

**KARNATAKA VOCATIONAL
SURVEY REPORT
OF
RAICHUR DISTRICT
1978**

GOVERNMENT OF KARNATAKA

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MESSAGE

“Change the system of Education” - is the talk of the day But how ?

Several attempts have been made in the past without much success. The Education Commission (1964-66) has recommended greater diversification of vocational courses at the Higher Secondary level. They have pointed out that training should cover not only people who seek employment but also those who are or may be interested in self employment. Experimentation was going on from 1973 onwards at the N.C.E.R.T., Delhi in the implementation of Vocationalisation of Education. The Poilt project on vocationalisation, was taken up in Karnataka during 1977-78 in some selected schools of Bangalore, South Kanara and Dharwar, on an experimental basis. Dr. Malcolm Adisheshaiah Committee set up by the Union Education Ministry to recommend a plan of action for Vocationalisation of education at the secondary and higher secondary stages, is in close agreement with the plan of the action of the pilot project undertaken in Karnataka.

Whatever may be the plan or pattern, the education offered in the Schools should enable the students-particularly of the lower strata, “to stand on their own legs”. For this, it should be based on the needs and requirements of our changing society and the infrastructural facilities available in the locality. The vocational survey presenting a broad overview of all the aspects of the District with a projection into the future and with suggestions about new courses based on the employment potential, can contribute a great deal for planning on realistic lines.

B. Subbayya Shetty
Minister for Education
Government of Karnataka

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FOREWORD

The growing problem of the educated unemployed has been examined by various commissions and Governments of India and Karnataka at different times. It is only recently that the Govt. of India recommended a comprehensive scheme with financial support for tackling it. The scheme is based on one of the main recommendations of the Education Commission (1964-66) that about 50% of the enrolment beyond class X should be in part-time or full-time vocational courses affording opportunities of employment or self-employment in various vocations.

The Education Commission envisaged development of skills at the higher secondary stage to provide middle-level supervisory and technician man-power. The role of the technician and middle-level supervisor is beginning to be understood in India only recently in respect of both their number and depth of skills to be built in each of them. It is, therefore, felt that instead of general education alone, vocational education must be introduced in as many institutions as possible for providing trained personnel, with the required skills in areas where employment potential exists or is likely to develop in the very near future. Also self reliance should be inculcated wherever possible.

For this purpose, District Vocational Surveys have been undertaken to estimate the employment potential likely to develop in the District and to suggest new Job-oriented courses for introduction in selected institutions to achieve the best possible result in an economical way. The Handbook of Vocational Survey of Kodagu District, compiled by Sri G. B. Joshi, Deputy Director, Vocational Education Officer, Mangalore Presents the major areas of economic activity in the District supported by relevant

statistical data. Also employment potential has been indicated with a projection into the future wherever possible. New courses have therefore, been suggested based on the employment potential in the District. It is on this basis that the data contained in the handbook has been used in predicting new areas and implementing the 'Job-oriented Diploma courses' in Kodagu District to answer the felt needs of the society in its economic activity.

E. S. Gurubasappa

*Director of Vocational Education,
Technical Education Buildings,
Bangalore-560 001*

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VOCATIONAL SURVEY REPORT OF KODAGU DISTRICT

INTRODUCTION

The Vocationalisation of Higher Secondary Education is an essential feature of the new pattern of school education which aims to establish close links between education and employment.

The Education Commission, while recommending the adoption of the educational structure of 10+2+3 pattern anticipated that at the end of the primary stage, about 20 percent would be stepping off the school system and enter working life, while about 20 percent would be moving into different vocational courses at the lower secondary stage and the remaining 60% would be continuing their general education. At the end of the 10th year, about 40% of these would be stepping off the school system and enter working life: about 30% would be entering vocational courses while the remaining 30% would be going into general education.

Vocational education at the lower secondary level aims at training semi-skilled and skilled workers. At the Higher Secondary Stage, the Education Commission envisaged development of skills to provide middle level supervisory and technician level manpower. They felt that the role of the technician and middle level supervisors is not properly understood in our country and that there is need for their numbers to be substantially increased.

The Education Commission has recommended greater diversification of vocational courses at the higher secondary level. At present is mainly confined to technical training in polytechnics and the existing courses are now run at this level for the training of teachers and para-medical personnel. They have suggested that a great range of courses in commercial, scientific and industrial trades can be offered covering not only people who seek employment but also those who may be interested, in self employment.

The National Policy of Education Resolution in agreeing with the recommendations of the Education Commission of Vocational Education spelt out the need to increase facilities for technical and vocational education at secondary stage confirming particularly to requirements of the developing economy and real employment opportunities to cover diversified fields such as agriculture, industry, trade and commerce, medicine and public health, home management, arts and crafts and secretarial practice. New courses should be started after taking into account the existing facilities to meet the needs of middle level persons in the concerned District/State.

At present, Higher Secondary stage of Education is known as Pre-Degree and is Pre-University preparatory in character. This has resulted in enormous pressure on higher education and caused strain on the facilities for higher education. It has contributed to the lowering of standards of higher education, particularly for the weaker sections of the community whose children comprise the bulk of the student body of the numerous subviable colleges which have sprung up. Apart from this, neither the eleven year nor the existing twelve year course has served any useful purpose as it is not terminal in character. The youth who joined the course and did not and could not

pursue university education merely served to increase the cost of public education without adding to the better trained or better qualified manpower or becoming employment worthy. It is estimated that at present out of about 2 million students who come out of secondary schools about 60% join the pre-degree stage out of which about 60% continue with higher education. From this it is clear that there is a large measure of unpurposeful education at this stage.

It is well known that because of their inability and delay in securing employment opportunities, vocational courses are introduced at the higher secondary stage. The reports on occupational and Educational Pattern in Public and private Sectors prepared by the Director General of Employment and Training reveal that the majority among the professional and technical personnel who include engineers, teachers, scientists, possess professional qualifications. But, on the other hand, many administrators, managers and those in charge of banks, insurance, transport and communication do not possess any professional qualifications. Most of them have completed only secondary education. In the case of craftsmen and skilled workers like textile designers, mechanics and electricians, very few possess general or professional qualifications. This goes to show that adequate training courses at the middle level management are not in existence at present.

Jobs in organised industry and services may not increase fast enough to absorb any appreciable section of the educated working force. Experience of the past 25 years has shown that as a result of revolutionary changes in science and technology training in narrow job specifications or in over specialised employment is likely to become obsolescent with the changing pattern of production relationship. Therefore terminal vocational courses are required to

be designed in such a manner that while they remain practical, they also seek to inculcate the capacity to utilise intellectual and theoretical training along with manual skills for socially productive labour.

Vocational education will also have significances for common citizens. A trained health assistant living in a village, even when he does not adopt a career, would be an asset to the rural community. So would be a person who has done a course in co-operatives even if he chooses to take to farming or teaching. Apart from the tangible benefits that will accrue to the individuals themselves - vocational courses will also create valuable community assets and an infrastructure upon which developmental programme necessary for the growth of the society can be built.

The aim of vocational education is therefore :

- a) To train persons for middle level jobs that can be anticipated in industry and in the services sector.
- b) To train people for self employment in the agricultural sector (used in the broadest sense) small scale industrial sector (including handicrafts, cottage industries etc.) or services related to and including co-operative marketing, servicing, repairs and maintenance of agricultural tools or special services needed by the rural community and for which the community may be in a position to pay and
- c) To offer vocational courses which are neither too narrow, nor over specialised nor too rigid in the range of occupations since with a fast changing technology and an ever accelerating phase of socio-economic change vocational training of today may not remain relevant to the needs either of the

individual or of the society even 5 to 10 years hence and require to be replaced by new ones having greater utility for the individual and the country.

The proposed scheme of study would be comprehensive with a duration varying from 1-3 years. The content would include some general education, broad theoretical education related to the vocation and Practical training, study of languages and the relevant aspects of general science; Mathematics, and other areas of general education required to support vocational subjects will be built into the course. The nature of training will be determined in consultation with the local industry and employing agencies. Adequate attention would also be paid therein to the social and economic aspects of the occupational fields and to organisational planning and marketing. Training will not be provided only in class-room; it will include training in workshops and fields. In developing instructional programmes services of practitioners of actual vocations will be utilised.

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Chapter 2

AIMS & OBJECTIVES OF THE DISTRICT ECONOMIC & VOCATIONAL SURVEY

Vocational courses will have to be organised in consultation with employing agencies- Government Departments, such as Agriculture, Health, Industries, Development etc, and Government and private owned industries needing trained personnel. It is common knowledge that matriculates by and large stay and work in their home districts. The existing wage structure for skilled workers and middle level technicians also does not stimulate large scale migration. Hence those offering vocational courses will have to be prepared mostly for jobs within the district and its neighbouring areas. The number of students joining a particular vocational course will have to be determined in the light of the demand from employing establishments.

District surveys and systematic monitoring of emerging jobs and occupations to meet the needs for the employment market and local development programmes are therefore essential pre-requisites to the introduction of Vocational Education in each District.

Since a variety of hitherto unattended areas of employment would be open to those coming out of the vocational higher secondary institutions, careful selection will have to be made from out of the existing higher secondary schools

where these course could be instituted. *Further the location of an institution of an institution has a crucial role from the point of view of facilities for on-the-job training and expertise to impart skills during training.*

The aims and objects of the survey, therefore are :

- 1) to identify the existing facilities; productive and commercial activities in the area, types of trades that are being pursued, agricultural products of the region, movement of commodities. marketing, storage facilities etc.
- 2) to identify the existing vocations in region.
- 3) to make medium term projections, if possible, taking into account the rate of growth process of development etc.
- 4) to identify the new vocations for the occupational categories which are currently in demand and.
- 5) to identify the existing institutions which can be utilised fruitfully for vocational education training.

Chapter 3

METHODOLOGY

The Survey has been formulated to consist of studies of:

- a) current non-farm establishments.
- b) prospective establishments;
- c) existing vocational training institutions
- d) statistical data used as secondary sources.
- e) information from documentary sources and discussion with knowledgeable persons and agencies both under Central and State Government involved in execution of plan projects.

First of all lists of current non-farm establishments and prospective establishments were prepared by collecting the addresses from various sources such Department of Industries and Commerce, Telephone Directory, Banks, etc. Studies of such establishments were made by issue of questionnaires and analysis of the filled-in questionnaires received from them. However, the response from these establishments were poor in spite of follow-up action through reminders.

The most important question in the questionnaire read:

“Are you able to meet your needs for trained personnel from existing training institutions.

If not in what categories of craftsmen are the needs not satisfied fully? Give approximate numbers in each category of trade".

Only a microscopic minority of the establishments who had filled in the questionnaires furnished correct and dependable answers to this question. Even out of this negligible number the majority had replied the question in the affirmative.

This position was apparently due to the fact that, in general, establishments feel that, filling in a questionnaire pertaining to a survey and furnishing statistical data is an imposition on their time; Further, the questionnaire has not been drawn up properly and contained questions which appeared to be not pertinent to the information, required. Several establishments expressed their inability to understand the questionnaire and a large number were apprehensive of divulging particulars of their capital investment, strength of establishments, qualification of their staff etc. Quite a few felt that answering the questionnaire would impose on them the responsibility of training persons in their establishments and or of absorbing persons in their establishments and or of absorbing persons trained under this scheme. Some of the establishments, especially the smaller ones, were interested to know whether answering the questionnaire would endow on them financial benefits and when told about the purpose of the survey most of them were not interested in answering the questionnaire.

As a result, the survey through issue of questionnaires was not a success. Therefore, the end result could be achieved only by discussions with knowledgeable people and agencies involved in executing plan projects and by the study of existing resources, infrastructural facilities, various development schemes that are running in the district and those contemplated to be introduced in the district, etc.

It was not possible in all cases to collect latest statistical data either because they are yet to be compiled or were not easily available.

A statement of the number of questionnaires issued and the statistical analysis of the response are given in Appendices. The statistical data of the district are also given in the Appendices.

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Chapter 4

DISTRICT PROFILE

The popular name Kodagu is derived from 'Kodimalenad' which means dense forest land on steep hills. Lt. Corner in his memory of the Coorg Survey is of the view that it may mean country of 'Million Hills'. According to other sources the word 'Kodagu' means, situated to the west, and the area came to be called by that name because it lies on the Western portion of the plateau.

The District has the distinction of being the smallest in size and lowest in population in Karnataka State. The density of population is also far below the state average. The people of the District known for their hospitality to guests and strangers. This may be due to their economic self sufficiency and production of surplus food grains. People of Kodagu communities have their own language called 'KOORGI' which does not have a script. The other languages in use are Kannada, English, Malayalam, Tamil, Konkani, Tulu etc.

Even though the District is rich in forest and Agriculture resources, there are no major industries in the District are generally realising the value of entrepreneurship and need for industrialisation.

The District is having as many as fifty rice mills ; other type of industries have been set up by people coming from other Districts. In small scale Sector mention may be made mainly of general Engineering Units, besides a few saw mills, bakery units and Printing Press Units.

Location and Topography :

Kodagu District lies on the Eastern and western slopes of Wester ghats. It is situated on the South West of Karnataka State and lies between North latitude $11^{\circ} 56'$ and $12^{\circ} 50'$ and East Longitude $75^{\circ} 22'$ and $76^{\circ} 11'$. It is surrounded by Hassan District in the North Mysore District in the East, Dakshina Kannada District in the North West and Malabar Districts of Kerala State in the West and South.

The District has a mountainous configuration which presents a grand panorama of verdant valleys, ravines, fast flowing streams, lofty peaks and awe-inspiring spurs.

The most conspicuous subdivisions of the ghats in the South are the Brahmagiris of the Malenad ranges from the Southern boundary of the District separating it from wyanad. The average height 4,500 Feet above the mean Sea level. The highest peak of the District is TADIANDAMOL in Madikeri Taluk which is 5727 Ft, above M.S.L.

The whole of the Western portion of Kodagu is an unbroken chain, presenting itself as a wall, ever protecting this little District. From the Foot-hills in Kerala, the Kodagu mountain system appears as a formidable wall, with lofty peak here and there.

No. of Taluks :

The District is having on area of 4104.0 Sq. Kms. with there Taluks Namely Madikeri Tq. Somwarpet Tq. Virajpet Tq: Madikeri is the Headquarters of the District.

Road Rail Communications :

There is no Rail connection to this District and the nearest railway station to the District is either Mysore or Hassan. There is no National Highway in the District. The total length of Roads incharge of P.W.D. is 1336 Kms ; the transport system however of the District is far better compared to other Districts. The District is having 3128 Motor Vehicles Regd. and there are 303 Tractors. The District is having 17 Major Bridges.

Climate and Rainfall:

The climate of the District is damp and can be classified moderate. The maximum temperature ranges from 90°F to 95°F in March to April and the minimum temperature is around 64°F in December. In general the air is highly humid, all through the year and particularly so during the Mansoon months.

The winds are light to moderate with some strengthening during the South West Monsoon Months. Winds blow mainly from directions between the South West and North West during the South west Monsoon. In the Post-monsoon season winds are mainly North Easterly or Easterly but on some deys north westerly winds blow in the afternoons. During the rest of the year winds blow from directions between north and East in the mornings and between South and West in the afternoon.

Rivers :

The configuration of the District is such that the main drainage is an easterly direction towards the Bay of Bengal; But there are few mountain torrents of the Western

declivities from the ghats. Which flow West-ward. The Kodagu rivers are neither too deep nor too wide but water is abundant through out the year.

As the sources of rivers are high up in the mountain & their courses are steep they flow with great rapidity, generally over rocky beds. The hight of the banks, the rocky beds and unevenness of the area render them wholly unsuited for Navigation of any kind, though a few of them allow artificial irrigation.

The largest river is the CAUVERY with its principal tributaries the Hemavathi, Lakshmanthirtha, Kakkabe and Harangi or Suvernavathi flow in an easterly direction. The BARAPOLE is famous river which flows through Virajpent taluk.

The Chief river of Kodagu, both in size and importance is 'CAUVERY' which rises in the Brahmagiri, at a place called Talakaveri. The Kannike river, another stream after a short run separately joins cauvery at Bhagamandala. The river Cauvery is considered very sacred.

Throughout the District there is not a lake or tank of any size worth mentioning. Only in Virajpet Taluk there are few Natural resorviors called Kolli, which contain water throughout the year.

Forests: Flora

The flora of Kodagu is similar to that of other areas in Southern India. Invaluable treasures of Timber trees and their produce, is available all over the Dist. There are two distinct tracts in the District with trees peculiar to them. Viz. Male-Kadu or Hill Forests and Kanive-Kadu or Valley Forests. Botanically they can be called as Evergreen and delicacious forests; the former clothing the high ghats and the latter the eastern hill tracts.

The principal timber species in the evergreen forests are Heb-balsu, Nandi, Teak, Rose Wood, Halmaddi, Sampige, Honne, Sandal Wood etc.

These of Secondary importance found in the region are Kat-Kumbala, Kaipamara, Lavanga pattemara, Gerumara, Cho remara, Bage, Nelli, Yeeyamara, Koomathi etc,

There are large clumps of Bamboos in eastern part of Kodagu. Minor Forest Produce of the District are Tamarind, Soapnut, Tanning Barks, Horus, Beewax, Honey, Gums, Lichens.

Rose Wood of fine quality is being exported, while soft wood is sent to plywood factories at Hunsur, Cochin and Match Factory at Madras.

Fauna :

The fauna of the Dist. is not very different from other adjoining District. The whole of district has rich fauna because of dense and evergreen forests. The Northern Eastern and Southern regions are full of animals. Important animals found in the Forest are Tiger, Elephants, Bison, Black bears, wild bears, Deers, Reptiles, Crocodiles, wild dogs, Mynahs etc., etc.,

Population :

The population of the District as per 1971 Census is 3,78,291 of which Somwarpet & Virajpet Tq. Shares the Major portion since Madikeri, is the Smallest taluk of the Dist. The main density of population/sq. Km. in these Taluks is arround 52.8 & 47.2 respectively. The rural population is approximately 84%. The total workers of the District and Non-workers amount to about 40% and 60% respectively.

Irrigation Facilities :

The crops of the District are mainly irrigated by canals Wells, Tanks, Rivers and Natural rain. At present there are no Major irrigation projects. Pumpsets are also being utilized to irrigate the lands.

A reservoir at Harangi, across Harangi River in Somawarpet Tq. is under construction, which is expected to irrigate a total of 1,64,000 Hectares; Kodagu District may share about 2604 Hectares.

The Balaji, Anicuts near Ponnampet, a canal from river Lakshmanathirtha, Swathihala anicut near Kushalnagar and Nyayadahalla, Shanthavery, Chickehole Madapur, Honnikoppa, Devanur Anicuts, Command an area of irrigation of 3200 Acres.

The Chickahole project in Somawarpet Tq at an estimated cost of Rs. 3.6 crores is expected to be taken up shortly.

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Chapter 5

INFRASTRUCTURAL FACILITIES

Power :

All the towns of the District have been electrified and villages electrified amounts to 40.2% at the end of 74-75. The per-capita consumption of power during 74-75 is 26.12 units, of which Madikeri Tq. alone comes at the rate of 59.34 units/capita. The total consumption of power as on 74-75 was arround 10,719,000 Kw. hrs. As many as 1016 Pumpsets have been energised. As on date of this report there is a power cut of 33½% to SSI units and 40% Power cut to other categories. The sources of power energy prospect may be also favourable in the State by 1980. It may stimulate the growth of Large and Medium, SSI and Village Industries. The prospect of power generation source may be by substituting Coal for Oil.

Water :

Since Kodagu District rainfall is 3164.5 mm. average per annum, there is no difficulty of water. Because of the Cauvery river water is abundant, throughout the District. There are as many as 7065 drinking water wells as on 75-76 & Bore wells can be installed where there is difficulty of water. There are no villages without water. The water of the District is generally very soft.

Road :

The roads of the Dist. are well maintained, and due to ghat section steep roads, transportation is a bottleneck. As on 75-76 the surface road length under P. W. D. is 1336 Kms. There are hardly two villages not connected by road.

Post Offices :

As per the statistics of 75.76, there are 161 post offices of which Virajpet Tq. alone is having 72. The population per post office is around 2548.

Telephones :

There are 1150 Telephone connections as per statistics of 75-76, of which Madikeri Tq. alone shares 520., frequent disturbances and repairs are common during rainy season. There are 18 Telephone exchanges in the district.

Hospitals & Dispensaries Primary Health Centres :

There are 65 Hospitals and Dispensaries in the District and 31 primary Health Centres and Family Planning Centres in the District. The population per health unit is around 4364. The figures relate to the statistics of 75-76.

Schoos / Education :

There are 377 Primary Schools which include 10 Nursery Schools in the District. The No. of Secondary Schools is around 50. There are 2 Colleges in the district, one at Madikeri and another at Gonicoppal, besides 2 Professional Institutions and Two Technical Institutions.

Chapter 6

EXISTING RESOURCES

The Industrial Sector of the District is not being expanded rapidly. The reason for this is heavy rainfall for a period of 5 months in the year and damp climate, Secondly due to lack of Entrepreneurship. The educated Entrepreneurs who are generally non technical now are to be trained. As such special consideration have been given in setting up entrepreneurs centre, in the infrastructural facilities proposed to be set up under Rural Industrialisation Scheme.

There are no large scale Industries in the district, and only Medium Sector units are functioning besides 3 Government owned Small Scale Units. In the Medium Sector one Fruit Processing unit at Gonicoppal is functioning, which is fully equipped with modern machineries. The full capacity of the unit is not being utilized at present. The unit is having a very good market and has export potential. The other medium sector enterprise is a Coffee Curing Works situated at Kushalnagar. The units owned by Government of Karnataka; a Saw Mill at Murkal, a Printing Press at Industrial Estate Madikeri and a Central Workshop at Madikeri. In the Small Scale Sector a Fruit

Processing Unit under Co-operative Sector is working at Kushalnagar, the products of which are having good demand in the country. It has export market also, but the factory is running under capacity.

Apart from the above there are as many as 352 Small Scale Industries functioning in the District as per the records up to 1977 October. Most of the Small Scale Industries are General Engineering/Automobile Repairs and Servicing, Rice Mills, Small Bakeries, Coffee Roasting and Grinding etc. The details of the units existing in the District is given below.

CLASSIFICATION OF SMALL SCALE INDUSTRIES

No.	Classification	Madikeri Taluk	Somwarpet Taluk	Virajpet Taluk	Total
1.	Coffee machinery manufacturing unit	3	....	....	3
2.	General Engg. & Automobile Repairs Servicing units	28	14	23	65
3.	Printing	10	6	7	23
4.	Non Ferrous Utensils (Tinopler, Brass)	3	2	3	8
5.	Tin Containers	1	....	....	1
6.	Electric Works/Repairs	7	....	3	10
7.	Wood Based Industries	5	7	6	18
8.	Cane and Bamboo	5	10	10	25
9.	Handicrafts (Wood Based)	1	....	4	5
10.	Rice Mills	9	14	20	43
11.	Food Beverages (Bakery, Coffee Roasting & Grinding)	9	20	16	45

12. Burnt Lime	....	2	4	6
13. Leather Based Units	2	....	1	3
14. Parafin Wax Candles	1	....	....	1
15. Natural Essential Oil	....	1	....	1
16. Rubber Sheets-Latex				
Rubber	1	....	....	1
17. Misc. Others	38	35	21	94
Total	123	111	118	352

Industrial Estate :

An Industrial Estate has been located at Madikeri which covers an area of 4.74 acres and 8 sheds have been constructed. The main occupants of the sheds are Govt. Branch Press (4 sheds) an Automobile Workshop, Tin Containers 18.5 Lts. capacity manufacturing 2 sheds- A General Engineering unit manufacturing, Coffee Pulpers, Sprayers and Washers. There are 9 plots in the Industrial Estate and all the plots have been leased out to entrepreneurs for setting up different types of unit, viz. Pulverizing unit, General Engineering, Sheet Metal. Printing Press etc.

Trade and Commerce :

The important commodities imported are Coconuts, Sugar, Cloth, Salt, Fertilizers, Food Articles, Medicines, Hardwares, Edible & Non Edible Oils, Fish, Petrol/Diesel etc. The chief commodities exported are Coffee, Orange, Chillies, Tamrind, Cardamom, Pepper, Paddy and Timber etc.

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Chapter 7

RESOURCE ANALYSIS

Project Profiles are mainly drawn up keeping in view the resources available in the District and the needs of the District. Important industries suggested as likely to come up for reasons given follows.

Pulverizing of Forest Products :

Many forest resources are not utilized in the District for setting up of industries. The available resources such as Sandlewood, Topiaco could be utilized for Pulverizing which may have export base for the market. Similarly the Mica available in the District could be utilized for Pulverizing and can be marketed to film processing unit. The employment potential at least 25 persons.

Textile Bobbins :

The teak wood and other hard woods available in the Dist. could be utilized well for manufacture of textile bobbins. The market for the same shall be in other districts, where textile mills are concentrated. The demand is continues for this products.

Handicraft Units :

A few units at Siddapur, Virajpet are working at present. The available forest resource are made use for

manufacture of Handicraft articles. A no. of Artisans concentrated in the area like Siddapur, Virajpet, Ponnampet, Madikere will be benefited under the scheme. The market for the same will be in and around the Dist. The unit may have also export Potential. The Artisan Training Institute proposed can solve the Technical Problems of Artisans.

Bee Keeping & Honey Processing Units :

The Apiculture Development Office, Industries and Commerce, Madikeri is looking after the organisation, promotion of Bee-keeping, establishing Honey Processing units need to be encouraged in Private Sector, No. of Bee-keeping Colonies could be developed by providing financial assistance for purchase of Bee-hives Boxes and other equipments.

Oil Expellers :

There are no oil expellers in the Dist. In Somwarpet Tq, Groundnut is being grown, which can be utilized to some extent to feed the unit. The location has been shown at Kodlipet, as such, the raw material available in the adjoining areas can be made use of to cover at least the marginal requirement of the District.

NEED BASED INDUSTRIES

Agriculture Implements :

The Agriculture & Plantation Sector of the District are using many types of Agricultural implements, the demand for which is met by the neighbouring districts and States. There are no Plants in the said line of manufacture and there is increase in demand for the same affears feasible. An Agricultural implements manufacturing unit in the District. At least 25 skilled workers can get employment.

Manufacture of Steel Furnitures :

The standard of living in Kodagu Dist. is very high and the Coffee Planters, businessman need their houses to be equiped with good steel furnitures. No Units in this lineof manufacture is established in the District, as such setting up of at least two units in this line of manufacture can be encouraged.

Mixed Fertilizers :

The use of fertilizers in the Dist. is very high, because of rich Paddy cultivation and Coffee Plantation. Due to this the unit proposed is need based and can work out very profitable.

Leather Goods Manufacturing :

Day to day fashions of the District is fast improving, due to a high standard of living of people of the District. Specialy designed goods are being purchased heavily from Mysore, Bangalore or Mangalore. The needs of the District can be met, if at least 2 to 3 well organised units are set up in this District itself.

Automobile Servicing Stations :

It seems that the Dist. stands 3rd or 4th place in our state with respect to the member of light motor vehicles in use. Almost every Planter having 10 acres and of Plantation is having a vehicle. But there are only a few service stations concentrated either at Madikeri, Virajpet, Siddapur etc. and it is well suggested to have some more service stations in important places. The unit can work out profitably and provide faster service.

Repairs of Oil Engines, Pumpsets, Pulpers, Washers, Sprayers etc.

One of the criteria for rich yield in Coffee Plantation Agricultural production is due to use of modern equipments,

such as pumpsets, Sprayers, oil Engines etc. The repairs at village level is not being made since there are no units to undertake the same. The persons trained in Agricultural machinery Training Centre or persons knowing the trade can be supplied with important tools through Nationalised Banks so as to assist the farmers at villages and solving their problems faster to a great extent. This will definitely boost production in Agricultural/Coffee Plantations.

Modern Foundry :

There are a few units existing in this Dist. (the end product of which is Coffee pulpers, washers etc) are getting their castings from outside the Dist. In addition to this Tobacco cultivation curing equipments within radius of 10 to 15 miles from Kushalnagar are using different types of castings. Units set up on their products is only during the role of essembly work obtaining castings from outside. This necessitates to set up a small Foundry of 50 to 75 tons, capacity. The unit can be preferably set up at Kushalnagar.

Tyre Retreading Works :

This type of unit is only concentrated at Madikeri since it is a nucleus point of Administration. Collection depots are established in different regions. Due to the larg number of vehicles in the District, a few more units can be encouraged at other important growth centres of the District.

Coffee Roasting and Grinding Units :

The demand for setting up of this unit is increasing day by day. In village side few units may be established to carry out job works of Coffee Roasting and Grinding units.

Wollen Blankets :

The winter Season of this Dist. is very chill due to hilly tracts, followed by heavy rains during mansoon. The labourers in the Coffee Estates are consuming good No. of wollen Blankets, but there are no units to meet the demand of the Dist. In consideration of above facts it is suggested to locate an unit for manufacture of Woollen Blankets in the District.

Other Industries Suggested :

Keeping in view the resoures of the Dist. and also in consideration of the needs of the Dist., other industries such as Agarabathi, Activated Carbon, General Engg. Workshop, Hosiery, Soap nut Powder, Tamrind seed starch, Wooden Doors & Windows, can also be quite feasible.

-: O :-

Statement of Questionnaires Issued and Response Thereto

1. No. of Questionnaires issued	500
2. No. of filled in Questionnaires received	65
3. No. of Questionnaires returned undelivered	85
4. No. of establishments who have regretted to furnish the information	10
5. No. of establishments reported as closed	40
6. No. of establishments as shifted	55
7. No. of establishments who have not responded	245
Total	<hr style="width: 10%; margin: 0 auto;"/> 500 <hr style="width: 10%; margin: 0 auto;"/>

**List showing the Names of Vocational Courses & College
Implementing them during 1978-79**

Sl. No.	Code No.	Name of the course	District	Name of the College	Remarks
1	2	3	4	5	6
1.	TE 1.01	Building Construction Technology	Belgaum	1. Govindram Saksaria Science College, Belgaum	
			Uttara Kannada	1. S D.M. College of Arts & Science, Honnavar	
			Mysore	1. Marimallappa Jr College, Mysore	
2.	TE 2.01	Servicing Technology (Office Equipment)	Tumkur	1. Govt. Junior College, Tumkur	
3.	TE 3.01	Electrical Wiring & Servicing of Elec. Appliances	Belgaum	1. Govindram Saksaria Science College, Belgaum	
			Mysore	2 R. D. Composite Junior College, Chikkodi	
				1. Marimallappa Junior College, Mysore	
				2. Government Junior College, Hunsur	
			Tumkur	1. Kalpataru College, Tiptur	
			Uttar Kannada	1. M.M. College of Arts & Science, Sirsi	
			Hassan	1. Navodaya Junior College, Channarayapatna	

(Continued)

4.	TE 7.02	Painting & Commercial Art	Belgaum		1. Beynon & Smith Composite Junior College, Belgaum
5.	TE 8.01	Printing & Book Binding	Raichur Mysore		1. Govt. Junior College, Manvi 1. Marimallappa Junior College, Mysore
6.	TE 8.02	Clothing & Embroidary	Belgaum		1. Municipal Composite 2. Beynon & Smith Composite Junior College, Belgaum Junior College, Belgaum
7.	TE 8.03	Textiles Technician	Uttara Kannada Belgaum		1. Shivaji Vidyalaya, Haliyal 1. Municipal Composite Junior College, Gokak
8.	TE 8.04	Sugar Technology (Pan Boilogy)	Belgaum		1. L. K. Khot College of Commerce, Sankeswara
9.	AG 1.02	Dairying	Belgaum Uttara Kannada		1. Jyothi Junior College, Belgaum 1. M. G. C. College, Siddapura 1. M. M. College of Arts & Science, Sirsi
10.	Ag 1.03	Sericulture	Raichur Mysore Tumkur		1. Government Junior College, Sindhanoor 1. J. S. S. College of Arts & Commerce, Chamarajanagar 2. Vidyodaya Junior College, T. Narasipura 1. First Grade College, Sira
11.	Ag 1.05	Co-operation	Uttara Kaunada Tumkur Hassan		2. Govt. Junior College, Pavagada 1. Mahasatee Junior College, Ulga 1. First Grade College Sira 1. Junior College, Holenarasipura

12.	Ag 1.06	Pesticides, Fertilisers & Weedicides	Raichur	1. Government Junior College, Lingasugur 2. Government Junior College, Sindhanoor
13.	Ag 1.09	Agricultural Economics & Farm Management	Belgaum Raichur Hassan Uttara Kannada	1. L. K. Khot College of Commerce, Sankeswara 1. Govt. Junior College, Manvi 1. Junior College, Belur 1. Shivaji Vidyalaya, Haliyal
14.	HE 1.01	Laboratory Technician	Belgaum	1. G. A. Composite Junior College, Belgaum
15.	HE 1.03	X-Ray Technician (Radiological Assistant)	Uttara Kannada Bangalore	1. Bangurunagar Composite Jr. College, Dandeli 1. Visweswarapuram College of Arts, Science & Commerce, K. R. Road, Bangalore
16.	B. 1.01	Banking	Mysore Tumkur Hassan Uttara Kannada	1. J. S. S. College of Arts & Commerce, Chamarajanagar 1. Government Arts College, Tumkur 1. M. Krishna College, Hassan 1. S. D. M. College of Arts & Science, Honnavar
17.	B. 1.02	Materials Management Technology	Belgaum Uttara Kannada	1. Jyothi Junior College, Belgaum 1. Bangurunagar Composite Junior College, Dandeli
18.	B. 1.03	Accountancy & Taxation	Belgaum	1. G. A. Composite Junior College, Belgaum

(Continued)

			Raichur	1. Government Junior College, Gangavathi
			Belgaum	1. R. D. Composite Junior College, Chikodi
			Tumkur	1. Kalpataru College, Tiptur 2. Government Junior College, Tumkur
19.	B. 1.04	Accountancy & Auditing	Belgaum	1. G. A. Composite Junior College, Belgaum
			Tumkur	1. Govt. Arts College, Tumkur
			Hassan	1. Navodaya Junior College Channarayapatta
20.	B. 1.05	Accountancy & Costing	Raichur	1. Tagore Memorial Junior College, Raichur
21.	B. 1.06	Primary Education	Raichur	1. Govt. Junior College, Lingasugur
			Hassan	1. Junior College, Holenarasipur
			Uttara	2. M Krishna College, Hassan
			Kannada	1. M. G. C. College, Siddapur
22.	B. 1.08	Salesmanship	Bangalore	1. Visweswarapuram College of Arts, Science & Commerce, K. R. Road, Bangalore
23.	1.B 1	Pre-School Education (Duration - one year)	Raichur	1. Tagore Memorial Junior College, Raichur
			Tumkur	1. Government Junior College, Pavagada
			Uttara	1. Mahasatee Junior College, Ulga
			Kannada	

Government of Karnataka
Department of Vocational Education
Job-Oriented Pre-University Diploma Courses

ANNEXURE--I

(Vocational Courses of Duration 2 years)

Sl. No.	Code No.	
1.	TE 1.01	Building Construction Technology
2.	TE 2.01	Servicing Technology (office equipment)
* 3.	TE 2.02	Foundry and Pattern Making
* 4.	TE 2.03	Automobile Servicing
5.	TE 3.01	Electrical Wiring & Servicing of Electrical Appliances
* 6.	TE 4.01	Assembly and Servicing (Electronics)
** 7.	TE 5.01	Oil and Soap Technology
8.	TE 6.01	Clock and Watch Repair Technology
9.	TE 7.01	Photography
10.	TE 7.02	Painting and Commercial Art
* 11.	TE 7.03	Wood Carving and Inlay work
* 12.	TE 8.01	Printing and Book Binding
13.	TE 8.02	Clothing and Embroidery
14.	TE 8.03	Textiles Technician
15.	TE 8.04	Sugar Technology (Pan Boiling)
16.	AG 1.01	Poultry Science
17.	AG 1.02	Dairying
18.	AG 1.03	Sericulture
19.	AG 1.04	Fisheries
20.	AG 1.05	Co-operation
21.	AG 1.06	Pesticides, Fertilizers & Weedicides
** 22.	AG 1.07	Forestry and Wood Products
** 23.	AG 1.08	Plantation Crops and Management
24.	AG 1.09	Agricultural Economics & Farm Management

25.	HE	1.01	Laboratory Technician
26.	HE	1.02	Physio Therapy & Occupational Therapy Assistant (Rehabilitation Assistant)
27.	HE	1.03	X-Ray Technician (Radiological Assistant)
28.	HE	1.04	Medical Record Technician
29.	HE	1.05	Optician and Refractionist
30.	HE	1.06	Multipurpose Basic Health Worker (Male)
31.	HE	1.07	Psychiatric Nursing Assistant (Psychiatric Nursing Aid)
* 32.	HE	1.08	Applied Nutrition, Dietetics and Institution Management
33.	B	1.01	Banking
34.	B	1.02	Materials Management Technology
35.	B	1.03	Accountancy and Taxation
36.	B	1.04	Accountancy and Auditing
37.	B	1.05	Accountancy and Costing
38.	B	1.06	Primary Education
39.	B	1.07	Office Practice and Procedure
40.	B	1.08	Salesmanship

ANNEXURE—II

(Vocational Courses of Duration 1 year)

1. 1.B. 1 Pre-School Education

ANNEXURE—III

(Vocational Courses of Duration 3 years)

- ** 1. 3.TE 1 Leather Technology

* Courses not introduced during 1978-79 — **
(Syllabi not finalised)

TABLES



I. Occupational Pattern of workforce - 1971

Sl. No.	Taluks	(1) Total workforce	(2) Workforce in the Category of			(3) Number Artisans
			Cultivators	Agricultural Labourers	Workforce in Manufacturing	
1.	Mercara	33,675	10,219	5,218	2,109	1,179
2.	Somwarpet	58,016	12,552	7,566	2,611	1,313
3.	Virajpet	61,147	13,225	17,269	2,689	929
District Total		1,52,838	35,996	30,053	7,409	3,421

Source : Estimate made by the Economics Advisor's Division 1975.

2. Employment and Unemployment : 1976-77

Taluka	Number of applicants on the live register of employment Exchange, end of December, 1976.				Total
	Educated			Illiterates	
	Graduates and post graduates	Matriculates	Others		
1. Madikeri	237	727	921	21	1906
2. Somwarpet	198	685	956	26	1865
3. Virajpet	169	610	937	18	1734
District Total	604	2022	2814	65	5505

3. Land Utilisation (Hectares) 1976-77

Taluka	Total Area according to village papers (1)	Net Area Sown (2)	Fallow land (3)	Forests (4)	land put to Non-agricultural use (5)	Cultivable Waste (6)
1. Madikeri	145045	46262	2794	36539	4337	15074
2. Somwarpet	99999	41308	2397	20032	16461	3210
3. Virajpet	165731	57528	2075	66015	3126	2882
District Total	410775	145098	7266	122586	23924	21166

Source : Annual Season and Crop report. 1975-76

**4. Area Under Selected Agricultural and Horticultural Crops Year 1976-1977
(Area in Hectares)**

Taluka	Foodgrains		Sugarcane	Cotton	Tobacco	Coffee	Others
	(Cereals & Pulses)	Oil seeds					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Madikeri	11226	340	—	—	—	8317	27385
2. Somwarpet	21549	482	15	298	38	15516	7289
3. Virajpet	24210	447	—	18	—	19866	13811
Diristrict	56985	1269	15	316	38	43699	44485

Source : District Statistical Officer.

5. Irrigation Year 1976-77

Taluka	Irrigation Potential (1)	Net area Irrigated (Hectares) from all Sources (2)	Net Irrigated areas as per cent of net sown area (Hectares) (3)	No. of Irrigation wells (4)
1. Madikeri	1529	1266	2.74	—
2. Somwarpet	10506	9571	23.71	85
3. Virajpet	13748	5742	9.98	98
District	25783	16579	11.43	183

The figure includes Major, Medium and Minor Irrigation Projects.

Source : Executive Engineer, P.W.D. Kodagu.

6. Power : Year 1976-77

Taluka	No. of Villages Electrified (1)	No. of Villages Electrified as per cent of total Number of villages (2)	Power Consumed (['] 000 K.W.H.) (3)	No. of Pumpsets energised (4)
1. Madikeri	27	36.99	4930	105
2. Somwarpet	63	52.50	3084	527
3. Virajpet	41	41.84	4914	508
District	131	45.02	12933	1140

Source : K.E.B.

7. Number of Industrial Units and Quantity of Production of Major Minerals and Industrial Products. Year 1976-77.

Taluks	Number of Large and Medium Scale Units (1)	Number of Small Scale Units (2)	Number of Handloom Industries (3)	Number of Cottage Industries (4)
1. Madikeri	2	102	—	—
2. Somwarpet	2	85	1	—
3. Virajpet	2	96	—	—
District	6	283	1	—

Honey (Tonnes) (5)	Fruit Products (Tonnes) (6)	Processed Rice (Tonnes) (7)	Processed Coffee (8)	Wooden Furniture (Nos) (9)
109.35	16520	—	—	20635
71.00	15215	331	736	15310
150.40	43110	—	—	132050
330.75	74845	331	736	167995

8. Health Year 1976-77

Taluka	No. of Hospitals & Dispensaries	No. of Primary Health Centres	Population served per Health Unit	No. Veterinary Hospitals	No. of Rural Vet. Dis- pensaries	Livestock Population served per Inst.
	1	2	3	4	5	6
1. Madikeri	12	2	7836	1	6	17977
2. Somwarpet	13	2	10567	—	6	15402
3. Virajpet	18	2	8160	—	8	19576
District	42	6	8804	1	20	16755

Source: District Health Officer & Senior Asst. Director of Animal Husbandary and Veterinary Service, Kodagu.

9. Education Year 1976-77

Sl. No.	Taluka	Literacy Level (%)				No. of Primary Schools	No. of Secondary Schools	General Edn.	No. of Colleges Tech. & Proff Edn.
		Male	Female	Rural	Urban				
1.	Madikeri	53.55	58.88	47.71	49.48	114	15	6	2
2.	Somwarpet	37.29	44.90	29.04	34.86	131	14	2	2
3.	Virajpet	44.08	49.53	39.69	43.26	132	21	5	1
District		44.30	50.22	37.39	41.72	377	50	13	5
Including Junior Colleges						Including Teacher's Training Colleges.			

Source: Deputy Director of Public Instruction, Kodagu.

10. Transport & Communications Year 1976-77

Sl. No.	Taluka	Surface Road Length in (Kms)	Unsurfaced Road Length in (Kms)	Road Length Per '000 Sq. Km. area (Kms)	No. of Villages not connected by roads	No. of Post Offices	Population per Post Office	No. of Tele-phones
1.	Madikeri	373	312	449	—	30	3657	538
2.	Somwarpet	351	499	905	—	59	2686	350
3.	Virajpet	539	342	544	—	72	2267	512
District		1263	1153	589	—	161	2610	1400

Source : P.W.D. Chief Engineer, Communications and Buildings, Bangalore.

II. Drinking Water Facilities Year 1976-77

Sl. No.	Taluka	Total Number of Villages	No. of Villages without any source of drinking	No. of Villages suffering health problems	No. of Villages where existing source is brakish
1.	Madikeri	73	Nil	Nil	Nil
2.	Somwarpet	120	Nil	Nil	Nil
3.	Virajpet	98	Nil	Nil	Nil
District		291	Nil	Nil	Nil

Source: Dist. Development Asst. to the Deputy Commissioner.

12. Financial Infrastructure Year 1976-77

Sl. No.	Taluka	No. of Commercial Bank Offices	No. of Co-operative Bank Offices	Population served per Bank Office (including Co-Opt, Banks)	Commercial Bank Deposits(Rs.Lakhs)	Commercial Bank Credits(Rs.Lakhs)
1.	Madikeri	21	9	3657	749.98	276.06
2.	Somwarpet	17	10	5870	314.62	161.61
3.	Virajpet	22	14	4533	658.41	234.57
District		60	33	4539	1723.01	672.24

Source:— 1) Divisional Manager, Canara Bank, Mysore. (Lead Bank)
 2) Deputy Registrar of Co-Op. Societies, Kodagu.

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2.	Somwarpet	120	Nil	Nil	Nil
3.	Virajpet	98	Nil	Nil	Nil
District		291	Nil	Nil	Nil

Source: Dist. Development Asst. to the Deputy Commissioner.

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District		60	33	4539	1723.01	672.24

Source:— 1) Divisional Manager, Canara Bank, Mysore. (Lead Bank)
 2) Deputy Registrar of Co-Op. Societies, Kodagu.

13. Land Utilisation Statistics Year 1976-77

(Area in Hectares)

Sl. No.	Particulars	Madikeri	Virajpet	Somwarpet	Dist. Total
1.	Geographical area	145045	99999	165731	410775
2.	Forests	47573	20849	67232	135654
3.	Land put to non-Agriculture uses	3941	15041	3050	22032
4.	Barran uncultivable land	13550	8923	9700	32173
5.	Cultivable Waste	15779	4025	3225	23029
6.	Permanent Pastures	4227	4740	10850	19817
7.	Land Under miscellaneous Trees	22300	3030	14310	39640
8.	Fallow Land	2723	1130	—	3853
9.	Area sown more than once	727	2791	403	3927
10.	Net area sown	34952	42261	57364	134577) 146971 12394)
11.	Total Cropped area	35679	45052	57767	138498) 150892 12394)

Source : Kodagu District Annual Plan 1978-79

**THE SCHEME OF VOCATIONALISATION
IN KARNATAKA**

DEPARTMENT OF VOCATIONAL EDUCATION

Government of India has formulated a scheme for the Vocationalisation of Higher Secondary Education. Accordingly, a separate Department of Vocational Education was created in the State during July 1977 for the efficient implementation of the centrally sponsored scheme.

Vocationalisation of Higher Secondary Education has been designed to offer the student greater scope for employment/self-employment while building up skills at the middle level of management and reducing the often meaningless scramble for collegiate education.

During 1977-78, a pilot scheme was introduced in 3 districts of the State namely, Bangalore, Dharwar and Dakshina Kannada. As many as 13 institutions were identified in the private sector where the managements showed considerable interest and enthusiasm in implementing these courses. In addition, the existence of suitable infrastructure in the form of trained staff or equipment and other facilities was considered desirable. A backward and rural area which needed strengthening of educational facilities of the vocational type, if available, was selected. One Women's College was also selected for implementation of programme.

21 Vocational courses covering all the major areas of economic activity such as Agriculture, Technical Education, Health, Banking and Commerce were identified and introduced in suitable combinations where the infrastructure and other facilities would ensure their successful implementation. Details of the courses, colleges and enrolment are given in Annexures 1 and 2.

Finances :

The scheme of vocationalisation at XIth and XIIth standards is sponsored by Government of India. Government of India assistance is made available in the following manner :

(1) For conducting District Vocational Surveys—
Rs. 10,000 per district.

(2) Assistance for salary of District Vocational Education Officer at Rs. 15,000 per annum per Vocational Education Officer (3 Officers).

(3) Assistance for salary of District Vocational Education Officers for implementing the scheme at Rs. 15,000 per annum for full year in three district (3 Officers).

(4) Expenditure towards salary of Vocational Education Officer (Examination and Survey).

(5) Assistance to Colleges for starting Vocational Courses.

(i) for equipment at Rs. 11,250 per annum for each course ; and

(ii) salary for 2 teachers at Rs. 7,500 per annum for each teacher for each course.

The Government of Karnataka has agreed to meet the rest of the approved expenditure on hundred percent grant-in-aid basis.

(1) Expenditure towards salary, travelling and other incidental expenditure for the establishment of the Director of Vocational Education in Bangalore.

(2) Expenditure towards salary of supporting staff for :

- (a) The Director of vocational Education.
- (b) District Vocational Education Officers, and
- (c) Vocational Education Officer (Examination and Survey)

(3) Expenditure towards salary of Additional Non-Vocational staff, required to run the Vocational Courses.

(4) Expenditure towards consumables and other miscellaneous expenditure.

(5) Expenditure to meet transport facilities for students/teachers, etc., to and from the Institution to the places where training is arranged.

(6) Expenditure towards one Typist cum-clerk and one helper for each of such Institution.

(7) Expenditure towards conduct of examinations, etc., and payment of professional and special services.

(8) Expenditure towards capital grants to certain institutions where the total requirement exceeds that sanctioned by Government of India in this behalf.

In addition, students opting for Vocational Courses are considered along with the students of other academic courses for purposes of grant of various fee concessions

Students Enrolment :

Against an anticipated strength of 1,200 as many as 1,030 had been enrolled by the end of 1st Semester. The number of students under training for each of the vocational courses introduced during 1977-78 is indicated in Annexure-2. For the training programme shown in Annexure-3, the following categories of teachers (full time, part time teacher, craft teacher etc.) are employed.

District Vocational Surveys :

9 Districts in the State have been chosen for District Vocational Surveys. 3 more districts will also be taken up for conducting district survey by 31st March 1978. These reports reveal the main thrust of the economic activities of the community in the district. The existing job opportunities and a forecast of job opportunities on the basis of developmental activities envisaged by the several Departments of Government and the private sectors are also assessed. This information helps to identify the vocational courses suitable for implementation in a particular district.

Almost all the colleges have established close liaison with factories, industries, banking establishment, engineering contractors, Housing Boards, Health, Agriculture, Animal Husbandry Departments for imparting practical training to these students.

PROGRAMME FOR THE SIXTH PLAN PERIOD

The remaining 10 Districts of Karnataka are being surveyed to determine the major economic activity, existing at present and planned for them in the near future. The report will include the probable areas of job opportunities that are likely to be generated in the coming years. It will also include areas in which the local student population is likely to be interested in getting trained to answer a definite felt need in the community depending upon the nature of services required in the various sectors namely, Technical Agriculture, Para-Medical Business and Banking.

After the survey reports are compiled, recommendations would be sent up to Government for the implementation of the scheme of Vocationalisation in some of the selected colleges in each District. As per the advise of the Man Power Planning Section, Government would decide on the number of colleges to be choosen depending upon their suitability for introducing vocational courses. It is proposed to recommended atleast 8 Institutions to be taken up for the implementation of the scheme for 1979-80 in each of the 10 Districts.

Vocationalisation is by and large acceptable to the population of Karnataka as revealed by the progress of the pilot scheme upto now. It is expected to be enlarged in the coming years so as to benefit all the Talukas in the State. By the end of the Sixth Plan period, it is hoped that Vocationalisation would be able to wean out about 20% of the students passing the Xth Standard from the academic stream into more useful avenues of an increasing number of vocations for which courses are being planned.



ANNEXURE 1

**List of Vocational Courses introduced and student strength
in each courses—1977-78**

<i>Courses</i>	<i>Total</i>
1. Accountancy and Auditing	.... 67
2. Accountancy and Costing	.... 49
3. Building Construction Technology	.... 144
4. Banking	.... 74
5. Clock and Watch Repair Technology	.... 34
6. Co-operation	.... 57
7. Dairying	.... 22
8. Electrical Wiring and Servicing of of electrical appliances	.... 172
9. Fisheries	.... 24
10. Multipurpose Basic Health Worker (Male)	.... 34
11. Material Management Technology	.... 75
12. Medical Record Technician	.... 30
13. Optician and Refractionist	.... 4
14. Photography	.... 22
15. Physio Therapy and occupational Therapy Technician	.... 17
16. Psychiatric Assistant	.... 10
17. Pesticides, Fertilizers and Weedicides	.... 62
18. Servicing Technology	.... 43
19. Sericulture	.... 43
20. X-Ray Technician	.... 4
21. Laboratory Technician	.... 43

	Total ....1,030

ANNEXURE 2

**Number of boys and girls enrolled for Vocational Courses
during—1977-78**

1		2		3		4	
<i>Name of the College</i>		<i>Courses</i>		<i>Boys</i>		<i>Girls</i>	
1.	Sri Jagadguru Renukacharya Arts and Science College, Bangalore	1.	Building Construction Technology	25	....	
		2.	Electrical Wiring and Servicing of Electrical Appliances	25	....	
		3.	Accountancy and Auditing	25	....	
		4.	Accountancy and Costing	25	....	
2.	Rural College, Kanakapura, Bangalore Dist.	1.	Building Construction Technology	21	....	
		2.	Servicing Technology	19	....	
		3.	Photography	11	....	
		4.	Sericulture	24	1		
3.	N.M.K.R.V. College for Women, Jayanagar, B'lore	1.	Clock and Watch Repair Technology	....	10		
		2.	Photography	....	11		
		3.	Physio-therapy and Occupational therapy Technician	....	13		
		4.	Psychiatric Assistant	....	6		
4.	M.E.S. College, Bangalore	1.	Multipurpose Basic Health Worker (Male)	11	....	
		2.	Banking	14	11		
		3.	Materials Management Technology	19	6		
		4.	Laboratory Technician	10	9		

<i>Name of the College</i>		<i>Courses</i>	<i>Boys</i>	<i>Girls</i>
1	2	3	4	
5. St. Alloysius College, Mangalore	1.	Building Construction Technology	24	
	2.	Electrical Wiring and Servicing of Electrical Appliances	25	....
	3.	Fisheries	24	....
	4.	Pesticides, Fertilisers and Weedicides	22	....
6. M.G.M.College Udupi	1.	Building construction Technology	22	....
	2.	Electrical Wiring and Servicing of Electrical Appliances	25	....
	3.	Laboratory Technician	21	3
	4.	Physio therapy and Occupational therapy technician	4	....
	5.	Medical Record Technician	6	....
	6.	Psychiatric Assistant	4	....
	7.	X-Ray Technician	4	....
	8.	Optician and Refractionist	4	....
7. Viveka College Kota (S.K.)	1.	Co-operation	11	11
	2.	Pesticides, Fertilisers and Weedicides	17	....
	3.	Banking	12	12
	4.	Accountancy and Auditing	15	8
8. Vivekananda College, Puttur	1.	Co-operation	12	5
	2.	Accountancy and Auditing	10	9
9. BASG. Science Vidyagiri College Dharwar	1.	Building Construction Technology	25	....
	2.	Electrical Wiring and Servicing of Electrical Appliances	25	....
	3.	Materials Management Technology	25	....
	4.	Accountancy and Auditing	21	3

<i>Name of the College</i>		<i>Courses</i>	<i>Boys Girls</i>	
1		2	3	4
10. Municipal Composite Junior College, Gadag, Dharwar District	1.	Building Construction Technology	24	....
	2.	Electrical Wiring and Servicing of Electrical Appliances	25	....
	3.	Medical Record Technician	25	....
	4.	Multipurpose Basic Health Worker (Male)	23	....
11. Mahantaswamy Arts and Science College Haunsbhavi, Dharwar Dist.	1.	Electrical Wiring and Servicing of Electrical Appliances	25	....
	2.	Clock and Watch Repair Technology	24	....
	3.	Sericulture Co-operation	18	....
12. K. E. Board Vidyaranya K. S. School Dharwar	1.	Dairying	22	....
	2.	Servicing Technology	24	....
	3.	Electrical Wiring and Servicing of Electrical Appliance	22	....
	4.	Pesticides, Fertilisers and Weedicides	23	....
13. Basel Mission Composite Junior College, Dharwar	1.	Banking	23	2
	2.	Materials Management Technology	23	2

Total : 908 122

ANNEXURE III

List of Teachers employed for Job-oriented Diploma Courses*Vocational :-*

1. Full-time	....	26
2. Part-time	....	140
3. Worker Teacher	....	11
4. Helper	....	11

	....	188
	....	32

Total -	....	220

:-*:-

ANNEXURE IV

Regulations, Courses of Study of Scheme of Examinations for Job-Oriented Pre-University Diploma Courses

1. Qualifications for admission :

a) Admission to all the Vocational courses shall, in general, be open to all students who have passed.

i) The S. S. L. C. Examination conducted by the Karnataka Secondary Education Board; or.

ii) The Indian Certificate of Secondary Education Examination conducted by the Council for the Indian School Certificate Examination; or

iii) Any other Examination recognised as equivalent to the Karnataka S. S. L. C. Examination.

b) Admission shall be made on the basis of merit in the qualifying Examination and an aptitude test prescribed by Government.

2. Duration of the Courses :

i) The courses of study shall extend over a period of academic years comprising of four semesters.

- ii) The duration of the course, the scheme of teaching, training and Examination in subjects listed under PART-I of the course shall be common to both Academic and Vocational streams.
- iii) The teaching and Examination of subjects, under PART-II of the Vocational courses, shall arranged under a SEMESTER SCHEME Consisting of 4 Semester of 4 months each.
- iv) The scheme shall also include period of intensive practical training in vocational courses during the Summer Vocations wherever necessary.

3. Medium of Instruction and Examinations :

The medium of Instruction and Examination in the course shall be ENGLISH or KANNADA.

4. Courses of Study :

- i) The details of the subjects to be studied and the number of hours/week allotted for them in both PART-I and II is saperately specified for each course.

There shall be common Syllabi and Scheme of Examination prescribed for both academic and Vocational Streams during first and second year classes.

1. Kannada/or any other Indian Languages	4 Hrs./week
2. English	4 Hrs./week

- ii) For part-II subjects.

For each theory paper as also Drawing, there shall be a maximum of 100 marks distributed for evaluation as under :

For each subject of 1st & 3rd Semesters

Continuous Internal Assessment	50 Marks
Internal Examination at end of Semester (3 hrs. paper)	50 „

For each subject 2nd & 4th Semesters

Continuous Internal assessment	50 Marks
External Examination at the end of semester (3 hrs. Paper)	50 „

- iii) Each practical under II shall carry a maximum of 100 marks distributed as under :

For each Practical of the 1st & 3rd Semesters

Continuous Internal assessment	50 Marks
Internal Examination at the end of Semester (3 hrs. Paper)	50 „

For each Practical of the 2nd & 4th Semesters

Continuous Internal assessment	50 Marks
External Examination at the end of Semester (3 hrs. Paper)	50 „

- iv) The practical experience of field training or in plant training or intensive practical training arranged shall be valued on the basis of daily record prepared by the candidate as an internal assessment only for a maximum of 50 Marks.

- v) An additional 50 marks shall also be prescribed as a maximum for Evaluation of report on the Education Tour, if any, when prescribed for the subjects in Part II.

5. Minimum Attendance :

- i) A candidate shall put in a maximum of 75% attendance in each of the subjects of Part-I.
- ii) A candidate shall put in maximum of 83% average attendance taking attendance in all the subjects of Part II for both the semesters of the year together.

6. Condonation of shortages Attendance :

- i) Heads of Institutions shall have powers to condone 15% shortage in attendance for both 5 (i) & 5 (ii) above for valied reasons.
- ii) Those candidates who fail to put in the minimum acceptable attendance as per Clause (5) and with (6) (i) above required to repeat the course afresh in all respects.

7. Admission to the examination :

Admission to the external Examinations at the end of 2nd & 4th Semesters shall be open to candidates.

- i) Who satisfy the attendance requirements as per Clause 5 and 6 (i) above.
- ii) and whose progress and conduct is satisfactory as per the certificate of the Head of the Institution.

8. Minimum for a pass :

- a) Candidates who secure not less than 30% in the subject and 35% in the aggregate for Part-I shall be declared to have passed in Part-I
- b) No candidate shall be declared to have passed any Examination in a subject under Part-II unless he obtains not less than 40% of the marks in each of the theory

papers and 50% in each of the practicals prescribed for the examination for both internal assessment and examination at the end of the Semester put together for that paper.

9. Classification of successful candidates :

- a) Candidates who obtain 60% and above of the maximum marks for each part shall be declared to have passed that part in **FIRST CLASS**.
- b) Candidates who obtain 50% and above marks but less than 60% of the maximum for each part shall be placed in **SECOND CLASS** for that part.
- c) All other successful candidates shall be placed in the **PASS CLASS** in the respective parts.

10. Promotion from one Semester to another :

- a) Promotion from the first semester to the second and from the third semester to the fourth is automatic.
- b) However, promotion to the third semester shall be subject to the condition that a candidate should not have failed in more than three subjects in all of the Ist and IInd semesters together.
- c) The marks once awarded for internal assessment shall be final unless the student is permitted to repeat the course afresh.
- d) The results of the final semester shall be with held until a candidate has passed in all the papers of all the semesters and has submitted the report of the inplant or intensive practical training diary and the same has been valued and judged as satisfactory, as per Clause 4 (iv) above.

ANNEXURE V

Courses introduced for 1977-78

Sl. No.	Code No.	Name of Course
Duration Two Years		
1.	TE 1.01	Building Construction Technology
2.	TE 2.01	Servicing Technology (Office Equipment)
3.	TE 3.01	Electrical Wiring and Servicing Electrical Appliances
4.	TE 6.01	Clock and Watch Repair Technology
5.	TE 7.01	Photography
6.	AG 1.01	Poultry Science
7.	AG 1.02	Dairying
8.	AG 1.03	Sericulture
9.	AG 1.04	Fisheries
10.	AG 1.05	Co-operation
11.	AG 1.06	Pesticides, Fertilizers and Weedicides
12.	HE 1.01	Laboratory Technician
13.	HE 1.02	Physio Therapy and Occupational Therapy Technician (Rehabilitation therapy Assistant)
14.	HE 1.03	X-Ray Technician (Radiological Assistant)
15.	HE 1.04	Medical record Technician
16.	HE 1.05	Optician and Refractionist
17.	HE 1.06	Multipurpose Basic Health Workers (Male)
18.	HE 1.07	Psychiatric Nursing Assistant (Psychiatric Nursing Aid)
19.	B 1.01	Banking
20.	B 1.02	Materials Management Technology
21.	B 1.04	Accountancy and Auditing
22.	B 1.05	Accountancy and Costing

ANNEXURE-VI

**Courses Proposed to be introduced
during 1978-79**

Sl No.	Code No.	Name of Course
Duration Two Years		
1.	TE 4.01	Assembly and Servicing (Electronics)
2.	TE 7.02	Painting and Commercial Art
3.	TE 8.01	Printing and Book Binding
4.	TE 8.02	Clothing and Embroidary
5.	TE 8.03	Textiles Assistant
6.	TE 8.04	Sugar Technology (Pan Boiling)
7.	AG 1.09	Agricultural Economics and Farm management
8.	HE 1.08	Applied Nutrition, Dietetics and Institution Management
9.	B 1.03	Accountancy and Taxation
10.	B 1.06	Primary Education
11.	B 1.07	Office practice and Procedure
12.	B 1.08	Salesmanship
Duration one Year		
13.	1.B 1	Pre-School Education

ANNEXURE VII

Salient Aspects of Vocationalisation at the Higher Secondary Stage

1. The Government of India took a policy decision of far reaching consequence when they sponsored Vocationalisation of Education at the Higher Secondary stage viz. the XI and the XIIth Standards. The Government of Karnataka approved this scheme and sanctioned Additional sums for its implementation from 1977-78 onwards. It is included as a Central Sector Scheme.

2. Many educationists and parents of students were pointing out from some time past, that their wards were forced to study academic courses since vocational courses of their choice and aptitude were not available in colleges/institutions.

3. It was also felt that in certain organised sectors like industrial establishments, and other public service, there is considerable dearth of people with vocational skills.

4. It is therefore felt that instead of general education, Vocational education must be introduced to answer the need for providing trained personal with the required skills.

5. It was therefore necessary to have a new approach to Education and the necessity to structure training programmes to suit the needs of the society.

6. Depending upon the findings of a District Vocational Survey conducted in many Districts, a large number of vocational courses are being planned when the needs are so established. Teachers and experts in the field, available in the region are identified and they are requested to teach and train the students in these vocations.

7. The courses are generally terminal in nature and the duration varies from one to three years depending on the nature of the skills required to development for the situations.

8. Courses of 2 years duration have two parts, Part-I (consisting of two languages) is common with the Pre-University academic stream. This helps to organise bridge courses if later needed to provide for vertical mobility and for introducing flexibility into the system. Part II of the programme is for the vocation subjects (18 to 24 hours per week). This would be utilised for providing the theoritical background and developing the necessary skills for a definite vocation. Out of this nearly 50 percent would be practical oriented, tailored to suit the repuirements of the profession or a job.

9. The maximum intake for each vocational courses is fixed at 25. The student has to take an aptitude test to determine where is talents lie.

In some courses like psychiatric Nursing Assistant, Reha-bilitation Therapy Technician, etc., the aptitude test based on Psychological assessment alone makes a candidate eligible.

10. The course of two years duration is organised in four semesters of 4 months duration each. The emphasis of training is on the learning aspect with the view to make the candidate highly acceptable in the professional field and the requirements of the profession dictate the contents of syllabi and scheme of training. The scheme of training is not examination oriented but learning oriented.

11. First and third semester examinations are conducted by the staff of the college. Examinations at the end of II and IV Semesters will however be public examinations and conducted by the State Council of vocational Education. Wherever

possible people of the profession and those in the field of employment will be associated in the assessment programme,

12. The Scheme provides for the involvement of people in the profession, representatives of industries and of employers as guest lecturers. Some workers with specialised skills are also included in the training programme to demonstrate and teach the practical methods adopted to develop skills of the profession.

13. There is a new move to prevail on the Universities to organise examinations leading to the award of external degrees for proficiency in some of these vocations, after a certain number of years of field experience of job training.

14. Government of India has come forward to meet a portion of the expenditure towards 1) Library, Furniture equipment for each of these courses 2) Salary expenditure of one full time teachers and worker teachers, whose ability to train the students in practical subjects is recognised.

15. Government of Karnataka has come forward to meet other approved expenditure other than the above on a 100% grant-in-aid basis.

16. The course is proposed to be organised at selected institutions running the XI and XII standards, Junior Colleges Composite Colleges, etc, where necessary facilities of infrastructure and the appropriate atmosphere are available.

17. In some of the courses, 4 to 8 weeks of in-plant training/field training or institutionalisation is insisted upon as pre-requisite for award of Diplomas, in this, the student has to maintain daily reports of work done and practical experience gained. This is expected to familiarise the students with the working procedures in the field of service.

18. Most of the regulations, and rules for the award of scholarships, etc. are common with the academic stream of the Pre-University Course through a separate set of Regulations are prescribed governing the operation of the scheme of Training and Examination for the Vocational Stream.

19. The State Council of Vocational Education issues Diploma recognised by State Board of Vocational Education to the successful candidates. All the Government Departments and the Government of India are being seperately requested to identify the various posts and cadres in services where appropriate education technology (Diploma of the State Council of Vocational Education) could be recognised for purpose of recruitment.

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ANNEXURE VIII

**Salient Points in the Implementation of a
Programme of Vocationalisation at the
11th & 12th Standards**

I. Selection of Colleges :

1. Colleges with an average total student in the First P.U.C. class of more than 100 for the previous 3 years-may be chosen. One or two rural Colleges also selected.

2. Colleges with an average total student strength at the First P.U.C. of about 200 may be selected for introducing four courses provided additional rooms/facilities are available.

3. The principal should be dynamic and resourcefull enough as judged by the Directorate, to arrange for effective liasion with industries/other establishments/agricultural universities/chartered accountants/ practioners /hospital suprintindents/bankers, etc., for getting practical training required in the particular fields.

II. Selection of Courses for each College :

This is decided upon by a combination of the following factors as a result of discussions of the College authorities with knowledgeable people in the field and the laision which can be established by them.

1. The trends of employment opportunities predicated by District Vocational Survey conducted by this Department and the local conditions of availability of qualified staff for giving effective training in some of those fields as also the popularity of vocation with the students concerned.

2. The economic development envisaged for the region as included in the development plans of the district.

3. Socio-economic background of the majority of the student community.

4. Requirements of teaching staff and the training staff.

5. The proximity of Engineering College or a polytechnic or a Hospital/s or a dairy or a Training Institute/Industry providing additional facilities for implementation of a course.

III. Selection of Students :

1. No courses shall have more than 25 students nor fewer than 15 unless otherwise specially permitted by the Director.

2. There should be reservation for S.C./S.T. and other weaker sections of the society as per Government Notification in this behalf in each course.

3. There shall be an aptitude test or a method of evaluation of the suitability of individual student for each course adopted of selection in addition to the marks in the qualifying Examination.

4. For some of the courses, a psychology test or physical fitness or age or all of it may be considered.

IV. Selection of Teachers :

A. For Vocational Subjects :

For Vocational courses, one lecturer-full and worker teacher-full-time may be appointed by a duly constituted selection committee. Part-time lecturers and part-time workers teachers can be appointed for practical training for specific periods a week or specific duration. A full-time teacher has to take 20-22 units of work (one hour lecture is taken equivalent to 2 units and one hour practical is equivalent to one unit).

Each of the teachers has to the following :

1. to take the classes regularly as per the time-table.
2. to conduct periodical test, correct periodical assignments, conduct quizzes, arrange announced and unannounced tests to be evaluated. They form the basis for continuous evolution for each student and a register should be maintained to report the marks obtained in each of the subjects entrusted.
3. he has to prepare brief notes and get them cyclostyled in the office for distribution to students. Stationery will be made available by the principal.
4. he has to conduct an End-examination for the subjects of first and third semesters and report the marks in the prescribed form with in the due dates stipulated.

The Staff Pattern For Each Course Should be Got Approved by the Director Before any Appointments are Made.

Guest lectures could also be arranged for each course with the previous permission of the Director.

The total expenditure per year on salary and honoraria on vocational training is to be limited Rs. 15,000/- per course for each class.

Success of the scheme directly depends upon the teacher and his love to inculcate practical aspects of the vocation in the student.

Note : All the full-time posts will have to be classified and recruitment done providing suitable reservations in each cadre as per Government Orders in this behalf.

A. *For non-Vocational Subjects :*

Unemployed graduates with suitable qualifications may be preferred as Part-time lecturers in languages.

Maintenance of Accounts

Seperate registers will have to be opened for maintaining accounts of all kinds including store account and will have to be produced before the auditing authority from the Directorate or the Accountant General as per rules. Vouchers will have to clearly written under each head, sub-head covering all expenditure under maintenance grant, contingency, T. A. and other miscellaneous accounts.

In respect of purchases rules laid down in the Manual of Financial Powers, Government of Karnataka are only applicable and should be strictly followed.

ANNEXURE IX


Statement showing the particulars of the Institutions in starting the vocational courses during.....

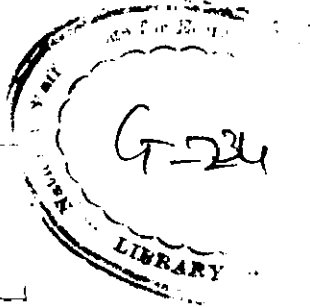
1. Name of the Institution
2. Name of the Principal with age, qualification and address
3. Detail of courses existing at present :
 - a) Academic
 - b) Vocational, if any
4. No. of teachers employed with their age and qualification and experience (a separate list to be enclosed)
 - i) No. of acres of land available
 - ii) Liaison with industry if any
 - iii) Involvement of the other voluantry and service agencies.
5. No. of student admitted to the I.P.U.C. during
 - 1975-76
 - 1976-77
 - 1977-78
6. Fee structure at the + 2 Stage.
7. Particulars of infrastructure already available for starting vocational courses if any :
 - i) Additional room space
 - ii) Additional furniture available
 - iii) Duplicator
 - iv) Overhead projector
 - v) Movie projector
 - vi) Slide projector
 - vii) Trained Staff, in any trade-give details
 - viii) Any other facility such as Typewriters; Printing Press, Hobby Centre Agricultural & Dairy, Poultry, Co-operative Society, Banks, Sewing Machines Workshop, Garrage.

8. Which courses according to you may be more population and why?
- a) Agricultural oriented
 - b) Technical oriented
 - c) Medical oriented
 - d) Business & Commerce oriented
 - e) Nursing oriented
 - f) Any other area to be specified.
9. A brief history of the Institution
10. Financial position of the management in brief
11. Any other information you would like to furnish to substantiate the claim of your institution for selection.

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