0.75	3.57	4.36	25.41	74.59
Uttar Pradesh	00.03	3.35	3.32	8.94	91.06
West Bengal	00.96	6.42	5.41	-1651.85	1751.85
All India	-00.27	2.76	3.04	13.06	86.94

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Electricity and Oil Input Coefficent in Agriculture

1	1980-81	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1996-97
	2	3	4	5	6	7	8	9	10	11
Output of Agriculture (Rs.Crores) At 1980-81 Prices	46278	52421	52208	51175	50555	60446	61318	61426	60349	70301 (a)
Electricity Consumption (Bill.Kwh)	14.49	20.96	23.42	29.44	31.81	38.88	44.06	50.32	53.48	76.00 (b)
Specific Consumption of Electricity Due to Technical Change Alone										
Kwh/Re.Output	0.0313	0.0399	0.0448	0.0575	0.0688	0.0643	0.0719	0.0851	0.0886	0.1081
%Change w.r.t.1991-92	-64.67	-54.97	-49.44	-35.10	-22.35	-27.43	-18.85	-3.95	0.00	22.01
Specific Consumption of Electricity Due to Conservation Measures										
Kwh/Re.Output	0.0313	0.0399	0.0448	0.0575	0.0688	0.0643	0.0719	0.0851	0.0886	0.1038 (c)
%Change w.r.t.1991-92	-64.67	-54.97	-49.44	-35.10	-22.35	-27.43	-18.85	-3.95	0.00	17.16
Diesel Consumption	Specific Consumption of Diesel Due to Technological Change Alone									
Mill.Tonnes of Oil equivalent		3.63					5.23	5.32	5.42	6.42 (d)
Grams of Oil Equivalent per Rupee of agriculture output		6.92					8.53	8.66	8.98	9.13
%Change w.r.t.1991-92		-22.94					-5.01	-3.56	0.00	1.67

Assumption :-

(a) - Estimates as given in Eighth Plan document.

(b) - Based on likely population of electric pumpsets.

(c) - Assuming that 20% saving in power consumption per pumpset is possible. This will be achieved in 20% of pumpset population by 1996-97.

(d) - Based on total population of tractors and diesel pumpsets.
i. Population of diesel pumpsets in 1996-97, 5.5 million Nos.
ii. @750 liters diesel/pump/year.
iii. 1.035 tonnes of diesel = 1 tonne of oil equivalent
iv. Population of tractors in 1996-97, 2.014 Million Nos.
v. @2.5 tonnes diesel/tractor/year.

Electricity, Input Coefficient in Aluminium Industry

Plant	1983-84	1984-85	1988-89	1991-92	1996-97
1	2	3	4	5	6
I. Output (000'T)					
NALCO	0	0	78.48	192.0	200
Other Aluminium Plants	220	276.49	278.01	320.3	456
Total	220	276.49	356.49	512.3	656
II. Norms of Electricity Consumption with Technological Change					
NALCO			15954	15954	15954
Other Aluminium Plants	20023	19834	18503	18503	17097(a)
All Plants Average	20023	19834	17942	17548	16748
% Change w.r.t. 1991-92	14.10	13.03	2.25	0.00	-4.56
III. Norms of Electricity Consumption with Conservation Measures Superimposed on Technological Change Effect					
NALCO			15954	15954	15156
Other Aluminium Plants	20023	19834	18503	18503	16242
All Plants Average	20023	19834	17942	17548	15910(b)
% Change w.r.t. 1991-92	14.10	13.03	2.24	0.00	-9.33

(a) CEA data shows that there has been fall in aggregate norm of electricity consumption in aluminium industry. For aluminium plant other than NALCO, decline in norm between 1983-84 and 1988-89 was 7.59 percent which is carried for 1996-97 also.

(b) NPC study shows energy conservation potential of 8-10% in Indian aluminium plants. For the year 1996-97, 5 reduction in overall norm anticipated.

Electricity Input Coefficient in Steel Industry

1	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1991-92	1996-97 (Proj)
	2	3	4	5	6	7	8	9	10	11	12
Production of Steel (ISP) Mill. Tonnes	6.28	7.26	7.29	6.39	7.00	7.77	8.22	8.59	9.21	10.58	15.94
Production of Steel (MSP) Mill. Tonnes	1.53	1.40	1.88	1.94	1.79	2.21	2.23	2.33	2.34	3.68	7.28
Total (Mill.Tonnes)	7.81	8.66	9.17	8.33	8.79	9.98	10.45	10.92	11.55	14.26	23.22
Share of Supply from ISP (%)	80.41	83.83	79.50	76.71	79.63	77.86	78.66	78.66	79.73	74.19	68.65
Share of Supply from MSP (%)	19.59	16.17	20.50	23.29	20.37	22.14	21.34	21.34	20.27	25.81	31.35
Total Percentage	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Norms of Electricity Consumption with Tehnological Changes											
Specific Consumption of Electricity in ISP Kwh/tonne	678.00	607.00	621.00	727.00	728.00	698.00	664.00	682.00	664.00	650.00	600.00 (a)
Specific Consumption of Electricity in MSP Kwh/tonne	750.00	767.00	785.00	803.00	822.00	859.00	898.00	938.00	980.00	980.00	980.00
Average Specific Consumption of Electricity in all plants Kwh/tonnes	692.00	633.00	655.00	745.00	747.00	734.00	714.00	736.00	728.00	735.00	719.00
% Change w.r.t. 1991-92	-5.85	-13.88	-10.88	1.36	1.63	-0.14	-2.86	0.14	-0.95	0.00	-2.18
Norms of Electricity Consumption with Conservation Measures Superimposed on Technological Changes											
Specific Consumption of Electricity in ISP	678.00	607.00	621.00	727.00	728.00	698.00	664.00	682.00	664.00	650.00	570.00 (b)
Specific Consumption of Electricity in MSP	750.00	767.00	785.00	803.00	822.00	859.00	898.00	938.00	980.00	980.00	980.00
Average Specific Consumption of Electricity in all plants	692.00	633.00	655.00	745.00	747.00	734.00	714.00	736.00	728.00	735.00	698.00
% Change w.r.t. 1991-92	-5.85	-13.88	-10.88	1.36	1.63	-0.14	-2.86	0.14	-0.95	0.00	-5.03

(a) due to shift in process technology from open hearth to LD converter, some fall in specific electricity consumption in ISP anticipated for year 1996-97.

(b) Due to various modernisation & conservation programmes taken up by ISP, 5% decline in norm anticipated.

1	1983-84 Actuals	1991-92 Actuals	1996-97 Proj.
	2	3	4
	Process Shares (%)		
Wet Process	37	20	15
Dry Process	63	80	85
Total	100	100	100
Total Production of Cement (Mill.Tonnes)	26.70	53.00	76.00
Coefficient of Electricity input Kwh/Tonnes due to combined effect of Technological and conservation measures			
Wet Process	114		
Dry Process	155		
Average	140	120	110(a)
%Change w.r.t.1991-92	6.70	0.00	-8.33

(a) Target by NCB
N.B. :   i) There is shift in technology from wet to dry process. It is assumed that by the end of 1996-97, there will be 85% dry capacity.
        ii) Although there is increase in electricity consumption in dry process. Study by NCB shows that the overall norm for cement industry is going down.

Railways:- Combined Effect of Conservvation Measures and Changes in Modal Mix of Traffic on Enerrgy Input Coefficients

Items	1983-84	1988-89	1991-92	1996-97
1	2	3	4	5
I. Traction Shares (%)				
a) Electricity	27.00	34.30	36.00	40.00
b) Diesel	58.90	57.50	57.00	55.00
c) Coal	14.10	8.20	7.00	5.00
Total	100.00	100.00	100.00	100.00
Total Traffic (Billion T Km) (Passenger + Freight)	140.855	223.740		
II. Specific Consumption Norm with Conservation Measures;				
a) Electricity Consumption (Kwh/000 Gross Tonnes Km)	14.02 (13.16)	12.39 (0.00)	12.39 (0.00)	12.34 (-0.40)
b) Diesel (Litres/000 GT Km)	4.09 (1.74)	4.02 (0.00)	4.02 (0.00)	3.93 (-2.24)
c) Coal (Kgs./000 AT Km)	84.63 (10.18)	76.81 (0.00)	76.81 (0.00)	76.20 (-0.79)
III. Specific Energy Consumpticn Coefficient *				
a) Electricity	3.785 (-115.14)	4.2498 (-4.72)	4.4604 (0.00)	4.936 (10.66)
b) Diesel	2.409 (5.13)	2.3115 (0.88)	2.2914 (0.00)	2.1615 (-5.67)
c) Coal	11.93 (1221.88)	6.2984 (17.14)	5.3767 (0.00)	3.81 (-29.14)

* Per Thousand Gross Tonne Kilcometres of Rail Traffic
N.B. : The figures in bracketts indicate the % change w.r.t. 1991-92.

Railways: Effect of Changes in Modal Mix of Traffic on Energy Input Coefficients

1	1983-84	1988-89	1989-90 Est.	1994-95 Proj.	1999-2000 Proj.
	2	3	4	5	6
Diesel	58.90	57.50	57.00	55.00	52.00
Electricity	27.00	34.30	36.00	40.00	48.00
Coal	14.10	8.20	7.00	5.00	0.00
Total Traffic	100.00	100.00	100.00	100.00	100.00
Bill.T.Km (P+F)	140.86	223.74		243.81	393.18

Specific Energy Consumption Coefficient For
Traffic by Different Modes

Diesel (Litrs/000 GT Km)	4.09	4.09	4.09	4.09	4.09
Electricity (Kwh/000 GT Km)	14.02	14.02	14.02	14.02	14.02
Coal (Kg/000 GT Km)	84.63	84.63	76.81	76.81	76.81

Specific Energy Consumption Coefficient Per
Thousand Gross Tonne Kilometers of Rail Traffic

Diesel (Litres)	2.4090 (3.3)	2.3517 (0.9)	2.3313 (0.0)	2.2495 (-3.5)	2.1268 (-8.8)
Electricity (Kwh)	3.7854 (-25.0)	4.8089 (-4.7)	5.0472 (0.0)	5.6080 (11.1)	6.7296 (33.3)
Coal (Kg)	11.9326 (101.0)	6.9397 (17.1)	5.3767 (0.0)	3.0724 (42.9)	0.0000

N.B. : Figures in the parentheis indicate percentage change
w.r.t. 1989-90.

Electricity Coefficients in Electricity (Generation Due to Conservation Measures & Technoblogical Changes

	1983-84	1987-88	1989-90	1991-92	1996-97
1	2	3	4	5	6
Total Electricity Generation-Uitility (Million Kwh)	140177	201894	245438	286710	418210
Transmission & Distribution Losses Million Kwh)	27689	41410	53260	61090	82100
Transmission & Distribution Losses as Percentage	21.28	22.23	23.28	23.00	21.00 (a)
Percentage Change in T&D Losses w.r.t. 1991-92	-7.48	-3.35	1.22	0.00	-8.70

Effect of Structural Changess without Conservation Measures

	1983-84	1987-88	1989-90	1991-92	1996-97
T and D Losses as Percentages	21.28	22.23	23.28	23.00	24.50
% Change w.r.t. 1991-92	-7.48	-3.35	1.22	0.00	6.52

Note: Total electricity generation pertains to utility only.

(a) Assumptions:
   i)   Reduction in losses assumed aftter considering increase in rural load density.

   ii) Improvements in low tension linnes.

   iii) Installation of meters.

Annexure-5.8
Share of Agriiculture and Households in Electricity Consumpitiion at Consumer End in Utilities

(Percentage)

Year	Agriculture	Household
1	2	3
1960-61	6.00	10.70
1970-71	10.20	8.80
1980-81	17.59	11.23
1984-85	18.38	13.59
1985-86	19.04	14.08
1986-87	21.60	14.21
1987-88	24.22	15.19
1988-89	24.27	15.46
1989-90	25.12	16.86

Annexure-5.9
Change in Share of Capacities Based on Feed Stock in Fertiliser Industry

(Percentage)

S.No.		1984-85	1991-92
0	1	2	3
1.	Natural Gas	14.20	43.00
2.	Naphtha	48.00	28.60
3.	Fuel Oil	22.60	17.90
4.	Coal	8.80	5.50
5.	Other	6.40	5.00
6.	Total	100.00	100.00

Electricity Input Coefficients in Fertiliser Indusrty

1	1979-80	1983-84	1984-85	1985-86	1989-90	1991-92	1996-97
	2	3	4	5	6	7	8
Production of P₂O₅ (000' Tonnes)	757	1050	1264	1430	1796	2500	3000
Production of Nitrogenous Fertiliser (Nutrients) (000' Tonnes)	2751	3485	3917	4328	6747	7301	9800
Total Production (000' Tonnes)	3508	4535	5181	5758	8543	9801	12800

Coefficient of Electricity Input Due to Technological Changes

1	2	3	4	5	6	7	8
Total input of Electricity (MKwh)	4256	5086	4342	5110	5253	6028	7680
Specific consumption of electricity (Kwh/T)	1213	1121	838	887	615	615	600
% change w.r.t. 1991-92	97.24	82.28	36.26	44.23	0.00	0.00	-2.44

Coefficient of Electricity Input Due to Conservation Measures

1	2	3	4	5	6	7	8
Total input of Electricity (MKwh)	4256	5086	4342	5110	5253	6028	7296
Specific consumption of electricity (Kwh/T)	1213	1121	838	887	615	615	570 (a)
% change w.r.t. 1991-92	97.24	82.28	36.26	44.23	0.00	0.00	-7.32

(a)   NPC & BICP study show that there is energy conservation potential
in this industry, 5% efficiency has been assumed for the year 1996-97.

N.B. :   Electricity input in fertiliser industry has gone down substantially during
the Seventh Plan. This is mainly due to higher share of production from
gas based plants which are energy efficient.

Annexure-5.11

Electricity Input Coefficient in Cotton Textile Industry

S.No.	Item	Units	1983-84	1985-86	1988-89	1991-92	1996-97
0	1	2	3	4	5	6	7
1.	Output of Cotton Textile	Million Metres	11758.00	17213.00	20018.00	21588.00	
2.	Share in total output. (%)						
a)	Cotton		74.34	73.43	68.23	64.84	
b)	Mixed/Blended Fabric		10.75	10.70	11.59	12.01	
c)	Man-made Fabrics		14.91	15.97	20.18	23.15	
	Total		100.00	100.00	100.00	100.00	
3.	Total Input of Electricity	Million Kwh	6932.00	8349.00	10085.00	11294.00	

Specific Consumption of Electricity Due to Structural Change Alone						
Electricity Kwh/metre of Cotton Textile		0.59	0.49	0.50	0.50	0.50
%Change w.r.t. 1988-89	:	18.00	-2.00	0.00	0.00	0.00

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Annexure--5.12

Electricity Input Coefficient in Paper Industry with Conservation
Measures Superimposed on Technological Change

1	1983-84	1985-86	1991-92 Est.	1996-97 Proj.
	2	3	4	5
Production of Paper (Thousand Tonnes)	1.248	1517	2500	2900
Input of Electricity (Million Kwh)	2144	2565	4125	4350
Specific Consumption of Electricity Due to Technological Change				
Coefficient of Specific Electricity Consumption (Kwh/Tonnes)	1 718	1691	1650	1650 (a)
% Change w.r.t. 1991-92	4 .12	2.48	0.00	0.00
Specific Consumption of Electricity Due to Conservation Measures				
Coefficient of Specific Electricity Consumption (Kwh/Tonnes)	1 718	1691	1650	1567 (b)
% Change w.r.t. 1991-92	4 .12	2.48	0.00	-5.03

Note:(a). Big units have higher specific consumption norms. Since
number of small units may not increase due to competition
in future, the norm is unlikely to decline.

(b). Indian paper industry has energy conservation potential
of 20-25%. For short term, 5% conservation anticipated for
electrical energy.

Annexure- 5.13
Coal Input Coefficient in Electricity Generation

ITEM	1983-84	1984-85	1989-90	1991-92	1996-97 (Proj)
1	2	3	4	5	6
Total Electricity generation in utilitties (Bill. Kwh)	140.17	156.9	245.44	286.71	418.2 (a)
Coal based electriciity generation in utilitty (Bill. Kwh)	84.44	96.96	165.26	188.53	272 (b)
Share of Coal based generation (%)	60.2	61.8	67.3	65.8	65.0
Total Coal used for electricity generatiion including middlings (Mill. Tonnes)	58.03	59.4	111.26	136.9	190 (c)
Kg/Kwh of Coal basedi generation	0.687	0.613	0.673	0.726	0.699
% Change in Coal Norrm w.r.t. 1991-92	-5.37	-15.56	-7.30	0.00	-3.72
Norms of Coal Consumption in total electricity generation with Technological change alone					
Kg/Kwh of total electricity generatikon	0.414	0.3786	0.4533	0.4775	0.454
% change in all modess norm w.r.t. 1991-92	-13.30	-20.71	-5.07	0.00	-4.80

(a) Based on demand estimates at consumer end.
(b) Based on thermal capacity to be added during Eighth Plan
(c) Based on Coal bassed generation anticipated in 1996-97.

Coal Input Coefficient in Iron & Steel Industry
Due to Technological Changes

	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1996-97
1	2	3	4	5	6	7	8	9	10
Crude Steel (Ingot Steel) Production (Mill. Tonnes)									
i. ISP (Mill. Tonnes)	8.32	9.01	8.95	9.64	10.59	10.82	11.27	12.63	18.23
ii. MSP(Mill. Tonnes)	2.33	3.02	3.08	3.31	3.35	3.48	3.87	4.21	7.81
Total Steel Production(i+ii) (Million Tonnes)	10.65	12.03	12.03	12.95	13.94	14.30	15.14	16.84	26.04
Coal based Sponge Iron Prod. (Mill. Tonnes)	0.09	0.10	0.15	0.17	0.20	0.32	0.38	0.40	2.00
Coal Input for ISP's & Foundaries (Mill. Tonnes)	23.75	24.49	23.39	25.60	28.58	28.37	30.05	31.66	42.00
Coal Input for Sponge Iron	0.09	0.10	0.15	0.17	0.20	0.32	0.38	0.40	2.00
Total Coal for Iron & Steel	23.84	24.59	23.54	25.77	28.78	28.69	30.43	32.06	44.00
Coal Kg./Steel Kg.	2.24	2.04	1.96	1.84	2.06	2.01	2.01	1.90	1.69
Change in Coal Input w.r.t. 1991-92	17.89	7.37	3.16	-3.16	8.42	5.79	5.79	0.00	-11.05

N.B.:   1. The figures are actuals excepting for 1996-97 which is a projection.

2. Share of production from Mini Steel Plant is likely to increase during the Eighth Plan in view of the liberalisation policies.

3. Due to fall in coke rate in ISP's specific consumption of coal in steel industry is going down.

Annexure-5.15
Coal Input Coefficient in Cement Industry

1	1983-84	1991-92	1996-97
	2	3	4
	Process wise share of capacity		
Wet Proces	37%	20%	15%
Dry Process	63%	80%	85%
Total	100	100	100
Total Production of Cement (Mill. Tonnes)	26.7	53.0	76.0
	Norms of Coal Consumption with technological change		
Wet Proces (Gcal./Tonne)	1.657	–	–
Dry Process (Gcal./Tonne)	0.977	–	–
Average (Gcal./Tonne)	1.23	1.00	0.90 (a)
%Change w.r.t. to 1991-92	23	0	-10
	Norms of Coal Consumption with conservation measures		
Wet Proces (Gcal./Tonne)	1.657	–	–
Dry Process (Gcal./Tonne)	0.977	–	–
Average (Gcal./Tonne)	1.23	1.00	0.855 (b)
%Change w.r.t. to 1991-92	23.00	0.00	-14.50

(a) Target by NCB

(b) Although change in technology has brought down the aggregate norm. NCB study shows that there is still conservation potential. For 1996-97, 5% efficiency anticipated.

Annexure-5.16

Natural Gas and Petroleum Products Input Coefficients in

Fertiliser Industry Due to Technological Change Alone

Sl.No	1	1979-80	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1889-90	1991-92	1996-97
		2	3	4	5	6	7	8	9	10	11
1.	Fertiliser p2o5 Production (000 T)	757	1050	1264	1430	1660	1665	2252	1796	2500	3000
2.	Fertiliser N2 Production (000 T)	2628	3485	3917	4326	5410	5466	6712	6747	7301	9800
	Gas based	472	100.00% 719 20.63%	100.00% 819 20.91%	100.00% 1233 28.47%	100.00% 1455 26.89%	100.00% 2210 40.43%	100.00% 3063 45.63%	100.00% 3233 47.92%	100.00% 3439 47.10%	100.00% 5394 55.04%
	Naphtha based	1391	1720 49.35%	2009 51.26%	2013 46.51%	2173 40.17%	1831 33.50%	2025 30.17%	1843 27.32%	2196 30.08%	2435 24.85%
	FO based	318	870 24.96%	674 22.31%	906 20.93%	1450 26.80%	1119 20.47%	1250 18.62%	1365 20.23%	1210 16.57%	1389 14.17%
	Coal based	447	118 3.39%	146 3.76%	108 2.50%	172 3.18%	139 2.54%	100 1.49%	126 1.87%	142 1.94%	235 2.40%
	Others		58 1.66%	68 1.74%	69 1.59%	160 2.96%	167 3.05%	274 4.08%	180 2.67%	314 4.30%	347 3.54%
3.	Total Fertiliser Production (1+2) (000 T)	3385	4535	5181	5758	7070	7131	8964	8543	9801	12800
4.	Total gas used for gas based N2 Production (mcm)		1283	1603	2500	3335	3490	5334	6578	5509	8641
5.	Cum/ T of gas based production		1784	1957	2029	2292	1579	1741	2035	1602	1602
6.	% change w.r.t 1991-92		11.36	22.16	26.65	43.07	-1.44	8.68	27.03	0.00	0.00
7.	Total petroleum prod. used for Naphta + FO based N2 production	3759					4082	4419	3918	4135	4642
8.	Petroleum products / T of Naphtha & FO based N2 fertilizers	1451					1384	1349	1221	1214	1214
9.	% change w.r.t 1991-92	19.52					14.00	11.12	0.58	0.00	0.00
10.	Of total fertiliser production		282.93	309.4	434.18	471.71	489.41	595.05	769.99	562.09	675.08
11.	% change w.r.t 1991-92		-49.67	-44.96	-22.76	-16.08	-12.93	5.86	36.99	0.00	20.10
12.	Petroleum Product/T of Total Fertiliser Production	828.89					572.43	492.97	458.62	421.90	362.66
13.	% change w.r.t. 1991-92	96.47					35.68	16.85	8.70	0.00	-14.04

N.B.:   The figure are actuals excepting for 1991-92 & 1996-97 which are estimated.

Annexure-5.17

Petroleum Products Input Coefficients in Steel Industry

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1996-97
				ACTUALS			(Proj.)
1	2	3	4	5	6	7	8
Production of Crude Steel (Mill.Tonnes)	12.03	12.95	13.94	14.30	15.14	16.84	26.04
Input of Petroleum Products (Mill.Tonnes Oil Equil).	0.429	0.443	0.554	0.587	0.593	0.541	0.643
Coefficient of Petroleum Input	0.0357	0.0342	0.0397	0.0410	0.0392	0.0321	0.0247
Change w.r.t. 1991-92	11.00	6.48	23.71	27.78	21.92	0.00	-23.14

Petroleum Products Input in Electricity Generation

1	1973-74	1979-80	1984-85	1985-86	1986-87	1987-??	1988-89	1889-90	1990-91	1991-92	1996-97
	2	3	4	5	6	7	8	9	10	11	12
Total electricity generation utility (BKwh)	66.69	104.53	156.86	170.35	187.71	202.09	221.40	245.44	264.00	287.00	418.00
Steel based generation (Coal + Lignite) (BKwh)	34.85	55.72	96.96	112.34	125.45	145.8.	154.88	172.48	179.70	197.04	285.00
Share of Steam based generation in total generation (%)	52.26	53.25	61.81	66.06	66.83	72.15	69.95	70.27	68.07	68.66	68.18
Total petroleum products used for steam based generation (Th.T) (in terms of oil equil.)			2845.00	2694.00	2617.00	2737.00	2755.00	2754.00	2730.00	2625.00	3021.00

Norms of oil consumption in steam based electricity generation

1	1973-74	1979-80	1984-85	1985-86	1986-87	1987-??	1988-89	1889-90	1990-91	1991-92	1996-97
Specific consumption of oil input in steam generation (Kg/Kwh)			0.0293	0.0239	0.0209	0.0186	0.0178	0.0160	0.0152	0.0133	0.0106
% change w.r.t. 1991-92			120.09	79.69	56.59	40.90	33.72	19.85	14.04	0.00	-20.43

Norms of oil consumption in total (all modes) electricity generation

1	1973-74	1979-80	1984-85	1985-86	1986-87	1987-??	1988-89	1889-90	1990-91	1991-92	1996-97
Tonnes/Kwh of total generation			0.0181	0.0158	0.0139	0.0135	0.0125	0.0112	0.0103	0.0091	0.0072
% change w.r.t 1991-92			98.16	72.91	52.43	48.08	36.25	22.68	13.06	0.00	-20.98

Annexure -5.19

Effect on Petroleum Products Input in Other Transports

Due to Conservation Measures

1	1983-84	1986-87	1889-90	1990-91	1991-92	1996-97 •
	2	3	4	5	6	7
Value added by other transport (Rs.Crores at 1980-81 prices)	4760	6139	7445	8059	8408	13022
Total consumption of diesel in other transports (Mill. Tonnes)	7.62	9.74	12.08	12.21	13.26	20.09(a)
Coefficient of diesel consumption	0.01601	0.015865	0.015865	0.015151	0.015770	0.015427
%Change w.r.t. 1991-92	1.52	0.60	0.60	-3.93	0.00	-2.17

(a) - Based on growth rate between 96-97/90-91 as 8.6 %

Input of Crude Oil in Petroleum Refining and Effect of Conservation Measures

1	1983-84	1986-87	1889-90	1990-91	1991-92	1996-97
	2	3	4	5	6	7
Total Crude throughput (Th. Tonnes)	35263	45699	51942	51772	51423	63320
Total Production of Petroleum Products (Th. Tonnes)	32926	42761	48690	48562	48349	59520
Total Refinery Losses (Th. Tonnes)	2337	2938	3252	3210	3074	3800
Refinery losses (%)	6.6	6.4	6.3	6.2	6.0	6.0
%Change w.r.t. 1991-92	10.86	7.55	4.73	3.72	0.00	0.00

N.B.:   With setting up of 3 new grass root refineries at Assam, Karnal and Mangalore and expansion of the existing refineries, total refinning capacity by 1996-97 will be 65 million tonnes.

Annexure-5.21
Natural Gas Input Coefficient in Electricity Generation

Item	1973-74	1979-80	1984-85	1985-86	1986-87	1987-88	1988-89	1889-90	1991-92	1996-97
1	2	3	4	5	6	7	8	9	10	11
Total electricity generation utility (Bill.Kwh)	66.69	104.63	156.86	170.35	187.71	202.09	221.4	245.47	287.00	418.00
Gas based generation (Bill.Kwh)	0.34	0.50	1.83	1.76	34.00	3.73	2.74	5.96	11.53	26.10
Share of gas based generation in total elect. generation (%)	0.52	0.49	1.17	1.03	1.78	1.85	1.24	2.43	4.02	6.20
Total Gas used for power generation (Mill. Cum)		514.00	1454.00	1299.00	2041.00	2721.00	1823.00	2140.00	4774.00	10819.00
Norms of gas consumption for gas based electricity generation										
Metre cube/Kwh of gas based generation		1.03	0.80		0.61	0.73	0.67	0.36	0.41	0.40
% change w.r.t. 1991-92		148.31	92.03		47.58	76.06	60.63	-13.29	0.00	0.00
Norms of Gas consumption in total (all modes) electricity generation										
Metre cube/ Kwh of total electricity generation		0.0049	0.0092	0.0076	0.0109	0.0135	0.0082	0.0087	0.0166	0.0250
% change w.r.t 1991-92		-70.47	-44.27	-54.16	-34.63	-19.06	-50.50	-47.59	0.00	55.60

Annexuree-5.22
Natural Gas Input Coefficient in Steel Industry by Technological Change

	1991-92	1996-97
1	2	3
Total sponge iron production (Mill. Tonnes)	1.28	5.00
Gas based sponge iron Prod. (Mill. Tonnes)	0.88	3.60
Input of gas (MCM)	96.36	394.20
Coeff. of gas based prod./ gas unit (CM)	109.50	109.50
Coeff. of total sponge iron prod./gas unit (CM)	75.29	78.84
% Change w.r.t. 1991-92	0.00	4.72

Annexure: 5.23

Coal-correspondence between Material Balance and Input-Output sectoral projection

		DEMAND												Supply Unit
		Inter Industry use								Final use				
		Steel plants and coke	Power Generation	Rail Transport	Fertilizers	Cement Manufacture	Collieries	Brick Making & other uses	Total Inter -Industry use	Consumption, Invest. & changes in stock	Export	Import	Final use (Net of import) (11+12-13)	Output (Actual/ Target)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1991-92 Actual/ Estimated	Mill. Tonnes	32.06	146.6	4.42	4.23	9.97	4.06	26.5	227.84	7.4	0.11	6.09	1.42	229.26
1996-97 Material Balance Projections	Mill. Tonnes	44	200.3	3	4	17.5	4	33.2	306	4	1	3	2	308
I.O. Model * Projections	Rs.Million	11296	28914	1484	1154	2165	280	19517	64812	13880	199	1730	12350	77161

* Rs. Million at factor cost at 1991-92 prices
  Commodities covered by I.O. sector are Coal and Lignite

Electricity-Correspondence between Material Balance and Input-Output projcetions

(1)	Unit	Inter Industry Use				Final Use				Output (actual Target) (6+10 12+13)	Supply	
		Agriculture	Industrial Production	Others	Total inter ind. use	Domestic consumption	Export	Import	Final use (net of Import) (7+8-9)		Average utilisation	Capacity at the end of the year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
											(Kwh/Kw)	(M. Kw)
1991-92 Actual/Estimates	Bill.Kwh	53.48	112.60	112.44	278.52	34.12	-	1.43	32.69	311.21 (51.48)	4505.00	69.08
1996-97												
Material Balance Projections	Bill.Kwh	76.00	155.00	153.75	384.75	65.46	-	2.00	63.46	448.21	4499.00 (51.44)	99.62
I-O Model * Projections	Rs. Million	24582	132742	155025	312350	81766	89	500	81355	393705		

* Rs. Million at factor cost at 1991-92 prices
I.O. sector includes Electricity, gas and water supply

Annexure: 5.25

Petroleum Products - Correspondence between Material Balance and Input-Output Projections

	Unit	Road and Other Transport	Rail Transport	Agriculture	Fertili- zers	Chemicals	Inds. other than ferti. and chem. and other uses	Power Generation	Total Inter Industry use	Consumption, investment and changes in stock	Export	Import	Final use (Net of imports) (11+12+13)	Output (Actual/ Target) (10+14)
							Inter Industry use					Final use		Supply Unit
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1991-92 Actual/ Estimated	Mill. Tonnes	19.537	1.484	4.94	4.13	2	12.27	2.6	46.96	8.93	2.7	9.44	2.19	49.15
1996-97 Material Balance Projections	Mill. Tonnes	31.345	2.121	6.546	5.021	4.395	13.966	2.599	65.993	15.205	3.3	22.92	(-)4.415	61.578
I.O. Model * Projections	Rs. Million	92577	7860	35158	11266	25693	127112	5238	304905	92305	10940	99032	4213	309118

* Rs. Mill. at factor cost at 1991-92 prices

Crude Oil - Correspondence between Material Balance and Input-Output Projections

	Unit	Demand						Supply
		Inter Industry Use		Final use				
		Petroleum Products Manufacture	Total Inter Industry	Consumption Investment & changes in stocks	Export	Import	Final use (Net of imports) (5+6-7)	(Actual/ Target) (4+8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1991-92 Actual/ Estimated	Mill. Tonnes	51.42	51.42	2.92	-	24	(-)21.08	30.34
1996-97 Material Balance Projections	Mill. Tonnes	63.32	63.32	-	-	13.32	(-)13.32	50
I.O. Model * Projections	Rs. Million	135256	145129	374	-	43860	(-)43486	101643

* Rs. Mill. at factor cost at 1991-92 prices
  1.O. sector includes crude petroleum and natural gas

Finished steel (Plain Carbon) Correspondence between Material Balance &
input-output Sectoral projcetions

| (1) | Unit | Inter Ind. Use | Final Use | | | SUPPLY | |
		Total	Consumption, Investment and change in stock	Export	Import	Total final use Net of imports (4+5-6)	Output (Actual/ Target) (3+7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1991-92 Actual/Estimated	Mill.Tonn.	15.20	–	0.30	1.00	(-)0.7	14.5
1996-97 Material balance Projection	Mill. Tonnes	21.00	–	2.80	1.00	1.8	22.8
I-O Model * Projection	Rs. Mill.	488918	31052	4431	37059	(-)976	487942

* Rs. Million at factor cost at 1991-92 prices
  I.O. sector includes Iron and Steel

Iron Ore-Correspondence between Input-Output and Material Balance Projections

	Unit	Inter Industry use	Final use				Supply
		Total	Consumption, investment & changes in stocks	Export	Import	Final use (Net of Imports) (4+5-6)	Output (Actual Target) (3+7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1991-92 Actual	Million tonnes	24.50	–	32.00	–	32.00	56.50
1996-97 Material Balance Projections	Million tonnes	40.00	–	32.00	–	32.00	72.00
I.O. Model Projections *	Rs. Million	1761	–	5415	–	5415	7176

* Rs. Million at factor cost at 1991-92 prices

Share of Consumption : Rural

(Percent)

S.No.	Year	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
0	1	2	3	4	5	6	7	8	9	10	11
1	1958-59	3.15	4.59	5.35	7.56	8.66	8.25	9.81	11.49	14.36	26.77
2	1959-60	3.75	4.95	5.93	6.60	7.82	8.73	10.00	11.65	14.93	25.65
3	1960-61	3.55	4.66	5.80	6.76	7.66	8.83	10.02	11.64	15.13	25.95
4	1962-63	3.80	4.90	5.96	6.88	7.54	8.88	9.90	11.56	14.70	25.87
5	1963-64	3.90	5.12	6.13	7.14	7.78	8.81	10.14	11.83	14.52	24.62
6	1964-65	3.79	5.15	6.25	7.19	8.00	9.00	10.16	11.64	14.24	24.57
7	1965-66	3.72	5.27	6.12	6.94	7.93	9.13	10.35	11.76	14.22	24.56
8	1966-67	3.62	5.16	6.11	7.08	8.16	9.21	10.06	12.35	14.65	23.60
9	1967-68	3.64	5.21	6.18	7.09	8.04	9.12	10.61	11.85	15.04	23.22
10	1968-69	3.62	5.12	5.99	6.95	7.79	9.12	10.21	11.42	14.26	25.51
11	1969-70	3.78	5.30	6.21	7.05	7.94	8.91	10.53	11.56	14.43	24.29
12	1970-71	3.90	5.27	6.20	7.25	8.31	8.77	10.79	11.79	14.45	23.26
13	1972-73	3.78	5.33	6.26	7.04	7.97	8.49	10.20	11.22	14.32	25.39
14	1973-74	4.02	5.52	6.45	7.23	8.17	9.15	10.38	11.98	14.21	22.89
15	1977-78	3.51	4.75	5.86	6.58	7.50	8.26	9.52	11.42	14.18	28.43
16	1983-84	3.80	5.23	6.21	6.89	8.01	9.04	9.93	11.67	14.59	24.64
17	1987-88	4.00	5.33	6.24	6.94	7.75	8.78	9.86	11.67	14.26	25.17
18	1988-89	4.09	5.42	6.23	7.00	7.83	8.74	10.14	11.58	14.22	24.75
19	1989-90	4.12	5.52	6.35	7.13	7.88	8.93	10.44	12.25	14.24	23.13
20	1990-91	4.15	5.44	6.38	7.38	8.22	9.04	10.14	12.05	14.63	22.56
21	1991-92	4.14	5.41	6.22	7.02	8.13	8.69	10.14	10.96	13.37	25.90

Note: Based on NSS data on Household Consumer Expenditure Distribution.

(Percent)

S.No.	Year	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
0	1	2	3	4	5	6	7	8	9	10	11
1	1958-59	3.02	4.55	5.64	6.35	7.22	8.35	9.78	11.68	14.85	28.56
2	1959-60	3.20	4.45	5.36	6.06	7.09	8.12	9.76	11.73	15.21	29.02
3	1960-61	3.23	4.39	5.46	6.33	7.18	8.36	9.67	11.96	15.26	28.15
4	1962-63	3.07	4.48	5.36	6.28	7.16	8.14	9.81	11.62	15.12	28.96
5	1963-64	3.25	4.53	5.24	6.13	7.05	8.06	9.38	11.45	15.87	29.07
6	1964-65	3.35	4.53	5.40	6.24	7.20	8.37	9.58	11.64	15.31	28.38
7	1965-66	3.46	4.70	5.50	6.42	7.23	8.37	9.87	11.64	15.37	27.44
8	1966-67	3.38	4.62	5.59	6.39	7.44	8.48	9.45	11.57	15.09	28.00
9	1967-68	3.42	4.73	5.62	6.48	7.17	8.44	9.86	11.72	16.44	26.12
10	1968-69	3.42	4.65	5.55	6.54	7.46	8.33	10.01	12.05	16.91	25.08
11	1969-70	3.31	4.59	5.43	6.17	7.48	7.96	9.69	11.91	18.56	24.90
12	1970-71	3.39	4.66	5.62	6.39	7.29	8.67	9.49	12.03	19.55	22.90
13	1972-73	3.45	4.72	5.69	6.05	7.65	8.12	10.05	11.44	15.20	27.62
14	1973-74	3.91	5.27	5.90	7.04	7.68	9.22	9.33	12.37	14.21	25.07
15	1977-78	3.30	4.66	5.57	6.36	7.27	8.53	9.42	12.54	14.11	28.23
16	1983-84	3.47	4.72	5.59	6.75	7.19	8.28	10.31	11.41	14.85	27.43
17	1987-88	3.39	4.59	5.37	6.13	7.12	8.27	9.60	11.59	15.11	28.83
18	1988-89	3.67	4.92	5.89	6.80	7.78	8.95	10.49	10.50	14.18	26.82
19	1989-90	3.42	4.56	5.43	6.34	7.20	8.25	9.46	11.55	14.55	29.25
20	1990-91	3.39	4.78	5.63	6.47	7.34	8.66	10.16	11.99	15.08	26.49
21	1991-92	3.26	4.36	5.28	6.01	7.09	8.00	9.02	11.40	13.94	31.65

Note: Based on NSS data on Household Consumer Expenditure Distribution.

Annexure 7.3
Trend in Decile-wise Consumption Share in Rural Area : 1958-73

Sl. No.	Dependent Variable	Constant	Regression Coefficient	R^2	$\bar{R}^2$
0	1	2	3	4	5
1.	1st Decile	1.2507 (45.16)	0.0072 (2.48)	0.34	0.28
2.	2nd Decile	1.5500 (112.81)	0.0097 (6.74)	0.79	0.77
3.	3rd Decile	1.7400 (108.43)	0.0075 (4.47)	0.62	0.59
4.	7th Decile	2.2900 (207.60)	0.0041 (3.57)	0.51	0.47
5.	10th Decile	3.2600 (159.69)	-0.0070 (3.26)	0.47	0.43
6.	Bottom 30%	2.6310 (157.33)	0.0081 (4.66)	0.64	0.61
7.	Middle 40%	3.5100 (396.90)	0.0024 (2.55)	0.35	0.30
8.	Top 30%	3.9600 (570.941)	-0.0039 (5.39)	0.71	0.68
9.	Bottom 50%	3.3600 (374.61)	0.0046 (4.87)	0.66	0.64
10.	Top 50%	4.2600 (1123.33)	-0.0012 (4.91)	0.67	0.64

N.B. 1. The share of consumption of 4th to 6th, 8th and 9th decile do not show statisticaly significant trend.
2. The form of function is exponential. Independent variable is time.
3. Figures in the parenthesis contain t-values.

Annexure 7.4
Trend in Decile-wise Consumption Share in
Rural Area : 1977-91

Sl. No.	Dependent Variable	Constant	Regression Coefficient	R^2	$\bar{R}^2$
0	1	2	3	4	5
1.	1st Decile	1.0025 (45.47)	0.0128 (17.22)	0.98	0.98
2.	2nd Decile	1.3800 (31.38)	0.0098 (6.65)	0.90	0.88
3.	3rd Decile	1.6800 (47.38)	0.0050 (4.18)	0.78	0.73
4.	4th Decile	1.7600 (36.66)	0.0062 (3.81)	0.74	0.69
5.	5th Decile	1.9200 (34.86)	0.0048 (2.60)	0.57	0.49
6.	6th Decile	2.0600 (30.84)	0.0040 (1.77)	0.39	0.26
7.	7th Decile	2.1600 (51.76)	0.0051 (3.64)	0.73	0.67
8.	10th Decile	3.5400 (24.26)	-0.0110 (2.25)	0.50	0.40
9.	Bottom 30%	2.4900 (78.55)	0.0086 (8.09)	0.93	0.91
10.	Middle 40%	3.3700 (85.06)	0.0050 (3.73)	0.74	0.68
11.	Top 30%	4.0900 (124.96)	-0.0057 (5.16)	0.84	0.81
12.	Bottom 50%	3.2000 (103.86)	0.0070 (6.79)	0.90	0.88
13.	Top 50%	4.3300 (333.51)	-0.0030 (6.85)	0.90	0.88

N.B.:1. The share of consumption of 8th and 9th decile
do not show statistically significant trend.
2. The form of function is exponential.
Independent variable is time.
3. Figures in the parenthesis contain t-values.

Trend in Decile-wise Consumption Share in Rural Area : 1958-91

Sl. No.	Dependent Variable	Constant	Regression Coefficient	R^2	$\bar{R}^2$
0	1	2	3	4	5
1.	1st Decile	1.2700 (69.15)	0.0042 (4.32)	0.50	0.47
2.	2nd Decile	1.5940 (103.47)	0.0031 (3.82)	0.44	0.41
3.	3rd Decile	1.7770 (137.65)	0.0021 (3.10)	0.34	0.30
4.	9th Decile	2.6870 (312.60)	-0.0012 (2.67)	0.27	0.23
5.	Bottom 30%	2.6670 (189.88)	0.0030 (4.01)	0.46	0.43
6.	Top 30%	3.9430 (460.12)	-0.0009 (1.98)	0.17	0.13
7.	Bottom 50%	3.3800 (351.35)	0.0015 (2.97)	0.32	0.28
8.	Top 50%	4.2570 (1051.14)	-0.0007 (3.05)	0.33	0.29

N.B.:1. The share of consumption in 4th to 8th decile, 10th decile & Middle 40 of the population do not show statisticaly significant trend.
  2. The form of function is exponential. Independent variable is time.
  3. Figures in the parenthesis contain t-values.

Trend in Decile-wise Consumption Share in Urban Area : 1958-73

Sl. No.	Dependent Variable	Constant	Regression Coefficient	R^2	$\bar{R}^2$
0	1	2	3	4	5
1.	1st Decile	1.1100 (53.61)	0.0107 (4.94)	0.67	0.64
2.	2nd Decile	1.4700 (86.67)	0.0069 (3.89)	0.55	0.52
3.	3rd Decile	1.6700 (118.80)	0.0039 (2.66)	0.37	0.32
4.	5th Decile	1.9500 (199.85)	0.0047 (4.59)	0.64	0.61
5.	10th Decile	3.3900 (113.95)	-0.0113 (3.65)	0.53	0.49
6.	Bottom 30%	2.5500 (178.40)	0.0066 (4.44)	0.62	0.59
7.	Middle 40%	3.4300 (381.44)	0.0025 (2.71)	0.38	0.33
9.	Top 30%	4.0300 (462.25)	-0.0032 (3.50)	0.51	0.46
9.	Bottom 50"	3.2600 (264.54)	0.0053 (4.16)	0.59	0.56
10.	Top 50%	4.3000 (884.35)	-0.0020 (4.01)	0.57	0.54

N.B.:1. The share of consumption of 4th and 6th to 9th
decile do not show statistically significant trend.
2. The form of function is exponential.
Independent variable is time.
3. Figures in the parenthesis contain t-values.

Annexure 7.7
Trend in Decile-wise Consumption Share in Urban Area : 1977-91

Sl. No.	Dependent Variable	Constant	Regression Coefficient	R^2	$\bar{R}^2$
0	1	2	3	4	5
1.	8th Decile	2.6·400 (21.·96)	-0.0064 (1.59)	0.34	0.20

N.B.:
1. The trend of ccnsumption share in other decile do not trun outt to be statistically significant.
2. The form of fumction is exponential. Independent vairiable is time.
3. Figures in the parenthesis contain t-values.

Annexure 7.8
Trend in Decile-wise (Consumption Share in Urban Area : 1958-91

Sl. No.	Dependent Variable	Constaint	Regression Coefficient	R^2	$\bar{R}^2$
0	1	2	3	4	5
1.	1st Decile	1.1.800 (61. 05)	0.0021 (2.07)	0.18	0.14

N.B.:
1. The share of consumption in other decile do not show statisticaily significant trend.
2. The form of function is exponential. Independent variable is time.
3. Figures in the parenthesis contain t-values.

Annexure 7.9
Lorenz Ratio of Consumption Diistribution

S.No.	Year	Rural	UJrban
0	1	2	3
1	1958-59	0.32588	0).34909
2	1959-60	0.31367	0).35710
3	1960-61	0.32174	0).34777
4	1962-63	0.31356	0).35669
5	1963-64	0.29769	0'.35962
6	1964-65	0.29366	0'.34924
7	1965-66	0.29725	0'.33848
8	1966-67	0.29338	0 .33681
9	1967-68	0.29079	0 .33236
10	1968-69	0.30514	0 .32915
11	1969-70	0.29277	0 .34026
12	1970-71	0.28313	0 .32647
13	1972-73	0.29935	0 .34101
14	1973-74	0.27581	0 .30125
15	1977-78	0.33861	0 .34481
16	1983-84	0.29759	0..33027
17	1987-88	0.29826	0..35369
18	1988-89	0.29041	0..33760
19	1989-90	0.27825	0..35000
20	1990-91	0.27202	0..33054
21	1991-92	0.28726	0..36734

Note:Estimated from NSS CConsumer
Expenditure Distribuution.

Trend in Inequality in Consumption Distribution

Sl. No.	Year	Dependent Variable	Constant	Regression Coefficient	R^2	$\bar{R}^2$
0	1	2	3	4	5	6
1. Rural						
a)	1958-73	Log LR	-1.11340 (-72..93)	-0.0083 (5.11)	0.68	0.66
b)	1977-91	Log LR	-0.83300 (-11..05)	-0.0133 (5.25)	0.85	0.82
c)	1958-91	Log LR	-1.11700 (-63..60)	-0.0025 (2.60)	0.26	0.22
2. Urban						
a)	1958-73	Log LR	-1.0150 (-58.49)	-0.0075 (4.15)	0.59	0.55
b)	1977-91	Log LR	-1.2540 (-5..28)	0.0053 (0.67)	0.08	-0.10
c)	1958-91	Log LR	-1.0670 (-59.58)	-0.0006 (0.66)	0.02	-0.03

Legend : LR = Lorenz Ratio of Consumption Expenditure Distribution.

N.B. 1. The form of function is exponential.
  2. Time indicated by year is tthe explanatory variable.
  3. Figures in the parenthesis contain t-value.