



Dakshina Kannada District HUMAN DEVELOPMENT REPORT - 2014



DAKSHINA KANNADA ZILLA PANCHAYAT,
MANGALURU

PLANNING, PROGRAMME MONITORING
AND STATISTICS DEPARTMENT,
GOVERNMENT OF KARNATAKA, BENGALURU

DAKSHINA KANNADA DISTRICT

HUMAN DEVELOPMENT REPORT

2014

Dakshina Kannada Zilla Panchayat
Mangaluru

Planning, Programme Monitoring
and Statistics Department
Government of Karnataka, Bengaluru

Dakshina Kannada District Human Development Report - 2014

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SIDDARAMAIAH
CHIEF MINISTER



MESSAGE

VIDHANA SOUDHA
BANGALORE - 560 001

CM/PS/234/2014

Date : 27-10-2014

I am delighted to learn that the Department of Planning, Programme Monitoring and Statistics is bringing out District Human Development Reports for all the 30 districts of the State, simultaneously.

Karnataka is consistently striving to improve human development parameters in education, nutrition and health through many initiatives and well-conceived programmes. However, it is still a matter of concern that certain pockets of the State have not shown as much improvement as desired in the human development parameters. Human resource is the real wealth of any State. Sustainable growth and advancement is not feasible without human development. It is expected that these reports will throw light on the unique development challenges within each district, and would provide necessary pointers for planners and policy makers to address these challenges.

The District Human Development reports are expected to become guiding documents for planning and implementation of Programmes within the districts. I urge the Members of Parliament, Legislators, Zilla Panchayat, Taluk Panchayat and Gram Panchayat Members, vis-a-vis representatives of Urban Local Bodies to make conscious attempt to understand the analysis that has been provided in the district human development reports and strive hard to ensure that the identified gaps are bridged through effective planning and implementation.

A number of people from many walks of life including administrators, academicians and people representatives have contributed in making of these reports. I commend each and every one associated with the preparation of the District Human Development Reports. I acknowledge the efforts put in by district committees headed by Chief Executive Officers and Officers of the Planning Department in completing this challenging task.

It gives me great pride to share with you that Karnataka is the first state in the country to prepare district human development reports for all the districts. I am hopeful that this initiative will spur us to double our efforts to make Karnataka, a more equitable progressive State.

Siddaramaiah
(SIDDARAMAIAH)



S. R. Patil

Minister for Planning &
Statistics, IT & BT
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And

Bagalkot District Incharge Minister



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Message

I am happy to learn that the District Human Development Reports (DHDRs) for all the 30 districts in the State are being placed in public domain shortly. A painstaking and massive effort has gone into the preparation of these reports. I heartily congratulate the Zilla Panchayats and the Planning Department for this commendable work.

The reports, I am sure would help policy makers, administrators, researchers, social organizations and the public at large to understand the critical concerns of human development in the Districts and Taluks of our state and also to bridge such deprivations by initiating suitable policy and programme interventions.


(S R Patil)



B. RAMANATHA RAI
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Message

The concept of human development does not depend solely on the improvement of facilities such as health, education etc. or increase in per capita income. It includes open atmosphere to get these facilities and attaining the competence of utilizing them. Therefore eminent economists have said, “Human development means extension of choices to the people”.

I am happy that the Government of Karnataka has recognized the importance of human development and decided to bring out Human Development Report with the aim of finding out the shortcoming and discrepancies. The reports from all the 30 district has successfully compiled the report. This success is due to the active involvement of institutions like Mangalore University, Justice K. S. Hedge Institute of Management, various NGOs, experts and various department of the government.

I hope this report will contribute immensely in framing the policy with regard to human development, in allotting financial resources for the projects and development works in the district. I congratulate all those who are involved in the preparation of this report.

(B. RAMANATHA RAI)



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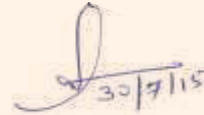
Message

It is now well recognized that the mere increase in the Gross Domestic product and per capita income cannot lead to the well being of people. The Human Development Approach of UNDP rightly put the well -being of people at the centre of development. Recognising the critical importance of well-being of people, Karnataka Government brought out two Human Development Reports in 1999 and 2005. Since state – level reports have not brought out disparities in various dimensions of human development at grass root level within the districts, the Government of Karnataka has now decided to bring out District Human Development Reports for all 30 districts in the state. The Zilla Panchayat of Dakshina Kannada was made responsible to coordinate the task of preparation of the Dakshina Kannada District Human Development Report. In the beginning Mangalore University was appointed as the lead agency and subsequently, Justice K S Hegde Institute of Management, Nitte took over as the lead agency for preparing Dakshina Kannada District Human Development Report.

The Preparation of the Report was a huge responsibility and challenging task. Human Development being multi- dimensional, the report adopted broad based methodology and a set of taluk-level human development indicators for construction of seven indices to focus on inter-taluk disparities in human development, gender inequality, child development, food security, urban development, deprivation of Dalits and composite taluk development. The Report also discusses meticulously various human development dimensions such as education, health, sanitation,

livelihood standards, empowerment of women, status of marginalized sections, urban development issues and governance from human development perspective. The Report has twelve chapters focusing on in-depth empirical analysis of all these human development related concerns. The concluding chapter, The Way Forward, charts out thrust areas for intervention policies and strategies for enhancing comprehensive, inclusive, equitable and sustainable human development in the district.

The Report is an outcome of collaborative efforts of both the Zilla Panchayat and the Lead Agency. In the initial stage, Smt. Thulasi Maddineni, then CEO, ZP and thereafter, Smt. P.I. Sreevidya who took over from her as the CEO spearheaded the task. The Planning Department of the ZP coordinated the work of compilation of data from the line departments, organization of workshops and collaborating with the Lead Agency in preparation of the Report. All the heads of the line departments and urban bodies have fully cooperated in provision of requisite data. A team of researchers from the Lead Agency worked very hard in computing various indices and in preparing this Report. Without their dedication, commitment and team efforts, this Report would not be in its present scholastic form. I would like to record our deep appreciation of all those involved for their dedication and commitment in producing this Report in time. I sincerely hope that the Dakshina Kannada District Human Development Report would be the basis for our future course of policies, programmes and resource allocation.



(ASHA THIMMAPPA GOWDA KUNDADKA)
President
D.K Zilla Panchayat.



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Foreword

Dakshina Kannada District Human Development Report 2014 is the outcome of collaborative efforts of a dedicated team of researchers of the JKSH Institute of Management, Nitte supported by the Planning Department, Dakshina Kannada Zilla Panchayat. The Department of Planning, Programme Monitoring and Statistics, Government of Karnataka undertook a number of preparatory steps like developing Guideline Document, organizing two workshops for sensitizing and technical capacity building and providing technical guidance at every stage of preparation of the Report. I would like to acknowledge their contributions, guidance and support. Special thanks are due to Shri Sanjiv Kumar, I.A.S. former Principal Secretary, Smt. Anita Kaul I.A.S. (Rtd), former Principal Secretary, Ms. V. Manjula I.A.S. former Principal Secretary and Shri Rajiv Ranjan I.F.S. Secretary, Planning, Programme Monitoring and Statistics Department and Dr. H. Shashidhar I.A.S., SLCC (State Level Consultant and Coordinator) for over-viewing the entire process and guiding the preparation of the Report. The DHDR is also supported by UNDP-PCI, under their project HDBI (Human Development: Towards Bridging Inequalities).

The entire process of preparation involved close consultation with a large number of experts, line departments of Dakshina Kannada ZP and various institutions. Initially, Smt. Thulasi, CEO, ZP,

my predecessor, spearheaded the initiative and coordinated the process. The Planning Department of the ZP organized district-level and three taluk-level workshops and collaborated with the Lead agency in compilation and validation of data from the line departments and preparation of the Report. The Heads of Departments such as Education, Health and Family Welfare, Agriculture, Horticulture, Animal Husbandry, Women and Child Development, Social Welfare, Urban Local Bodies and others provided required data and participated actively in the deliberations of Core Committee. I would like to express my sincere thanks to all of them for their assistance and contribution.

The research team of the Lead Agency consisting of Dr. N.S.Shetty (Lead Coordinator), supported by Shri Vinod Dixit worked very hard with commitment in preparing this Report. Prof Rakesh Shetty of the Institute helped in computing the indices. The Report also greatly benefited from the intellectual advice from Dr. N.K.Thingalaya, Emeritus Professor and Dr. M. S. Moodithaya, Registrar of Nitte University. I am profoundly grateful to them.

Special thanks are also due to Prof. Sayeegeetha Hegde of the Department of Humanities, Nitte University, for translating the entire Report into Kannada and Sri Jagadish of Ultra Designz for designing the Report.

Finally, I thank all those directly or indirectly involved in giving the Report its final shape. I sincerely hope that the Report would be of great policy relevance and provide basis for preparing district planning process from human development perspective and resource allocation by the State Government.


P I Sreevidya I.A.S.
Chief Executive Officer
Zilla Panchayat, Dakshina Kannada.

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ABBREVIATIONS

AAV	: Anthyodaya Anna Yojana
AIDS	: Acquired Immune Deficiency Syndrome
ANC	: Antenatal Care
BPL	: Below Poverty Line
CALC	: Computer-aided Learning Centre
CMPCO	: Cocoa Marketing and Processing Cooperative Ltd.
CBOs	: Community Based Organizations
CBR	: Crude Birth Rate
CC	: City Corporation
CDI	: Child Development Index
CDDI	: Composite Dalit Development Index
CTDI	: Composite Taluk Development Index
CDR	: Crude Death Rate
CEO	: Chief Executive Officer
CHCs	: Community Health Centres
CMR	: Child Mortality Rate
CPO	: Chief Planning Officer
CRZ	: Coastal Regulation Zone
CSO	: Central Statistical Organization
CSR	: Child Sex Ratio
DC	: Deputy Commissioner
DCDI	: District Composite Development Index
DDI	: Dalit Deprivation Index
DES	: Directorate of Economics and Statistics
DHDR	: District Human Development Report
DHFW	: Department of Health and Family Welfare
D. K.	: Dakshina Kannada
ENT	: Ear, Nose and Throat
DPT	: Diphtheria, Polio and Tuberculosis
DSO	: District Statistical Officer
DWCD	: Department of Women and Child Development
FSI	: Food Security Index
GDI	: Gender-related Development Index
GDP	: Gross Domestic Product
GII	: Gender Inequality Index
GEM	: Gender Empowerment Measure
GER	: Gross Enrolment Ratio

GNI	: Gross National Income
GOI	: Government of India
GOK	: Government of Karnataka
GP	: Gram Panchayat
GDDP	: Gross District Domestic Product
GSDP	: Gross State Domestic Product
HDI	: Human Development Index
HDR	: Human Development Report
HDD	: Human Development Division
HIV	: Human Immunodeficiency Virus
ICDS	: Integrated Child Development Services
IHDI	: Inequality-adjusted Human Development Index
IMR	: Infant Mortality Rate
ITDP	: Integrated Tribal Development Programme
KHDR	: Karnataka Human Development Report
KMC	: Kasturba Medical College
KUDCEM	: Karnataka Urban Development and Coastal Environment Management
KIOCL	: Kudremukh Iron Ore Company.
LEB	: Life Expectancy at Birth
LIC	: Life Insurance Corporation of India
LPCD	: Liter per capita per day
MCF	: Mangalore Chemicals Fertilizers Ltd.
MCH	: Maternal and Child Health
MDGs	: Millennium Development Goals
MGNREGA	: Mahatma Gandhi National Rural Employment Guarantee Act
MMR	: Maternal Mortality Rate
MRPL	: Mangalore Refinery and Petrochemicals Ltd.
MPI	: Multidimensional Poverty Index
MESCOM	: Mangalore Electricity Supply Company
NABARD	: National Bank for Agriculture and Rural Development
NDDP	: Net District Domestic Product
NER	: Net Enrolment Ratio
NGOs	: Non-Governmental Organizations
NGVCT	: Navodaya Grama Vikas Charitable Trust
NRHM	: National Rural Health Mission
NSS	: National Sample Survey
NSSO	: National Sample Survey Organization
OBC	: Other Backward Community

PDS	: Public Distribution System
PHCs	: Public Health Centres
PMGY	: Pradhana Mantri Gramodaya Yojana
PNC	: Post Natal Care
PPMSD	: Planning, Programme Monitoring and Statistics Department
PPP\$: Purchasing Power Parity in terms of US Dollars
PRI	: Panchayat Raj Institutions
PTG	: Primitive Tribal Group
PTR	: Pupil Teacher Ratio
PUC	: Pre-university Course
RBI	: Reserve Bank of India
RCH	: Reproductive and Child Health
RMSA	: Rastriya Madhyamik Shikshan Abhiyan
RRBs	: Regional Rural Banks
RUDSETI	: Rural Development and Self-employment Training Institute
RTE	: Right to Education
SCs	: Scheduled Castes
SEZ	: Special Economic Zone
SCDCCB	: South Canara District Central Cooperative Bank
SDMCs	: School Development and Monitoring Committees
SGRY	: Sampoorana Grameena Rozgar Yojana
SGSY	: Swarnajayanti Grama Swarozgar Yojana
SHGs	: Self-Help Groups
SKDRDP	: Shree Kshetra Dharmastala Rural Development Project
SLCC	: State Level Coordination Committee
SSA	: Sarva Shikshan Abhiyana
SSLC	: Secondary School Leaving Certificate
STs	: Scheduled Tribes
TB	: Tuberculosis Bacilli
TMCs	: Town Municipal Councils
TP	: Taluk Panchayat
IT	: Information Technology
TSC	: Total Sanitary Campaign
UDI	: Urban Development Index
ULBs	: Urban Local Bodies
UN	: United Nations
UNDP	: United Nations Development Programme
WHO	: World Health Organization
WPR	: Work Participation Rate
ZP	: Zilla Panchayat



Part I

Executive Summary

Income



Education



Health



Empowerment





Executive Summary

As the conventional development approach measured in terms of GDP and per capita income did not capture basic aspects of well-being of people, the United Nations Development Programme (UNDP), in its first Human Development Report in 1990, advocated people-centric human development as an alternative approach. It made the human development as the primary goal of development. Since people are wealth of nations, the development should aim at creating an enabling environment for people to lead a long and healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living. The Human Development Index (HDI) was evolved as a yardstick to measure well-being of people across countries. As a composite index, it takes into account three core dimensions of human development viz. health, education and standard of living. The UNDP 2010 HDR has made HDI broad-based beyond three core dimensions and suggested users to take into consideration other key human development concerns affecting human development.

The Government of Karnataka brought out the first HDR in 1999 and second HDR in 2005. Recognizing the critical importance of human development concerns at grass root level, the State Government has decided to undertake DHDRs in all 30 districts in the state. The main purpose of the DHDRs is to capture all the key dimensions affecting well-being of people at the taluk and district levels. Accordingly, a broader approach is adopted to take into account most of the key factors affecting human development at taluk level. A common conceptual and methodological framework and uniform set of measurable indicators with standardized

definition and data sources are considered with a view to ensure taluk-wise and district wise commonality and comparability in all 30 districts in the state. Dakshina Kannada DHDR is the outcome of this initiative. The Executive Summary is a brief summary of the findings and recommendations of the main DHDR.

Findings of HDIs

The DHDR computed six different human development related indices to provide a comprehensive view of human development at taluk and district levels. They are - Human Development Index (HDI), Gender Inequality Index (GII), Child Development Index (CDI), Food Security Index (FSI), Urban Development Index (UDI) and Composite Taluk Development Index (CTDI). In addition, Composite Dalit Development Index (CDDI) was computed to understand the human development issues specific to Dalits (SCs'). A set of 68 indicators to measure three core dimensions of human development –health, education and standard of living – has been used for construction of these indices. These indicators are selected by taking into account demographic factors, livelihood and employment related factors, household assets, empowering factors, health factors including safe drinking water supply, and sanitation and education factors. Since SCs are marginalized community and face distinctly different development problems such as social exclusion, social discrimination and deprivation, CDDI is computed to capture perception on human development issues specific to Dalits (SCs) pertaining to a one selected gram panchayat in the district. The purpose of this index is to understand the difference between the perception and reality in

a limited manner based on a case study of a GP.

The HDI for Dakshina Kannada district works out to 0.687. This shows the overall human development deficit of 31 percent in the district. It has relatively higher dimension index values for education (0.809) and living standard (0.708), but it has lower index value in health (0.567). Taluk-wise, Mangaluru taluk, which ranks first, has the highest HDI of 0.830 and is in very good category. Belthangady ranks the lowest and has HDI of 0.399. The HDIs of other taluks were below 0.500. The differences between first ranked Mangaluru taluk and other taluks in the district are significantly high. The inter-taluk disparities in three dimension index values are also very wide. Mangaluru ranks first in education and standard of living, while Belthangady ranks first in health but lowest in education and standard of living.

In gender equality, the district is found in 'very good' status. The GII for the district works out to 0.043, showing only 4 percent gender inequality. In GII, Belthangady ranks first (0.026), followed by Mangaluru (0.034) and Sullia (0.046). Bantwal has the lowest index value (0.061) showing the highest gender inequality. As regards other indices, the district is in 'good' status in CDI (0.518), FSI (0.571) and District Composite Development Index (0.661). Taluk-wise, there is wide divergence in ranking pattern in various indices and also in dimension indices. In CDI, Bantwal ranks first (0.847), followed by Mangaluru (0.493) and Sullia (0.449). Belthangady has the lowest position in CDI (0.382). In FSI, Mangaluru ranks first (0.603), followed by Sullia (0.593). Puttur has the lowest FSI index (0.416). Similarly, the inter-taluk variations in various dimensions of these indices are found to be very wide.

In the case of UDI, since ULBs are of different category, they can be compared and ranked only in similar category. Since 48 percent of the district's population live in urban areas, it is important to look at urban development from human development perspective. Mangaluru CC has the highest index value of 0.690. It shows development deficit of 31 percent. Among TMCs, Puttur TMC tops with UDI of 0.562, followed by Ullal TMC (0.406). Bantwal and Moodabidri TMCs have UDI of 0.310 and 0.316 respectively. As regards TPs, Sullia TP with UDI of 0.636 ranks first, followed by Belthangady TP (0.397). Mulky TP has the lowest UDI of 0.380. The development deficits in the case of TMCs and TPs vary from 36 percent to 69 percent.

The CDDI works out to 0.787 which is considered "very good". Thus Dalit Deprievation Index for the panchayat studied is only 0.213. With the increasing education and Dalit friendly government interventions the disparities between them and the other communities in terms of social discrimination and institutional inclusion are reduced. However the outcome of this index is should not be used for generalization.

The computation and analysis of six human development related indices at taluk and district levels are quite revealing and of important policy relevance. The indices computed brought out disparities and the relative position of taluks in various dimensions of human development within the district. Only in GII, all taluks and district as a whole are in very good status. In other indices, the taluks are either in 'good' or 'average' status. In some dimensions of human development, they are in 'poor' category. Moreover, the inter-taluk disparities are significantly high. The gap

between the highest ranked taluk and the lowest ranked taluk is very wide. Interestingly, there is no close correlation between index values of various dimensions. The taluks, which have higher education index values, have lower health index values. Similarly, the taluks which have lower standard of living index values have higher education and health indices. For human development in the district, all dimensions are equally important. The development of one dimension cannot automatically take care of development of other dimensions. For any planning or policy to succeed, it has to take into consideration inter-taluk disparities in various dimensions of human development and tackle them at that level.

The DHDR also carried out disaggregated analysis of human development problems for each dimensions at taluk and social groups level. The findings of them are summarised below:

Literacy and Education

Education is a basic ingredient for human capability building and functional empowerment. It is in fact important input indicator influencing other human development dimensions such as health, standard of living, income, choices and freedom. Dakshina Kannada district has achieved a remarkable progress in literacy rate. As per 2011 Census, the district has the literacy rate of 88.57 percent which is the highest literacy rate in the state and 18 percent higher than the State's average (75.36 percent). The gender-wise, the male population has literacy rate of 93.1 percent and female 84.13 percent. The gender disparity in literacy rate works out to 9 percent, which is also the lowest in the state. There is no wide inter-taluk variation

in the literacy rates. Belthangady taluk has the lowest literacy rate (83.92 percent), followed by Puttur (85.92 percent). Mangaluru taluk has the highest literacy rate of 91.67 percent. In rural areas, 85.33 percent of people are literate and in urban areas, 92.12 percent, literate. The rural/urban disparity in literacy rate in the district works out to 6.79 percent as against state level rural/urban disparity of 17.05 percent.

In education, the performance is analyzed at primary, secondary and tertiary levels in terms of access, enrolment, retention, teacher-student ratio, quality, equity, educational attainments and infrastructure. The achievement of the district in most of these indicators, as shown in this study, is quite impressive. The district has made impressive progress even in higher education. It is ranked as one of the best in education attainment in the state. It is almost on the way to universal in primary and secondary education. Even in the education attainment in terms of pass percentage in SSLC and PUC, the district is always one among top ranked districts in the state. The disparities between taluks, rural and urban and across social groups and gender do exist but are not very significant. The district also witnesses a gradual upward movement of the students in the ladder of education and particularly towards professional courses. The programmes such as Sarva Shiksha Abhiyana (SSA), the Mid-Day Meal programme and now Rashtriya Madhyamik Shiksha Abhiyan (RMSA) have all contributed significantly to this achievement.

Despite considerable improvement in the field of education, the district is still faced with many areas of concern. Most of the schools in rural areas are short of the RTE norms of provision of requisite school infrastructure.

Some of the government school buildings in rural areas were constructed in 1950s and 1960s, which require major repairs/renovation. The gender gaps, social inequities and rural-urban disparities in enrolment at secondary, PUC and higher education levels still persist. The discontinuation of education by SC, ST and some minority students at secondary and PUC level is relatively very high. The rural-urban divide in terms of quality education at primary and secondary level is widening. While in urban areas, children have easy access to private nursery schools, in rural areas, children are deprived of pre-schooling. The urban children are also benefiting from mushrooming tuition classes in secondary and PUC level. The rural students do not have easy access to tuition classes and also cannot afford them. This adversely affects their performance in competitive examinations for professional education.

Leveraging computer technology in the primary and secondary education system is essential in today's world, but it still remains a distant dream. Moreover, the private English medium schools are increasingly becoming popular and thereby threatening the sustainability of Kannada medium government schools. It also creates inequality in education; English medium for elites in urban areas and Kannada medium for poor and socially disadvantaged sections in rural areas. Though the district has favorable pupil-teacher ratio, in many rural lower primary schools due to lack of students, a mandatory number of two teachers have to manage classes I to V. With the declining population and enrolment in the district, the number of such schools in rural areas will increase in near future. This has serious implications on the quality of education in rural

areas. Since the district is already on the way to universal primary and secondary education, the challenge would be now not on expansion but improvement in quality, equity in educational attainment and equipping children with life-skills required to compete at the higher levels in all spheres.

Health and Nutrition

Health is another important ingredient of human development. It determines both the longevity and the quality of life. Health also impacts learning outcomes, functioning capability and earning capacity of the people. Dakshina Kannada district is blessed with good health infrastructure and enviable public-private initiatives in provision of healthcare service. The district has 11 privately run medical and dental colleges and a number of para-medical and nursing colleges. All of them played a catalytic role in building up necessary health infrastructure and delivery of high quality health care services in the district. Public sector health care infrastructure through PHCs, CHCs and taluk and district level hospitals renders health care services mainly to the weaker section of the community throughout the district. In rural areas, the government through PHCs/CHCs is the main provider of health care services. Under the NRHM initiatives, the district has made remarkable progress in most of the RCH indicators like IMR, CMR and MMR and stands out as one of the districts to achieve the UN millennium development goals in time.

Despite these achievements, the district is faced with the problems emanating mainly from prevailing institutional set up and the changing health environment like aging population and modern life style and food habits

and resultant change in disease profile. The institutional problems arise mainly due to more urban orientation of private health infrastructure, scarcity of qualified doctors and paramedical staff in public network and absence of networking between PHCs/CHCs and tertiary hospitals at taluk and district levels. The private sector health facilities and the public tertiary health facilities mainly located in urban centres, while in rural areas, only available healthcare services are from PHCs/CHCs. The PHCs and CHCs lack qualified doctors and nurses as well as timely supply of required medicines. They also do not provide health services to rural people round the clock. There is, thus, a growing rural-urban divide in the access and provision of quality healthcare services, which creates stumbling blocks towards achieving the dream of 'health for all' and universal comprehensive quality health coverage as envisaged under Twelfth Five Year Plan.

Other area of health concern is the unrelenting burden of the old and emerging threats of new diseases. Though good progress was achieved in RCH indicators, the maternal and child health care and nutrition are still continuing to be a problem among weaker and marginalized section of the population. The declining child sex ratio in the district, which has at present a favourable male-female ratio till now, has serious future demographic implications. The revival of malaria and filaria, rising incidence of Dengue Fever and HIV/AIDS, aging population, chronic non-communicable diseases such as diabetes, hypertension, heart ailments, growing mental diseases, alcoholism among the youth and increasing unnatural deaths such as road accidents and suicides are the emerging new health problems in the district. The district is also

faced with the problem of numerous endosulfan infected illnesses in endosulfan sprayed areas. All these require specialists' treatment at affordable costs. The health service network in rural areas is at present not fully geared to cope up this requirement. The cost of non-communicable health services of private hospitals in urban areas is beyond the affordability of rural people.

The high morbidity and mortality rates among the marginalized SCs/STs, migrants and other vulnerable sections of the society in urban slum areas are also posing problems in health sector. They have a very poor health profile compared with the other communities. The current influx of massive number of floating migrant workers because of the rapidly growing urbanization and acute shortage of labour resulted in rising urban slums without basic amenities. These slums are characterized by temporary houses crowded together without access to safe drinking water and sanitation. As a result of the unhygienic conditions, these slums are increasingly becoming a breeding ground for communicable diseases.

Livelihood Factors

Living standard is closely linked to per capita income, employment status, ownership of assets and basic livelihood amenities such as housing, safe drinking water supply, electricity for lighting and sanitation. Dakshina Kannada district ranks second in per capita income and 3rd in total GDP among 30 districts in the state. During the last decade, the district, however, witnessed lower growth compared to the state's average. The agriculture witnessed deceleration in growth. Industrial sector is also facing slow-down in growth in recent years. The tertiary

sectors only witnessed higher growth. Employment oriented traditional industries like tiles and beedi rolling are almost in closing stage. More importantly, the economic growth in the district is mainly driven by cities, particularly Mangaluru city. The growth is not broad-based, benefitting all taluks and all sections of people. In rural areas, most of the families in the district depend on the remittances from outside district to maintain standard of living and for investing in housing, health and education of children.

As regards employment, the major area of concern is the significant decline in the work participation rate (WPR) among women and increase in women non-workers. Men dominate in the workforce and the gap between men and women in WPR is very wide. The structural shift in the occupation pattern from rural areas towards secondary and tertiary sectors is taking place at faster rate. Though, it is a healthy sign in the dynamics of economic change, the area of concern is the decline of agricultural sector as source of employment when 52 percent of the district population still lives in rural areas. The slow demise of traditional gender-friendly industries like beedi rolling and tiles factory adversely affected the employment and income of weaker section of the community particularly women in rural areas. Though poverty incidence in the district is considered as one of the lowest in the state, BPL families, as per the eligibility criteria stipulated by the state, constitute nearly 50 percent of the families in the district. Most of them are in rural areas and concentrated among marginalized rural communities, such as marginal farmers, agricultural labourers, SCs and STs.

Dakshina Kannada has made significant progress in basic livelihood amenities such as

housing, safe drinking water, electrification and sanitation. The quality of housing in terms of materials used for roofing and walls and quality in terms of availability of dwelling rooms, kitchen and bathroom in the district is comparatively better than most of the other districts in the state. The district is, in fact, in the process of reaching the goal of houseless households in all sections of the community. Similarly, almost all inhabited villages in the district are electrified and nearly three-fourth of households uses electricity for lighting. The government's pro-active and pro-poor housing policy also significantly contributed in provision of quality houses and electricity in the case of weaker and marginalized section of the community.

In regard to safe drinking water, the district, traditionally, relied on open wells. More than half of rural households still depend on open wells for drinking water. Even in urban areas, one-third of the households use open wells for drinking water. The water quality of open wells is considered not very safe for drinking from health point of view. The tap water treated is available mainly in urban areas. The district has also the problem of availability of adequate drinking water during summer. With the overexploitation of ground water for irrigation through bore wells, the ground water table is depleted and open wells and rivers dry up during summer months, which create acute shortage of water for drinking during summer. Thus, the problem of safe drinking water centred on not on access but on quality and adequate supply particularly during summer.

The types of fuel used for cooking differs widely between rural and urban areas. In rural areas, nearly three-fourths of the households depend on traditional bio-fuels like fire-wood

for cooking. As against this, in urban areas, about two-thirds of the families use modern fuel type mainly LPG. Inaccessibility and unaffordability of LPG and absence of its supply/services network in rural areas are the main constraints in this regard. The bio-gas was expected to replace traditional fuel for cooking, but it has not taken off as expected.

In the area of sanitation, the district has made a remarkable progress in both rural and urban areas. The majority of households including weaker sections have flush toilets in their own premises. The Government's enabling pro-poor policy and programmes facilitated this achievement. However, their effective use particularly in rural areas and among weaker section of the community remains doubtful. The menace of growing slums with the increasing number of floating migrant labour families in and around urban centres also poses serious threat to the sanitation in the district particularly in urban areas.

Gender Issues

The women constitute slightly more than half of the total population. Inclusive human development is not possible unless they are brought into mainstream on equal basis economically, socially and politically. The district is considered as one of the most progressive districts in the state with regard to women and their empowerment. The gender-friendly enabling factors such as matriarchal system, favourable sex ratio, high literacy amongst men and women etc have contributed significantly to the gender development in the district. The government schemes such as Bhagya Laxmi Programme to provide insurance cover for new born girl's education and marriage

of poor families, free education for girls in government schools up to the secondary level, provision of bicycles to secondary school girls, Stree Shakthi SHG model for empowering women and reservations in political representation in local governing bodies have also played significant role in gender development and improving gender equality in the district.

Notwithstanding these achievements, the women in the district still suffer from some traditionally rooted gender biases such as social norms and customs on women's roles, codes of modesty, code of honour and dowry system as well as women's ability to do some jobs. The parents still prefer boys rather than girls in professional education. Declining sex ratio, declining female work participation, feminization of employment and casualization of women's employment in informal sectors without security of jobs and benefit of any social security are some of the emerging gender issues in the district. The disintegration of undivided joint family, dowry system, increasing spouse abuse and divorce, out-migration of husbands and consequently single women living and the life of widows without children support also increase women's insecurity and vulnerability. Adding to this is the recent phenomenon of increasing alcoholism among young generation which result in family quarrels, spouse abuse and violence against women. However, compared to other districts, the number of reported such cases are minimal.

Marginalized Section

The SCs and STs are historically, socially and economically deprived communities. The Central and the State

Governments have implemented several multi-faceted and multi-pronged programmes for social and economic welfare of the SCs and the STs to bring them into the mainstream development. Most of the government social programmes implemented have been found successful in provision of the basic livelihood amenities to the SCs and the STs in the district. They are, at present not lagging very much behind other communities as regards primary and secondary education, housing, safe drinking water supply, electricity and sanitation. They, however, still lag behind the rest of the population in higher and professional education, access to healthcare facilities, high-end job market, access to productive assets and credit, business enterprises and standard of living. Most of them remained resource poor and in low-end labour jobs. The setting up separate colonies for SCs and STs with all infrastructures, though good, has adverse effect on their integration into mainstream society.

Another important emerging issue is the existence of wide gaps among the sub-castes of the SCs and the STs. All sub-castes among SCs and STs have not benefitted from government programmes equally. Among the STs, Koragas are still far behind economically and socially compared to other ST groups. There is no data on livelihood, education and health status, occupation pattern, poverty and other socio-economic indicators of various sub-castes in SCs and STs. The challenge is to compile such data to recognize the real downtrodden sub-castes and prepare a holistic action plan to bring them to the level of the rest of the community.

Governance Issues

Good governance means efficient and

timely delivery of public services, simplicity and easy accessibility of systems and procedures, accountability, transparency and sound financial management, active people's participation, autonomy in decision making process and strict enforcement of right to information. Dakshina Kannada district, by all standards, has done relatively better in local governance than most of other districts in the state. However, there are many grey areas, which are mainly systemic and require civil reforms. Under panchayat raj system, GPs are the bottom of the pyramid administrative units for direct delivery of developmental services for the well-being of people. The GPs in the district are plagued with numerous problems, which include *inter alia* inadequate allocation of resources, political interference, absence of community participation, lack of knowledge and capability of representatives, lack of accountability and transparency etc. The GPs have at present no financial and functional autonomy. The Grama Sabhas and Ward Sabhas are at present not active. They are not empowered to participate effectively and act as watch-dogs at the GP level.

As against this, the ULBs in the district have better record of performance. They have achieved significant improvement in provision of safe drinking water, water bill collection, road sweeping and cleaning and solid waste collection and disposal. However, there are still gaps in provision of these basic civic services. They are mainly centered around supply of portable tap water in required quantity throughout the year to all households, segregation of solid waste collection at primary stage, UGD coverage for all households etc. Besides these issues, there is also problem of the basic needs of migrant population who live in slums and suffer from multiple deprivations that

include lack of access to basic amenities such as water supply, sanitation, decent housing and electricity.

The Way Forward Strategies

The six human development indices computed provide comprehensive view of present status human development as well as development deficits at taluk and district level. The ranking of taluks, divergences between rankings and spatial and social disparities in various human development related indices and in their components have serious implications for the way forward policies and strategies for inclusive, equitable and sustainable human development in the district. They provide thrust areas for action. It is also important that the future policies and strategies should not be restricted to merely on eliminating disparities across gender, social class and regions in respect of various dimensions of human development, but they should aim at enhancing all round wellbeing of all people in all the taluks. The sector-wise the policies and strategies emerged from the study are adumbrated below.

Towards Universal access to Quality Education:

In the education sector, the primary objective of education policy should be to ensure that all children across gender, social class, rural-urban or differently-abled have equal access to educational institutions and quality education. This requires a holistic approach and concerted efforts to strengthen the system at all levels of education: elementary, secondary and higher education. The district is already on the way to universal elementary and secondary education. The challenge would be now on

improvement in quality, curriculum, social equity in educational attainment and equipment of students with life-skills required at formative stage to enable students to compete at the higher levels in all spheres. The Government is going to remain the main provider of primary and secondary education in rural areas. With the declining population growth and declining number of students in the rural areas, what is required is not institutional expansion but provision of quality education. It would be ideal to consider integrating primary and secondary as one model high school to one GP with all RTE requirements to provide quality education instead of maintaining number of lower primary, higher primary and high schools within a jurisdiction of 5km. The following are also considered the critical elements of the way forward strategy in the education sector in the district:

- Motivate and incentivize students of SCs and STs and other weaker sections to increase transition rate from secondary to PUC and PUC to higher and professional education.
- Create IT-based teacher support tools with free broadband internet to provide both content and pedagogical support.
- Train periodically teachers to update their knowledge and professional skill critical for quality education and incentivize them for creativity, research and extra-curricular activities.
- Integrate pre-vocational courses for skill development at secondary and PUC level either as an add-on or alternative subject to facilitate mobility options and improve employability of students who do not go for higher education.

- Involving community partnership with more emphasis on alumnae without political interference not only to provide financial support but also to ensure good school governance and act as watch-dog.

Equitable Comprehensive Health Care System:

The health care system in the district has to be comprehensive, easily accessible and inclusive. The accessibility, availability and affordability should be made critical in universal health coverage system. The following are considered important for future strategy in the district's health care system:

- Need for a close collaboration of private medical colleges with Taluk and District Hospitals to ensure access to quality and super specialty health services in the present public sector system.
- Strengthen the primary health care in rural areas to provide comprehensively preventive, curative and rehabilitative health care services by upgradation of PHCs and CMCs as per IPHS standards.
- Consider the Tamil Nadu Model of mapping geographically and setting one Junction Hospital for a group of PHCs with specialist doctors and adequate number of nurses and provide their services to the rural people round the clock.
- Develop network linking of PHCs, Junction hospitals and Taluk and District Hospitals through IT in order to ensure prompt referral system, close interface, robust surveillance and timely treatment
- Organize awareness campaign to enable

rural weaker section to access health care facilities from both private and public with the help of various health insurance schemes introduced by the Government as well as private hospitals.

- Provide special health services through well equipped Mobile Units to remote tribal areas, forest areas, and Naxalite affected areas to ensure easy access and effective reach to the people staying there.
- Strengthen monitoring and surveillance as well as preventive and curative measures to control revival of communicable diseases like Malaria, TB and Dengue Fever as well as prevalence of HIV/AIDS and endosulfan infected illnesses.
- Conduct periodical awareness campaigns and Medicare camps for chronic diseases like diabetes, hyper-tension, blood pressure etc particularly in rural areas.

Linking Human Development with Growth:

Income, asset ownership and basic amenities not only determine the living standard but also functionally linked to education, health and other dimension of human development. The need to strengthen the virtuous cycle of linking human development with economic growth hardly requires any emphasis. The district has vast potential for diversification of agriculture, development of medium and small scale industries and tertiary activities like tourism, software industries etc. The recent spread of communication technology to rural areas has also opened up opportunities to foster a variety of secondary and tertiary activities in rural areas. Several rural centres have, in recent years, emerged as rural towns. This process of

semi urbanization and associated improvements in infrastructure also provide good scope for non-farm employment opportunities both in the secondary and in the tertiary sectors in the surrounding rural areas. The formation of self-help groups of women and promotion of micro finance in rural areas can also play a crucial role in encouraging women's participation in household industries. The way forward strategy for human development in livelihood sector should, therefore, focus on virtually linking human development with achieving higher, sustainable and more inclusive economic growth in the district. This seems to be the only way to arrest out migration and improve women work participation in rural areas in the district.

Empowerment of Women:

The emancipation of women from persisting gender bias and gender inequality can be achieved only through empowerment of women in all human development dimensions. The process of empowerment involves not only equity in access to and control over resources but also development of functional capabilities to access one's rights and entitlements on equal basis. The empowerment of women has to therefore go beyond mere capacity building to get control over the circumstances of their lives, but also address the problems of women's agency, their rights and freedom and their well-being and self-esteem. Poverty reduction, access to livelihood resources, capability building, security against vulnerability and equality of gender relations in all spheres of activities have to be considered integral part of the gender planning and development. The interventions and programmes should be therefore based on ground realities and by taking into consideration gender differential needs and related emerging

issues. Taking into consideration this perspective, the following strategies for gender empowerment are suggested:

- **Empowering Women:** The focus should continue, as hitherto, on improving reproductive health, education, relief and rehabilitation of women in distress, women concerns in employment, access and control over resources, promotion of women's Self-help Groups and enhancing their capacity to participate effectively in community and political decision making process.
- **Fostering women's self-employment ventures and entrepreneurship:** The women focused specific strategies are required for promotion of women SHGs, capacity building, business skill development, credit linkage, and provision of industry specific inputs and organization of marketing networks to enable women to take up income generating micro enterprises and also enter into business world as entrepreneur.
- **Empowering women in agriculture:** In rural areas, there is a need to empowering women in agriculture through a multi-pronged strategy aiming at independent land rights for women, strengthening their agricultural capacities, improving their access to credit, extension and marketing facilities, designing women-friendly technologies and promoting gender-friendly diversification of agriculture.
- **Social security protection for women:** There is an urgent need for providing social security protection to women employees in the informal sector and widows and single women living in urban areas.

Mainstreaming Marginalized Groups:

The well-being of historically marginalized groups like SCs and STs is possible only through right based entitlement interventions. In all government interventions, the emphasis, so far, was given on social welfare focus - education, health, shelter, basic amenities such as electricity and sanitation. These initiatives are essential and need to be strengthened. What is now required is the economic empowerment as they are still in lowest rung of socio-economic ladder. They require capability building to actively participate in productive sectors and other economic activities. They should graduate from their low-end traditional occupations to high-end professional occupations on par with other communities. The following strategic interventions are considered critical for improving the well-being of the SCs and STs in the district:

- Need for undertaking a stock-taking and diagnostic exercise to compile information on livelihood, education and health status, occupation pattern, poverty and other socio-economic parameters of all sub-castes of SCs and STs with a view to plan sub-cast specific focused demand driven government interventions with monitorable signposts for their economic and social uplift.
- Motivate and incentivise SC and ST students to enter higher and professional education to enable them to move away from low-end traditional jobs and become closer to other communities economically.
- Motivate and incentivise SC and ST students who completed secondary or PUC education and do not want to pursue higher

education to go for vocational training for skill development and improve employability to enable them to enter income generating productive ventures like agriculture, livestock enterprises, small and medium industries and business world as well as to enable them to enter organized job market.

Effective Local Governance:

The good governance at panchayat raj institutional level matters for effective and efficient delivery of public services at grass root level. The main ingredients of good governance at local level are: (i) efficient and effective delivery system for public services, (ii) simple, easily accessible and people-friendly rules and procedures, (iii) transparency, accountability and sound financial management, (iv) responsive to local needs and aspirations and (v) stringent anti-corruption measures and absence of rent seeking behaviour. The panchayat raj institutions and ULBs in the district should be geared to adopt these ingredients of good governance. The way forward agenda should also include capacity and capability building, leveraging IT technology in governance, devolution of functions and finance, active people participation, involvement of civil society especially voluntary agencies in implementation of programmes and the crucial right to information. Special attention need to given to the capacity building at GP level for need assessment, priority setting, formulation of projects/programmes, and their effective implementation, sound financial management, transparency and accountability as well as right to information. The Grama Sabhas and Ward Sabhas should be empowered to participate

effectively and act as watch-dogs at the GP level. In the case of ULBs, besides these ingredients, their task is to make cities livable for all with basic urban infrastructure facilities. Notwithstanding the progress already achieved in development of urban infrastructure, there are many areas where the scaling-up delivery of civic amenities and provision of utilities with emphasis on universal access to the urban poor is needed. The following are also the priority areas in urban governance from human development perspective:

- **Safe Drinking Water:** There is a need to ensure that all households in the municipal areas have access to portable treated water supply and requisite quantity throughout the year.
- **Underground drainage system:** UGD should cover all households in the cities.
- **Solid Waste Management:** In order to ensure scientific solid waste management and facilitate proper treatment of solid waste, there is need to ensure scaling up segregation of solid waste at primary source.
- **Basic livelihood amenities in Slums:** There is an urgent need to address their basic civic service needs of migrant people living in slums.

In conclusion, human development concerns are numerous and challenging. An agenda for sustainable and equitable human development is broader, multi-faceted and multi-dimensional. The agenda should address both social and spatial human development deficits and inequalities in various dimensions of human development, institutional failures, social, religious and cultural barriers, vulnerabilities and emerging concerns affecting the well-being of people. The findings and recommendations of the DHDR provide a framework to evolve a strategic vision and to plan both short term and long term action plans.

It is important that the strategic plans of action should be bottom-up process and take into consideration inter-taluk disparities and needs and aspirations of local people. Each taluk should build on its strengths and opportunities. Such an agenda for human development should be made an integral part of the Comprehensive District Development Plan backed by adequate funds and monitoring mechanism with monitorable human development signposts. Only with effective implementation of the Comprehensive District Development Plan inclusive, equitable and sustainable human development is possible and can be achieved in the district.



Pilikula Zoological Park Mangaluru



Part II

Dakshina Kannada District Human Development Report

Chapter 1

Introduction



Yakshagana - Traditional Folk Art of Dakshina Kannada

Karnataka State Map



Increasing Gross Domestic Products (GDP) and per capita income were considered in the past as primary goal of economic development. However, the development experience of many countries had empirically shown that the mere GDP growth miserably failed to reduce socio-economic deprivation of substantial section of their population. It was well recognized that the conventional measure of economic growth in terms of GDP and per capita income cannot capture the basic aspects of human well-being. In the words of Mahabub-ul-Haq, the architect of the first Human Development Report (HDR) of United Nations Development Programme (UNDP) “any measure that values a gun several hundred times more than a bottle of milk is bound to raise serious questions about its relevance for human progress” (Mahabub-ul-Haq, 1995). This led to the realization that development process is a far more complex phenomenon than mere growth in domestic product alone and there is a need to reflect on the level of well-being of the people.

Since the income centric development paradigm did not capture the various dimensions of well-being of people, the need was felt to have a broader people-centric approach for development. UNDP, as an international development agency played a pioneering role in developing human development as an alternative development paradigm and human development index (HDI) as a composite measure of human well-being. It brings out every year HDR comprising HDIs to measure achievements in human development in every nation since 1990. UNDP HDRs were global

reports and indicate achievement in human development only across countries. Hence, many nations have brought out country-specific HDRs to capture performance in various dimensions of human development in their country. The Government of India, for the first time, prepared the National Human Development Report in 2001 providing Human Development Indices both state-wise and for the whole nation. Since then, many states in India have made efforts to prepare such reports at state level. Karnataka State brought out the first HDR in 1999 and its second HDR in 2005. These reports have brought out regional level imbalances existing in various dimensions of human development within the state.

With the view to capture variations in the status of the human development at the district and taluk levels, the Government of Karnataka initiated four pilot projects in the first phase in Vijayapura, Kalaburagi, Mysuru and Udupi for preparing District Human Development Reports (DHDRs). Encouraged by the experience of pilot DHDRs, the Government of Karnataka has decided to develop DHDRs to taluk-level for all 30 districts in the state. The present study is, accordingly, an outcome of the attempt to prepare DHDR for Dakshina Kannada district.

1.1 Concept and Methodology

The first HDR of UNDP defined human development in the following terms:

“Human development is a process of enlarging people's choices. In principle, these choices can be infinite and change over time. But at all levels

of development, the three essential ones are for people to lead a long and healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living. If these essential choices are not available, many other opportunities remain inaccessible” (UNDP, 1990).

By definition, the objective of human development is to enlarge people's choices. Fundamental to enlarging people's choices is the expansion of human capabilities to do what they want and what they value. According to Sen, the term capabilities refer to the opportunities that a person has to exercise his or her 'freedom to attain different kinds of alternative lives between which a person can choose” The capabilities and choices are multi-dimensional. They include political, social, economic and cultural freedom, community participation without discrimination by class, gender, race, nationality, religion, community, or generation and opportunities for being creative and productive and live with self respect and human rights. To achieve all these, UNDP considered three basic capabilities essential. They are *to lead long and healthy lives, to be knowledgeable and to have access to the resources needed for a decent standard of living.* The objective of development, therefore, should be to create an enabling and conducive environment in which people can develop their full potential and lead productive, creative lives in accordance with their needs, aspirations, capabilities and choices.

Human development being multi-dimensional, the measuring of it involved using multiple human capabilities and capturing them in an aggregate index for evaluating achievements in well-being of people. Since the

quantification and reliable data availability of most of the human development capabilities posed problem, UNDP has considered health, knowledge and standard of living as the essential and critical capabilities of well-being of people for constructing HDI as a composite measure of human development. The underlying assumption is that without these basic capabilities, people cannot have other choices and opportunities. The HDI was computed originally as a simple arithmetic average of three dimension indices of health measured by life expectancy at birth (LEB), education computed as a combination of adult literacy (two-third weight) and enrolment ratios at the primary, secondary and tertiary levels (One-third weight) and command over resources for standard of living measured by per capita real GDP adjusted for purchasing power parity in dollars (PPP\$) to ensure international comparison.

For computing HDI, each of the dimension indices were considered as of equal importance for human development and estimated as normalized indicators of achievements. By using minimum and maximum goalposts, the indices were normalized. The reason for normalizing each dimension was to transform indicators into indices between 0 and 1, thus to give equal relevance to each dimension and to allow the arithmetic sum of the indices. The lower bound was considered as minimum and the upper bound as a 'saturation' point beyond which additional increments do not contribute to expansion of human capabilities. Thus, the HDI is the arithmetic mean of three dimension indices: living a long and healthy life, having access to knowledge and a decent standard of

living. Besides HDI, UNDP also computed the Gender-related Development Index (GDI), Gender Empowerment Measure (GEM) and Human Poverty Index (HPI) to measure the gender empowerment and deprivation.

In spite of its popularity, there were criticisms on choice of dimensions and indicators of the HDI and its computational methodology. In 2010, for the twentieth anniversary edition, the HDR undertook a comprehensive review of the criticisms and introduced several key changes to the HDI while

maintaining the three basic dimensional structures with equal weights. Changes introduced are mainly centered around choice and measurement of indicators for education and income, method of aggregation from arithmetic average to geometric average and upper and lower goal posts to normalize the index. The new HDI, according to the revised methodology, is the geometric mean of normalized indices measuring achievement in each dimension of human development as follows.

Dimensions	Measurement Indicators	Minimum Goal post	Maximum Goalpost	Dimension Index
Long and Healthy life	Life expectancy at birth	20 years	83.4 years	Health Index
Knowledge	Mean years of schooling	0	Observed Maxima	Education Index
	Expected years of schooling	0	Expected Maxima	
Standard of living	GNI per capita (PPP\$)	100	\$107721	Income Index
Aggregation (Geometric Mean)	Human Development index			

The dimension sub-indices are computed on the basis of the following general formula:

$$\text{Component Index} = \frac{\text{Actual Value} - \text{Minimum Value}}{\text{Maximum Value} - \text{Minimum Value}}$$

HDI is the geometric mean of the three dimensions $(I_{\text{health}} \cdot I_{\text{Education}} \cdot I_{\text{Income}})^{1/3}$.

The UNDP 2010 HDR has also made a significant move away from the idea that the ideal measure of human development must cover only three core dimensions and recommended user to 'build your own development index' by taking into account key contextual human development concerns. The DHDR, while taking into consideration the conceptual and methodological framework of UNDP, has made an attempt to adopt a broader approach with a view to take into account the key human development concerns affecting at the district and taluk level.

1.2 Factors Contributing to Human Development

The human well-being being multidimensional, the factors contributing to human development are numerous. One of the major criticisms of the HDI was that it restricted to only three capabilities. It excluded other important capability dimensions such as equity, freedoms, social security, political voice, sustainability and happiness- just to name a few. Even in the case of three critical capabilities, the choice of indicators selected to measure was restricted to one or two indicators. For example, life expectancy as a measure of longevity does not reflect the quality and health profile of people during the time that they are alive. The health factors such as mal-nutrition, infant mortality rate (IMR), child mortality rate (CDI), maternal mortality rate (MMR) and other health related factors are equally important. Similarly, literacy rate and enrolment ratios do not reflect quality of education, knowledge, skill development and competence. In the case of standard of living, the per capita income does not

capture basic requisites of livelihood such as housing, safe drinking water, sanitation and other livelihood concerns. The per capita GDP also does not capture inequality, poverty and social deprivation. The composite measure of human development should, therefore, go beyond three core dimensions. It should include all key factors - economic, social and political - affecting the wellbeing of the people.

It is also important to recognize that the actual performance variations, disparities and deprivations in most of the dimensions affecting human development are better reflected at micro and household level rather than at global, national or state level. While the macro level perspective based on aggregate data enables to rank countries, regions and states based on status of specific dimension indices as well as on composite index of HDI, the ground reality of a range of human capabilities and deprivations across regions and communities can be captured only from micro level perspective where people actually live. The micro level perspective, besides ranking bottom level regions, facilitates ranking of communities, evaluation of prevailing policies and programs and their impact from human development lens. It is also possible to broaden the HDI by capturing as many potential dimensions as possible at micro level as the compilation of meaningful and reliable data would be easier at household level.

Recognizing the importance of and the need for micro level human development perspective, the Government of Karnataka has initiated a program for preparing DHDRs in all its 30 districts with the assistance of UNDP. Instead of focusing on only three-dimensional HDI and preparing status reports like pilot

DHDRs initiated in the first phase, the emphasis in the DHDRs was laid on all key human developmental factors that enhance the well-being of life at taluk and district level. Accordingly, a broader approach and modified methodology was considered for DHDR exercise keeping in mind the UNDP's conceptual and methodological framework.

With a view to take into account all key factors contributing to human development at taluk and district levels, the following six indices on various human development issues are considered for preparing the DHDRs:

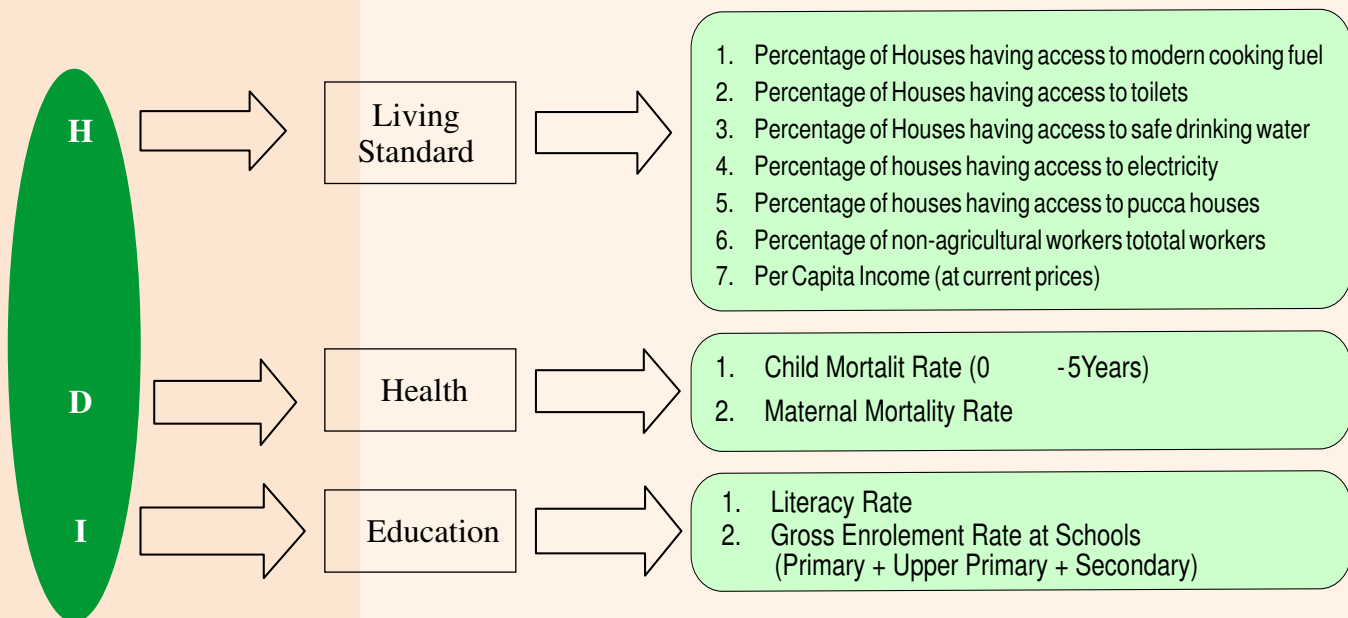
- A) Human Development Index (HDI),
- B) Gender Inequality Index (GII),
- C) Child Development Index (CDI),
- D) Food Security Index (FSI),
- E) Urban Development Index (UDI),
- F) Composite Taluk Development Index (CTDI).

In addition to these Human Development related indices Composite Dalit Development Index (CDDI) was computed based on a case study of a gram panchayat in a district.

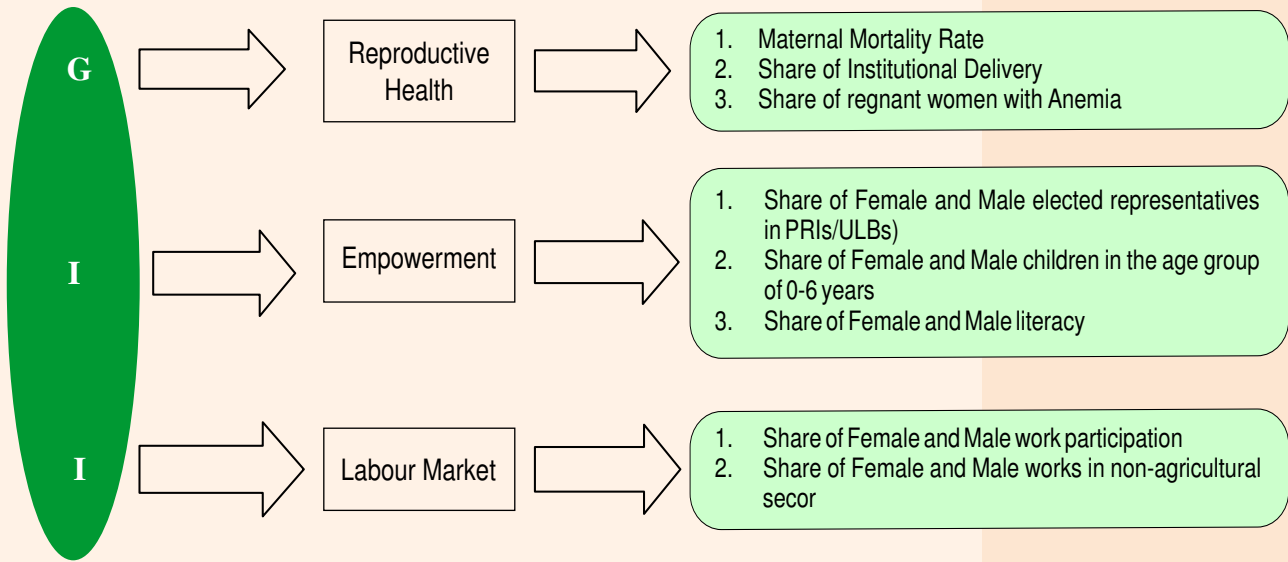
After detailed deliberation at the high level workshop represented by government officials of Human Division, Planning Department, Directorate of Economics and Statistics (DES), State Level Coordinator of the project, Consultants and professionals from Universities, Institute of Social and Economic Research and Non-Government Organizations (NGOs) in the state and taking into account quantifiability, measurability and data availability, a set of indicators affecting the three basic dimensions of human development-health, education and standard of living - have been identified and selected for construction of these indices. The set of indicators selected for each index is shown in the flow chart below:

Flow Chart 1.1: Key Indicators Selected for Human Development Indices

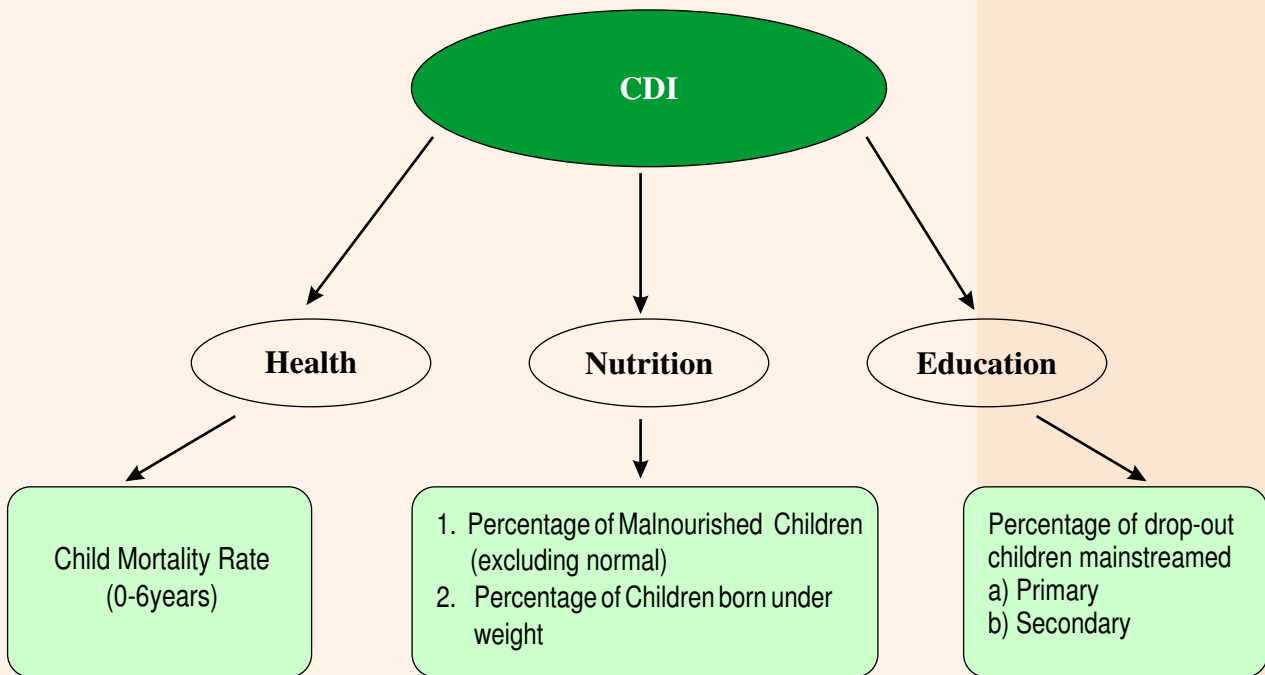
A)1.Percentage of Houses having access to modern cooking fuel

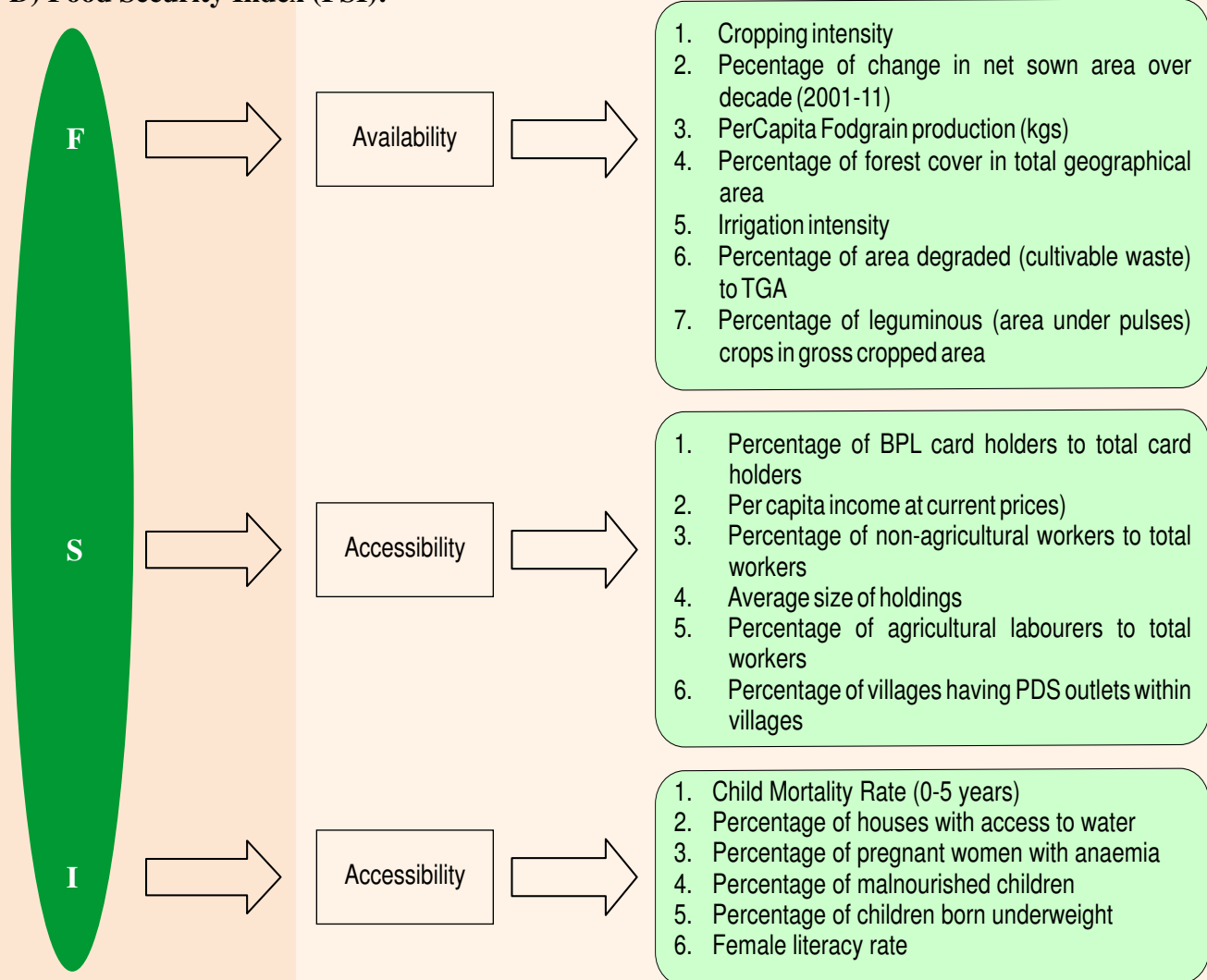
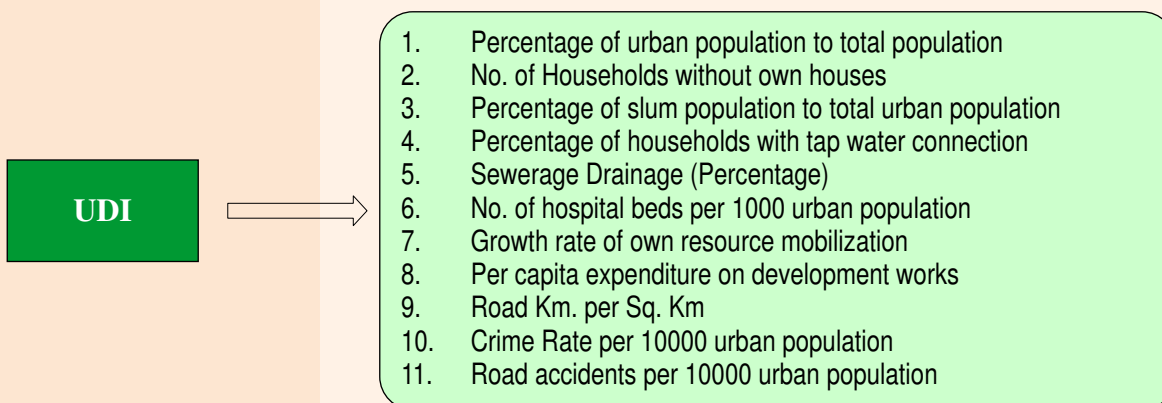


B) Gender Inequality Index (GII):

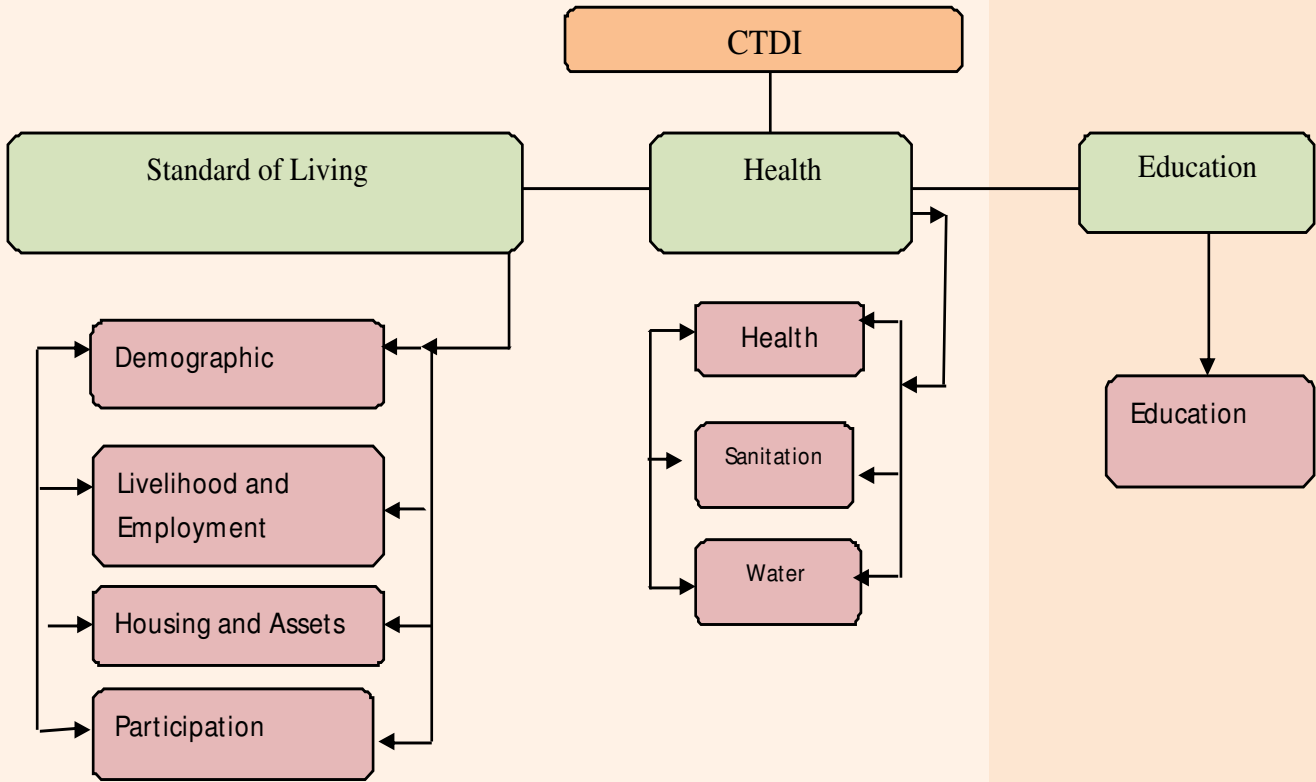


C) Child Development Index (CDI):



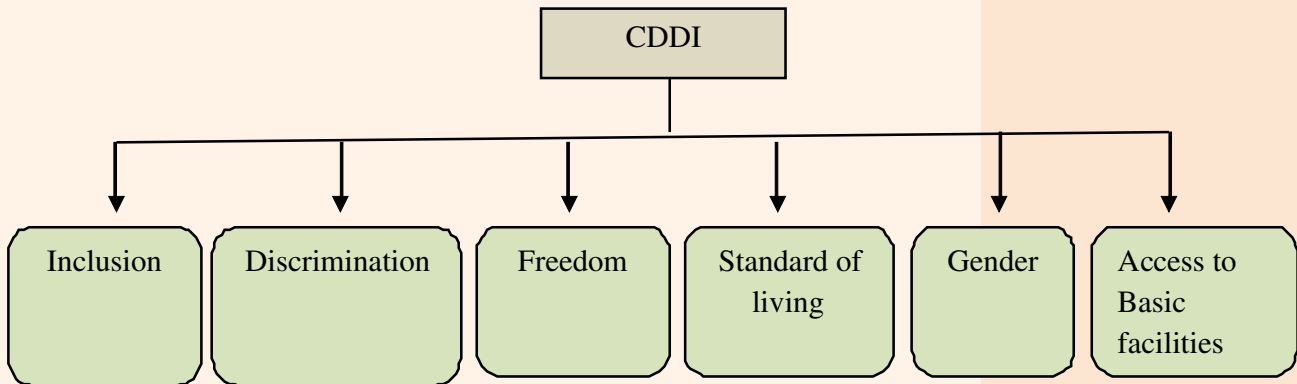
D) Food Security Index (FSI):**E) Urban Development Index (UDI):**

F) Composite Taluk Development Index (CTDI):



(Note: 68 Indicators related to taluk Human Development concerns are considered for CTDI as given in annexure table 10)

Composite Dalit Development Index (CDDI)



Excluding CDDI, 68 indicators as given in Annexure 10, were chosen taking into account their contribution to the human development at taluk and district level. They are mainly centered on demographic factors, livelihood and employment related factors, household assets, community participation, health factors, including safe drinking water supply and sanitation and education factors. It is also important to note that the indicators selected were identified with the objective of standardizing information gathering, analysis and presentation, and providing a comprehensive picture of human development for all taluks and districts in the state.

The dalits are marginalized community and continue to remain at the lowest rung of the socio-economic ladder. They constitute a sizeable portion of the total population in the state. Their development problems such as untouchability, social exclusion, social discrimination, unfreedom etc., are different from mainstream human development issues and not reflected in the above development indicators. These problems, in fact, produce disabilities among the Dalits, which hinder their capabilities to absorb development opportunities and affect their institutional and social inclusion, freedom, mobility, access to basic amenities, community participation and integration to mainstream economic development. Because of these reasons, it is felt that there is a need to construct a separate CDDI to capture all Dalit specific factors affecting human development. Key factors considered for construction of CDDI are: social and institutional inclusion, perception of discrimination, perception of freedom, standard of living, gender dimension of development, access to basic facilities including education.

However the CDDI is restricted to a case study of one GP in the district.

The DHDR for Dakshina Kannada district has made an attempt to construct all these human development indices with a view to evaluate on holistic basis the present status of human development, human development concerns and policies and programs required from human development perspective both at taluk and district level.

1.3 Data Collection, Compilation and Validation

Collection of the relevant and reliable data on the indicators chosen is very important for construction of various indices at taluk and district level on realistic basis. In order to facilitate comparative analysis across 30 districts and 176 taluks in the state, it was decided by the GOK that all DHDRs should adopt the common conceptual and methodological framework. As per the Guidelines issued by the Government in this regard, following are the main common features proposed for preparation of DHDRs:

- The conceptual and methodological framework as suggested in the 2010 UNDP-HDR should be adopted for estimating district and taluk-wise HDIs and GIIs, using proxy indicators.
- Uniform set of indicators with standardized definitions and data sources should be adopted for various indices on human development issues to ensure district-wise commonality and comparability.
- DHDR should analyze all the indicators and indices at taluk level in comparison to the district.

- DHDRs should undertake a case study on the position of marginalized Dalits (Schedule Castes) in one Panchayat in each district based on secondary and primary data. The primary data should be compiled from not less than fifty Schedule Caste (SC) households in the selected Panchayat.
- Radar Scale should be computed sector-wise to reflect sectoral achievements and taluk-wise to show taluk position using 19 proxy indicators of education, health and living standard reflecting the status of human development and in both cases, the physical distance from the accepted norm should be measured.
- DHDR should undertake four or five small area/micro studies on district's special focus issues particularly in areas such as education, health, living standards, gender empowerment, status of SCs and STs, minorities, water supply and sanitation and housing.
- DHDR should maintain uniformity in respect of presentation of tables and chapter contents.

A wide range of data is required from different sources on different indicators and for disaggregated analysis of human development issues both at taluk and district level. The data sources are primarily from secondary sources and to a limited extent from primary sources. The data required for various indicators were collected from secondary sources. The secondary sources of data used are mainly from 2011 Census, documented data from the functional departments of Zilla Panchayat (ZP), Urban Local Bodies (ULBs), non-government organizations (NGOs) and published government documents. The primary sample

data were compiled mainly for construction of CDDI and for special area/micro studies. The interview and participant observation and rapid appraisal methods were used for collection of primary data. Wherever required, the structured questionnaires were used for collection of data through personal interview.

Since data collection involved through several agencies, it is important to have accuracy, consistency and reliability of data. The process of data collection, compilation and validation is therefore done in a participatory manner involving district administration, urban authorities, concerned line departments, NGOs, academia, women's groups, and people's representatives. The validation of the data compiled is done by the lead agency in consultation with the concerned agency and in the District Core Committee meetings. Wherever required, the data are revised or updated and approval of the Core Committee obtained. The Planning Department, Government of Karnataka also checked and authenticated the data collected for selected 68 indicators. Thus all efforts were made to ensure that the data gathered from different sources are authentic, clean, consistent, accurate and realistic.

1.4 Measurement of Indices

As per the guidelines issued by the Government, the conceptual framework of the UNDP's three core dimensions namely health, education and standard of living and the modified computation methodology of 2010 HDR were adopted for construction of all human development indices. Since the DHDR adopted broad based approach, instead of one or two indicators as adopted in the UNDP's framework, the measurement of core dimensions was done

by multiple indicators selected. As shown in the flow chart above, 68 indicators were selected to measure core dimension of six human development related indices (excluding CDDI). The measurement of indicators depends on quantification of the indicators.

The computation of indices, as per the guidelines was done at two levels. First one is done to understand the position of the taluks within the district for which the observed minimum and maximum goalpost values among the taluks in the district are taken into account. The second type of computation is undertaken to understand the position of taluks and districts among the 176 taluks and 30 districts in the state by taking into account the observed minimum and maximum values from all the 176 taluks in the state. In the DHDR, the focus is only on the first one to understand the position at the taluk level in the district. The second method index values for the districts and taluks in the state are compiled separately by the Planning Department, GOK for comparing the position of 30 districts and 176 taluks in the state. The chapter 3 and Technical note in the Appendix explain in detail methodological issues involved in measurement of indicators and computation of indices.

The CDDI was constructed based on a case study of one Gram Panchayat (GP) in the district where the dalit population is concentrated. Both secondary and primary data were used. The primary data are collected from a sample of 50 dalit households. The computation of CDDI has taken into account the following dimensions:

- a) Inclusion – Institutional and Social inclusions,
- b) Discrimination – Perception, protest and Resolution,

- c) Freedom – Social, Political, Economic and Cultural,
- d) Standard of Living – Land, non-agricultural source of income, T.V., Fridge, Two-Wheelers
- e) Gender Dimension- Pre and Post delivery rest, Reproductive health support
- f) Access to basic facilities – Education, Drinking water, Housing, Toilets and Sanitation.

The scoring for each dimension was done based on the positive or negative responses and the CDDI is computed by dividing the aggregated actual values of all dimensions by aggregated expected maximum values of all dimensions. Since CDDI was done based on perceptive survey one GP, it has limited validity and cannot be used for generalization.

1.5 Structure of the Report

It should be noted that the attempt to compile data on 68 key human development indicators and construct six human development Indices at taluk level within the district and compare taluks within district and also to carry out a disaggregated analysis of human development problems for each dimensions at the grass roots level is itself a pioneering one and is of great importance. For the first time, it would provide grass root level baseline data for the district on various human development issues for policy formulation and planning.

For analytical convenience, as per the Government guidelines, the report has been organized into twelve chapters. The chapter one, by way of introductory note, provides a broad conceptual and methodological framework. The

second chapter presents the socio-economic profile of Dakshina Kannada district together with the SWOT (strengths, weaknesses, opportunities and threats) analysis for development of the district as a backdrop. In chapter three, an attempt was made to compute human development indices based on chosen 68 indicators and bring out their implications at the taluk and district levels. The next three chapters contain an in-depth disaggregated analysis of present status and spatial and social group disparities in various indicators of three core dimensions of human development viz. literacy and education, health and nutrition and income, employment and poverty. The standard of living issues in terms of access to basic amenities by taluks and social groups are analysed in chapter seven. In chapter eight and nine the present status, emerging issues and areas of concerns

with regard to women empowerment, child development and the marginalized SCs and STs are looked into. The chapter ten focuses on the governance issues of Panchayat Raj Institutions and the role of NGOs and voluntary groups from the human development perspective. The discussion on urban issues in human development is included in the chapter eleven. The concluding a way forward chapter recapitulates the key areas of human development concern and their implications and to suggest strategic interventions and programmes required to address the existing spatial and social disparities and for further enhancement of human development in Dakshina Kannada district. Annexure contains a technical note, supporting statistical tables and a bibliography.



Arecanut Cultivation an Integral Part of Agriculture in Dakshina Kannada

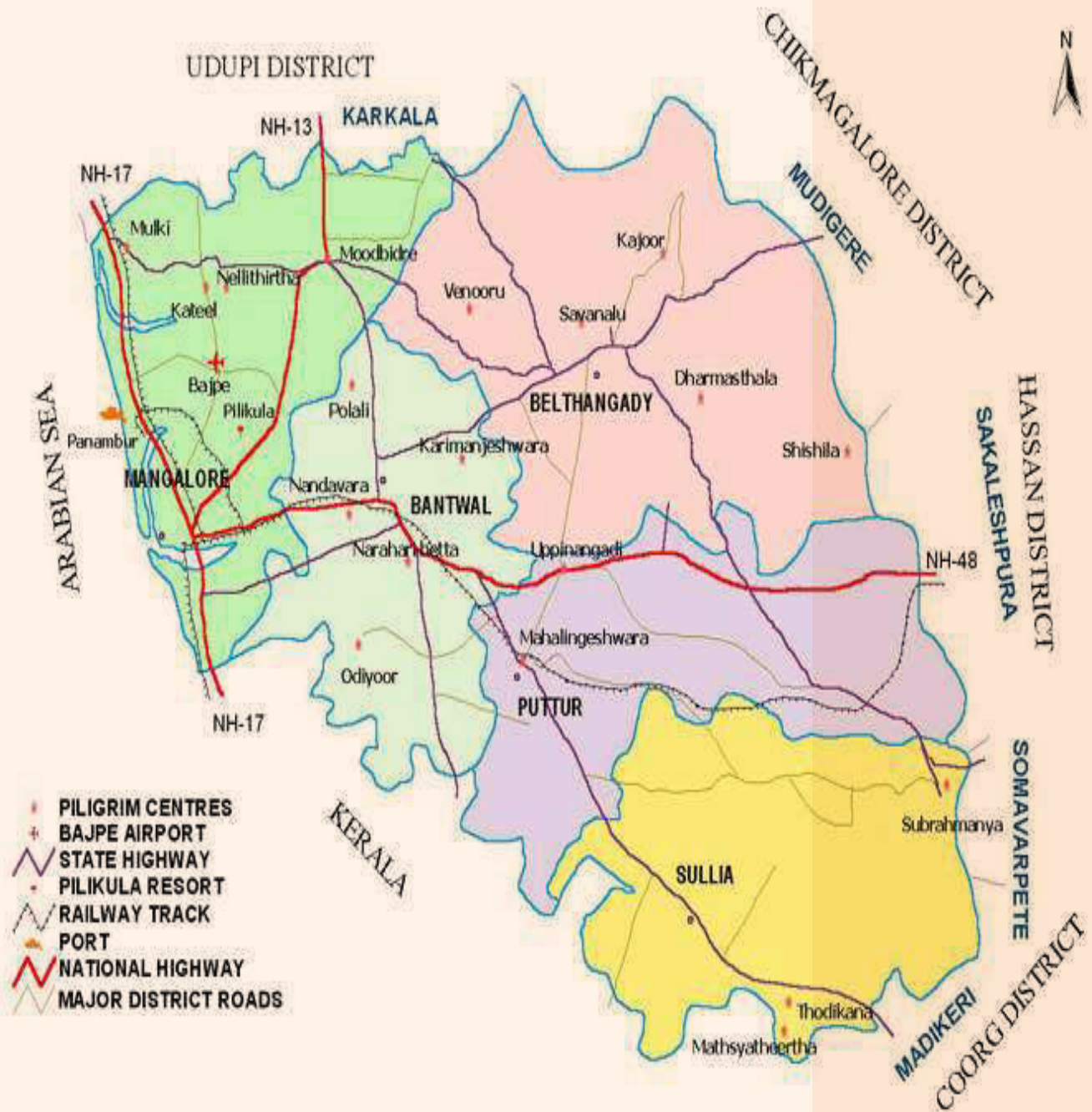
Chapter 2

District Overview



DAKSHINA KANNADA ZILLA PANCHAYAT OFFICE
MANGALURU

Dakshina Kannada District Map



2.1 Introduction

Dakshina Kannada (erstwhile South Kanara) is one of the three coastal districts of Karnataka State with a geographical area of 4859 sq. Km. Located between the foothills of Western Ghats in the east and Arabian sea in the west, it is bordered by Udupi District to the north, Chikkamagaluru district to the northeast, Hassan District to the east, Kodagu to the southeast, and Kasaragod District in Kerala to the south. The district has five taluks namely, Bantwal, Belthangady, Mangaluru, Puttur and Sullia. Mangaluru city is the district headquarters and the main city of the district. Mangaluru is also one of the main port cities of Karnataka State. The district is blessed with abundant rainfall, fertile soil, and lush vegetation. Pristine beaches, picturesque mountain ranges, temple towns, and rich culture makes it a sought after tourist destination.

Dakshina Kannada district constitutes a part of Tulu Nadu along with the neighbouring Udupi district. Kannada, Tulu and Konkani are the main indigenous languages in the district. Administratively, the district has 331 villages, 203 GPs, one municipal corporation (Mangaluru City Corporation), four town municipal councils (Bantwal, Puttur, Ullal, and Moodabidri) and three town panchayats (Belthangady, Mulky and Sullia).

This chapter presents a brief overview of historical, geographical, demographic and socio-economic features of the district to provide the contextual background for the district's human development report. It also made an attempt in brief a SWOT (strength, weakness, opportunity and threat) analysis to highlight sectoral development potentials and problems of the district.



Western Ghats

This chapter presents a brief overview of historical, geographical, demographic and socio-economic features of the district to provide the contextual background for the district's human development report. It also made an attempt in brief a SWOT (strength, weakness, opportunity and threat) analysis to highlight sectoral development potentials and problems of the district.

2.2 Background and Brief Regional History

Dakshina Kannada district, historically known as “Parashuram Nadu”, has a long history and cultural heritage. Empirical evidences are available to prove that there existed a distinct indigenous civilization in the district from pre-historic days. Historically many dynasties ruled and played key roles in bringing about socio-cultural and economic transformations in the district. In the epic Ramayana, Lord Rama and in the epic Mahabharata, Sahadeva, the youngest of Pandavas believed to have ruled over the region. In the third century BC, the district formed part of the Maurya Empire. The region was then known as Sathia (Shantika). This region was historically known as Tulunadu since Tulu was one of the prominent languages of the region.

As per the recorded history, the earliest dynasties that ruled the region were Alupas, Hoysalas and Kadamba. Mangalapura (now Mangaluru) was the capital of Alupa dynasty until the 14th century. During that time, the city was an important trading centre for Persian and Arab merchants. With the establishment of Vijayanagara Empire in the early 14th century, the district came under its rule. Jain kings ruled the district as feudatories of the Vijayanagara Empire and brought the district under an

efficient and centralized administration. In 1448, Abdur Razak, the Persian Ambassador of Sultan Shah Rukh of Samarkhand visited Mangalapura and recorded the rich cultural heritage of the city. After the ruin of Vijayanagara Kingdom, the district came under the rule of Keladi kings.

Portuguese were the first Europeans who entered the district in the beginning of 16th century. Between 1763 and 1799, the district was under the Mysore rule of Hyder Ali and Tippu Sultan. With the defeat of Tippu, the district came under the British rule and became a part of Madras Province. During the British rule, the Christian Missions were actively involved in education, health and social services and contributed significantly to the socio-economic development of the district. Mangaluru flourished during this time in education and industry. The Lutheran German Basel Mission set up in 1834, besides playing active role in education and health, became instrument in setting up cotton weaving, tile manufacturing and other industries in Mangaluru and other cities in the district. The linking of Mangaluru to Madras through railway in 1907 was another landmark development during this period.

Prior to 1860, Dakshina Kannada was part of a district called Canara, which was under a single administration in the Madras Presidency. In 1860, the British split the region into South Kanara and North Kanara; the former being retained in the Madras Presidency, while the later was made a part of Bombay Province in 1862. Kundapura taluk was earlier included in North Kanara, but was re-included in South Kanara later. After independence, with the formation of linguistic states in 1956, the district was merged with Mysore State (renamed as Karnataka State on 1st November 1973) named as Dakshina Kannada district. In August 1997, for

administrative reasons, three taluks: Karkala, Kundapura and Udupi were separated from the district and formed new district named as Udupi district.

Dakshina Kannada district is, historically, known for its own distinct indigenous cultural traditions. Important among them are: Nagaardhane (snake worship), Boothaaradhane (spirit worship), Kambla (buffalo race) and Yakshagana (classical folk dance). They are part of Tulu culture. It is also known for famous Hindu and Jain temples, churches, beaches and tourist spots. The district is famous for red clay roof tiles, popularly known as Mangaluru tiles, cashew nut and its products, banking, professional education and exotic cuisines.

2.3 Physiographic Division of the District

The total geographical area of the district is 4859 sq.km which constitutes about 2.53 percent of the total geographical area of the state (Table 2.1). Geographically, Belthangady is the

largest taluk with 1375 sq.km (28.3 percent), followed by Puttur with 1000 sq.km (20.6 percent) and Mangaluru with 923 sq. km (19 percent). Bantwal with 735 sq. km (15 percent) is the smallest taluk in terms of geographical area. Sullia has geographical area of 826 sq. km, which constitute 17 percent of the district's geographical area.

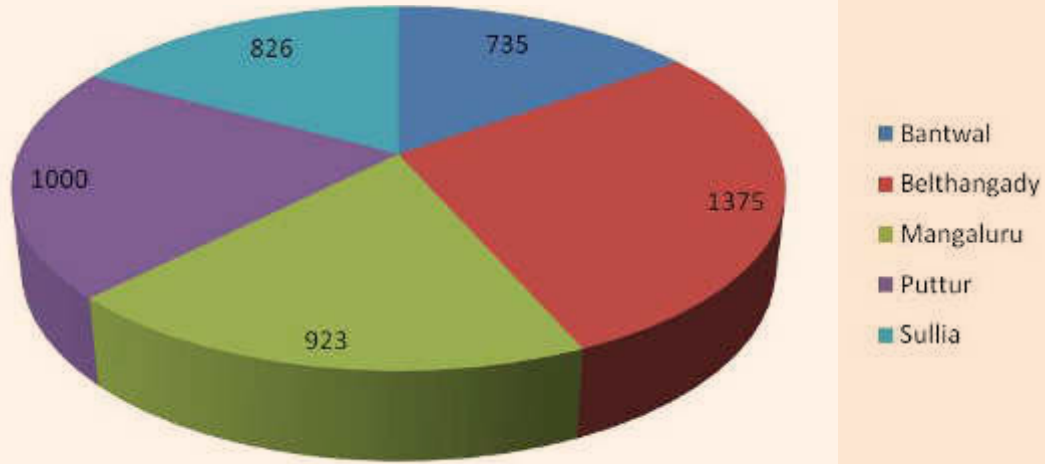
The district lies between 12.57° and 13 50° North Latitude and 74° and 75 50° East Longitude. The district can be divided into three physiographic belts: coastal belt, middle plain terrain belt and the Western Ghat malnad section. The narrow stretch of coastal area is the most thickly populated part of Mangaluru taluk comprising mostly beaches, backwater swamps and creeks. The middle belt consists of undulating terrain of forested hills and valleys. Bantwal, Puttur and lower part of Belthangady are located in this belt. The Western Ghats form the eastern boundary of the district consisting of evergreen forested hills and plantation gardens of crop like areca nut Sullia and upper part of Belthangady are in this area.

Table 2.1
Taluk-wise Geographical Area and Rainfall

Taluk/District	Geographical Area (sq.km)	Share in the District (Percent)	Normal Rain Days (Days)	Normal Annual Rainfall (mms)	Actual Annual Rainfall (mms 2012)
Bantwal	735	15.13	120	3833	3282
Belthangady	1375	28.30	128	4509	4046
Mangaluru	923	18.99	120	3609	3166
Puttur	1000	20.58	124	4017	2929
Sullia	826	17.00	125	3593	2768
District	4859	100.00	123	3912	3238
State	191791	2.53	103	1198	1094

Source: Dakshina Kannada District at Glance 2012-13
Note: Normal rainfall 1951 to 1990

Graph 2.1
Taluk-wise Geographical Area in sq.km



Dakshina Kannada district has a tropical monsoon climate with varied climatic zones. It is humid in the coastal region, warm in the midland and cool in the Ghat region. The humidity is as high as 78 percent during the greater part of the year. There are four seasons namely rainy season from June to September, when the district gets most of the monsoon rainfall; two months of warm and damp weather during October and November, when south-west monsoon is retreating; pleasant winter season between December and February and a hot and sultry summer season from March to May.

The district is blessed with one of the highest rainfall in the state mainly from the South-west monsoon. The normal annual rainfall for the district is 3912 mm as against the state's average of 1198 mm (Table 2.1). Among taluks, Belthangady has the highest rainfall (4509 mm) followed by Puttur (4017). Sullia taluk has the lowest rainfall (3593 mm).

2.4 Land, Soil and Natural Resource Endowment

Land utilization pattern in the district shows that of the total geographical area of 4.77 lakh hectare (ha), the area under forest is 1.29 lakh ha (27 percent), area under net cultivation, 1.31 lakh ha. (28 percent) and fallow land, 11774 ha (2.5 percent). The remaining 42.5 percent of the geographical land is either not available for cultivation or uncultivable (Table 2.2). Dakshina Kannada district has large tracks of tropical evergreen forest in Western Ghat area which is one of the biodiversity hot spots in the world. Among taluks, Belthangady has the highest geographical area under forest (49837 ha) followed by Sullia (43282 ha) and Puttur (27386 ha).

In the case of Sullia, slightly more than 50 percent of geographical area is under forest. Bantwal taluk has only 5069 ha (7 percent) under

forest, while Mangaluru taluk has the lowest forest and of 2902 ha (3 percent).

As regard land under cultivation, the district has one of lowest percentage of land area under cultivation in the state. As against the state average of 55 percent, the net area under cultivation in the district is only 27.5 percent. The gross cropped area is 1.58 lakh ha. The cropping intensity works out to 1.2, which is one of the lowest in the state. The area cultivated

more than once, thus, constituted slightly less than 20 percent of the cultivated land area. The proportion of net cultivated area in the geographical area is the highest in Bantwal (39 percent); followed by Belthangady (28 percent) and Sullia (26 percent). Puttur taluk has the lowest percentage of land area under cultivation. The inter-taluk variation in the cropping intensity is only marginal.

Table 2.2
Land Utilization: 2001-12
(Hectares, Figures in bracket percentage)

Taluk/District	Geographical Area	Forest	Non-available for cultivation	Uncultivated land	Fallow land	Net cultivated area	Gross cropped area
Bantwal	71758 (100.00)	5069 (7.06)	23323 (32.50)	14699 (20.48)	957 (13.34)	27710 (38.62)	34720
Belthangady	137510 (100.00)	49837 (36.24)	29976 (21.80)	18253 (13.28)	1170 (0.85)	38274 (27.83)	45934
Mangaluru	85385 (100.00)	2902 (3.41)	33244 (39.04)	20233 (23.76)	7439 (8.74)	21335 (25.05)	29647
Puttur	99697 (100.00)	27386 (27.47)	31101 (31.20)	17013 (17.06)	2103 (2.11)	22094 (22.16)	24926
Sullia	83031 (100.00)	43282 (52.13)	6576 (7.92)	11035 (13.29)	105 (0.13)	22033 (26.53)	22456
District	477149 (100.00)	128476 (26.93)	124220 (26.03)	81233 (17.02)	11774 (2.47)	131446 (27.55)	157683
State	19049836 (100.00)	3071833 (16.12)	2173931 (11.41)	1614677 (8.48)	1785288 (9.37)	10404107 (54.62)	12873308

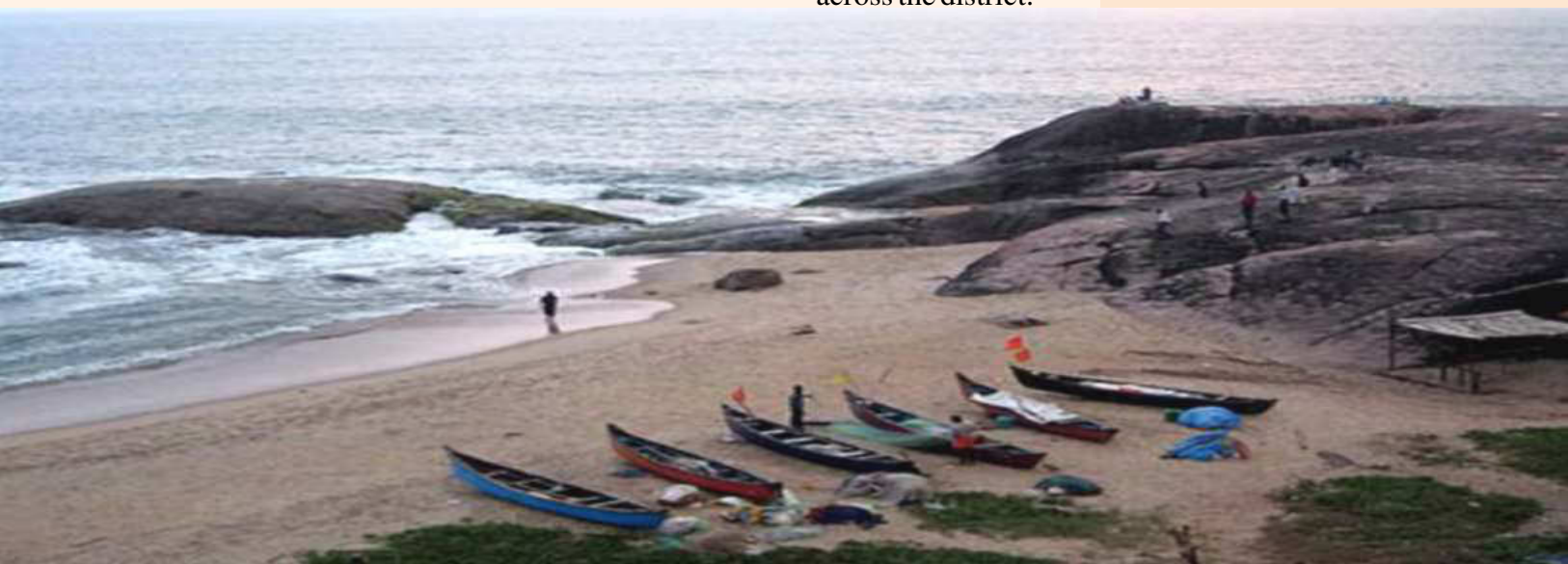
Source: Dakshina Kannada District at a Glance: 2011-12

Soil structure of the district contains three types: sandy alluvium soil, yellow loamy soil and red lateritic soil. The sandy soils are in coastal belt. Other parts of the district are characterized by yellow loamy and lateritic soil with high iron and aluminium contents. The texture of the soils varies from fine to coarse depending on location. The soils in the valleys are rich in loam whereas in upland plains they are coarse type. The soil in general is acidic due to heavy run-off, but rich in nitrogen and deficient in potassium and phosphorous. There is rich deposit of alluvial soil in the valleys and ravine bases. The lateritic stones are more in the high plain. Yellow loamy soils, which are mostly found along river banks and lower valleys, are fertile and well suited for irrigation. The plain land is suitable for growing variety of food crops while to the east of the coastal region, the soil is suitable for growing plantation crops like areca nut, banana, cocoa, and rubber. The water retention capacity of the soil structure, in general, is very poor.

Dakshina Kannada district is blessed with many rivers, which take birth in the

foothills of Western Ghats, flowing westwards and joining the Arabian Sea. Important rivers of the district are: Phalguni, Nethravathi, Kumaradhara, Nandini and Shambhavi. Besides these perennial rivers, there are number of tributaries and streams, all running from east to west. They normally become dry during summer. In spite of many rivers, the district has no major and medium irrigation schemes.

With the Western Ghats in the east and Arabian Sea in the west, the district has got many biospheres and biodiversity. The Western Ghats Mountains have thick tropical forests and vegetation and are rich in biodiversity. It is a treasure house of flora and fauna and medicinal plants. It has also falls such as Bandaje, Alekana and Kadamba Gundi and Wild life Sanctuaries. The district has a long coastal belt with beaches and tourists spots like Pilikula Nisarga Dhama of immense tourism potential. The coastal belt has backwaters, estuaries and creeks, mangroves, salt marshes and lagoons. It also provides good scope for fisheries. The district has also endowed with mineral resource potentials. Lateritic and granite stones are available all across the district.



The Coastal Line – An Integral Part of the Topography of Dakshina Kannada

2.5 Demography

As per 2011 census, the total population of Dakshina Kannada district is 20.90 lakh, of which 10.35 lakh (49.5 percent) were males and 10.55 lakh (50.5 percent) females. The population of the district has increased by 1.92 lakh people during the decade 2001-11 and in terms of percentage; it has registered a decadal growth 10 percent (Table 2.3). The decadal growth rate of population of the district has witnessed declining trend during the last two decades from 1991 onwards. It declined from 14.6 percent to 10 percent. While the decadal growth of population is significantly lower than state average of 17.5 percent and 15.6 percent during these decades, compared to neighboring Udupi district, it is very high. The decadal growth of population in Udupi district during 2001-11 was only 5.85 percent.

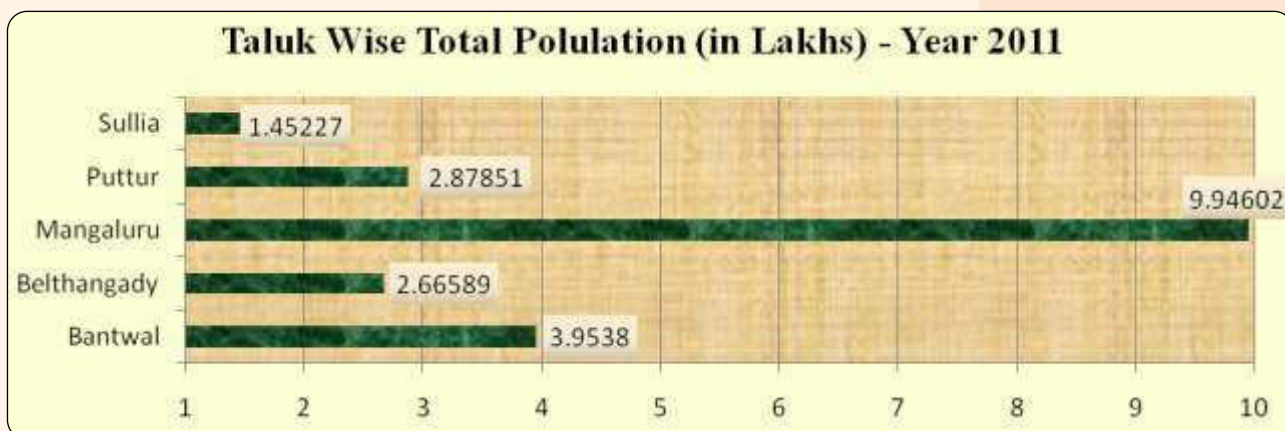
Taluk-wise, Mangaluru taluk has the highest population (9.95 lakh), followed by Bantwal (3.95 lakh) and Puttur (2.88 lakh). The total population of Belthangady is 2.67 lakh and Sullia, 1.45 lakh. All taluks have witnessed significant decline in decadal population growth during 2001-11. The decadal growth in population in Mangaluru taluk is the highest (12.7 percent) followed by Bantwal (9.4 percent). Sullia has recorded the lowest decadal population growth. The density of the population in the district works out to 430 per sq.km as against the state population density of 319. Mangaluru taluk has the highest population density (1078 per sq. km) followed by Bantwal (538 per sq.km). Sullia has the lowest (176 per sq. km). Puttur and Belthangady have population density of 288 and 194 per sq.km respectively.

Table 2.3
Growth of Population in Dakshina Kannada District

Taluk	1991 (Number)	2001 (Number)	2011 (Number)	Decadal Growth (Percent)	
				1991 -2001	2001 -2011
Bantwal	323005	361554	395380	19.31	9.36
Belthangady	211394	246494	266589	16.60	8.15
Mangaluru	759705	882856	994602	16.21	12.66
Puttur	237237	266072	287851	12.15	8.18
Sullia	124824	140754	145227	12.76	3.18
District	1656165	1897730	2089649	14.57	10.11
State	44977201	52850562	61095297	17.51	15.60

Source: Census 1991, 2001 and 2011

Graph 2.2



Interestingly, there is no change in the gender composition in the total population during the decade. The percentage share of the female population remained unchanged at 50.5 percent during 2001-11. The decadal growth in male and female population, however, shows slightly decline in the growth rate of female

population. During the decade 1991-2001, the growth of male population increased by 14.4 percent, female population witnessed slightly higher percentage of 17.7 percent during 1991-2001. As against this, the decadal growth during 2001-11 for male population works out to 10.3 percent while for female population, 9.9 percent; slightly lower.

Table 2.4
Gender Composition of Population in Dakshina Kannada District

Taluks	2001			2011		
	Male (No.)	Female (No.)	Sex Ratio	Male (No.)	Female (No.)	Sex Ratio
Bantwal	178664	182890	1024	196708	198672	1010
Belthangady	121288	125206	1032	131967	134622	1020
Mangaluru	434702	448154	1031	490797	503805	1027
Puttur	132786	133286	1004	143116	144735	1011
Sullia	70994	69760	983	72126	73101	1014
District	938434	959296	1022	1034714	1054935	1020
State(lakh)	268.99	259.52	965	309.67	301.29	973

Source: Census 2011. Sex ratio: female population per 1000 male population.

Consequently, sex ratio declined marginally from 1022 in 2001 to 1020 in 2011. Comparative male-female ratio of the state is 1000:973 in 2011. The neighbouring Udupi district has still higher sex ratio (1094) than Dakshina Kannada. There is also decline in child (0 – 6) sex ratio from 952 to 947. This is an area of concern. The children in the age group of 0 – 6, also declined from 2,28,060 in 2001 to 2,08,297 in 2011, accounting for decline of 9 percent during the decade. Taluk-wise, Belthangady has the highest child sex ratio (962)

and Mangaluru has the lowest (941) child sex ratio.

The rural and urban composition of the population taluk-wise is shown in Table 2.5. Out of 20.90 lakh population in the district, the rural population is 109.3 lakh (52.3 Percent) and urban population, 99.7lakh (47.7 percent). The share of rural population has declined from 61.6 percent in 2001 to 52.3 percent in 2011. Even in terms of number, the rural population declined from 11.68 lakh to 10.93 lakh during this decade.

Table 2.5
Rural-Urban Population: 2011

Taluks	Rural			Urban			Rural and Urban share (percent)	
	Male	Female	Total	Male	Female	Total	Rural	Urban
Bantwal	138959	140523	279482	57749	58149	115898	70.69	29.31
Belthangady	124672	127130	251802	7295	7492	14787	94.45	5.55
Mangaluru	102613	107420	210033	388184	396385	784569	21.12	78.88
Puttur	112812	114165	226977	30304	30570	60874	78.85	21.15
Sullia	62428	62841	125269	9698	10260	19958	86.26	13.74
District	541484	552079	1093563	493230	502856	996086	52.33	47.67
State(lakh)	189.30	185.40	374.69	120.37	115.89	236.26	61.37	38.63

Source: 2011 Census

The share of urban population, on the other hand, increased from 38.4 percent to 47.7 percent. There was an increase of 37 percent in urban population as against 7 percent decline in rural population. The taluk-wise analysis of demographic data shows that except Mangaluru taluk, in all most all taluks have rural population above 70 percent as against the state average of 61 percent. Belthangady has the highest

proportion of rural population (94.5 percent). As against this, Mangaluru taluk has the lowest percent of 21 percent of population in rural areas. Hence, though the district has one of the highest percent of urban population in the state, it is important to note that urbanization is only confined to Mangaluru taluk. All other four taluks are still dominated by rural people. As regards sex ratio is concerned, the rural areas have better sex ratios than urban areas. Taluk-wise, it varies from 1007 in Sullia to 1047 in Mangaluru in rural areas. In urban areas, it ranges from 1007 in Bantwal to 1058 in Sullia.

Dakshina Kannada district has one of the lowest percentages of schedule caste (SC) population in the state. As against the state percentage of 17.2 percent SC population, the district has only 6.9 percent SC population. In the case of ST population, the district has 7 percent as compared to state's 7 percent. The decadal growth during 2001-11, in the case of SC population works out to 13 percent and for ST population, 31 percent as compared to decadal growth of 10 percent of total population. The respective decadal growth rates in the state are 22.3 percent and 22.7 percent.

Mangaluru taluk has the highest number of SC population (49275), while Bantwal taluk has the largest number of STs (20912). Similarly, Bantwal taluk has the lowest number of SC people (19260) and Sullia has the lowest number of STs (11841). About 69 percent of SCs live in rural areas whereas in the case of STs, it is 80 percent. The sex ratio for SC population works out to 1021 and for ST population, 1008. The sex ratio of SCs is comparable to 1020 for the district population as a whole. In the case of STs, the sex

ratio is 1008 which is below the District's average for the total population. At the state level, the sex ratio for SC population is 989 and for ST population 990.

2.6 Literacy

Dakshina Kannada district is in the forefront in education. As per 2011 Census, the district has 16.66 lakh literate people, out of which 8.64 lakh males and 8.02 lakh females. The literacy rate in the district is 88.57 percent as against the state average of 75.6 percent. The district has the highest literacy rate in the state. It has increased from 83.4 percent in 2001. The literacy rate among male population is 93.13 percent and among female population, 84.13 percent. In 2001, it was 89.2 percent for males and 77.2 percent for females.

The gap between the male and female literacy rates was reduced from 12 percent in 2001 to 9 percent in 2011. As against 4 percent increase in literacy rate among males, female literacy rate has gone up by 9 percent during this period. In rural areas, the literacy rate is 85.33 and urban areas, 92.12. While in rural areas, 90.97 percent of males and 79.83 percent of females are literates, in urban areas, male and female literacy rates are 95.5 and 88.83 percent respectively. Taluk-wise, Mangaluru has the highest literacy rate (91.67), followed by Bantwal (86.76 percent) and Sullia (86.35 percent). Puttur taluk has literacy rate of 85.92 percent. Belthangady has the lowest literacy rate of 83.92 percent. An in-depth analysis of literacy and education status in the district is looked into as an important dimension of human development in Chapter 4.

2.7 Agriculture and Irrigation



Agriculture – A Prominent Occupation of the District

Agriculture

Agriculture and allied activities are the backbone of the district's rural economy, where the majority of the population lives. In the coastal area, fishing is the main occupation. Agriculture and allied activities contributes 14 percent to district GDP. Agro-ecologically, the district has three zones: coastal plain, midland plains and Western Ghats area. During 2011-12 crop years, the net cultivated area was 131446 ha and gross cropped area, 157683 ha. The net cultivated area constitutes 27.5 percent of the geographical area of the district. The cropping intensity works out to 1.2, which is one of the lowest in the state. The district has no major and medium irrigation projects. Consequently, irrigated area is 72378 ha which is mainly through wells, tube-wells, and lift irrigation.

The crop production in the district is mainly concentrated on paddy. During the crop year 2011-12, total area under paddy was 55166 ha. Paddy crop was mainly raised during Kharif - the rainy season. Pulses grown are black gram, horse gram, green gram and cowpeas. The area under pulses during 2011-12 was 3277 ha. Sesamum is the only oilseed grown in the district. It was grown in an area of 511 ha. Paddy accounts for nearly 42 percent of the total gross cropped area, followed by pulses (2.5 percent) and oilseeds (0.4 percent). The area under food grains is steadily declining mainly due to high cost of cultivation and labour scarcity. The area under paddy cultivation has declined from 61888 ha in 2001-02 to 55166 ha in 2011-12. The area under pulses witnessed a decline from 3395 ha to 3277 ha during this period. Bantwal, Belthangady and Mangaluru taluks are the main

paddy cultivating areas in the district. Sugarcane, which was grown in about 340 ha in 2001, is grown in only 44 ha in 2011-12; almost abandoned with the break-down of nearby Brahmavar sugar factory.

The district has substantial acreage under plantation and horticulture crops mainly coconut (16163 ha.), areca nut (27921ha.), cashew-nut (31119 ha.), rubber (10645 ha.), cocoa (952 ha), pepper (2183 ha) and fruits (37188). The area under vegetables was 1619 ha. Major fruits grown are Mango, Banana, Pineapple, sapota, lemon and Guava. The area under the plantation and horticulture crops also

in recent years witnessed almost stagnation. Puttur, Belthangady and Sullia are the main taluks growing horticulture crops in the district.

Dakshina Kannada district has 209097 farmers. Most of them (73 percent) are marginal farmers with land-holding less than 1ha (Table 2.6). Land-holding pattern in the district in the table shows that the marginal farmers with less than one ha who constitute 73 percent of farming community own only 33 percent of the land area. Small farmers with 1 to 2 ha constitute 18 percent of farmers and own 28 percent of land. Marginal and small farmers, together, account for 91 percent of farming community.

Table 2.6
Distribution Pattern of Land Holdings: 2010-11

Size of Land Holding (ha)	Number	Percent	Area (ha)	Percent
0 - 1	153155	73.24	58357	32.71
1 - 2	37460	17.92	50800	28.47
2 - 4	13621	6.51	35958	20.15
4 - 10	4340	2.08	24220	13.58
Above 10	521	0.25	9080	5.09
Total	209097	100.00	178415	100.00

Source: 2010 - 2011 Agriculture Census

Graph 2.3



The medium and large farmers with above 2ha, on the other hand, form 9 percent of farming community and own 39 percent of the land area cultivated. The average size of land-holding works out to 0.85 ha. Out of 2.09 lakh farmers, 68.7 percent are males and 31.3 percent are females. The distribution pattern of landholding is more or less the same in all taluks.

Considering the agro-climatic and physio-geographic conditions, Dakshina Kannada district was, once, considered not suitable for commercial development of animal husbandry activities. However, the situation has recently changed. As cropping is becoming unviable, small and marginal farmers and other weaker sections of the rural community have accepted dairy farming as a viable option for their livelihood. The district has now 229838 indigenous cows, 166771 cross-bred cows and 15119 buffaloes. The milk collection in the district is more than two lakh litre per day. The Karnataka Milk Federation operates a dairy unit at Mangaluru with a processing capacity of milk up to 2 lakh litres per day.

As against the white revolution in milk production, meat production in the district is very negligible, the lowest in the state. In spite of growing demand, the progress in poultry, goat and sheep rearing and piggery in the district is very negligible. There are very few commercial farms. Traditional backyard poultry keeping,

once dominated, is now declining. As per Livestock Census 2007, the district has 1322880 poultry birds, 25749 goats, 5332 pigs and 307 sheep. The district is depending on other districts for supply of goat meat and poultry products.

The district has about 42 km. long coastal belt, which provides good scope for fisheries in the district. There are around 21 fishing villages with 53,584 fishing people. Out of this, 30,651 people are directly involved in fishing. Fishing is mainly done by using 65 purse-seiners, 890 mechanized trawlers, 1206 gillnetters and traditional boats. The district has 11 cold and frozen storages and 60 ice plants. The annual fish production during 2011-12 was 138506 metric tons. Fish catch of the district accounts for about one-third of the total fish production in the state. Since the district has heavy rain fall, a number of tributaries and backwaters provide good scope for inland fishery. With a view to promote inland fishing, the Fisheries Department has set up a fish breeding centres at Pillikula.



Fishing – A Source of Livelihood in the Coastal District

Box 2.1 Agricultural Sector: Strengths, Constraints and Prospects

Strengths:

- District is located in coastal zone with an annual rainfall above 4000mm.
- District has many rivers and tributaries covering most of the areas.
- District has agro-climatic conditions well suited for horticultural and medicinal plants.
- District has vast forest land with high biomass and natural green fodder.
- Enterprising and Skilled farming community.
- Well connected road, transport network, international airport and port facilities,
- High penetration of banking facilities.
- Mangaluru city provides good market prospects for all agricultural products.

Constraints:

- Predominance of small/marginal farmers and fragmented and scattered land holdings.
- Mono-crop cultivation viz. paddy, which is labour intensive and at present yield non-viable.
- High cost of cultivation, labour scarcity and high labour wage made crop production unviable.
- Lack of irrigation and over-dependence on irregular monsoon rainfall.
- Soil erosion, low moisture retention and micro-nutrient deficit.
- Absence of processing and value additions and backward and forward linkages.
- Migration of younger generations and dependence on old people.
- Absence of good market infrastructure and well connected market link.
- Lack of dissemination of market information

Prospects:

- Diversification into high-value and labour saving horticulture, dairy and goat enterprises.
- Increase cropping intensity and productivity by promotion of irrigation projects by building vented dams to rivers and setting up lift irrigations.
- Value additions through setting up agro-processing and contract farming initiatives.
- Improve rural infrastructure (roads, electricity, markets) for market linkages.
- Export of flowers, fresh vegetables and fruits with opening of international airport at Mangaluru
- Development of both marine and inland fisheries and fish processing for value additions.

2.8 Industry

Dakshina Kannada district was historically and internationally known for the red-clay tiles (Mangalore tiles), cashew-nut processing and beedi rolling industries. The tile and beedi rolling industries are now losing importance due to declining demand. The cashew-nut processing is still pre-dominant industry in the district. Mangaluru is the main industrial belt of the district. The major industries in and around Mangaluru include Mangalore Chemical and Fertilizers Ltd (MCF), Mangalore Refinery and Petrochemicals Ltd (MRPL), Kudremukh Iron Ore Company (KIOCL), The Canara Workshop Ltd., BASF, TOTAL GAZ and Bharati Shipyard Ltd. At Puttur, there is a cooperative chocolate manufacturing plant called Central Areca nut and Cocoa Marketing and Processing Cooperative Ltd (CAMPCO). As per the data available, there are 24 chemical factories, 48 engineering firms and 373 others employing 34156 people. In recent years, information technology and outsourcing companies are emerging as the new players in the medium and large scale industry segment. They include Infosys, Lasersoft Infosystems Ltd, MPhasis BPO etc. Three IT parks are under construction; one Export Promotion Industrial Park at Ganjimutt, and second, IT SEZ near Mangalore University. Another IT SEZ of 2 million sq. ft. (180000 m²) is also under construction at Thumbe.

The small scale industrial sector in the Bykampadi Industrial Estate and industrial estates in other taluks in the district is mainly dominated by 484 automobile, 730 electrical and electronic, 365 chemicals manufacturing, 357 Ferrous and non-ferrous, 4252 food and

intoxicants, 528 glass and ceramics, 239 leather 2240 mechanical engineering, 600 paper and printing, 665 rubber and plastics, 2353 textiles, 3465 wood and 3021 other manufacturing units. As on 31st March 2012, 20434 small and medium scale units employing about 134076 people were registered and operating in the district.



Mangalore Chemicals and Fertilizers Ltd, Mangaluru

With the declining importance of agriculture, the future of the district's economy mainly depends on industrialization. There is good scope for expansion of cashew production and processing industry in the district. At present, the cashew-nut processing units depends on nearly import of 50 percent of their raw cashew nut requirement from African countries. There is also good scope for setting up food processing and software technological parks in all taluks in the district. Box 2.2 summarizes strength, constraints and opportunities for industrial growth in Dakshina Kannada district.

Box 2.2: Prospects and Constraints for Industrial Development

Strengths:

- ❖ High literacy level and availability of qualified skilled manpower. The district is the hub of high standard professional education.
- ❖ High enterprising nature of people.
- ❖ Good communication and transport networks.
- ❖ Wide net work of banking and financial institutions.
- ❖ Konkan Railway, International Airport and Port facilities for export.
- ❖ Stock of indigenous origin industrialists in Bangalore, Bombay and outside India (NRI entrepreneurs).

Opportunities:

- To set up more industrial estates/zones with cluster development.
- To set up software and bio-technology parks in and around Mangaluru, Bantwal, Moodabidri, Puttur and Mulki.
- To establish agro-food processing park at Puttur and Belthangady.
- To set up agri-export zone at Bajpe.
- To expand cashew-nut processing for export with backward linkage to agriculture.
- To promote small scale and tiny rural based industries.
- To promote fish processing for export.
- To promote ancillary small scale industries.
- To promote service sector based industries.

Constraints:

- Non - availability of large tract of land for industrialization.
- Lack/shortage of industrial raw materials.
- Power shortage and irregular supply.
- Shortage of skilled and unskilled labour due to high out-migration.
- High humid and heavy monsoon rain.
- Environmental awareness and anti-industry mindset.

2.9 Infrastructure

Well-knit and well-connected motorable roads are the hall mark of Dakshina Kannada district. Transport network within and outside the district is one of the best in the country. All villages are connected by all weather motorable roads. The total road length in the district is 127042 km. National Highway 169, 66, 75 and 73 pass through the district. The district has National Highway road length of 239.7 km. The State Highways of 528.8 km length are well linked to major urban centres in the state. Within the district, the road network includes *inter alia* 1321 km municipality roads and 7567.29 km rural/Panchayat roads. As per the RTO registration, the district has 23002 goods transport vehicles, 4426 buses, 19222 taxies, 28290 auto-rickshaws, 318387 two-wheelers, 105061 four-wheeler vehicle and 14326 other vehicles in the year 2011-12.

Mangaluru city is well connected throughout India through both Konkan and Southern Railways. The district has 118.63 km broad gauge railway route with 11 railway stations; 8 in Mangaluru taluk, two in Puttur taluk and one in Bantwal taluk. The district has major ports at Mangaluru. The district can also boast of well connected telecommunication facilities by BSNL and private mobile, landline and WLL service providers. 2G service is veered throughout the district and 3G in selected areas. Broadband connectivity is available in all urban areas. All GPs are provided with internet facility. Every village has postal office. There are 147 telephone exchanges with 124317 telephone connections.

The district falls under Mangaluru Electricity Supply Company (MESCOM). The district gets electricity from Varahi and also from

the main receiving station of Shivamogga. From Varahi and Shivamogga, through 220KV line, electricity is supplied to Mangaluru centre and from Mangaluru, through 110 KV line, electricity is redistributed to other places. There are electric sub-stations in all taluks. All the villages in the district are electrified. The total electricity consumed during 2011-12 was 13114.20 lakh units. Industry uses about 12.7 percent, commercial consumption, 19.4 percent and irrigation uses 14.4 percent. The home consumption accounts for 38.4 percent. Other uses account for the balance 15.1 percent. With the commissioning of Nandikur Thermal plant in the neighbouring Udupi district, the electricity supply in the district is expected to improve.

Education infrastructure in the district is the cynosure of many. Most of the villages have more than three primary schools. There are 1459 primary schools, 516 high schools, 169 pre-university colleges, 145 general degree colleges and 33 professional colleges besides 9 polytechnic colleges in the district. Besides Mangaluru University, the district is blessed with education network of two private deemed universities namely Nitte University and Yenepoya University apart from a campus of Manipal University. The professional education institutions in the district are known education centres of excellence in medical and engineering in the country. Dakshina Kannada district is also unique in the nation's banking map with the highest concentration of bank branches. Almost all nationalized and private banks are operating in the district. There are 425 branches of nationalized banks, 19 branches of Regional Rural Bank and 35 branches of District Central Bank. As against the national per branch population of 12000, the district has 4308 people per branch.

Box 2.3: South Canara District: The Cradle and Nursery of Banking

The erstwhile South Canara district (now divided into Dakshina Kannada and Udupi districts) provides a fascinating story of growth of banking institutions rooted in its soil and culture, though it was not then a major hub of commercial and industrial activities. It had given birth to ten banking institutions in the present Udupi district and 13 other banks set up in the now Dakshina Kannada district during the last century. It can proudly claim to be the home of four out of 19 nationalized banks in India viz. Corporation Bank, Syndicate Bank, Canara Bank and Vijaya Bank. It also given birth to one of the oldest and largest private bank namely Karnataka Bank. Even now the head quarters of Corporation Bank and Karnataka bank are in Mangaluru city. Dakshina Kannada district has, even today, a unique position in the banking map of the country. It has one of the highest concentrations of bank branches and the highest penetration ratio in terms of banking services provided in the country. Almost all nationalized and private banks are operating in the district with a network of more than 500 branches. The district has achieved 100 percent financial inclusion. Syndicate Bank is the Lead Bank for the district.

Source: *Dr. N. K. Thingalaya: The Banking Saga: History of South Kanara Banks, 1999, Corporation Bank and District Credit Plan 2011-12, Syndicate Bank..*



Corporation Bank Head office at Mangaluru

2.10 Regional Perspectives and Backwardness

Out of 30 districts, Dakshina Kannada ranks 3rd in total Gross Domestic Product (GDP) and 2nd in per capita income in the state. The total GDP of Dakshina Kannada district was Rs.13690 crore as per the GDP estimate for 2009-10 at constant 2004-05 prices. The per capita income works out to Rs. 76438¹. Its contribution to the state GDP works out to 5.32 percent. The district witnessed its share in state GDP decline from 5.7 percent in 2004-05 to 4.8 percent in 2008-09 and increase to 5.3 percent in 2009-10. As against the state average growth of 7.94 percent in GDP during Eleventh Plan period, Dakshina Kannada achieved an average

growth rate of 5 percent per annum during Eleventh Plan. The major contribution for the overall growth in the district came mainly from the secondary and tertiary sectors (Table 2.7). The primary sector contribution to district GDP declined from 22.5 percent in 1999-2000 to 12 percent in 2010-11.

The contribution of industry increased from 24 percent to 36 percent during the period between 1999-2000 and 2005-06, but thereafter it declined to 30 percent. The service sector contribution, on the other hand, increased from 53 percent in 1990-91 to 58 percent in 2008-09. The structural change observed in the sector-wise composition of district GDP is almost similar to the one observed in the state GDP.

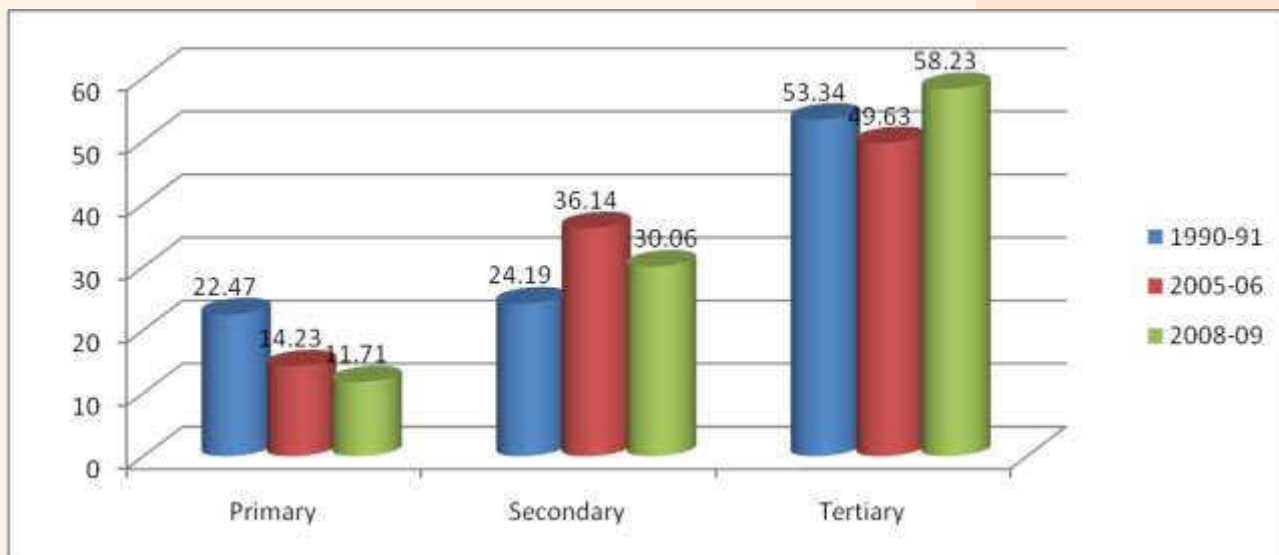
Table 2.7
Change in sector-wise Contribution to GDP (percentage)

	Sector	1990-91	2005-06	2008-09
Dakshina Kannada District	Primary	22.47	14.23	11.71
	Secondary	24.19	36.14	30.06
	Tertiary	53.34	49.63	58.23
	Total	100.00	100.00	100.00
Karnataka State	Primary	34.60	19.63	15.66
	Secondary	26.80	28.67	30.53
	Tertiary	38.60	51.70	53.80
	Total	100.00	100.00	100.00

Source: DES, GOK.

¹ As per the district income and per capita income estimates made by the Directorate of Economics and Statistics in their 'Sector –wise Gross District Domestic Product at Constant prices.

Graph 2.4
Change in sector-wise Contribution to GDP



Dakshina Kannada district is known for the origin and growth of banking institutions, good branch network and rapid growth of transportation, communication and education facilities. The district has a higher percentage of educated middle class. Mangaluru cuisines are well known brands in hotel industry all over the country. Transport industry had prospered in the past as a result of mainly private initiatives.

There are a number of private transport companies operating in the district now. In the field of education, the district is in the forefront of professional education and has succeeded in attracting students all over the country and abroad. Every taluk in the district has more than two or three colleges. Mangaluru city is the hub of professional education. A host of education institutes offer courses in medicine, engineering, pharmacy, management, law, nursing and hotel and catering management. The educational institutes promoted by Manipal University, Nitte University, Yenepoya University, Shri Kshetra Dharmasthala Education Trust and other private

players play major role in professional education. Alva's Education Trust in Moodabidri, Bhandary Foundation and Sullia Venktramana Gouda Education Trust are the main players in professional education in other taluks.

In the agricultural sector, the district has good rainfall, many rivers for irrigation exploitation, enterprising and educated farming community, good scope for agricultural diversification and value addition. The growth in agricultural sector is, however, decelerating. It is presently plagued with a number of problems; *inter alia* mono-crop culture, high cost of cultivation, low yields, acute shortage of labour, limited scope for diversification and lack of processing facilities and low value addition. The Karnataka Agricultural Policy Document focuses on doubling the agricultural GDP in the next decade by achieving the growth rate of 4.5 percent per annum. Within this policy framework, the challenge for the district agricultural sector is to reverse the negative

growth trend and revive the sector to grow at 4 percent per annum.

In industrial sector, the traditional industries like tiles and beedi rolling, which once dominant players in the district's economy are now losing importance due to declining demand. Some of the chemicals and manufacturing based small and medium scale industries are in bad shape due to non-availability of raw materials and recessions. Industrial development was confined to only Mangaluru city and has not taken place in other taluks. Notwithstanding these, Dakshina Kannada district has Potential and the cutting edge advantage to trigger industrial development, which is unmatched by other districts of the state such as a long coastal belt, high literacy rate, enterprising people, qualified labor force, good road, transport and communication network, enabling infrastructure and institutions, wide network of banking institutions and international airport and port facility.

The district's growth is now led by the service sector. The district has good potential to achieve higher growth in the service sector in the

next decade. The main potential and thrust areas are: transport and communication, banking and insurance, real estate, retail trade, health and education services, tourism, infrastructure development and other service based activities. The district has vast potential in tourism. Bound by lush green mountains of Western Ghats on the east and palm-fringed beaches along the Arabian Sea on the west, the district is studded with numerous tourist spots of great scenic beauty. The coastal land mass offers vivid stretches of beaches, panoramic seashores, endless stretches of sand and surpassing shores of coconut plantations. The mid-stretch of green land presents vast expanses of paddy fields, river tributaries, interspersed with old tiled houses. The Western Ghats forms beautiful curtains hung from the skies. They provide places worth visiting like waterfalls and wild sanctuaries.

The district is also well known for its pilgrim centres and vividity of diverse forums of cultural heritage. The pilgrim places include the famous Mangaladevi temple, Kadri Manjunatha temple, Kudroli Gokarnanatha temple, Kateel Durga Parameshwari temple, Dharmasthala



An International Cargo Ship entering the New Mangalore Port

Manjunatheshwara temple, Puttur Mahalingeshwar temple, Kukke Subramanya temple, Uppinangadi Sahasralingeshwara temple etc beside St. Aloysius Cathedral Church, Ullal Sayyad Madani Darga. The district is also famous for its various fairs and festivals and folk dances like Yakshagana - a fabulously costumed musical dance drama, Boothakolas, Nagaardhane, Hulivesha and Kambla (buffalo race).

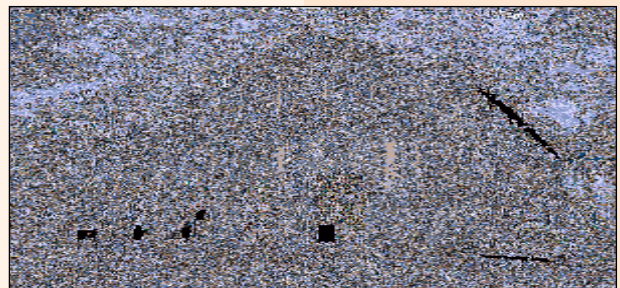
The district's perspective vision should be based on resource endowment, need assessment, potential and constraints for growth in various sectors and aim at achieving speedy, inclusive and sustainable 9 to 10 percent annual GDP growth in the next two decades. The rapid growth in the district's economy is critical because not only to expand income and improve well being of people, but also to provide employment opportunities to growing younger generation and thereby arrest out-migration of young people. The growth has to be also broad based and inclusive in order to spread its benefits widely, particularly to marginalized weaker section. The district's development perspective should be to make the district an all-round developed one with modern physical and social enabling infrastructure and conducive atmosphere for people to face all possible challenges and live with dignity in a healthy and sustainable environment.



Mangaladevi Temple



Naga Mandala – The Snake Worship



St. Aloysius Chappel



Ullala Darga Masjid



1000 Pillar Temple, Moodbidiri Jain Basadi



Hulivesha – The Tiger Dance during Dasara Celebrations

Box 2.4: Mangaluru City - A Gateway City of Karnataka

Mangaluru is a known historical city. Its original name was Mangalapura which came from Mangaladevi, the diety of Mangaladevi Temple. Its history goes back to Ramayana and Mahabharat. During Maurya Empire; the region was known as Sathia (Shhantika) and was ruled by the Buddhist emperor, Ashoka, of Magadha. Since then many dynasties ruled the region from this city. European influence can be traced back to arrival of Vasco-da-Gama. The city came under British Rule after defeat of Tippu Sultan in eighteenth century. It was made headquarter of South Canara district under the Madras Presidency. After independence, as a result of the State Reorganization in 1956, Mangaluru city became part of the Mysuru State which subsequently named Karnataka.

Historically Mangaluru city was an important trading centre for Persian and Arab merchants. Mangalore tiles, Mangaluru Mallige, cashew nut, areca nut and spices were then the branded commodities internationally traded. Since independence, Mangaluru city witnessed remarkable growth. It is the major port city of Karnataka. Mangaluru Chemicals and Fertilizer Limited was commissioned on 15th March, 1976. Mangaluru Refinery and Petrochemicals Limited (MRPL) was set up in 1993. The last decade witnessed rapid growth of service sector particularly software industries with the entry of Infosys. It is the cradle of banking industry. It had given birth to three nationalized banks viz. Canara Bank, Vijaya Bank and Corporation Bank and one of the largest private banks: Karnataka Bank. The city has enormous potential for tourism development. Palguni and Nethravathi rivers encircle this city on three sides and join together to enter the Arabian Sea. Someshwara, Ullal, Thannirbhavi, and Panambur Beaches, St .Aloysius Chappel, Rosario Church built by Portuguse, Gokarnath temple , oldest Mangaladevi Temple and Kadri temple It is also the centre for higher and professional education. It has three universities: Mangaluru University and two deemed private universities Mangaluru city is now one of the fastest growing cities in Karnataka. It is rightly and famously known as the “Gate Way of Karnataka”.

Source: compiled from various sources.

2.11 An Overview

In this chapter an attempt has been made to provide a synoptic review of physio-geographical and socio-economic features together with historical and more recent glimpses of the district's economy to provide a backdrop for the Human Development Report of Dakshina Kannada district. Dakshina Kannada district is considered as one of the most progressive districts in Karnataka state. It ranks

second in per capita income, second in health, and literacy and education. The district has lowest level of poverty. The factors contributed to this virtuous cycle of development are the earlier rapid progress in the industrial and service sectors, enabling infrastructure, education and health facilities, remittance from migrants, conducive cultural heritage and enterprising nature of the people.

Box 2.5: Dakshina Kannada District: Challenging Potential for Tourism

Dakshina Kannada district is blessed with numerous tourist spots of great natural scenic beauty in its entire expanse. Sheltered by lush green Western Ghats on the east and bordered by the blue waters of the Arabian Sea in the west, the district has beautiful, vivid stretch of green land marked by its heterogeneity and panoramic seashores, endless beaches, shores of the coconut and casuarina plantations, vast expanse of paddy fields and backdrop provided by the Western Ghats in form of beautiful curtains hung from skies. The district is well known for its pilgrim centres and of diverse forms of cultural heritage. The district is known for the pilgrim centres. The famous Temples include the oldest Mangaladevi Temple, Kadri Temple, Gokarnanth Temple, Dharmasthala Manjunath Temple, Durgaparameshwari Temple, Kateel and Kukke Subramanya Temple. St. Aloysius Chapel at Mangaluru offers the famous paintings of Antonio Moscheni of Italy in walls and ceilings. Sayyad Madani Darga at Ulla of 400 years old is a famous darga in the region. Modabidri is the holy shrine of the Jains and has eighteen Basadis which include Thousands Pillars Basadi built in 15th century. It is a treasure house of arts and architecture. The picturesque beaches include Surathkal beach, Panambur beach, Someshwar beach and Tannirbhavi beach. The historical monuments and places include Sulthan Battery, Jamalabad Fort and Venoor Gomateshwar, a colossal monolithic statue of 38ft in height. The Western Ghat Mountains offer places worth visiting for eco-tourism and bio-diversity. Pilikula Nisargdhama located in Mudushedde is an integrated nature park with variety of attractions to eco-tourists and nature lovers. The district is also famous for its various folk dances such as Yakshagana, Boothakola, Kambala, Nagamandala snake dance etc. Thus the district is unique and offers lot of diversities in various spheres.

Sources: Compiled by Prof. K P Sandhya Rao, Justice K S Hegde Institute of Management, Nitte.



Dasara festivities - The crowd puller from neighboring districts

The district is, however, faced with many grey areas and some emerging issues of concerns in economic, social and sustainable development of the district. It has one of the highest out-migration of younger generation resulting acute shortage of labour. The high literacy rate and persistent unemployment led people to seek employment outside the district. Agriculture, which was once the backbone of the rural economy, is losing ground because of its non-viability due to high costs and acute labour shortage. Horticulture and dairy have in the recent past emerged as important economic activities in rural areas. However, their sustainability is in problem due to shortage of labour, absence of appropriate technology for harvesting and milking and younger generation no more interested in agriculture. Outside Mangaluru city, the district is not well developed industrially. Traditional industries such as tiles

and beedi rolling are losing ground due to declining demand. Medium and small scale industries already set up are faced with numerous problems. The expected boost to industrial development with commissioning of IT Parks, SEZ and opening of international airport is not yet realized.

Considering the geographical potential, the long coastal belt and availability of qualified and talented younger generation, the district provides a challenging potential for diversification of agriculture into high value addition, setting up agro-processing industries, re-energization of medium and small scale industries and promotion of tertiary activities particularly, tourism, IT software, infrastructure development etc. What are required are an enabling policy, good modern infrastructure and conducive environment for the people to realize the development potential in the district.

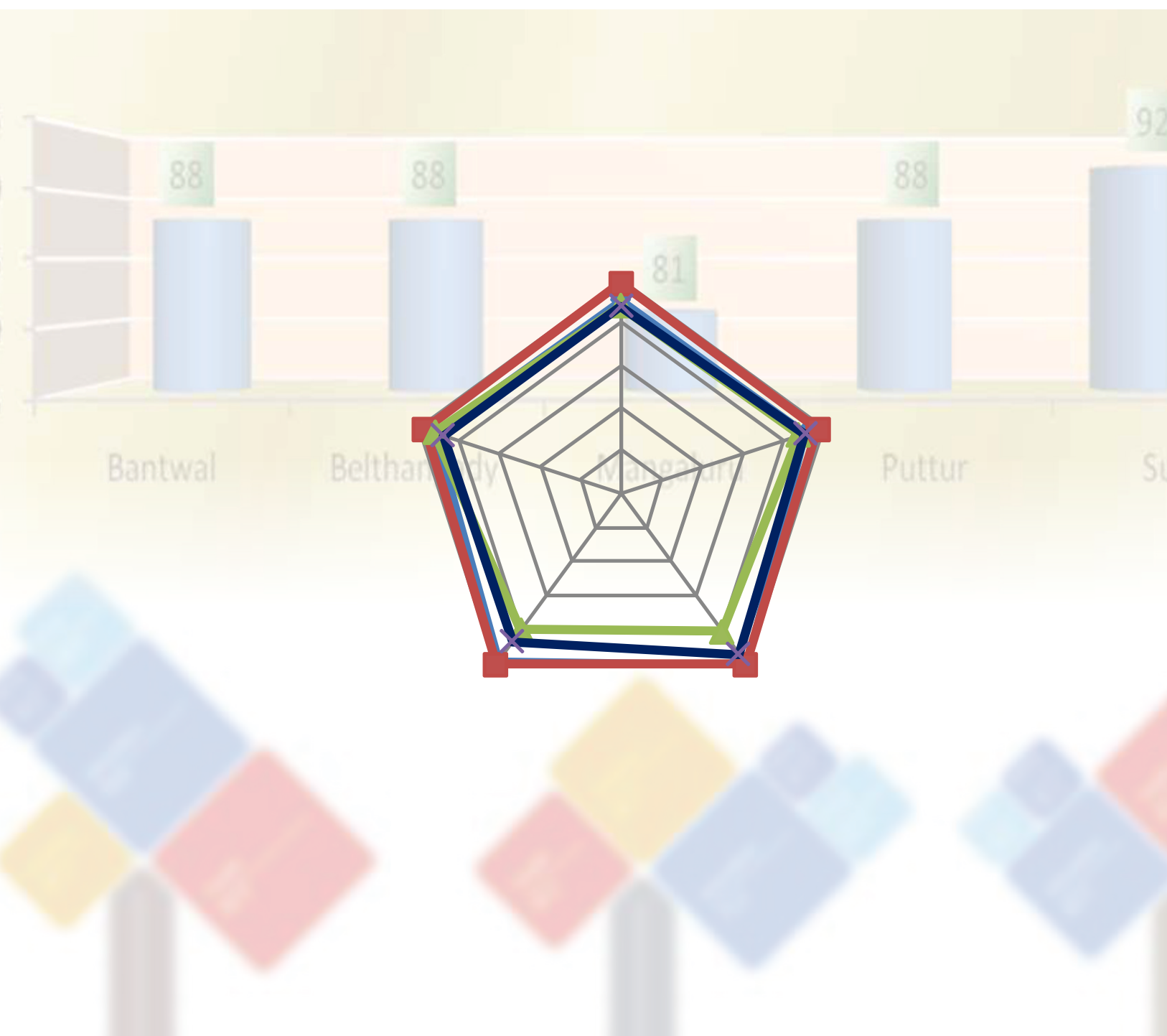


Mangalore Tiles – Once The Hall Mark of Mangaluru



Chapter 3

Computation of Indices





3.1 Introduction

The Human Development Index (HDI) is a summary measure which captures several dimensions of human development. Thus, it involves using key variables or indicators of core dimensions of human development and aggregating them to a summary index. The concept of human development, the key factors affecting the human development and the conceptual and methodological framework for computing human development index (HDI) as envisaged by UNDP are discussed in detail in Chapter one. Since the main purpose of the DHDRs is to capture all the key dimensions affecting human development at the taluk and district levels, it was decided that instead of focusing only on three-dimensional HDI, the DHDRs should take into account all key human developmental parameters required for enhancing the wellbeing of the people at taluk and district levels. To achieve this, a broader approach and modified methodology was suggested for the DHDR exercise particularly from the view point of different dimensions of human development and choice of indicators, keeping in mind the data availability and the basic three dimensional framework of UNDP HDI. Accordingly, the following six measures of human development were considered for preparing the DHDR for Dakshina Kannada district:

- Human Development Index (HDI),
- Gender Inequality Index (GII),
- Child Development Index (CDI),
- Food Security Index (FSI),
- Urban Development Index (UDI),
- Composite Taluk Development Index (CTDI).

For computation of dimensional indices and composite indices for each of this index, the UNDP's three core dimensional conceptual and methodological framework namely health, education and standard of living and functional form were used. A set of indicators were selected for computation of indices based on their contributions towards various dimensions of human development. Since indicators are measured differently, with a view to normalize, the index value for each indicator was computed in the range between 0 and 1, 0 indicating lowest value and 1 indicating the highest value. There is also a need to take into account the positive or negative contribution of each indicator. For computing the dimension indices and composite index, the geometric mean is used. As regards minimum and maximum goalposts, in the case of positive indicator, the minimum value was taken as 10 percent less than the observed minimum value in the taluk and in the case of negative indicator, the maximum value was taken as 10 percent more than the observed maximum value at the taluk level. The index value in the case of positive indicator was computed on the basis of the following general formula:

$$\text{Component Index value} = \frac{\text{Actual Xi Value} - \text{Minimum Xi Value}}{\text{Maximum Xi Value} - \text{Minimum Xi Value}}$$

In the case of negative indicator, index value was computed using the following formula:

$$\text{Component Index value} = \frac{\text{Maximum Xi Value} - \text{Actual Xi Value}}{\text{Maximum Xi Value} - \text{Minimum Xi Value}}$$

A Technical Note in the Annexure explains in details the methodology adopted for computation of various indices. This chapter focuses on the analysis of the above six human development indices computed at taluks and district level. Based on the findings, the taluks are ranked according to dimension indices and composite indices and the performance of taluks and districts on various human development indicators is analysed in depth from human development perspective.

3.2 Human Development Index

Karnataka Human Development Report (KHDR) 1999, for the first time, computed the district-wise HDIs to assess status of human development in the state based on the Census 1991 data. Subsequently, KHDR 2005 has provided HDIs for districts based on 2001 Census data. Table 3.1 compares the trend in human development in Dakshina Kannada district based on these estimates.

The HDI of Dakshina Kannada district in 1991 was 0.661, which was 22 percent higher than the state average of 0.541. During the decade 1991-2001, the HDI of the district improved from 0.661 to 0.722 in 2001. While the

state level decadal improvement in HDI was 20 percent, the decadal improvement in the district HDI was only 9 percent. The gap between the district level and state level HDIs was narrowed down. Among then 27 districts in the state, Dakshina Kannada ranked first in HDI in 1991 and 2nd in 2001 (Appendix Table - 4). Bengaluru urban district was ranked first in HDI in 2001. The analysis of the three core dimension indices in the table shows that the district witnessed lower improvement in all dimensions of human development compared to the state level indices. While in 1991, it ranked second in health, education and income, in 2001, its rank slipped to third and fourth in health and education respectively. In income, it has maintained its second rank in the state. In health and education, Udupi district was ranked higher than Dakshina Kannada in 2001. Only in income, Udupi had a lower rank than Dakshina Kannada district. As already stated, in the present DHDR, the HDI was computed based on a broader approach by taking into consideration a set of key taluk level indicators. To compute HDI, 11 taluk level indicators are used covering the area of standard of living, health and education. Table 3.2 shows the taluk level indicators considered for the three dimensions for the purpose of deriving taluk and district level HDIs.

Table 3.1
HDI and its Dimensions Indices of Dakshina Kannada District and the State

Indicators	1991		2001	
	District	State	District	State
Health	0.683	0.618	0.707	0.680
Education	0.799	0.602	0.823	0.712
Income	0.500	0.402	0.636	0.559
HDI	0.661	0.541	0.722	0.650

Source: Karnataka Human Development Report-2005

Table 3.2
Taluk-wise values of HDI Indicators

Indicators	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
Standard of Living						
Percentage of HHs having access to Cooking Fuel	24.86	18.38	63.73	23.58	15.14	42.02
Percentage of HHs having access to Toilets	92.58	90.65	96.33	88.02	80.81	92.66
Percentage of HHs having access to Drinking Water	47.87	27.46	64.83	45.33	29.18	51.77
Percentage of HHs having access to Electricity	93.46	77.31	96.73	84.94	80.10	90.83
Percentage of houses having access to Pucca Houses	54.54	34.55	73.30	48.28	44.57	59.52
Percentage of Non-agricultural Workers to Total workers	91.22	85.58	95.36	97.46	98.46	93.68
Per capita income (in Rupee)	54572.15	50267.21	94715.90	53245.50	81882.46	74528.00
Health						
Child (under 5 years) Mortality Rate (per 1000 live births) in a year	24	27	28	33	14	22
Maternal Mortality Rate (per 100000 live births)	122	47	44	89	103	89
Education						
Literacy Rate	86.71	84.06	91.50	86.02	86.69	88.57
Combined Gross Enrolment in Primary and Secondary Education	86.7	85.76	90.94	92.18	85.91	89.22

Source: Census 2011 and DHFW and Education Departments, ZP, Mangaluru

The data required for computing these indicators are compiled from 2011 Census and documented secondary data from the Health and Education Departments of the Zilla Panchayat. The comparative analysis of the data in the table shows inter-taluk variations in performance and achievement in various indicators of standard of living, health and education dimensions of human development. Seven indicators selected for the standard of living dimension were five indicators of the basic amenities: access to modern cooking fuel, safe drinking water, electricity, pucca house and toilet facilities and two reflecting income capability: per capita income, which reflects the direct command over resources and share of non-agricultural workers in total workforce as proxy indicator for income. These indicators were considered critical for a reasonable level of standard of living. In the case of health dimension, the child mortality rate (CMR) and maternal mortality rate (MMR) were considered as important indicators. In the same vein, the education dimension is measured by achievement in literacy rate and gross enrolment in both primary and secondary schools.

The dimension indices for health, education and standard of living and HDI as

composite index were calculated by taking into account minimum and maximum values of these eleven indicators observed among taluks within the district. The dimension indices and HDI computed following the UNDP methodology are shown in Table 3.3.

For analytical and comparative purposes, if the index value is above 0.750, it is considered as 'very good'; if it is in the range between 0.500 and 0.750, 'good', if it is between 0.300 and 0.500, 'average' and if below 0.300, 'poor'. The HDI for the district works out to 0.687 and hence can be considered 'good' in human development. Still it has development deficit of 31 percent and a long way to catch up 'very good' status. It is important to note that the HDI for the district now computed is lower than district HDI estimated in the KHDR-2005 which was 0.722. The difference in the HDI values is mainly attributed to different indicators taken into account to measure the three core dimensions of HDI as well as change in computation methodology in these studies. Hence, they are strictly not comparable. It is also important to note that the lower HDI index in the present study is mainly due to lower achievement values in indicators like access to modern cooking fuel, access to safe drinking water and access to pucca

Table 3.3
Taluk wise data of HDI and its Composition

Taluk	Standard of Living		Health		Education		HDI Ranking	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank
Bantwal	0.510	2	0.273	4	0.665	3	0.452	4
Belthangady	0.182	5	0.635	1	0.551	5	0.399	5
Mangaluru	0.978	1	0.610	2	0.958	1	0.830	1
Puttur	0.440	3	0.272	5	0.809	2	0.459	3
Sullia	0.274	4	0.588	3	0.637	4	0.468	2
District	0.708		0.567		0.809		0.687	

houses. In rural areas, most of the households depend on open wells for drinking water, which was not considered as safe drinking water under Census definition. Similarly most of the rural households still depend on traditional fuel like firewood for cooking. In the KHDR 2005 study, instead of these indicators, only per capita income was considered as proxy to standard of living.

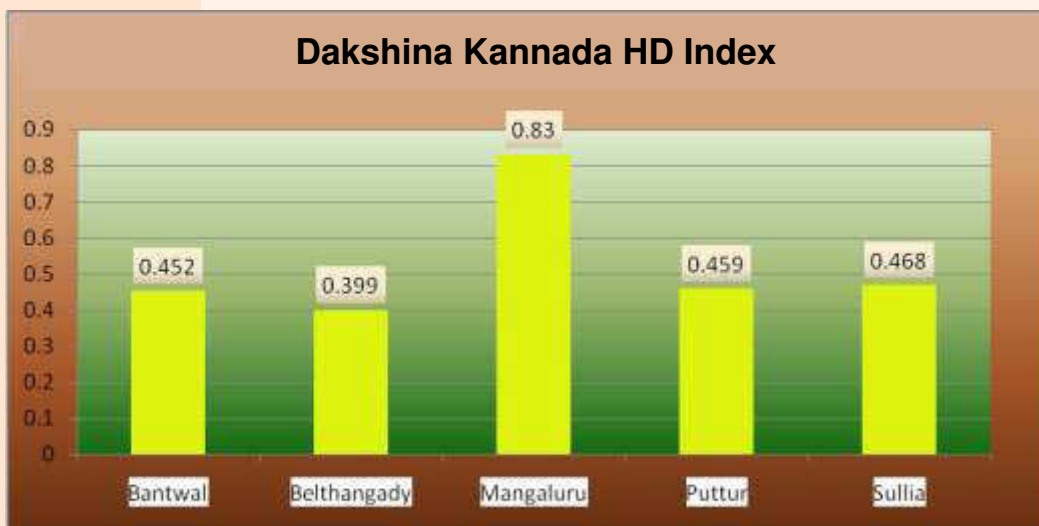
The HDI of Dakshina Kannada district (0.687) is apparently driven by education dimension index (0.809) and standard of living index (0.708). The district has the highest adult literacy rates in the state and student enrolment ratios both at primary and secondary levels are almost 90 percent. The health dimension index works out to 0.567. Though it reflects “good” status, its value is relatively lower than other two dimension index values. The district has one of the lowest CMR and MMR in the state. Since they have negative values for computation of index and maximum and minimum goal posts are considered within the district, the lower

index value was due to computation methodology adopted.

Taluk-wise analysis of the data shows wide inter-taluk disparities in HDI as well as index values of dimensions of human development. In HDI, Mangaluru taluk ranks first with index value of 0.830 showing 'very good' status in human development. Sullia ranks second with HDI of 0.468, followed by Puttur with HDI of 0.459 and Bantwal with HDI of 0.452. Belthangady with HDI of 0.399 ranks the lowest. Inter-taluk disparity between the highest ranked Mangaluru taluk and lowest ranked Belthangady in human development works out to 108 percent. Even in the case of other taluks, the disparities between the highest and other taluks range between 77 percent and 84 percent. The plausible explanation for these wide inter-taluk disparities in HDIs is that Mangaluru taluk is more urbanized and industrialized and other taluks are mainly agricultural based.

The analysis of dimensional indices also

Graph 3.1



shows wide inter-taluk variations. In standard of living, Mangaluru taluk ranks first with index value of 0.978. Belthangady which ranks the lowest has index value of 0.182 followed by Sullia with index value of 0.274. Both these taluks are in poor category in standard of living. The inter-taluk disparity between the highest and lowest is 437 percent. Bantwal with index value of 0.510 ranks second and Puttur with index value of 0.440 ranks third. The wide inter-taluk disparities in living standard are mainly due to lower indicator values in safe drinking water, modern cooking fuel, share of non-agricultural workers and per capita income.

In the case of health, interestingly Belthangady ranks first with index value of 0.635. Mangaluru taluk ranks second with index value of 0.610. Puttur ranks the lowest with index value of 0.272. The inter-taluk variation between the highest and lowest ranked taluks is 133 percent. While Belthangady, Mangaluru and Sullia are more or less in 'good' status, Bantwal and Puttur are in poor status in health. In the case of education, Mangaluru taluk ranks first (0.958), followed by Puttur (0.809) and Bantwal (0.665). Belthangady ranks lowest (0.551). Inter-taluk disparities in education range between 18 percent and 74 percent. In education, Mangaluru and Puttur are in 'very good' status, while other taluks in 'good' status. Apparently, there is no positive correlation between standard of living and health and also education and health. There appears to be some relation between standard of living and education.

3.3 Gender Inequality Index (GII)

The gender equality and empowerment is an essential dimension of human

development. With growing international recognition of the importance of eliminating gender inequality and need for empowering women, UNDP introduced two gender development related measures in the 1995 Human Development Report: Gender-related Development Index (GDI) and the Gender Empowerment Measure (GEM). Since these indices did not fully capture the disparities women faced, the UNDP introduced the Gender Inequality Index (GII) as a new measure of the gender inequalities in the 2010 Human Development Report. The new index is a composite measure which captures the loss of achievement in human development due to gender inequality using three female related dimensions: reproductive health, empowerment, and labour market participation. As the index reflects degree of inequality, the zero GII value shows perfect gender equality and the value of one shows perfect gender inequality. The higher GII, the greater is the discrimination and vice versa.

Following the earlier approach of UNDP, the KHDR 1999 and 2005 computed Gender related Development Index (GDI). The GDI of Dakshina Kannada district was 0.645 in 1991, which increased to 0.714 in 2001. The district was ranked first in 1991 and second in 2005 in GDI among 27 districts in the state. The GDI of Dakshina Kannada was significantly higher than the state average of 0.637 and the all-India GDI of 0.609 in 2001. The major contribution for gender improvement in the district came from health and education.

AS per the guideline of the Government for DHDRs, the new measure introduced by the UNDP namely GII should be used as a measure of gender inequalities. Accordingly, the UNDP

Table 3.4
Taluk-wise Gender Inequality Index (GII) and Its Dimensions

Dimension	Reproductive Health		Empowerment		Labour Market		GII	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank
Bantwal	0.681	5	0.601	2	0.808	1	0.061	5
Belthangady	0.769	1	0.595	4	0.721	4	0.026	1
Mangaluru	0.760	2	0.611	1	0.699	5	0.034	2
Puttur	0.702	4	0.599	3	0.782	2	0.049	4
Sullia	0.712	3	0.601	2	0.737	3	0.046	3
District	0.725		0.601		0.749		0.043	

conceptual framework of three dimensional GII viz. reproductive health, empowerment and labour market participation was considered to measure gender inequality in the district. A technical note in Appendix contains computation methodology adopted for calculating GII. A set of three key taluk level indicators for each dimension were identified for computation of GII at taluk and district levels. Table 6 in Appendix shows taluk-wise values of various indicators chosen for measuring the three dimensions for computing GII. The data required are compiled mainly from 2011 Census and the district's Department of Health and Family Welfare.

The district and taluk-wise index values of GII and its dimensions computed are presented in Table 3.4.

The GII for Dakshina Kannada district works out to 0.043 which clearly demonstrates minimal gender inequality of 4.3 percent in the district. Inter-taluk comparison shows that Belthangady taluk ranks first with GII value of 0.026 and has the lowest gender inequality. Bantwal taluk ranks highest with GII value of 0.061 and has the highest gender inequality.

Next to Bantwal taluk, Puttur has the highest gender inequality (0.049). Though inter-taluk variation in gender inequalities is found not very significant, surprisingly, Bantwal taluk, which is more urbanized and more literate have higher gender discrimination in the district. Compared to other taluks, it is significantly higher.

3.4 Child Development Index (CDI)

Today's children are the future generation of the nation. Hence, the development status of children is very important from human development perspective. The development of children refers to all round development: physical, mental, emotional and social developments. In Dakshina Kannada district, children in the age group 0-6 years constitute about 10 percent of the total population. Child Development Index (CDI) is a composite performance measure specific to children development. It comprises of three child development related dimensional indices: health, nutrition and education. The indicators for each dimension are selected based on their contribution to child well-being. They are given in Table 3.5.

Table 3.5
Taluk-wise Values of CDI Indicators

Dimension	Indicators	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
Health	Child Mortality Rate	24	27	28	33	14	22
Nutrition	Percentage of Malnourished children	19.06	25.59	17.89	22.89	31.54	21.23
	Percentage of children born underweight	5.90	9.24	20.73	10.41	15.04	12.26
Education	Percentage of primary and secondary school drop-out of schools mainstreamed	89.50	84.30	87.98	86.14	86.45	86.87

The indicators selected for health and nutrition dimension are negative in nature; lower the value, better for children well-being status and vice versa. In the case of education, on the other hand, the indicator selected is positive in nature. They contribute positively towards children welfare. The CDI is the arithmetic average of three dimensional index values. The highest index value indicates better child development outcome. Table 3.6 compares the CDI and dimension index values for taluks and the district.

The CDI for the district works out to

0.721, which can be categorized as 'good'. Taluk-wise, Bantwal taluk has the highest CDI value of 0.779 and ranks first. Inter-taluk differences in CDI are not very significant. Surprisingly, Mangaluru taluk has the lowest child development index (0.559). This is mainly due to its poor performance in nutrition and health. In nutrition, Bantwal has the highest index value (0.964), followed by Puttur (0.718). Mangaluru and Sullia have the lowest index values. The respective values are 0.350 and 0.294. In child health, Bantwal ranks first followed by Belthangady. Belthangady ranks second in child health. Mangaluru has the lowest value of 0.123,

Table 3.6
Taluk-wise CDI and its Compositions

Taluks	Nutrition		Health		Education		CDI	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank
Bantwal	0.964	1	1.000	1	0.632	5	0.779	1
Belthangady	0.659	3	0.802	2	1.000	1	0.690	2
Mangaluru	0.350	4	0.123	5	0.740	4	0.559	5
Puttur	0.718	2	0.733	3	0.870	2	0.613	4
Sullia	0.294	5	0.459	4	0.848	3	0.624	3
District	0.707		0.624		0.818		0.721	

followed by Sullia (0.459). The difference between the highest ranked and the lowest ranked is very significant. In child education, Belthangady ranks first, followed by Puttur. Bantwal has the lowest rank. Inter-taluk differences in child education are only marginal.

The CDI for the district works out to 0.721, which can be categorized as 'good'. Taluk-wise, Bantwal taluk has the highest CDI value of 0.779 and ranks first. Inter-taluk differences in CDI are not very significant. Surprisingly, Mangaluru taluk has the lowest child development index (0.559). This is mainly due to its poor performance in nutrition and health. In nutrition, Bantwal has the highest index value (0.964), followed by Puttur (0.718). Mangaluru and Sullia have the lowest index values. The respective values are 0.350 and 0.294. In child health, Bantwal ranks first followed by Belthangady. Belthangady ranks second in child health. Mangaluru has the lowest value of 0.123, followed by Sullia (0.459). The difference between the highest ranked and the lowest ranked is very significant. In child education, Belthangady ranks first, followed by Puttur.

Bantwal has the lowest rank. Inter-taluk differences in child education are only marginal.

The lower index values in nutrition and health in Mangaluru and Sullia taluks are really areas of concern. This is particularly so when the Central Government implemented Integrated Child Development Services (ICDS) program for all round development of children and set up in the district 1614 anganawadi centres to cater to the supplementary needs of pregnant women and children, their health care including vaccination and non-formal pre-school education. The nuclear family and two or one child norm, pro-child attitude of parents, higher literacy of women and easy access to health care services – all these were expected to contribute significantly to the well-being of the children in the district.

3.5 Food Security Index

Food security is the availability and ability to access to enough food for an active and healthy life for all people and all time. Food security, therefore, take into consideration both

Graph 3.2



supply and demand aspects of food. It has, thus, three dimensions: physical availability, economic access and social access. Availability of adequate quantity of food at all times is important. But equally important is economic access; people should have purchasing power to access the required quantity of food to him and family. It is also important to ensure social access to food particularly marginalized and poor section of the community. In spite of achieving self-sufficiency in food production and various initiatives to improve household food security in the country, the problem of chronic hunger and malnutrition continue at very high level.

Recognizing the critical importance of food security from human development perspective, Food Security Index (FSI) was included in the DHDRs as one of the six human development indices to be computed. For computing FSI, three major parameters of household food security are considered. They are: Availability, Accessibility and Absorption. The indicators considered for measuring these parameters are the following:

- **Availability (7 Indicators):** Cropping intensity, Change in net area sown over 2001-2011, Per capita food grain production, Per capita forest cover, Irrigation intensity, Percentage of area degraded to total geographical area and percentage of leguminous crops in gross cropped area.
- **Accessibility (6 Indicators):** Percentage of BPL families, Per capita income, Percentage of non-agricultural workers to total workers, Average size of holdings, Percentage of agricultural labourers to total workers and Percentage of villages having PDS outlets within village.
- **Absorption (5 Indicators):** Child mortality rate, Percentage of households with access to safe drinking water, Percentage of pregnant women with Anaemia, Percentage of malnourished children and Female literacy rate.

The values computed for these indicators taluk-wise and for the district as a whole are shown in Table 8 in the Appendix. It may be noted that out of 18 indicators chosen, 12 are positive in contributing to food security and

Table 3.7
Food Security Index (FSI)

Taluk	Availability	Accessibility	Absorption	FSI	Rank
Bantwal	0.341	0.431	0.656	0.476	3
Belthangady	0.639	0.317	0.409	0.455	4
Mangaluru	0.491	0.772	0.544	0.603	1
Puttur	0.350	0.432	0.466	0.416	5
Sullia	0.450	0.863	0.466	0.593	2
District	0.439	0.637	0.638	0.571	

6 are negative in their contribution. FSI and its dimension indices were computed by taking into account the contribution of these selected indicators. Table 3.7 presents index values of three dimensions of food security and the overall food security index for the taluks and the district.

The FSI for the district works out to 0.571. In food security, the district is lagging behind by 43 percent. Inter-taluk comparison shows that Mangaluru taluk ranks first with the index value of 0.603 followed by Sullia with index value of 0.593 and Bantwal with index value of 0.476. Puttur has the lowest FSI of 0.416. Inter-taluk variation in FSI between the highest and the lowest ranked is 45 percent. In food availability, the district's index value works out to 0.439. The district is in average status. There is a deficit of 56 percent. Since the indicators selected to measure food availability are production-oriented, the low value of the index clearly demonstrates decline in food production in the district. In food accessibility and food absorption, the district is in better position. The index values are above 0.600.

The inter-taluk analysis of dimensional indices demonstrates that in food availability, Belthangady taluk has the highest index value of 0.639, followed by Mangaluru taluk (0.491). Bantwal has the lowest index value (0.341). Surprisingly Puttur and Sullia, which are mainly agricultural based economies, have lower food availability index values. This may be mainly because they are increasingly shifting from food production to horticulture. In food accessibility, Sullia followed by Mangaluru ranks first and second. Belthangady ranks lowest. Inter-taluk variation is very wide. The difference between the first ranked and lowest is 172 percent. As

against this, in food absorption, Bantwal ranks first, followed by Mangaluru. Belthangady ranks the lowest. In food absorption, the inter-taluk variation is only marginal. This may be mainly due to the government's good network for public distribution of food and subsidized food for weaker section in all taluks.

3.6 Urban Development Index (UDI)

Dakshina Kannada district has urban population of 996086, which constitutes 47.7 percent of the total population of the district. The comparative state level urban population is 38.7 percent. The district has, thus, one of the highest percentages of urban population in the state. While the rural population in the district witnessed decadal decline of 6.4 percent, the decadal growth in urban population was 36.6 percent during 2001-11. Thus, the district is witnessing a rapid growth in urbanization. Urbanization being a driving force for economic development, it is an inevitable phenomenon. With the growing urbanization, the provision of basic urban services such as housing, safe drinking water, sewerage, drainage etc. poses a real challenge for well-being of people living in urban areas. Since growing numbers of people live in urban areas, the urban issues related to human development cannot be ignored.

Dakshina Kannada district has eight Urban Local Bodies (ULBs). Mangaluru, the district head quarter with population of 499487 has City Corporation. Bantwal, Puttur, Ullal, and Moodabidri have Town Municipal Councils (TMCS). Their population range from 29431 in Moodabidri to 53773 in Ullal. Sullia, Mulky and Belthangady have Town Panchayats (TPs). Their population is below 20000. With a view to

evaluate the ULBs from human development perspective, the DHDR envisages construction of Urban Development Index (UDI) as a composite index of urban related human development indicators. Eleven critical urban related development indicators were identified to compute composite UDI for each ULB. The data for these indicators were compiled from the 2011 Census, concerned ULBs and the Urban Development Cell of the Deputy Commissioner's (DC) office. The urban development indicators selected for computation of UDI and their actual values for each ULB are set out in Table 9 in Appendix. Table 3.8 shows the UDIs computed for eight ULBs in the district:

At the outset, it should be noted that ULBs in the district are of different categories. There is only one City Corporation, four TMCs and three TPs. They cannot be ranked except in the case of four TMCs and three TPs. Even while comparing the relative position, the limitation of their comparability should be taken into account. However UDI shows the present status in urban infrastructure development and development deficits in all ULBs based on common urban development indicators.

Table 3.8
Urban Development Index

Urban Local Bodies	UDI	UDI Rank
City Corporation		
Mangaluru City Corporation	0.690	-
Town Municipal Concils		
Bantwal TMC	0.310	4
Puttur TMC	0.562	1
Ullal TMC	0.406	2
Moodbidri TMC	0.316	3
Town Panchayats		
Mulky TP	0.380	3
Belthangady TP	0.397	2
Sullia TP	0.636	1

The data on UDIs in the table shows that Mangaluru city has the highest UDI value of 0.690. Though it is in the category of 'good' in regard to basic amenities and infrastructure related to human development, it has still development deficit of 31 percent in some dimensions such as health infrastructure, crime rate, road accidents etc. Among TMCs, Puttur TMC has the highest UDI value (0.562). Ullal with UDI of 0.406 ranks second. Moodabidri with UDI of 0.316 ranks third. Bantwal with UDI of 0.310 ranks the lowest among TMCs. Moodabidri and Bantwal appear to be in the worse position in terms of all basic urban amenities. Among TPs, on the other hand, Sullia ranks first with UDI of 0.636. Belthangady TP has lower UDI of 0.397 and Mulky with UDI of 0.380 ranks the lowest. They have development deficit slightly more than 60 percent.

3.7 Composite Taluk Development Index (CTDI)

The primary objective of DHDR is to focus on taluk level human development issues which enhance the quality of life at the grass root levels. In order to achieve comprehensive taluk development from human development perspective, the Guidelines Document for Preparation of DHDRs has identified and selected a broad set of 68 indicators affecting human development at taluk levels. All selected indicators centered around three core dimensions of human development viz. standard of living, health and education. They broadly take into account demographic factors, livelihood and employment related factors, household assets, political participation, health, basic amenities such as electricity, water supply,

housing, and sanitation and education factors.

The relevant data for all indicators were compiled from Census 2011 and from the relevant Government's Departments. The index values for indicators were computed by taking into account whether the indicators are positive or negative in order to make the index unidirectional. Following the UNDP methodological framework of three core dimension and HDI computation formula, the dimensional index values and composite CTDI values were calculated. The actual values of 68 indicators at taluk and district levels used for computation are given in Table 10 in the Appendix. Table 3.9 provides the outcome of dimensional indices and CTDI values for different taluks and the district as a whole.

The comparative analysis of CTDI in the taluks in the table shows that Mangaluru taluk with CTDI of 0.711 ranks first followed by Sullia with CTDI of 0.660. Belthangady has the lowest index value of 0.618. The development deficit varies from 29 percent in the case of first ranked taluk to 38 percent in the case of lowest ranked taluk. Interestingly, the inter-taluk disparities in CTDIs are not very significant. The difference between the highest and lowest

ranked taluks works out to 15 percent. The District Composite Development Index (*DCDI*) works out to 0.673. There is a development deficit of 33 percent at the district level.

The analysis of dimensional index values shows that Belthangady taluk ranks first in standard of living (0.658), while Mangaluru taluk ranks the lowest with index value of 0.576. The dimension index for standard of living for the district works out to 0.608. At the district level, there is a deficit of 39 percent in living standard. In health, Puttur ranks the highest with index value of 0.703, followed by Belthangady (0.680). Sullia ranks the lowest in health (0.584). As against this, in education, Mangaluru ranks first (0.902), followed by Puttur (0.673), Belthangady ranks the lowest (0.517). In education, the difference between the top ranked Mangaluru taluk and lowest ranked Belthangady is 74 percent, which is by all standards very high.

3.8 Concluding Remarks

The computation and analysis of various human development related indices at taluk and district levels are quite revealing and of policy

Table 3.9
Composite Taluk Development Index

Taluk	Standard of Living Index	Health Index	Education Index	CTDI/DCDI	Rank
Bantwal	0.601	0.662	0.619	0.627	4
Belthangady	0.658	0.680	0.517	0.618	5
Mangaluru	0.576	0.654	0.902	0.711	1
Puttur	0.588	0.703	0.673	0.652	3
Sullia	0.643	0.584	0.573	0.660	2
District	0.608	0.640	0.733	0.673	

significance. Six different indices computed together provide a comprehensive view of human development at the grassroots level. The indices computed bring out spatial disparities, the relative performance position and development deficits of taluks in various dimensions of human development within the district. They provide thrust areas for action plan to achieve comprehensive and equitable human development in the district. For any planning or policy to succeed, it must take into consideration human development deprivation and disparities in various dimensions of human development and relative position of taluks therein.

The overall performance based on the five indices shows that though Dakshina Kannada district is considered progressive, all is not well from human development perspective. There are many areas of concern. The district as a whole is in very good status only in GII. Most of the taluks are either in 'good' or 'average' status. In some dimensions of human development, they are in 'poor' category. There is also wide inter-taluk disparities in the ranking and values of indices. The analysis of dimension indices also shows no close correlation between them. In the case of HDIs, the taluks which have higher education index values have lower health index values. Similarly, the taluks which have lower standard of living index values have higher education and health indices. This empirically proves that for overall human development, all dimensions are equally important. The development of one dimension cannot automatically take care of development of other dimensions, though theoretically such a possibility cannot be ruled out.

In the ultimate analysis, human development is the outcome of economic growth, social policies and right based poverty reduction strategies at taluk level. The six indices computed clearly demonstrated that the taluks which perform better in these indices are also better in economic and social development outcomes. Mangaluru taluk is the top achiever in some human development related indices because it has more industries, higher scope for non-farm employment, higher urbanization and easy access to educational and health infrastructural facilities. As against this, Belthangady taluk is more agricultural based has the lowest rank in most of the indices. In the case of health and education, easy access to infrastructural facilities matters more than income. In the case of income, nearness to urban centres and major industries, scope for non-agricultural employment and diversification of agriculture apparently played a significant role.

Thus, the ranking of taluks and divergences between rankings based on various human developments related indices and in their components have serious implications for policy makers, while formulating strategies and allocating resources. They provide thrust areas for action programmes and policy interventions and also pointers for monitoring the programmes in terms of human development perspective. In the following chapters, an attempt is made to carry out in-depth disaggregated analysis of various dimensions of human development at taluk and district level.



Sulthan Battery, Mangaluru



Chapter 4

Literacy and Education



A HOLISTIC APPROACH TO THE EDUCATION



4.1 Introduction

Education is considered as the key determinant for formation of functioning capabilities and enhancing choices and freedom. Without basic literacy and education, people cannot have requisite skills and knowledge for functional capabilities. They also cannot have freedom to choose the life they value most. According to Sen, illiteracy causes *unfreedoms*. Without education, people will be marginalized and become voiceless and hopeless. Education functionally empowers people and enables them to make informed choices about their lives, seize opportunities and exercise freedom to achieve among alternatives, what is best for them. It expands employment opportunities and freedom of choice. A well educated population, equipped with knowledge and functional skills, is essential to drive higher and inclusive development. Education is, therefore, valued as human capability-promoting, opportunity-enhancing and empowerment manifesting human development dimension.

Dreze and Sen (2002) in their well-known work on influence of education on social sector in India identified following five roles of education:

- Intrinsic value to enable people knowledgeable and secure better and higher position in the society,
- Instrumental role at individual level to expand employment opportunities,
- Instrumental role at societal level to participate in social, political and development process,
- Other instrumental role necessary to lead the life one values most and with dignity, and

- Empowering and distributive role to fight against deprivation, exploitation, inequality and discrimination.

Under the Universal Declaration on Human Rights of 1948, the United Nations recognized education as a fundamental human right along with other basic necessities such as food, shelter and water. The UN Development Millennium Goals envisage goal of achieving universal primary education and gender equality in primary and secondary education by 2015. The Sarva Shiksha Abhiyan (SSA) introduced in 2001-02 in India focused on universalization of elementary education. With the Right of Children to Free and Compulsory Education (RTE) Act which was enacted by Parliament in 2009 and came into effect in 2010, the primary education has become a mandated right to all children up to the age 14. The Eleventh Plan has launched Rashtriya Madhyamik Shiksha Abhiyan (RMSA) for universalization of secondary education. The Twelfth Five Year Plan has articulated the need for expanding educational facilities and improving quality of education at all levels as key instruments for achieving faster, sustainable and more inclusive growth.

Recognizing the critical importance of education, the UNDP has rightly considered it as one of the three core dimensions of HDI. Since human development is predicated upon universal access to education, it has implications for equity, social justice and quality at all levels of education. In this chapter, an attempt is made to analyze in-depth education profile of people at taluks and the district levels. While carrying out disaggregated analysis of education, emphasis is

given more to gender, social, regional and rural-urban inequity and also on basic education indicators such as access, enrolment, retention, drop-out rate, transition rate, teacher-pupil ratios, infrastructure and quality of education. All these parameters are looked into at primary, secondary and tertiary education levels. An attempt is also made to carry out radar analysis of key education indicators for intra and inter-taluk comparisons.

4.2 Historical Backdrop

Historically, education system in India was on “Gurukula” model and more religious and theological oriented. Since the district's economy was agriculture-based, occupational knowledge was passed on from generation to generation by parents, elderly relatives and neighbours. The modern education system in the district has only a recent history. In the initial stage, the contributions of Christian Missionaries were immense in the spread of modern education in the district. The first primary school was set up in Mangaluru by Basel Mission in 1832. The number of schools set up by the Mission in erstwhile Dakshina Kannada district increased to 300. The educational institutions were set up not only in Mangaluru but also in other cities and surrounding rural areas. The Roman Catholic Diocese had set up St. Aloysius College for boys and St. Agnes College for girls in Mangaluru besides schools all over the district. Subsequently nationalists like Ammembala Subbarao Pai were instrumental in setting up high schools mainly in Mangaluru city. The district was then under Madras Presidency.

With the setting up of Education

Box 4.1: Contribution of Christian Missionaries to Education in erstwhile South Kanara District

Basel Mission was the pioneer in setting up modern educational institutions in the District:

- Beginning with the first primary school in Mangaluru in 1832, the number of schools set up in erstwhile South Kanara district (undivided Dakshina Kannada district) increased to 300.
- At a time when schooling for girls was not much supported by society, Basel Mission started a school exclusively for girls.
- It also provided opportunities to people from marginalised sections of the society. In 1911, it started a school for the members of the Scheduled Caste for the first time in Mangaluru.
- It was also a pioneer in establishing Kinder Garden School in 1876 for children of weavers given free education.
- It started night technical schools to train workers in technical education.

Roman Catholic Diocese also played active role in spread of modern education in the district. Reputed educational institutions, schools and colleges such as St. Aloysius College and St. Agnes College for girls Schools were set up by Roman Catholic Mission.

Source : compiled from various sources

Department under Madras Presidency and introduction of the “New Education System” by the British during 1855-56, the government schools were set up mainly in the urban centers. Madras University set up in the year 1857 provided avenues for higher education mainly for elite class in the district. In spite of various initiatives, more than three-fourths of the

population in the district was illiterate at the time of independence. Only Mangaluru city had colleges at that time. The education map of the district, however, changed significantly after Independence. The Government was in the forefront and took a number of initiatives in the field of primary and secondary education. The government set up High Schools in most of the urban centres to improve access to the secondary education. The public effort was also supplemented by the private initiatives in higher education. Manipal Academy of General Education, Nitte Education Trust, Dharmasthala Education Trust, Yenepoya Education trust, Alvas Education Foundation and others promoted higher education institutions in the district.

4.3 Literacy Profile of the District

As per 2011 Census, Dakshina Kannada district has the literacy rate of 88.57 percent which is the highest literacy rate in the state. As against the state's literacy rate of 75.36 percent, the district has 18 percent higher literacy rate (Table 4.1). In 1991, the district had literacy rate

of 76.74 percent, which increased to 83.4 percent in 2001, accounting for a decadal increase of 8.68 percent. During 2001 and 2011, the literacy rate of the district increased to 88.57 percent; witnessing a decadal increase of 6.2 percent.

The decadal growth in literacy rate is lower than the state's 13.1 percent. The lower decadal growth was mainly because, the district is at the end-stage of universal literacy rate. The gender-wise literacy status in the table reveals that the male population has literacy rate of 93.1 percent and female 84.13 percent in the district in 2011. The respective literacy rates at the state level are 82.47 percent and 68.1 percent. While the decadal growth rate in male literacy rate between 2001 and 2011 is 3.8 percent, in the case of female literacy rate, it is nearly 9 percent. The significant increase in female literacy rate has narrowed down the gender gap in literacy rates from 12.5 in 2001 to 8.97 in 2011. The gender gap in the district is significantly lower than the state level which is 14.4 percent.

There is no wide inter-taluk variation in the literacy rates. All taluks have literacy rates, both or male and female, above state's average.

Table 4.1
Taluk-wise Literacy Rates by Sex: 2001-2011 (Percentage)

Taluku	2001			2011			Decadal Growth		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Bantwal	88.30	73.20	80.60	92.60	81.02	86.76	4.87	10.68	7.64
Belthangady	85.10	70.60	77.70	89.99	77.99	83.92	5.75	10.47	8.01
Mangaluru	92.60	82.10	87.30	95.31	88.15	91.67	2.93	7.37	5.01
Puttur	87.20	73.50	80.30	90.71	80.51	85.92	4.02	9.54	7.00
Sullia	87.40	74.90	81.20	91.34	81.44	86.35	4.51	8.73	6.34
District	89.70	77.20	83.40	93.10	84.13	88.57	3.79	8.98	6.20
State	76.10	56.87	66.64	82.47	68.08	75.36	8.37	19.71	13.08

Source: Census 2001 and 2011.

Belthangady taluk has the lowest literacy rate (83.92 percent), followed by Puttur (85.92 percent). Mangaluru taluk has the highest literacy rate of 91.67 percent. The gap in literacy rates between highest and lowest works out to 7.8 percent. The gender-wise data analysis shows that Mangaluru taluk has the highest and Belthangady taluk, the lowest literacy rates for both males and females. The gap between the highest and lowest is 5.3 percent for male literacy and 10.2 percent for female literacy. It is pertinent to note that except Mangaluru, all other taluks have the literacy rates significantly lower than the district average for both male and female population. The higher district's literacy rate is apparently due to high literacy rate of Mangaluru taluk.

The rural and urban disparities in literacy rates in different taluks and the district are given in Table 4.2. As per 2011 Census, in rural areas, 85.33 percent of people are literate and in urban areas, 92.12 percent literate. The respective literacy rates at the state level are 68.7 percent and 85.8 percent. The rural/urban disparity in literacy rate in the district works out to 6.79

percent as against state level rural/urban disparity of 17.05 percent. The district has the highest literacy rates both in rural and urban areas in the state. The district has also the lowest rural-urban disparity in literacy rates in the state. Taluk-wise, Bantwal has the highest literacy rate (86.32 percent) in rural areas and Belthangady has the lowest (83.74 percent). In urban areas, on the other hand, Mangaluru has the highest literacy rate (95.49 percent) and Belthangady has the lowest literacy rate (89.61 percent) in the district. In all taluks, rural and urban literacy rates are above the state's average literacy rates.

Gender-wise, in rural areas, the literacy rate for male population is 90.97 percent and for female population, 79.83 percent. In urban areas, for male population it is 95.5 percent and for female population, 88.83 percent. The gender disparity in literacy rates works out to 11.14 percent in rural areas and 6.67 percent in urban areas. Mangaluru taluk has the lowest rural literacy rate for male, while for female population; Belthangady has the lowest literacy rate. As against this, Bantwal has the highest literacy rate for rural male population and

Table 4.2
Rural and Urban Literacy Disparity: 2011 (Percentage)

Taluks	Rural			Urban			Gender Disparity	
	Male	Female	All	Male	Female	All	Rural	Urban
Bantwal	92.28	80.44	86.32	95.40	86.19	90.74	11.84	9.21
Belthangady	89.91	77.73	83.74	92.67	86.66	89.61	12.18	6.01
Mangaluru	87.52	84.67	86.11	98.35	92.71	95.49	2.85	6.24
Puttur	90.31	78.62	84.41	96.23	88.76	92.24	11.69	7.47
Sullia	90.72	80.28	85.48	95.37	88.50	91.80	10.44	6.87
District	90.97	79.83	85.33	95.50	88.83	92.12	11.14	6.67
State	77.61	59.71	68.73	90.04	81.36	85.78	29.98	10.67

Source: Census: 2001 and 2011

Mangaluru has the highest for female population. The gender disparity in rural literacy rates is the highest in Belthangady and lowest in Mangaluru taluk. In urban areas, gender disparity in literacy rates is the highest in Bantwal and lowest in Belthangady. Comparatively, at the state level, the gender disparity is 30 percent in rural areas and 10.6 percent in urban areas. Inter-taluk variations in literacy rates both in rural and urban areas are not significantly high.

4.4 Primary Education

The education system in Dakshina Kannada district like in other districts in the state consists of lower primary classes: I-V, upper primary classes: VI-VIII, secondary: IX and X, pre-university: XI and XII and higher education including professional courses. A primary school is the fundamental and foundational unit of an educational system. The universal primary education requires the fulfillment of following objectives:

- I. Universal access to primary schools: Availability of primary schools within walking (1km) distance for all children;
- II. Universal enrolment: 100 percent enrolment entitlement for all eligible children;
- III. Universal retention: Active and regular participation of all children enrolled without any drop-out until completion of 8 year elementary education;
- IV. Universal achievement: Attainment of minimum essential levels of learning by all children when they complete their primary education; and
- V. Eradication of gender and social gap in education

In what follows, an attempt is made to assess taluk-wise status of primary education system in the district broadly in terms of access, enrolment, retention and drop-out, pupil/teacher ratio, infrastructure and quality of education with emphasis on gender and social equity.

4.4.1 Access to Schools

Access to universal primary education mainly depends on the number of primary schools in relation to inhabitants in a given area. The Sarva Shikshana Abhiyaana (SSA) aims at to provide school facility in the same habitation or at least within one km for lower primary schools and within 3 km for higher primary schools to all elementary school age children. Dakshina Kannada district has witnessed a significant growth in the number of primary schools after independence. The district has 1734 habitations and all habitations are now covered by lower and upper primary schools. There are 354 lower primary schools and 1098 upper primary schools in the district.

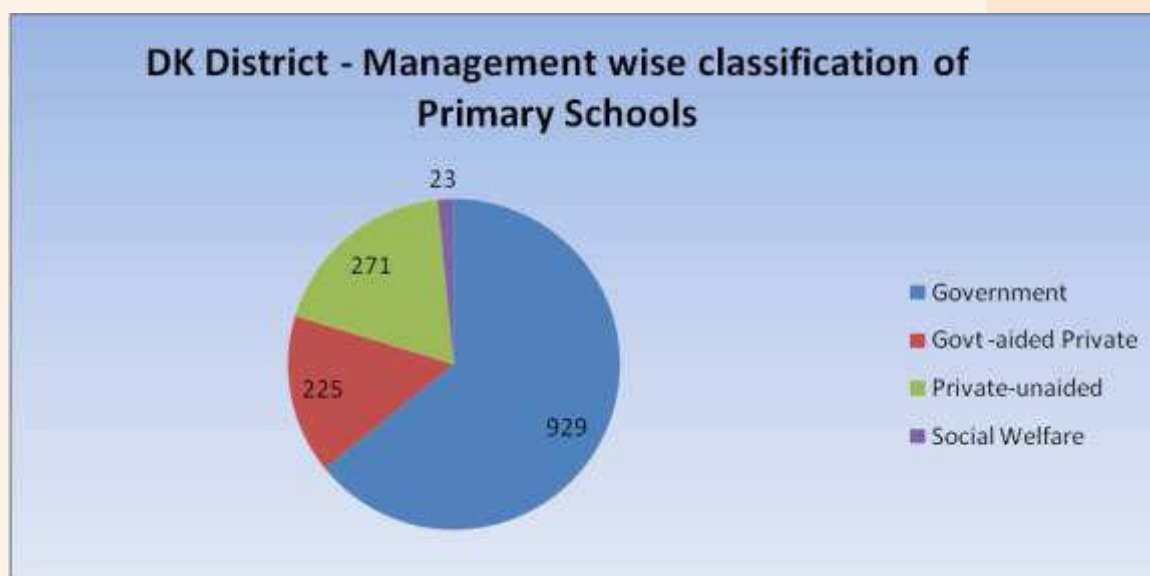
The schools in the district fall under four categories based on the type of management and funding. They are (i) Government schools managed by the Department of Education (DOE), (ii) Private aided schools funded by the government and managed by the private sector, (iii) Private unaided schools, both funded and managed by the private sector, and (iv) Government schools managed by Department of Social Welfare. The State Government is the main provider of primary education in the district. The private sector plays an active role in primary education mainly in urban areas. Table 4.3 provides management-wise classifications of primary schools in the district.

Table 4.3
Management-wise Classification of Primary Schools: 2011-12 (number)

Taluks	Government	Govt -aided Private	Private-unaided	Social Welfare	Total
Bantwal	195	56	44	4	299
Belthangady	180	21	22	6	229
Mangaluru	231	129	153	7	520
Puttur	183	13	35	2	233
Sullia	140	6	17	4	167
District	929	225	271	23	1448

Source: Education Department/ SSA.

Graph 4.1



The data in Table 4.3 on management-wise classification of primary schools in different taluks clearly shows that out of 1448 primary schools, 929 (64 percent) schools are managed by the State Government's Department of Education. If aided and Social Welfare Department schools are added, nearly 81 percent primary schools are Government funded. It is, however, important to note that the recent increase in unaided primary schools is mostly a

phenomenon of urban areas providing education in English medium. Most of the private schools are upper primary schools.

4.4.2 Enrolment

Enrolment of all children in 6 to 14 age-groups is the first step in universalization of primary education. It is also mandated entitlement of every born child as per the RTE

Act. It is, however, important to note that enrolment of school going children depends on growth rate of population and out-migration of young people. Dakshina Kannada district witnessed decline in child population from 228060 in 2001 to 208297 in 2011. Table 4.4 clearly shows this declining trend in enrolment in elementary education. The total enrolment in primary education declined from 274198 in

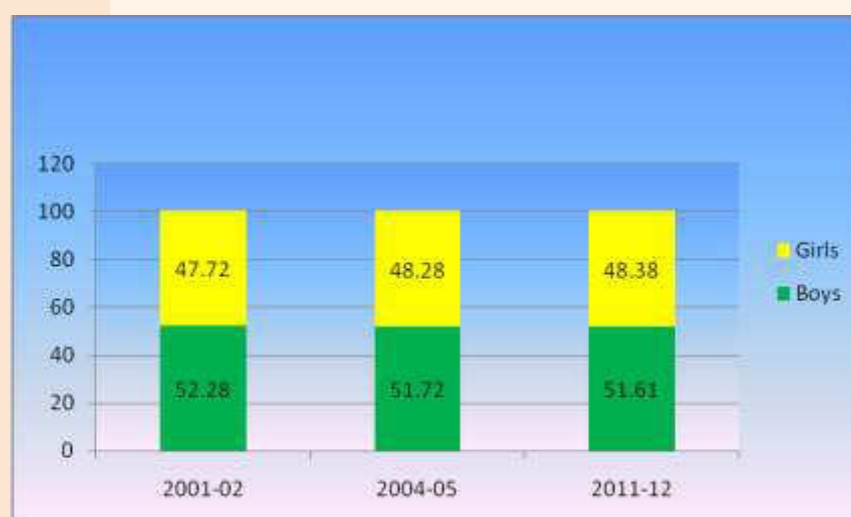
2001-02 to 238946 in 2011-12. The decline took place both in boys and girls. There was also slight decline in boys' participation ratio. It declined from 52.3 percent to 51.6 percent during this period. As against this, participation rate of girls increased from 47.7 percent to 48.4 percent. The present gender participation rate in primary education is more or less consistent with the present sex ratio in child population in the district.

Table 4.4
Enrolment of Students in Primary Schools in Dakshina Kannada District (I – VII)

Year	Boys (Number)	Girls (Number)	Total (Number)	Change in Enrolment (Percent)	Gender Participation (Percent)	
					Boys	Girls
2001-02	143359	130839	274198	-	52.28	47.72
2004-05	133541	124631	258172	(5.85)	51.72	48.28
2011-12	123327	115619	238946	(12.89)	51.61	48.38

Source: Education Department/SSA. Figures in bracket show decline.

Graph 4.2
**Enrolment of Students in Primary Schools in Dakshina Kannada District -
Gender Participation (Percent)**



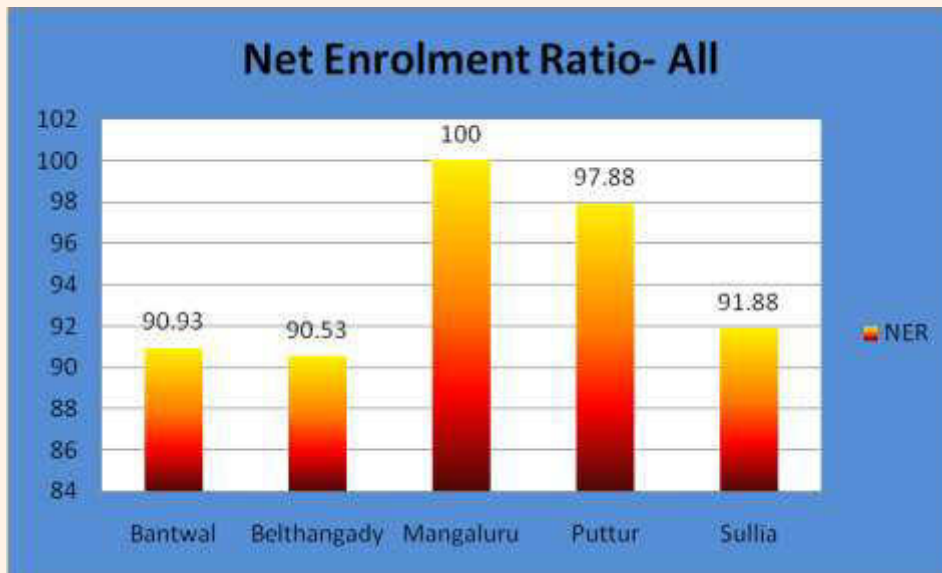
The taluk-wise data on gross enrolment and net enrolment in the primary education is analyzed in Table 4.5.

Table 4.5
Taluk-wise Gross and Net Enrolment in Primary Education: (2011 -12) (Percentage)

Taluk	Boys		Girls		All	
	GER	NER	GER	NER	GER	NER
Bantwal	96.44	91.30	96.00	90.52	96.23	90.93
Belthangady	95.84	91.04	94.80	89.99	95.34	90.53
Mangaluru	104.24	99.78	103.63	99.15	103.94	100.00
Puttur	104.69	99.34	101.53	96.57	103.13	97.88
Sullia	96.34	92.26	95.83	91.47	96.09	91.88
District	101.03	95.89	100.36	95.06	100.56	95.49

Source: Education Department/DISE

Graph 4.3



The gross enrolment ratio (GER) is the percentage of students enrolled in a level of education irrespective of relevant age group to population in the relevant age group at that level. Net enrolment ratio (NER), on the other hand, is the percentage of students enrolled in a level of education belonging to relevant age group to the population in that age group. The GER and NER for the district works out to 100.56 percent and 95.49 percent respectively. For boys, they are

101.03 percent and 95.89 percent and for girls, 100.36 percent and 95.06 percent. The never enrolled eligible children during the year 2011-12 numbered only two. The GER exceeds 100 percent mainly due to inflow of migrant students mainly in Mangaluru. The inter-taluk variation in enrolment in both boys and girls in primary education level is not very significant. Similarly gender disparities among taluks are not significantly high. Its only in Mangaluru-South

block, GER and NER are significantly lower than the district's average. The high GER and NER for boys and girls in all taluks clearly demonstrate that the objective of universal access and enrolment has been largely achieved in the district. This may be attributed to the successful implementation of various interventions under SSA.

The analysis of enrolment data taluk-wise rural and urban as well as by social class in Table 4.6 and 4.8 clearly demonstrates almost similar pattern in enrolment and gender-wise participation in primary education in both rural and urban areas in all taluks in the district.

Table 4.6
Taluk-wise Rural-Urban GER in Primary Education (Percentage)

Taluk	Rural			Urban			Rural-Urban Disparity
	Boys	Girls	All	Boys	Girls	All	
Bantwal	94.86	93.56	94.21	97.89	98.34	98.12	3.91
Belthangady	93.45	91.82	92.64	97.57	97.86	97.72	5.08
Mangaluru	102.78	102.23	102.51	105.63	104.96	105.30	2.79
Puttur	102.78	100.78	101.78	105.93	102.76	104.35	2.57
Sullia	94.78	93.43	94.11	97.82	98.29	98.06	3.95
District	98.73	98.53	98.63	101.29	101.96	101.63	3.00

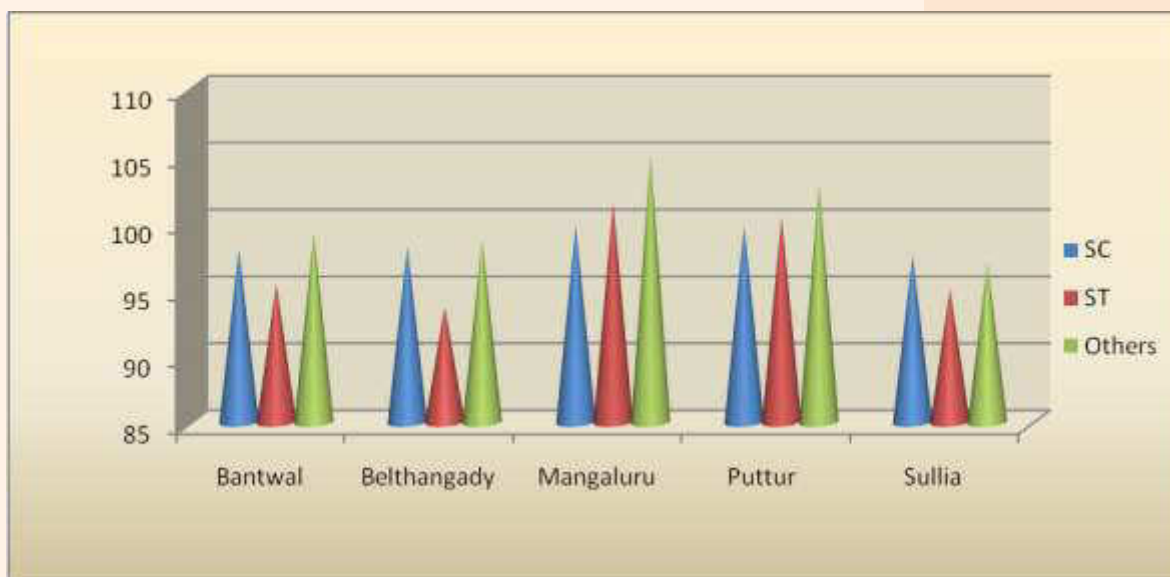
Source: Education Department/DISE

Table 4.7
Taluk-wise GER by Social Class in Primary Education (Percentage)

Blocks	SC			ST			Others		
	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All
Bantwal	97.89	98.12	98.01	95.89	94.89	95.39	99.54	98.89	99.22
Belthangady	97.89	98.46	98.18	94.86	92.49	93.68	98.12	99.15	98.64
Mangaluru	99.56	99.94	99.75	101.02	101.96	101.49	105.45	104.56	105.01
Puttur	99.79	99.71	99.75	100.89	99.89	100.39	104.69	100.98	102.84
Sullia	97.45	97.59	97.52	95.46	94.56	95.01	97.42	96.48	96.95
District	99.45	99.24	99.64	98.16	97.46	97.81	103.24	101.32	102.28

Source: Education Department/DISE

Graph 4.4
Taluk-wise GER by Social Class in Primary Education Percentage - ALL



Even among SCs and STs, universal enrolment has been achieved in both males and females in all taluks. Whatever inter-taluk rural-urban, inter-social group and gender differences found are negligible. This performance achievement may be attributed to the successful implementation of various interventions under SSA.

4.4.3 Retention and Drop-out

The retention and drop-out rates are important indicators of the effectiveness and efficiency of the primary education system. The objective of universal elementary education is to ensure that all children enrolled to first standard continue in schools, progress on the ladder and complete the final stage of elementary education. There should not be any drop-out of

Table 4.8
Taluk-wise Drop-out Students by Sex and Social Groups (Number)

Taluk	General			SC			ST			All		
	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All
Bantwal	3	0	3	2	0	2	0	0	0	5	-	5
Belthangady	2	2	4	7	6	13	0	1	1	9	9	18
Mangaluru	46	20	66	12	15	27	4	1	5	62	36	98
Puttur	5	1	6	4	0	4	0	0	0	9	1	10
Sullia	0	1	1	4	1	5	0	0	0	4	2	6
District	56	24	80	29	22	51	4	2	6	89	48	137

Source: SSA Karnataka-Annual Report, 2011-12

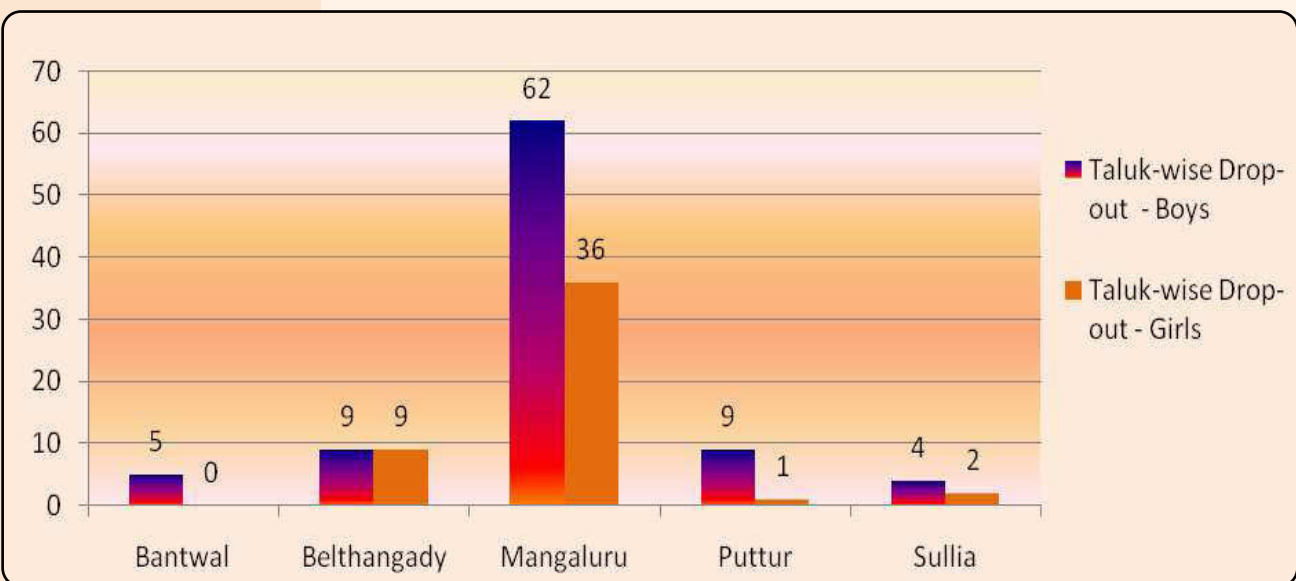
schools for any reason. Every student enrolled has to be retained to complete elementary schooling to enable to enter secondary education. To achieve universal retention, the zero drop-out of schooling is a must.

The drop-out of schooling is the difference between number of enrolled children at 1st standard and the number of students reaching the 8th standard and the retention rate is the percentage between the two. Table 4.8 shows taluk-wise drop-out in elementary school during 2011-12.

Total students dropped out from the schools are 137. The proportion of drop-outs in total enrolled students works out to 0.14 percent. The district has relatively the lowest drop-out rate in the state. Out of 137 drop-outs, girls

number 48 and boys, 89. Among social groups, the number of drop-out is the highest among SC students (51). Incidentally, among ST students, it is the lowest (6). In all social groups, the number of drop-out of boys is more than girls. Taluk-wise, Mangaluru has the highest school drop-outs and Bantwal has the lowest in numbers. The percentage-wise, Mangaluru has the lowest drop-out rate and Sullia has the highest drop-out rate. Except in Belthangady, in all other taluks, more number of boys than girls dropped out at primary education level. There are no drop-outs at lower primary level and hence retention rate was 100 percent. At higher primary level, the district's retention rate was 99.86 percent. Taluk-wise it varied from 97.18 percent in Sullia to 99.87 percent in Mangaluru taluk.

Graph 4.5
Taluk - wise Dropout of Boys and Girls



4.4.4 Pupil-Teacher Ratio

The pupil-teacher ratio is one of the important determinants of quality of primary education. An adequate number of trained teachers obviously improve the quality of instruction. The pupil-teacher ratio as per RTE norm should be 1:30 and for schools that have more than 200 students, it should not exceed 1:40. With the implementation of SSA, the strength of teachers in government schools has gone up considerably and this has improved favorably the pupil-teacher ratio. In Table 4.9, the number of teachers

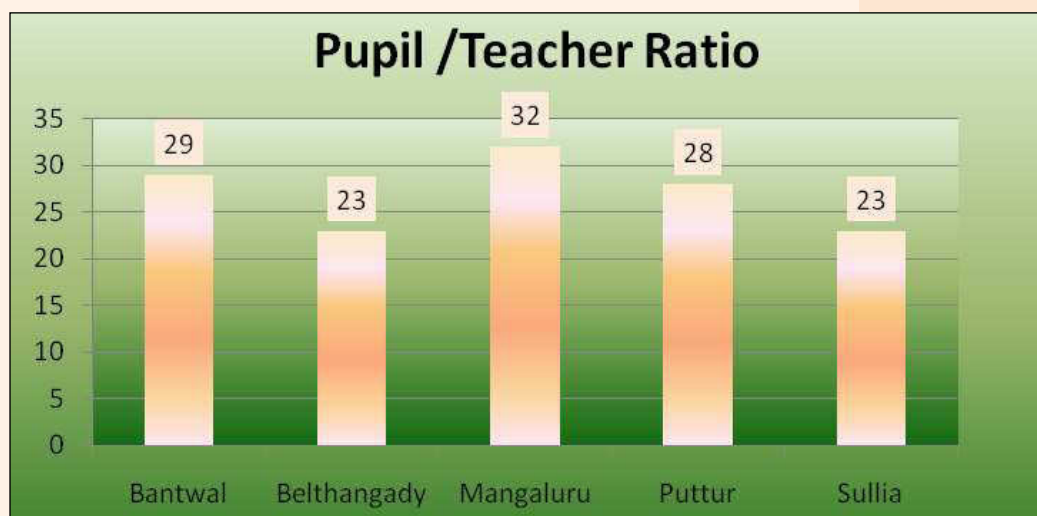
Working and pupil/ teacher ratio are given. The total number of teachers working in the district is 7946 (Table 4.9). The pupil-teacher ratio works out to 30, which is 27 percent higher than the state average (24). It is nearer to RTE norm of 30. At lower primary school level, the district has pupil-teacher ratio of 16 as against the state average of 16. Out of 7946 teachers, 3369 (50 percent) are working in Mangaluru taluk. Taluk-wise, Sullia has the lowest number of school teachers (681), followed by Belthangady (1039).

Table 4.9
Taluk-wise Pupil /Teacher Ratio at Primary Education: 2011-12 (Number)

Taluk	Total Enrolment	Teachers	Pupil /Teacher Ratio
Bantwal	46227	1590	29
Belthangady	31333	1039	23
Mangaluru	108802	3369	32
Puttur	36462	1267	28
Sullia	16122	681	23
District	238946	7946	30

Source: Education Department/DISE

Graph 4.6



Box No. 4.2: Mainstreaming of Destitute Children in Education

The mainstreaming of destitute children in education poses a serious challenge to the district's Education Department to ensure universal primary education. The destitute children are:

- Children who are involved in unhealthy activities such as drinking, smoking, theft and irregular to the school
- Run away children, street children, children-beggars, and destitutes who are abandoned

These children require counseling, de-addiction camps, close monitoring and safe place to dwell. This problem is more acute in city like Mangaluru. With a view to bring these destitute children in mainstream education, the district's Education Department has taken an initiative to arrange Chinnara Thangudhama (Transit Home) with the Target of 50 Children. This Center is run in collaboration with Prajna Counseling Center, an NGO in Kankanady Mangaluru. The centre is a short stay home for the rescued children where their needs are met till such time they are mainstreamed. It would be operational for 24 hours and have some basic facilities like toilets, bathroom, bedding, play activities food drinking water first aid box etc. The staff would include field volunteers, counselors, doctors, teachers, cook, wardens and staff for maintaining and cleaning. The voluntaries / staff could use this transit home as a drop in centre for street children throughout the day with a view to build the trust and confidence in the child

Food cloth, bedding and other daily needs, play activities.

- Medical care and protection
- Once the children get used to this centre, the counseling is done. In the counseling, information is gathered about their family background, reason for walkout of home, the problem faced by the child, ambitions of the child etc.
- The drug addict and alcoholic children would be enrolled in de-addiction camps.

50 Urban Deprived children under went through this scheme. One residential school is already sanctioned for this purpose. The Department has also uses the school/hostel premise of Government Model Higher Primary School, Belthangady. Belthangady is the Naxal affected Taluk with forest and hilly area. Studets selected from remote area belongs to SC, ST and backward class with Naxal menace are also accommodated under this initiative.

Source: Education Department/DISE, ZP, Mangaluru.

SSA stipulates a norm of 50 percent female teachers at primary education level. The district has 6275 female teachers out of total 7946 teachers. The proportion of female teachers works out to 79 percent. Taluk-wise, the pupil-teacher ratio is the lowest in Belthangady and Sullia. Except Mangaluru, all other taluks have pupil-teacher ratio below the RTE norm. The challenge before the district, at present, is not the pupil-teacher ratio but the quality of

teachers and updating of training to keep abreast with changing pedagogical methods for child-centered learning.

4.4.5 Education Attainment and Transition Rate

Education attainment at primary education level can be judged from transition rate to higher education and learning levels in

terms of reading, comprehension and mathematics. Transition from 1st to 8th standards of schooling is usually smooth. It may not be so when children have to take transition from 8th to 9th standards schooling onwards. There is a perceptible change in terms of access, financial implications and commitment from parents' point of view. At the same time, the transition from 7th to 8th is critical from student's point of view as it is a stepping stone for higher education. The transition rate is an important indicator to know how many children enrolled at primary education successfully complete primary education and enter next stage of higher education. It is estimated as percentage of enrolment in class 8th to enrolment in class 7th.

In Dakshina Kannada district, transition from 5th standard to 6th standard is 100 percent in all taluks. The district's transition rate is higher than the state average of 96.88 percent. The transition rates from higher primary to secondary (from 7th to 8th standard) in different taluks are given in Table 4.10.

Table 4.10
Transition Rate from 7th to 8th Standard:
2011-12 (Percentage)

Taluks	From 7 th to 8 th Class
Bantwal	96.07
Belthangady	100.81
Mangaluru	104.53
Puttur	106.51
Sullia	100.16
D.K. District	101.5
State	97.32

At the district level, the transition rate from 7th to 8th standard works out to 101.5 percent. There is no transition loss. Comparative transition rate at state level is 97.3 percent. Taluk-wise, only in Bantwal, the transition rate is below 100 percent. There is a transition loss of nearly 4 percent.

Learning attainment can be assessed based on the findings of quality assessment agencies such as ASSER. It evaluates education



Primary Education – An Area of Strength of Dakshina Kannada District

in terms of performance indicators such as reading, comprehension, mathematics etc. Based on the findings of ASSER evaluation, the district ranks one of the best first among 30 districts in the state. The SSA Mission, Government of Karnataka also evaluates districts for allocation of resources based on Educational Development index. For the year 2010-11, the educational Development index for the district was estimated for lower primary, 0.722, upper primary, 0.679 and for the overall, 0.701. The district is ranked 10th in lower primary level, 11th at upper primary level and 10th at overall index.

4.4.6 School Infrastructure

The provision of basic infrastructure is critical for improving enrolment and retention as well as for quality education. As per the road map laid down under RTE Act - 2013, within a time

frame of three years, schools should have provision of school infrastructure: all-weather school buildings, one classroom for 30 students and other infrastructure such as separate toilets for boys and girls, drinking water facilities, barrier-free access, library, playground and boundary wall. SSA has accordingly accorded special significance and weightage for the provision of infrastructure facilities to schools. It has identified eight basic facilities: common toilet, separate girl's toilet, electricity, playground, drinking water, ramps, compound wall and library.

Table 4.11 provides the data on number of schools without basic infrastructure facilities and composite infrastructure index based on availability of eight basic facilities (identified by the SSA). Dakshina Kannada district has achieved significant progress in the

provision of most of the basic facilities to

Table 4.11
Schools with Basic infrastructure Facilities at Primary Schools (Number)

Infrastructure Facilities	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
No. of Schools	196	180	228	184	140	928
Boys Toilets	196	180	228	184	140	928
Separate Girl Toilets	196	180	228	184	140	928
Electricity	196	180	228	184	140	928
Playground	151	166	201	173	138	829
Drinking Water	196	180	228	184	140	928
Ramps	196	180	228	184	140	928
Compound Wall	187	173	198	146	134	838
Library	196	180	228	184	140	928
Computer	30	25	48	21	16	140
Infrastructure Index	88.00	88.00	81.00	88.00	92.00	87.50

Source: Education Department/SSA, Data relates to Government Schools only

the schools during the last five years under SSA. Almost all primary schools in the district have their own all-weather pucca buildings, Kitchen rooms, separate toilets for boys and girls, electricity, drinking water, and ramps. The student class room ratio is one of the important infrastructure indicators for quality elementary education. In all taluks, some schools lack playground, compound wall and computers. In the case of computer, only 140 schools out of 928 have computers. The composite infrastructure index for the district works out to 87.50. In School infrastructure development, the district ranks second next to Kodagu in the state.

4.5 Secondary Education

The secondary education from 8th to 10th standard is crucial stage in education as it enables students to enter higher education and professional courses to acquire necessary functional capabilities to seize opportunities to lead the lives they want. With the universalization of primary education becoming reality, the focus is now on the universalization

of secondary education. In pursuance of this objective, the Eleventh Plan has launched the programme of Rastriya Madhyamik Shiksha Abhiyan (RMSA) on similar line of the SSA for primary education to improve enrolment and quality in secondary education. The universalization of secondary education by 2017 is also accorded priority in the Twelfth Plan. As the demand for secondary education is bound to increase in the coming decade, the challenges of universal secondary education would be improving access, enrolment, retention, quality and transition to higher and professional education.

4.5.1 Access

The access to secondary education depends on the proximity in terms of number of habitats having access to high schools, network of high schools and educational infrastructure in place in the district. The taluk-wise network of high schools managed by the government and the private sector is shown in Table 4.12.

Graph 4.7

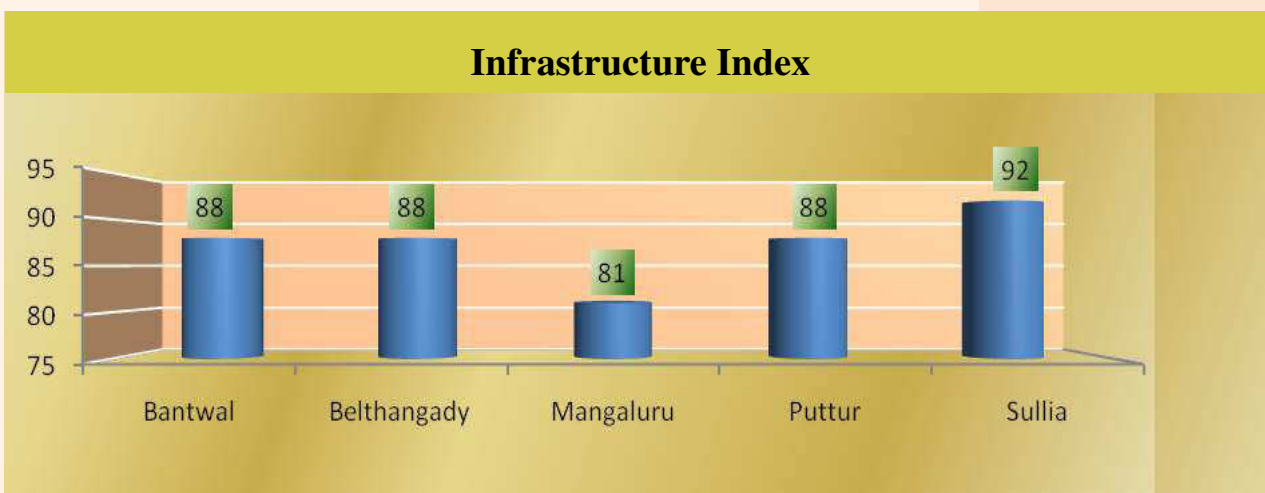


Table 4.12
Taluk and Management-wise High-Schools (Number)

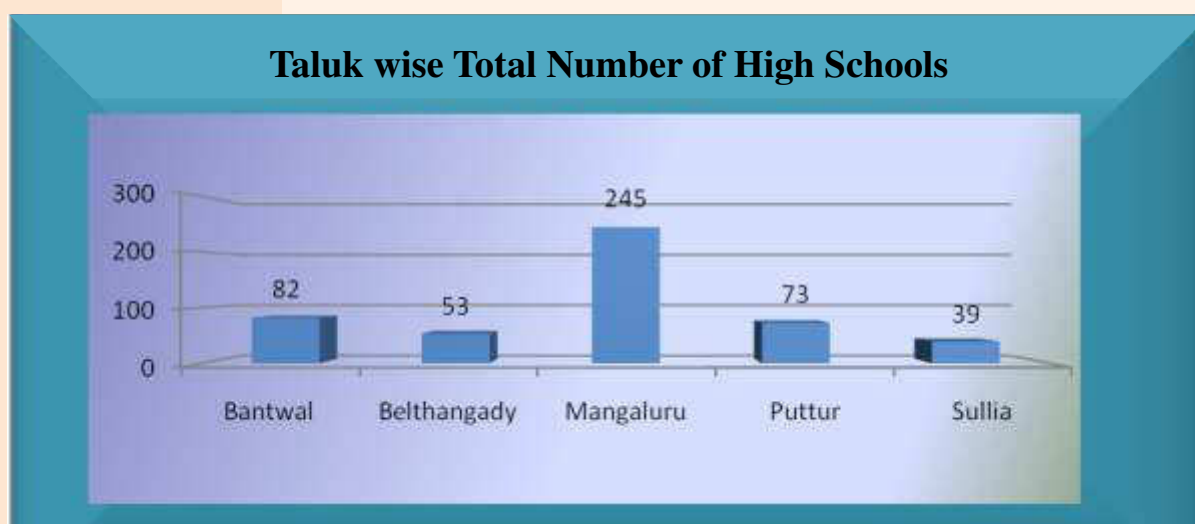
Taluk	Government		Private Aided and Unaided		Total		
	Rural	Urban	Rural	Urban	Rural	Urban	Total
Bantwal	34	2	33	13	67	15	82
Belthangady	31	1	16	5	47	6	53
Mangaluru	37	27	70	111	107	138	245
Puttur	21	3	40	9	61	12	73
Sullia	13	3	16	7	29	10	39
District	136	36	175	145	311	181	492

Source: Education Department/DISE

The district has 492 high schools, out of which 172 Government managed high schools, and 320 privately managed both government aided and unaided high schools. Most of the unaided are English medium high schools. The data on network of high schools shows that in the past, the government was the main provider of secondary education in the district, but not now. At present, the private sector owns and manages 65 percent of secondary schools in the district. Out of 492 secondary schools, 311 are in rural areas, which accounts for 63.21 percent of total high schools in the district. Most of the government high schools are in rural areas

(79.07 percent). The private aided and unaided high schools are mainly in urban centres. The taluk-wise data in the table shows that Mangaluru taluk has the highest number of high schools (50 percent), followed by Bantwal (17 percent). Out of 1734 habitations in the district, only 80 habitations have no easy access to high schools. Belthangady taluk has the highest number of habitations without easy access to secondary education followed by Sullia. Mangaluru, Bantwal and Puttur have no habitations without easy access to secondary education.

Graph 4.8



4.5.2 Enrolment and Dropouts

Enrolment of students in secondary education which was 75822 in 2001-02, increased to 98586 in 2011-12. The participation ratio of girl students in secondary education is on par with school going children sex ratio which works out to 48.8 percent. Table 4.13 shows the taluk-wise enrolment of boys and girls in secondary education. The gender gap in participation ratio is 2.34 percent which is on par with school going children sex ratio. Mangaluru taluk has the highest number of students in secondary education followed by Bantwal.

Taluk-wise, there is no wide difference in gender participation rate.

Table 4.14 sets out taluk-wise gross enrolment ratios in secondary education for both boys and girls.

Mangaluru and Puttur have GER more than 100 percent mainly due to migrant students from outside taluks. Among taluks, Bantwal has the lowest GER (87 percent), followed by Sullia (89 percent) in secondary education. The pattern of gender-wise GER in all taluks is almost the same. In all taluks, the GER of girl students in secondary education is more than boy students.

Table 4.13
Taluk-wise Gross Enrolment in High Schools-2011-12

Taluk	Boys		Girls		Total (number)
	Number	Percent	Number	Percent	
Bantwal	9142	51.94	8458	48.06	17600
Belthangady	6216	51.10	5949	48.90	12165
Mangaluru	24032	50.89	23193	49.11	47225
Puttur	7742	50.87	7478	49.13	15220
Sullia	3312	51.94	3064	48.06	6376
District	50444	51.17	48142	48.83	98586

Source: Education Department/SSA

Table 4.14
GER in Secondary Education: 2011-12

Taluk	Boys	Girls	All
Bantwal	85.75	88.42	87.04
Belthangady	87.36	93.56	90.34
Mangaluru	103.46	109.75	106.51
Puttur	105.50	108.40	106.90
Sullia	85.20	94.47	89.46
District	96.02	101.20	98.52

Source: Education Department/SSA

In the district as a whole, girl students' GER is 101.2 percent while for boy students, it is 96.02 percent. There is a gap of 5 percent.

The drop-out rates at secondary education level taluk-wise are shown in Table 4.15.

The data in table reveals that drop-out varies from 7.94 percent in Mangaluru taluk to 13.05 in percent in Belthangady. The drop-out rate in secondary schools is relatively higher in Belthangady, Bantwal and Sullia taluks. Mangaluru and Puttur have comparatively lower drop-out rates. In all taluks, the dropout rate among boy students is significantly higher than the dropout rate among girl students. Among boys, the dropout rate is the highest in Sullia (22 percent), followed by Bantwal and Belthangady with 18 percent dropout rate. Among girls, Belthangady and Bantwal have the highest dropout rate in secondary education. Their dropout rates are 8 percent and 7 percent respectively. Interestingly Sullia, which has the highest drop out rate for boys, has the lowest

(0.83 percent) dropout rate among girls. The drop-out rate in the district as a whole is 9.96 percent; for boys, it is 14.23 percent and for girls, 5.38 percent. Compared to other districts in the state, Dakshina Kannada district has one of the lowest dropout rates in secondary education.

4.5.3 Pupil-Teacher Ratio

In secondary education, pupil-teacher ratio is crucial for ensuring quality of education. The total number of teacher for high school education in the district is 3761 (Table 4.16). Out of 3761 teachers working in high schools, 1474 are males and 2287 are females. The percentage of female teachers is 61. The pupil-teacher ratio in the district works out to 26, which is quite satisfactory. The state average is 20.6. Taluk-wise, Belthangady has the highest pupil-teacher ratio of 31, followed by Bantwal (28). Mangaluru and Puttur have pupil/teacher ratio of 25 each. Sullia has the lowest pupil-teacher ratio of 22.

Table 4.15
Taluk-wise Drop-out Rate in Secondary Schools: 2011-12 (Percentage)

Taluks	Boys	Girls	All
Bantwal	18.19	6.65	12.73
Belthangady	18.17	7.74	13.05
Mangaluru	10.49	5.25	7.94
Puttur	14.47	4.26	9.45
Sullia	21.91	0.83	12.51
District	14.23	5.38	9.96

Source: Education Department/SSA

Table 4.16
Pupil-Teacher Ratio in Secondary Education: 2011-12

Taluk	Total enrolment (Number)	Teachers (Number)			Pupil/Teacher Ratio
		Male	Female	Total	
Bantwal	17600	298	312	610	28
Belthangady	12165	198	192	390	31
Mangaluru	47225	578	1311	1889	25
Puttur	15220	284	308	592	25
Sullia	6476	116	164	280	22
District	98586	1474	2287	3761	26

Source: Education Department/SSA

4.5.4 Educational Attainments

The educational attainment in secondary education is ultimately measured in performance of Board Examination. In Table 4.17, taluk-wise data on the SSLC pass results of students of various social groups for the year 2011-12 are compared.

In 2011- 12, out of 29363 students appeared for SSLC examination, 26295 have passed, giving the percentage passed as 89.55. For boys, the percentage passed was 86.43 and for girls, 92.38. The girls usually perform better than boys in secondary education. Taluk-wise, Mangaluru has the highest percentage (94) of

pass, followed by Belthangady (91). Other taluks have about 88 percentage pass in SSLC. In secondary pass results, wide disparities are, however, found among social groups in all taluks. , SC and ST have relatively lower percentages compared to other groups. At the district level, both SC and ST students have pass percentage of 79 percent as against 86 percent for OBCs and 89 percent for all. Among SCs and STs, in Belthangady, Mangaluru and Sullia, ST students have better results than SCs. In other Taluks, SC students got better results. Importantly, out of 447 high schools, 120 have achieved 100 percent results in final secondary examination in the district.

Table 4.17
Taluk-wise SSLC Results by Social Groups: 2011-12 (Percentage)

Taluk	SC	ST	OBCs	All
Bantwal	80.97	79.37	82.73	88.00
Belthangady	80.57	85.31	88.59	91.00
Mangaluru	81.02	85.28	87.14	94.00
Puttur	76.92	72.01	83.47	87.00
Sullia	76.25	77.07	85.62	88.00
District	79.64	79.45	85.84	89.55

Source: Education Department/SSA

4.5.5 School Infrastructure

The availability of adequate infrastructure in secondary education is one of the important determinants of enrolment and retention of students as well as quality in secondary education. The data on number of high schools with basic infrastructure facilities and the composite infrastructure index of eight basic facilities are shown in Table 4.18.

All high schools in the district have pucca buildings. However, most of the government high school buildings were constructed in 1950s and 1960s it is found that in some high schools the class rooms in the district are in disorder condition and require renovation/repairs. All high schools have drinking water facilities, separate toilets for boys and girls, library and electricity. As regards other infrastructure such as playground, ramps, compound wall and playground, the number of

high schools without these facilities in all taluks is significantly high. It is gratifying to note that all high schools have computers. The overall performance index in provision of eight basic facilities at high school level education in the district is recorded as 88.19 percent, which is significantly higher than the state average of 78.9 percent.

4.6 Pre-University Education

Pre-University (PU) education is an important bridge between the secondary education and higher general education and professional courses such as medicine, engineering, agriculture etc. A student, who passes SSLC, usually decides at this juncture whether to pursue vocational education or enter pre-university course (PUC) to pursue higher education. The PU education is conducted both in extended high schools known as Junior

Table 4.18
High Schools with Basic Infrastructure (Number of Schools):2011-12

Infrastructural Facilities	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
No. of High Schools	35	33	57	23	15	163
Drinking Water	35	33	57	23	15	163
Separate Boys Toilets	35	33	57	23	15	163
Separate Girls Toilets	35	33	57	23	15	163
Playground	19	29	46	18	14	126
Electricity	35	33	57	23	15	163
Library	35	33	57	23	15	163
Ramps	35	12	51	23	15	136
Compound wall	9	10	40	6	8	73
Computer	35	33	57	23	15	163
Infrastructure Index: 8 Basic Facilities (Percent)	85.00	81.82	92.54	88.04	93.33	88.19

Source: Education Department/SSA. Data relates to Government High Schools only

(Padavi Purva) Colleges and First Grade Degree Colleges.

Dakshina Kannada district has made significant progress in pre-university education during the last decade. It had 99 PU colleges in 2001-02, which has increased to 169 in 2011-12. Table 4.19 provides taluk-wise data on PU institutions and student enrolment. Except Mangaluru, in other taluks, most of the PU colleges are managed by the government. Taluk-wise, Mangaluru has the highest number of PU colleges (85), followed by Puttur (26). Bantwal has 25 and Belthangady, 20 PU colleges. Sullia has the lowest number of PU network (13). The total enrolment of students in PU in 2011-12 was 50016, out of which the government managed PU colleges account for 12 percent, the government aided PU institutions, 40 percent and the unaided private PU institutions, 48 percent. Unlike primary and secondary education, in PU education, private sector plays dominant role.

It is encouraging to note that out of 50016 students enrolled in PU course, 26780 were girls. Their performance was to 53.54

percent; about 7 percent more than boys. Except Sullia, in all other taluks, more girls enrolled than boys in PU education. In Sullia, surprisingly, the girls participation in PU education is only 47 percent. The girls participation is the highest in Mangaluru taluk (55 percent). The lower enrolment ratio of boys in PUC may be attributed to lower percentage pass of boys in SSLC and higher percentage of boys entering vocational training.

There are 1258 lecturers and pupil-teacher ratio works out to 39.76 which is below the prescribed standard of 45 for PUC. Inter-taluk variation in pupil/teacher ratio is found to be very high. Puttur has the lowest ratio of 24, whereas in Mangaluru taluk, it is as high as 55. Other taluks, which have more favourable pupil/teacher ratios are Belthangady (37) and Sullia (31). The performance of students in PU examinations shows that Dakshina Kannada along with neighboring Udupi district ranks continuously highest in the state. Girls have continuously outperformed boys. Even among social groups, the disparity in performance in terms of percentage students passed was only

Table 4.19
Pre-University Colleges and Student Enrolment In Dakshina Kannada District (2011-12)

Taluk	PU colleges	Boys		Girls		Total
	Number	Number	Percent	Number	Percent	Number
Bantwal	25	2499	47.49	2752	52.41	5251
Belthangady	20	2742	47.80	2995	52.20	5737
Mangaluru	85	13546	45.18	16433	54.82	29979
Puttur	26	2984	47.64	3279	52.36	6263
Sullia	13	1465	52.58	1321	47.42	2786
District	169	23236	46.46	26780	53.54	50016

Source: D.K. District at Glance: 2011-12

marginal. As against the state average of 57 percent, the district has attained 87 percent pass in PU examination during 2011-12.

4.7 Higher Education

The growing economy is creating huge demand for higher education. Higher education is also essential to build a workforce in various disciplines capable of managing a modern, competitive and knowledge-based economy. In India, enrolment in higher education is below 12 percent while in developed countries, it is more than 40 percent. Enrolment in higher education has, therefore, to be increased significantly on a demand driven basis in the coming decade. Higher education includes degree courses in general education, technical and medical education and other professional courses. The Government of India has targeted to achieve the gross enrolment ratio in higher education 20 percent by 2017 and 25 percent by 2022.

In Dakshina Kannada district,

Mangaluru city is the main centre of higher and professional education. Mangaluru University, Nitte and Yenepoya Deemed Universities are located in Konaje and Deralakatte; near Mangaluru city. Manipal University was a pioneer in establishing medical college in Mangaluru city. There are number of education trusts promoted by private persons who set up professional colleges particularly medical, engineering and management institutions in Mangaluru city, Sullia, Moodabidri and Belthangady.

In general education, private sector is the dominant player in the district. The district has 143 general degree colleges out of which 17 are government managed and 126 private managed. The number of government colleges has increased from 7 in 2001-02 to 17 in 2011-12, whereas in the private sector, it increased from 3 to 126. In Table 4.20, taluk-wise spread of degree colleges and enrolment in all classes during 2011-12 are given.



Govt. School Building



*National Institute
of Technology
Karnataka at
Surathkal*

**Table 4.20
Higher General Education: Number of Colleges and Enrolment (2011-12)**

Taluk	Colleges (Number)		Enrolment from First year to final (Number)				
	Government	Private	Boys	Percent	Girls	Percent	Total
Bantwal	4	4	1592	39.00	2489	61.00	4081
Belthangady	2	8	2005	37.17	3389	62.83	5394
Mangaluru	5	98	15007	54.08	12742	45.92	27749
Puttur	4	12	1526	34.36	2915	65.64	4441
Sullia	2	4	1139	41.31	1618	58.69	2757
District	17	126	21269	47.88	23153	52.12	44422

Source: D.K. District at Glance: 2011-12

Mangaluru taluk has the highest network of degree colleges in the district. Out of 143 degree colleges, 103 colleges are in Mangaluru taluk. Puttur has 16, Belthangady-10, Bantwal-8 and Sullia-6 degree colleges. The total enrolment of students for general education was 44422, out of which, 23153 were girls and 21269 boys. Except Mangaluru, in all other taluks, girl students were more than boys students in general degree education. In Mangaluru taluk, surprisingly, Girls student participation was only 46 percent as against 54 percent of boy students' participation. The lower level of boys'

participation in general education in other taluks reflects preference of boys towards professional courses and to some extent more dropouts at secondary level. In professional courses, the private sector is the main player. In medical, the main players are Manipal University (Kasturbha Medical College), Nitte University (K.S. Hegde Medical Academy), Father Muller Medical College, Yenepoya Medical College, Srinivas Medical College and A.J. Institute of Medical Science. Table 4.21 contains the network of professional educational institutions in the district.

Table 4.21
Professional Education in Dakshina Kannada District: 2011-12 (Number)

Category	Institutions	Enrolment (Total)		
		Boys	Girls	Total
Medical (Allopathic)	11	2487	2898	5385
Medical (Ayurvedic)	-	-	-	-
Dental	5	610	1508	2118
Engineering	15	15189	7177	22366
Others	NA	NA	NA	NA

Source: D.K. District at Glance: 2011-12, others include MBA, Nursing, Hotel Management etc. NA: not available.

Box 4.3: Mangaluru University: A Hub of Higher Education

Mangaluru University was established in 1980 at Konaje near Mangaluru city. It has a jurisdiction of three districts: Dakshina Kannada, Udupi and Kodagu. It grew originally out of a post-graduate centre of the University of Mysore. The campus, once housed mere three post-graduate departments has now 25 post-graduation departments in different disciplines and 208 affiliated colleges including two constituent colleges: one at Mangaluru and other at Madikeri. The University has also one PG centre at Madikeri and another it proposes to set up in Belapu, Udupi district. The university has exchange program of faculty and students with universities in USA, UK, Finland, Japan, Norway, German and Spain. The university is now recognized as a major centre for the study of ecology and environment. The University was the first to start undergraduate programmes in hotel management, human resource development, fashion design and yogic sciences. At present 411 scholars are pursuing their doctoral studies in various disciplines. It as established several endowments chairs with the objective of development in areas such as bank management, rural development, ecology and environment, Sanskrit literature, Christianity, tulu language, Konkani language, Kanakadas studies etc. Its Dr. Ambedkar Study Centre, Kanakadas Adyayana Peetha, Yakshagana Study Centre and Ambigara Chowdayya Peetha undertake empirical reaserch studies in the concened fields. The university has also introduced distance education in both undergraduate and post-graduate courses for the benefit of poor students. For the benefit of SC/ST and other backward class students, with the help of Union Ministry of Social Justice and Empowerment, it undertakes IAS/IPS coaching classes.



Mangaluru University, Mangaluru

The district is blessed with 11 medical, one homeopathic, 5 dental and 15 engineering colleges. There are number of other professional institutions such as Business Management, para-medical, nursing, Hotel Management etc. run by the private players mostly located in and around Mangaluru city. Medical colleges and Engineering colleges are well-known nationally

for quality education. It is difficult to get reliable information on intake of district's students for professional courses as most of the professional colleges have extensive outreach outside the district. The enrolment data shows that gender participation rate is more in medical and dental colleges than in engineering colleges. In dental, the girls' participation is significantly higher than that of boys.

Box 4.4: Nitte Education Trust

Nitte Education Trust, established in 1979, is one of the important private initiatives in the field of education in the district. Founded by Justice K. S. Hegde, a retired Supreme Court judge and the former Speaker of Lok Sabha (Parliament) in Nitte, a village in Karkala taluk, the Trust located in Mangaluru, has developed a number of education institutions mainly in Mangaluru in Dakshina Kannada district and also in Bengaluru and Udupi district. The Trust has a medical and dental college at Deralekatte and seven Health Science Institutions in and around Mangaluru city under K.S.Hegde Medical Academy (KSHEMA). They are accorded deemed university status in 2008. The university is named as Nitte University and stationed at Dealekatte. It has also three Engineering Science Institutions, three Management Institutes, one college of communication, one hotel management institute, two First Grade Colleges, two Pre-university Colleges and four high Schools located at Nitte, Mangaluru and Bengaluru. Nitte has now become an Education Brand of Excellence in medical, engineering and management education. Under the leadership of visionary, Shri N Vinaya Hegde, Chancellor of Nitte University, its mission is to impart quality education, develop competent and skilled professionals to face the scientific, technological, managerial and social challenges in the fast evolving global scenario, with a high degree of credibility, integrity, ethical standards and social concern. It has remarkable student base of more than 10000 and 18500 alumina. The Trust has carved a niche for itself, changing significantly the educational landscape of the district.

Source: Nitte Education Trust, Mangaluru



Nitte University, Mangaluru

4.8 Vocational Education

Vocational training and skill development is crucial for employability of growing youth population. While skill formation has to be mainstreamed in the formal education system right from secondary education onwards, skill creation outside the formal education focusing on employability in several key areas on demand driven basis is very important to drive economic growth. The National Education Policy of Government of India emphasizes skill-based vocational training for at least 25 percent of students after the completion of secondary education. It is also important to note that traditional family based vocational skills/knowledge in areas like carpentry, jewellery, pottery, plumbing, painting and various agricultural enterprises which were ignored so far require to be brought into minstream skill development. In fact, there is a growing demand for such skills as the family traditions of these job skills are gradually being abandoned. The objective here is to impart necessary vocational/technical skills and competencies to enable the students to enter the job world or self-employment. Vocational education after secondary education through polytechnics and vocational training institutes therefore assumes crucial importance in skill development.

Dakshina Kannada district has, at present, 7 private Polytechnics colleges and two government polytechnic institutes and 15 Industrial Training Institutes besides Rural Development and Self-employment Training Institute (RUDSETI) promoted by Sri Dharmasthala Manjunatheshwara Educational Trust in collaboration with Syndicate Bank and

Canara Bank. The main objective of the RUDSETI is to train unemployed rural youth to enable them to take up self-employment ventures in their own villages. The total number of enrolled students for vocational training in polytechnics during 2011-12 was 5330, out of which 1179 were girls and 4151, boys. In 23 industrial training institutes, 22366 youths were trained during 2011-12, out of which 7177 were girls and 15189 were boys.

4.9 Schemes for Promotion of Literacy Level in the District

In view of the crucial importance of education for human development, the government has initiated many schemes to universalize the access, improve enrolment and retention and make formal education at all levels more inclusive and improve quality. The SSA introduced in 2001-02 focused on provision of basic education infrastructure to all elementary schools such as repair of school buildings, provision of additional class rooms, drinking water, toilets, etc. Under various State Government's schemes, in all government and aided schools, all students studying from 1st to 10th standard are given text books and uniforms at free of cost. All girl students and SC and ST students up to 12th standard have been exempted from paying school fees. SC and ST students are also provided with school-bags and writing note-books. All students studying in 8th standard in government-run schools are given bicycles for transport. For extra curriculum activities, a grant of Rs.5000 for each lower primary school and Rs 12000 for each higher primary school is given every year.

In selected upper primary schools in the district, computer aided learning centres (CALCs) are set up to provide computer literacy and facilitate computer-based education. They are provided with five computers, one multi-video projector and UPS besides required furniture and a separate computer room for teaching. Akshara Dasoha (Mid-day Meal) is another important scheme implemented by the State Government aiming at improving the

attendance of children at the primary level. The scheme has now been extended up to 10th standard. All government –managed and private-aided schools and high schools in the district are involved in the implementation of mid-day meal scheme. Under Suvarna Health Scheme, the Education Department arranges free medical check-up once a year for all students studying 1st to 10th standards in all schools.

Box 4. 5: RUDSETI at Ujire: A Replicable Model for Skill Development

The mainstreaming of rural youth dropped out from secondary and PUC level for their socio-economic emancipation warrants vocational training and skill development not only to make them employable but also foster self-employment ventures in their own areas. Recognizing the critical importance of vocational training for work skill development, two public sector banks viz. Canara Bank and Syndicate Bank together with Sri Dharmasthala Manjunatheshwar Education Trust came together to jointly built up a Rural Development and Self-Employment Training Institute (RUDSETI) at Ujire, Belthangady taluk. RUDSETI started functioning in 1982. The main objective was to transform and empower of unemployed rural youth by training in various work skills to enable them to take up income generating self-employment ventures. The candidates selected for various courses are provided free boarding lodging and training during the duration of the courses. The RUDSETI, since its inception, played front runner role in developing holistic approach to motivate, counsel and promote entrepreneurship among rural youth, develop training modules and methodology appropriate to meet the requirement of self-employment ventures. The training pedagogy adopted involves, on package basis, providing training for skills development, start-up promotion services tied up with bank finance and post-training follow-up service. The duration of the programme usually varies from two weeks to three months



depending on the nature of the programme. Now the RUDSETI has network of institutes all over India. The model adopted by RUDSETI for skill development has thus proved to be quite successful and emerges as the only way to empower rural unemployed youth. The model warrants replication throughout the country to make India skilled India.

Source: Rural Self-Employment Programmes in India: An Appraisal by M.S. Moodithaya, Nitte University.



Mid-day Meal – An Important Scheme implemented for promoting Literacy in the District

4.10 Per capita Expenditure Analyses

The public expenditure incurred as a proportion of the district GDP is an indicator of importance given to education in the district by the state government. The total expenditure incurred (both plan and non-plan) by the District Education Department during 2011-12 is shown in the Table 4.22.

The Per capita public expenditure for education works out to Rs 326. Total expenditure as proportion of the district GDP works out to 0.08 percent. Inter-taluk disparity in per capita expenditure in education is very wide. It varies from Rs.510 in Bantwal to Rs.163 in Puttur. While Mangaluru taluk, it works out to Rs.426, in Belthangady and Sullia, it is Rs.281 and Rs 249 respectively.

Table 4.22
Public Expenditure for Primary and Secondary Education: 2011-12 (Rs.in lakh)

Taluk	SSA	Per Capita Expenditure (Rs)
Bantwal	336.7265	510.52
Belthangady	249.5787	281.54
Mangaluru	487.833	426.04
Puttur	248.8703	162.99
Sullia	128.655	249.48
District	1451.6635	326.11

Source: District Education Department

4.11 Radar Analysis for Education

The radar scale technique is used to view within a taluk and within the district the status and disparities of critical education indicators through graphical portrayal. A radar scale chart is a graphical method of displaying multivariate data in the form of a two dimensional chart of three or more quantitative variables on axes starting from the same point. It provides the actual status of a taluk or district in relation to norms. This also enables inter and intra-taluk comparisons. This helps policy makers to take corrective actions on specific indicators analyzed on a radar scale.

For drawing radar for education, four important indicators: net enrolment rate in elementary education (1-8 classes), drop-out rate (6-14 ages), school infrastructure index and SSLC pass-out rate were selected. By using converting the actual values of these indicators into index with 10-point scale, two types of radars are drawn: (i) radar for each taluk, and (ii) radar for all the taluks together (for the district).

Table 4.23 shows the data on actual values of the education indicators selected and indices computed based on 10-point scale.

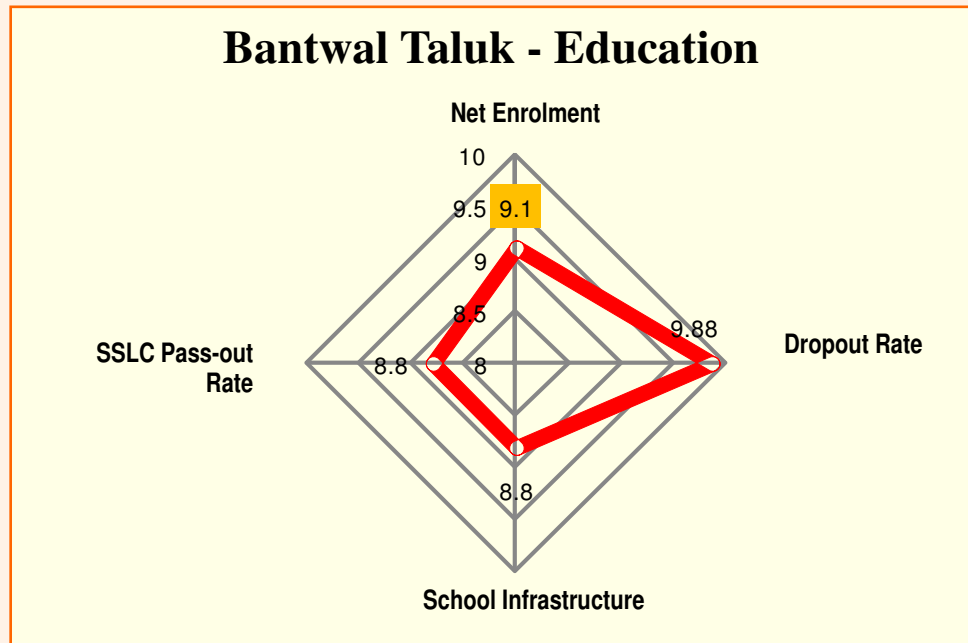
Table 4.23
Radar for Education: Indicator Values and Radar Index

Taluks	Net Enrolment		Dropout Rate		School Infrastructure		SSLC Pass-out Rate	
	Actual	Index	Actual	Index	Actual	Index	Actual	Index
Bantwal	90.93	9.10	1.18	9.88	0.88	8.80	88	8.8
Belthangady	90.53	9.10	2.47	9.75	0.88	8.80	91	9.1
Mangaluru	100.00	10.0	0.13	9.99	0.81	8.10	94	9.4
Puttur	97.98	9.80	0.13	9.99	0.88	8.0	87	8.7
Sullia	91.88	9.20	2.82	9.72	0.92	9.20	88	8.8
District	95.49	9.5	0.14	9.98	0.87	8.70	90	9.0

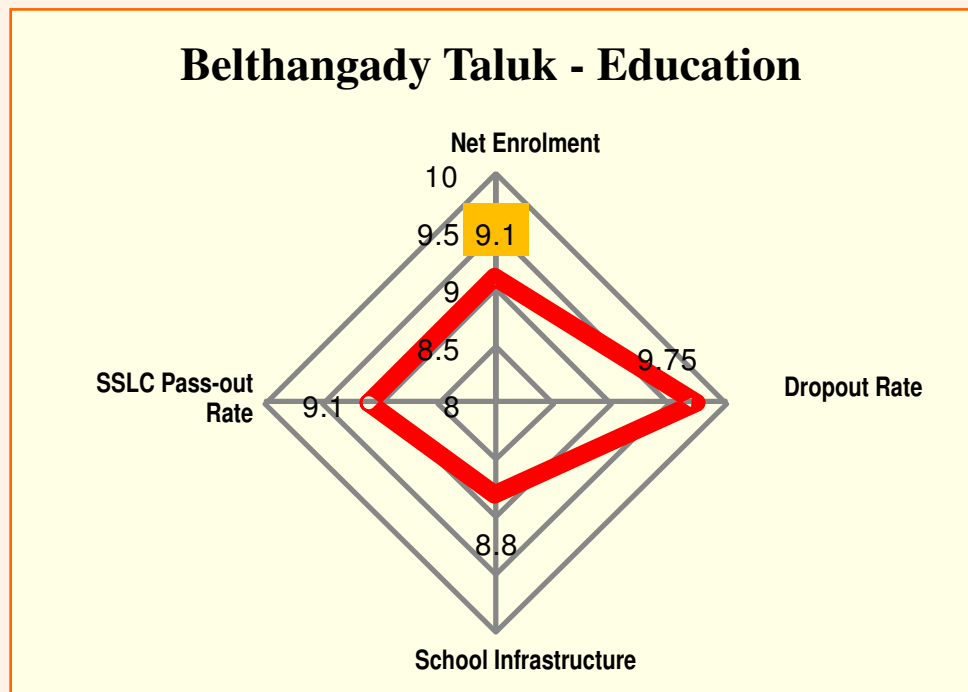
Note: Since the Drop – out rate being the negative value indicator, the index computed for radar represents the retention rate

Based on the indices of the education indicators computed in the table, the radar charts drawn for each taluk and all taluks within the district are shown below:

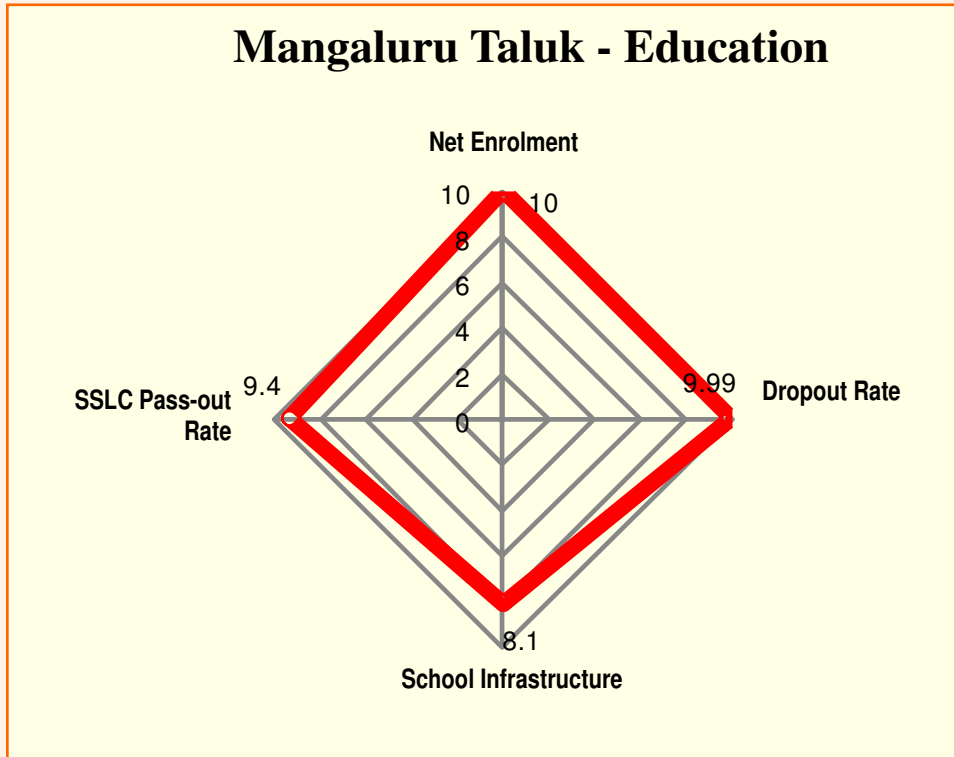
Graph 4.9 – Radar Chart



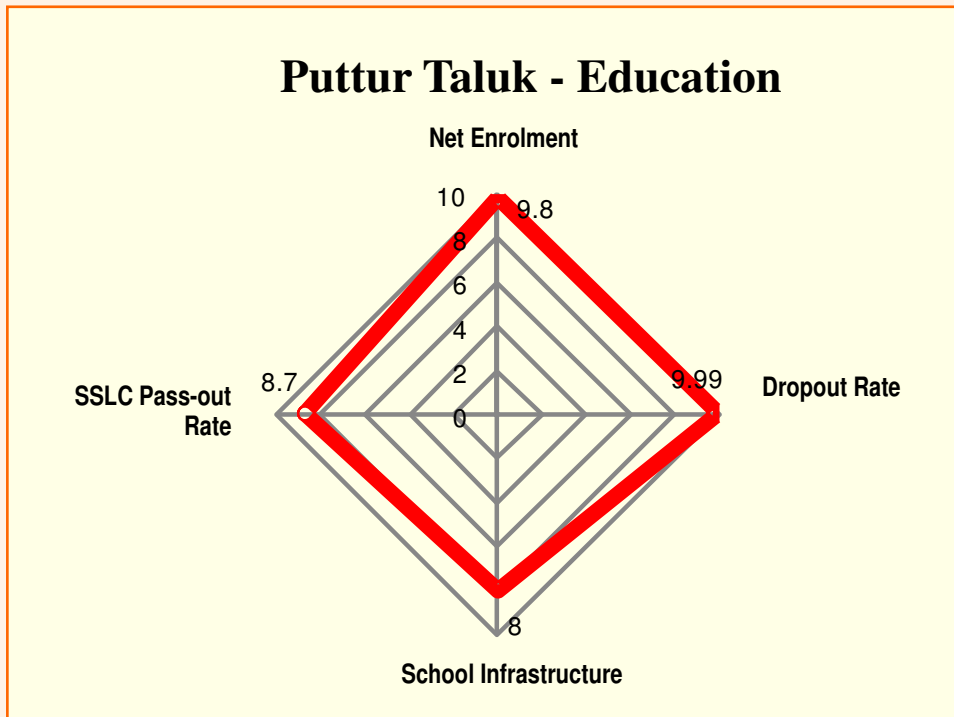
Graph 4.10 – Radar Chart



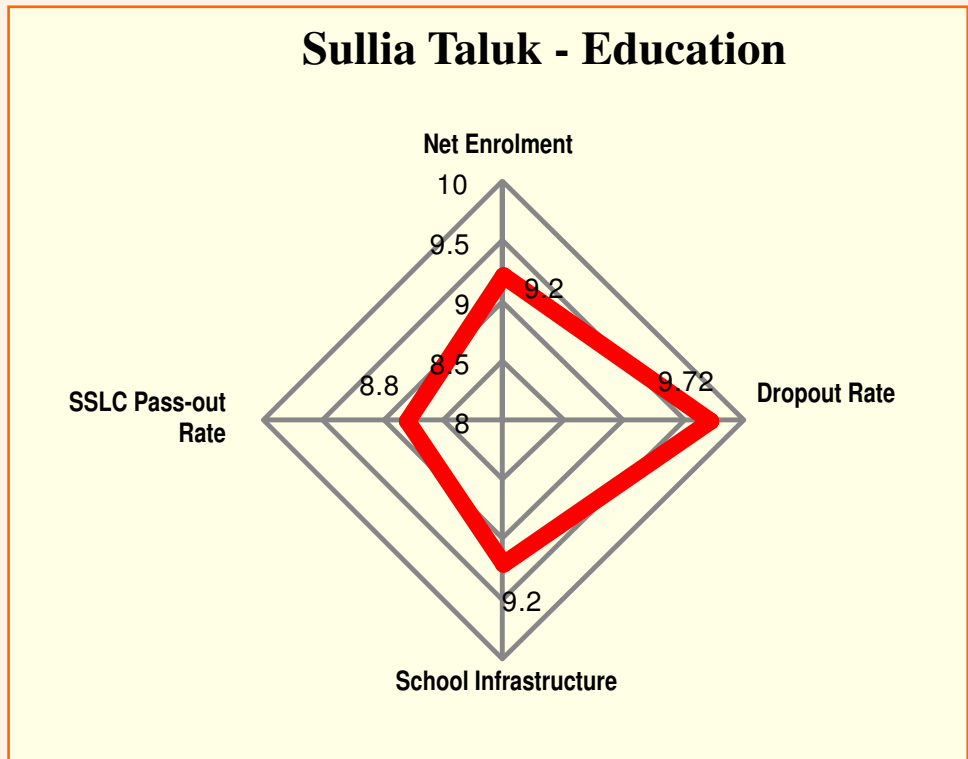
Graph 4.11 – Radar Chart



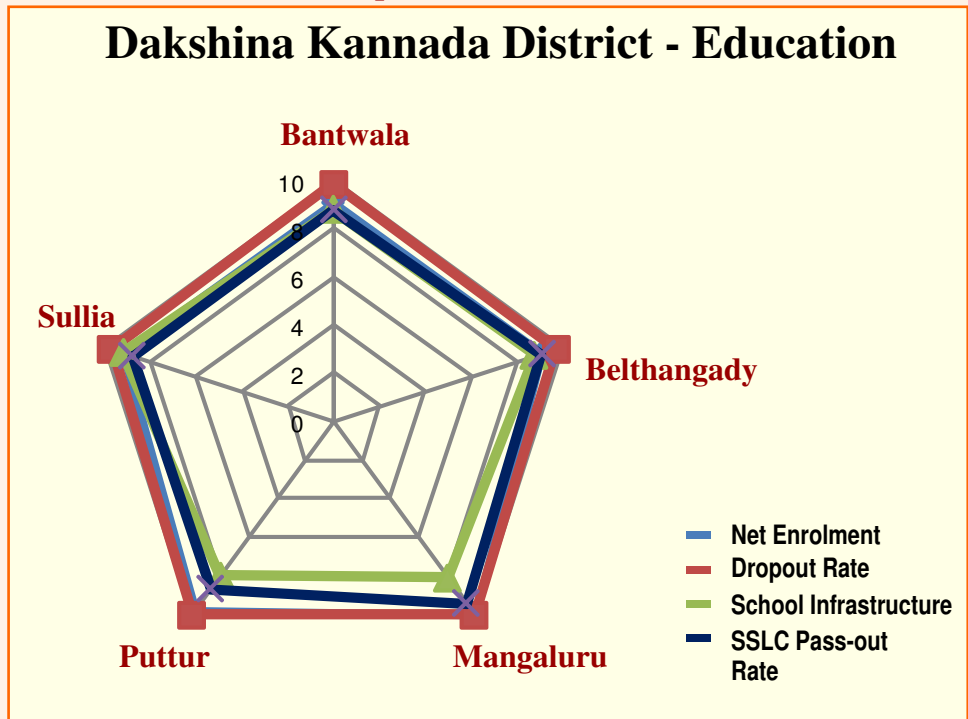
Graph 4.12 – Radar Chart



Graph 4.13 – Radar Chart



Graph 4.14 – Radar Chart



The radars are all self-explanatory. They show graphically disparities in performance metrics of four education indicators within taluks and in comparison to different taluks within the district. The overall education status of Mangaluru and Puttur taluks appears to be better compared to other three taluks. The radar clearly shows the gap in achievement in each indicator and also among taluks.

4.12 An Overview and persisting Educational Gaps in the District

In the field of education, the issues of concern are mainly centered on access, enrolment, retention, teacher-student ratio, quality, equity, educational attainments and infrastructure. The achievement in terms of most of these indicators, as shown in this study, is quite impressive. Dakshina Kannada district has also made remarkable progress in higher education during the last two decades. The district is ranked as one of the best in education attainment in the state. The district is almost on the way to universal literacy and also universal primary and secondary education. Even in the education attainment in terms of pass percentage in SSLC and PUC, the district is always one among top ranked districts in the state. The disparities between rural and urban and across social groups and gender do exist but are not very significant. The district also witnesses a gradual upward movement of the students in the ladder of education and particularly towards professional courses.

Despite remarkable achievements, many

gaps remain in the quality of education at all levels besides persistent social and regional disparities. Since the district is on the way to universal elementary and secondary education, the quantum of challenge would be now not on expansion but improvement in quality, curriculum, social equity in educational attainment and equipment of students with life-skills required to compete at the higher levels in all spheres. The primary and secondary education is the foundation for integrated and holistic development of the school-going children. The quality education should therefore facilitate realization of all innate potentials of children from primary education stage itself. The innate potential should not be limited to learning text book subjects only. It should be extended to non-scholastic areas through innovative children friendly extra curriculum activities. Even in the class room education process, emphasis should be given more towards exploration, project work, experimentation, investigation, fields based experiential learning and interactive/communicative learning rather than mere text book teaching. Under the RTE Act, it is a fundamental right of all children to demand such quality education at all levels. The major challenge before the district is now the effective implementation of these initiatives from RTE perspective.

Notwithstanding this, there are some of the key areas of concern, which require immediate attention. They are briefly summarized below:

- Though the district is near universal literacy

rate and elementary education, the gender gap, social inequity and rural-urban disparity in literacy rates and enrolment at primary and secondary level still persist.

- School infrastructure matters in quality education. No doubt, infrastructural facilities in the primary and high schools have been improving under SSA and RMSA. Nevertheless, much remains to be achieved in this respect. Most of the government school buildings in rural areas were constructed in 1950s and 1960s and require major repairs / renovations. A substantial number of schools have no playgrounds and compound walls. Rural schools are relatively at a disadvantage in this regard.
- Computer assisted instruction through setting up computer aided laboratories in all primary and secondary schools is still a dream. Only few upper primary schools are brought under CALC. Wherever, CALC are set up, computer teachers are not appointed and as a result, students are deprived of computer learning. Learning computer technology in the education system has to be mainstreamed at the formative years of schooling.
- Computer education in high school is provided through ICT Phase I, Phase II. But in these schools all the systems are dysfunctional, ICT phase III is still a dream.
- Discontinuation at secondary level among SCs, STs and Muslim girls is relatively high. Apart from this, seasonal and intermittent missing out on school attendance is an issue among the SC and ST students. The compulsion of providing support to the livelihood of households causes absenteeism even while they are enrolled in schools. This adversely affects their performance.
- There is a rural-urban divide in primary and secondary education in the district. In urban areas, children have easy access to private nursery schools, while in rural areas, children are deprived of pre-schooling. Anganwadis with multifarious functions cannot substitute pre-nursery schools. Moreover, the urban children are benefiting from mushrooming tuition classes in secondary level. The rural students do not have easy access to tuition classes and also it is beyond their affordability.
- Though the district has favorable pupil-teacher ratio, in many rural lower primary schools, a mandatory number of two teachers have to manage classes I to V. With the declining population and enrolment in the district, the number of such schools in rural areas will increase in near future. This has serious implications on the quality of education in rural areas.
- The popularity of private English medium schools is becoming a threat for sustainability of Kannada medium government schools. It creates inequality in education; English medium for elites in urban areas and Kannada medium for poor and socially disadvantaged sections in rural areas where bulk of students live and study.

With the emergence of English medium schools, affordability of primary and secondary education in English medium schools in terms of fee is also an area of concern particularly, for economically weaker sections.

- The mainstreaming vocational training in general education for increasing employability and skill development hardly needs any emphasis. It should be made integral part of higher secondary education.

- The School Development and Monitoring Committees are at present politicized. This adversely affects the governance at government schools. Involvement of committed stakeholders and old alumina without political interference would go a long way in ensuring good governance of government schools particularly in rural areas.



"Ksheera Bhagya" - A prominent scheme introduced by the Government to improve the health of children

Chapter 5

Health and Nutrition



WENLOCK DISTRICT GOVERNMENT HOSPITAL, MANGALURU



5.1 Introduction

Health is prerequisite to the well-being of human beings. It determines both the length and the quality of people's lives. Health is also important constituent of the capability as, without health, none of the other components has any value. The capability to lead a longer and socially and economically productive life depends on good health. The World Health Organization (WHO) defines health as “a state of complete physical, mental and social well-being and not merely absence of disease or infirmity.” The health care system, therefore, embraces multitude of “services provided to individuals or communities by agents of the health services or professions, for the purpose of promoting, maintaining, monitoring and restoring health”. A healthy community is an asset upon which an economically viable and vibrant society can be built. The enjoyment of long and healthy life has been declared by the WHO as one of the fundamental rights. Being a merit good, the state has a responsibility for ensuring good health of the people. The UNDP has, therefore, rightly considered health as the second most important core dimension to measure human development.

Recognizing the critical importance of health for human development, under the Constitution of India, the provision of healthcare is made a responsibility shared by central, state and local governments. The Government of India and the State Government implemented several programmes for health care since independence. National Rural Health Mission (NRHM) was most recently launched programme to improve health care in the rural areas, where the bulk of population lives. The

NRHM seeks to provide accessible, affordable and quality health care to all rural population. The UN Millennium Development Goals include *inter alia* health related goals such as reduction of infant and under 5 mortality rates by two-thirds, reduction of maternal mortality by three-quarters, halt and begin to reverse the spread of HIV/AIDS and halt and begin to reverse the incidence of malaria and other major diseases by 2015.

This chapter attempts to analyze empirically the health profile of the taluks and the district from human development perspective. The focus in the chapter is on disaggregated analysis in terms of various healths related indicators and availability, adequacy, accessibility and affordability of health care services in the district. Depending on the data availability, an attempt is also made to carry out cross-section analysis of various health parameters by taluk, rural-urban, gender and social groups.

5.2 Demographic Profile

As per 2011 Census, the total population of the district is 20.90 lakh, out of which 10.35 lakh are males and 10.55 lakh are females. During 2001-11, the district witnessed decadal population growth of 10 percent as against the State's decadal growth of 15.7 percent. The proportion of male population works out to 49.5 percent and female 50.5 percent. The sex ratio works out to 1000:1020. The sex ratio only marginally declined during the last census decade. It declined from 1022 in 2001 to 1020 in 2011. The district has, however, favourable sex ratio compared to the state average of 1000:973. The sex ratio of children of the age group 0-6

years is, however, lower (947). There was a decline of child sex ratio from 952 in 2001 to 947 in 2011. The lowering of child sex ratio in the district, which was known for favourable sex ratio, is really a worrisome feature.

Taluk-wise, demographic profile was discussed in depth in chapter two (Table 2.4). The pattern of distribution of population gender-wise and sex ratios are almost same as reflected in the district data. Mangaluru taluk has the highest population of 9.95 lakh, followed by Bantwal with population of 3.95 lakh. Sullia has the lowest population of 1.45 lakh. The respective population of Puttur and Belthangady are 2.88 lakh and 2.67 lakh. Mangaluru taluk has the highest adult sex ratio of 1027, followed by Belthangady (1020). Bantwal has the lowest adult sex ratio (1010). As regards child sex ratio, Sullia has the highest ratio (967), followed by Belthangady with the ratio of 962. Surprisingly, Mangaluru has the lowest child sex ratio of 941. Bantwal and Puttur have same child sex ratio of 945

The rural population constitutes 10.93 lakh (52.3 percent) and urban 9.96 lakh (47.7 percent) (Table 2.5). The district, in fact, witnessed change in the rural-urban composition of population since last census. While share of rural population declined from 61.6 percent to 52.3 percent, the share of urban population increased from 38.4 percent to 47.7 percent. The district has one of the highest proportions of urban population. Out of 10.93 lakh rural people, 5.41 lakh are males and 5.52 lakh, females. In Urban areas, out of 9.96 lakh people, 4.93 lakh are males and 5.03 lakh, females. There is wide rural-urban disparity in both adult and child sex ratios in the district. As against

urban adult sex ratio of 1005, the comparative rural sex ratio is 1033. Contrary to this in the case of child sex ratio, the urban areas have the higher child sex ratio of 960 and rural areas has lower ratio of 947.

As regards religious composition of population, as per 2001 census, Hindus constitute about 68.59 percent of the population, followed by Muslims, 22.07 percent and Christians, 8.69 percent. Jains and other religions account for less than one percent of the district population. The district has the lowest percentage of Schedule Caste (SC) and Schedule Tribe population in the state. As per 2011 Census, SCs are 148178, accounting for 7.09 percent as against the state percentage of 17.2 percent (Table 2.6). STs are 82268, which account for 3.9 percent as compared to state's 7 percent (Table 2.6). The decadal growth is, however, significantly higher in the case of SCs which works out to 13 percent and for STs, it is 31 percent as against decadal growth of 10 percent of total population in the district during 2001-11. Among taluks, Mangaluru taluk has the highest SCs (49275), followed by Puttur (34040). Bantwal has the lowest SC population (19260). STs are more in Bantwal (20912), followed by Puttur (17627). Sullia has the lowest STs (11841). Mangaluru taluk has ST population of 16246.

5.3 Health Status: IMR AND MMR

Infant mortality rate (IMR), child mortality rate (CMR) and maternal mortality rate (MMR) along with life expectancy at birth (LEB) are universally accepted as the most important indicators of overall health status of any community. UN Millennium Development

Goals aim at reduction of infant and under-5 mortality rates by 2/3rd and maternal mortality rates by three-quarters by 2015. IMR is measured as a mortality ratio of 1000 live birth. MMR measures a mortality ratio of 100000 live births. Complementary to IMR, the CMR is

measured as a ratio of mortality of children up to age 5 to 1000 live births. Other indicators are crude birth rate (CBR) and crude death rate (CDR).

Table 5.1 shows taluk-wise position of IMR, CMR, MMR, CBR and CDR in the district during 2011-12.

Table 5.1
Taluk-wise IMR and MMR and other Health Indicators (2011-2012)

Taluk	IMR	CMR	MMR	CBR	CDR
Bantwal	22	24	122	14.06	3.59
Belthangady	23	27	47	13.81	3.27
Mangaluru	24	28	44	10.14	2.45
Puttur	25	33	89	14.02	4.09
Sullia	13	14	103	13.40	4.98
District	19	22	89	12.1	3.23
State	35	40	144	19.20	7.10

Source: SRS, 2011 for IMR CMR and MMR

DSO, ZP, DK for CBR and CDR

Note: IMR and child mortality rates per 1000 children and MMR per 100000 mothers.
Crude Birth Rate and Death Rate per 1000 persons

Box 5.1 Comprehensive health Care: Eleventh Plan Seven Measureable Targets

The Eleventh Five Year Plan set seven measureable targets, reflecting the health status to be achieved by the end of the plan period. The Twelfth Plan aims to re-strategize to achieve faster progress towards the seven goals set under the Eleventh Plan. These targets relate to:

1. Infant Mortality Rate (IMR)
2. Maternal Mortality Rate (MMR)
3. Total Fertility Rate (TFR)
4. Under-nutrition among children
5. Anaemia among women and adolescent girls
6. Provision of clean drinking water for all
7. Raising child sex ratio for age group 0-6 years

Source: Eleventh and Twelfth Five Year Plans.

At the outset, it should be noted that IMR, MMR and CMR were computed for taluks and district by using SRS (sample registration system) estimates of Government of Karnataka and ratio method to avoid underestimation and to ensure uniformity in computation methodology for all 176 taluks and 30 districts in the state (see Technical Note in Annexure 3). In the case of Dakshina Kannada district, they were, however, found overestimated and are significantly higher than the actual reported by DHFW Department. For example, as per the DHFW, the actual CMR for the district in 2011-12 is 13.64 as against the estimate of 22 computed by SRS, 2011, Taluk-wise, the actual data varies from 5 in Mangaluru taluk to 15 in Sullia. In the government estimates it ranges between 14 and 33. Similarly the actual IMR and MMR for the district are significantly lower than the estimates provided by the government. Since for computation of human development indices, the estimates of SRS, 2011 were adopted and also to fall in line with other districts, the analysis in this chapter is made based on the estimates provided by them.

The IMR for the district works out to 19. The comparative IMR at national level is 47 and in the state level, 35. The district ranks third in IMR in the state. Udupi which ranks first has IMR of 11 and Bengaluru, which ranks second, has IMR of 15. The district witnessed a significant decline in IMR during the last decade. In 1992, it was 59. In 2001-02, it declined to 44. Taluk-wise it varies from 13 in Sullia to 25 in Puttur, which has the highest IMR. Mangaluru taluk has the next highest IMR (24). In CMR also, the district stands third after Udupi and Bengaluru. The CMR for the district works out to 22 as against the state average of 40. Udupi

district has CMR of 13 and Bengaluru, 17. Taluk-wise, CMR varies from 14 in Sullia to 33 in Puttur. Mangaluru and Belthangady taluks have also higher CMR. The district also ranks third in MMR. Its MMR is 89. The comparative MMR of first ranked Udupi is 50 and second ranked Bengaluru, 73. The state average is 144. Taluk-wise, MMR is very high in Bantwal (122) and Sullia (103) and; very low in Mangaluru (44). In Belthangady, it is 47, whereas in Puttur, it is on par with the district's average of 89. It is interesting to note that Sullia has the lowest IMR and CMR but its MMR is one of the highest in the district. The district has also one of the lowest CBR and CDR. Taluk wise, CBR varies from 10.14 in Mangaluru to 14.06 in Bantwal. Similarly, CDR ranges from 2.45 in Mangaluru to 4.98 in Sullia. Inter-taluk differences in both CBR and CDR are marginal.

At the outset, it should be noted that the district's Department of Health and Family Welfare (DHFW) provide certain unique health services for maternal health and child care under various schemes like Janani Suraksha Scheme for safe motherhood, Madilu-kit for child birth of STs, Thayi Bhagya Plus and the Prasuthi Araike. The National Rural Health Mission initiated by the Central government, which was implemented in the district since 2005 contributed significantly to improve RCH parameters in rural areas.

Dakshina Kannada district achieved significant improvement in LEB during the last two decades. In 1991, the LEB for the district was 66 years. It has increased to 67.4 years in 2001. Women have higher LEB than Men. As against LEB of 68.5 years for women, the LEB for men was 65.9 years in 2001. The district had

the highest LEB for both men and women in the state. The comparative data for the year 2011 is not available. With the significant improvement in health profile of the people, the LEB for the district must have gone beyond 70 years.

Graph 5.1



Box 5.2: Karnataka State Integrated Health Policy – 2004

The Government of Karnataka formulated a state Integrated Policy based on the recommendations of the Task Force on Health and Family Welfare (2001). The key focus areas of the policy are:

- Providing integrated and comprehensive primary healthcare.
- Providing a credible and sustainable referral system.
- Establishing equity in delivery of quality healthcare.
- Encouraging greater public-private partnership in the provision of quality health care in order to better serve the under-served areas.
- Addressing emerging issues in public health.
- Strengthening health infrastructure.
- Improving access to safe and quality drugs at affordable prices.
- Increasing access to alternative medicine systems.

Source: Economic Survey of Karnataka, 2011-12

5.4 Couple Protection Issues and Family Welfare

With the growing population, the family planning is given higher priority under the government's health and family welfare programmes. The Government's family planning policy mainly focuses on three areas: First is to ensure availability and access to a sufficient range of contraceptive options and relevant contraceptives in stock. Second is to make informed decisions, clients need to have adequate information about the available options, their side effects and advantages. Third is to provide a service in a manner that protects the individual's or couple's privacy.

The district has good network of family welfare service centres. All taluks have equitable distribution of family welfare service centres based on population. The district has 83 family welfare centres and 430 sub-centres. The district has one of the lowest total fertility rates in the state. It is less than 1.5. Earlier two children was the couple's mantra and now most of the younger couples prefer one child. The spacing between

the births of two children is also equally adopted. Table 5.2 presents number of beneficiaries of various family planning measures and the couple protection rate for different taluks in the district.

The women sterilization is the most common method of family planning in the district. The couple protection rate is the indicator of use of contraceptive practices in the community. For the district, it works out to 66.18 percent. It is slightly lower than the state average of 66.42. It is the highest in Puttur (71 percent), followed by Bantwal (69 percent). It is the lowest in Mangaluru (62 percent). With the increasing education and entry into employment market, the women are now aware of the need for family planning.

5.5 Infrastructure and Health Personnel Facility

Prior to independence, in the erstwhile South Kanara district, the government-run Wenlock Hospital at the district headquarter

Table 5.2
Beneficiaries of Family Planning Measures

Taluk	Vasectomy (number)	Tubectomy (number)	I.U.D. (number)	C.C. (number)	O.P. (number)	Couple Protection Rate (Percent)
Bantwal	4	1137	1687	1381	1109	68.90
Belthangady	4	1146	1192	1752	1152	66.50
Mangaluru	18	3012	3269	3501	2313	62.50
Puttur	11	926	1199	1680	999	71.09
Sullia	7	683	689	723	525	66.20
District	44	6904	8036	9037	6098	66.18

Source: Dakshina Kannada District at a Glance 2011-12/DHFW

Mangaluru and the taluk level hospitals at taluk headquarters were the main health infrastructure for provision of health services. Other known hospitals were one missionary-run hospital namely Father Muller's Hospital at Kankanadi and other government run Lady Goschen hospital in Mangaluru city. All these hospitals were located in urban centres and there was no health service network in rural areas. The medical graduates were very few. In the absence of transport and communication facilities, rural people had no access to health facilities. The local medicines were the only source. After independence, with the introduction of public health services and emergence of private hospitals, there was a revolutionary change in the health infrastructure in the district. Both public and private sectors have played a dominant role in the overall development of the health sector in the district.

The three-tier government's health infrastructure at the district level comprises of Primary Health Centres (PHCs) at Grama

Panchayat (GP) level, Community health centres (CHCs) at block level and taluk and district hospitals at tertiary level. Dakshina Kannada district has Wenlock as district hospital in Mangaluru city, four taluk hospitals at taluk headquarters and 72 hospitals in important urban centres. The district has seven CHC's, 64 Primary Health Centres (PHCs). Besides this, the district has net work of 107 private hospitals and nursing homes. Table 5.3 shows the taluk-wise network of health infrastructure, both public and private in the district.

In the private sector, the district has 11 teaching hospital; important among them are: Kasturba Medical College Hospital in Mangaluru, Father Muller Hospital at Kankanadi, Justice K.S. Hegde Charitable Hospital at Deralakatte, Yenepoya Hospital at Deralakatte, A.J.Hospital in Mangaluru, K. Venkatramana Gowda Medical Hospital at Sullia and Srinivas Medical Hospital at Mukka. The government hospitals have 1891 beds, out of which 1351beds are in Mangaluru taluk. The

Table 5.3
Health Infrastructure in Dakshina Kannada District (2011-12)

Taluk	Government Hospitals		Private Hospitals/Nursing Homes		Private Ayurvedic Hospitals		PHCs/CHCs*		Clinics
	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.
Bantwal	20	186	13	148	-	-	19	156	173
Belthangady	13	102	9	447	-	-	12	72	103
Mangaluru	25	1351	62	6960	-	-	23	186	1042
Puttur	12	166	16	556	-	-	11	70	180
Sullia	7	86	7	845	-	-	6	36	83
District	77	1891	107	8956	-	-	71	520	1581

Source: Dakshina Kannada District at a Glance – 2011-12/ DHFW. *PHCs refers to Public Health Centres and CHCs, Community Health Centres

private hospitals have 8956 beds capacity; out of which 6960 beds capacity in Mangaluru taluk only. 11 teaching hospitals have 6310 beds capacity. In rural areas, PHCs and CHCs have 520 beds capacity. Besides hospital network, there are 1581 private clinics, 788 medical shops and 13 blood banks. Most of them are in Mangaluru city. The government's health system also include network of 19 ambulance vehicles 24/7 services and mobile health units mainly for tribal community.

For combating specific public health problems, the districts health system is equipped with a range of specialized facilities at taluk and district levels. They include TB control units, the district leprosy control units, mother and child health care units, family welfare units, district HIV-AIDS prevention unit and so forth. All these specialized branches report under the overall District Surveillance Unit. The government health system has its unique feature

of including traditional medicine as means of treatment integrated with allopathic practices. There are governmental Ayurveda units in the district hospital including one which practices Panchakarma. Moreover, homeopathic and unani services are also widely available in the district. Father Muller homeopathic hospital is well known in this field. Health infrastructure for health services available in the district, is one of the best in the state

The quality of health care services depends on not only on the net work of health infrastructure but also availability of qualified doctors, nurses and facilities in terms of population served. 77 government hospitals have 92 doctors and 107 private hospitals and nursing homes, 462 doctors (Table 5.4). Besides there are 1581 doctors having clinics. Most of the clinics are in Mangaluru city. Out of 2135 doctors involved in health



Shri Dharmasthala Manjunatheshwara Yoga and Naturopathy Centre

Box 5.3: KMC, Mangaluru: First PPP Model in Medical Education and Health Care

KMC Mangaluru was started in 1953 utilizing the clinical facilities of the Government Wenlock Hospital and Lady Goschen Hospital. It was the first medical college set up in the district and in the private sector in India with private public partnership model in Medical education and health care. The collaboration between the KMC and the government's Wenlock Hospital, which is the district hospital and one of the oldest public sector hospitals in Mangaluru city still in practice. It was set up by Late Dr. T.M.A.Pai, the founder and builder of now Manipal University. Apart from Government hospitals, there is a full-fledged 500-bed teaching hospital at Attavar established in 1992 and College of Dental Sciences. In 1993, it was, along with KMC Manipal, granted deemed university status by the Government of India because of their excellent track record and academic reputation. Now it is affiliated to Manipal University. In 2001, a centre for Basic Sciences was started at Bejai. It is at present ranked 25th among top medical colleges in India; the medical college with the highest ICMR STS awards in the country. The KMC Mangaluru is also recognized as one among 20 International Medical Schools by the Educational Commission for foreign graduates (ECFMG). In research publications, it was ranked first among private universities in India. Students from 45 countries graduated from KMC Mangaluru. Its degrees have been recognized worldwide.

Source: KMC, Mangaluru



Kasturba Medical College Hospital Mangaluru

Table 5.4
Taluk-wise Number of Doctors

Taluk	Government Hospitals	Private Hospitals/Nursing Home	Clinics	Total
Bantwal	21	23	173	217
Belthangady	5	17	103	125
Mangaluru	37	124	1042	1203
Puttur	19	46	180	245
Sullia	10	252	83	345
District	92	462	1581	2135

Source: Dakshina Kanada District at a Glance – 2011-12/DHO

Service, 1203 are in Mangaluru taluk. Belthangady has the lowest number of doctors. Surprisingly, as against 13 government hospitals, it has only 5 doctors. Next to Mangaluru, Sullia has the highest number of doctors. This is mainly due to a medical college and teaching hospital in Sullia. In the network of

clinics, next to Mangaluru, Puttur taluk has the highest number of clinics (180).

Table 5.5 gives taluk-wise some key indicators of availability of basic health facilities to the people. The doctor/population ratio for the district works out to 0.89 doctors per 1000 people.

Graph 5.2

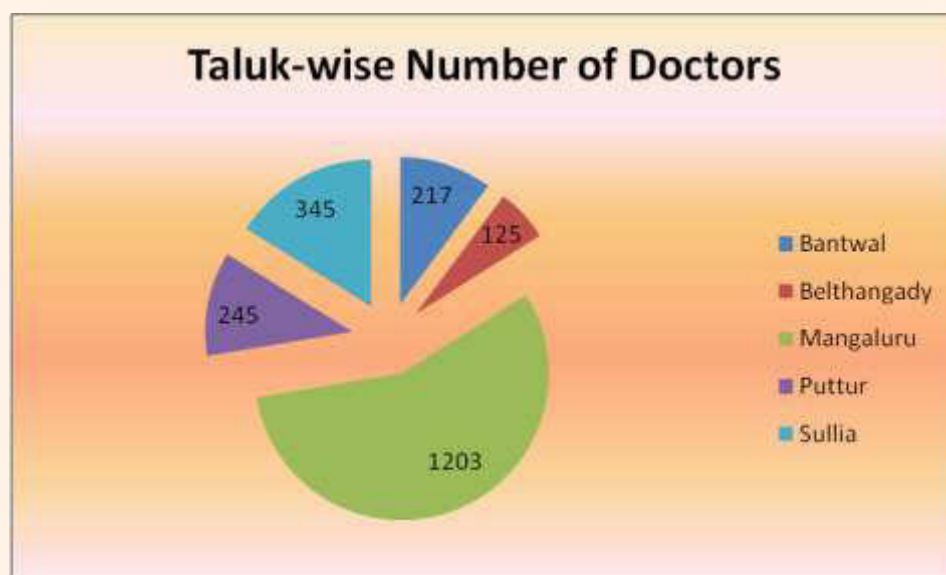


Table 5.5
Taluk-wise Health Facilities: Some Indicators

Taluk	Population served by sub-centres	Population Served by PHC	Doctors per 1000 population	Nurses per 1000 population	Hospital Beds per 1000 population
Bantwal	4316	25089	0.52	0.23	1.24
Belthangady	3688	23048	0.47	0.59	2.45
Mangaluru	4631	36261	1.23	0.73	8.54
Puttur	3925	26764	0.81	0.82	2.75
Sullia	2426	23462	0.59	0.26	6.66
District	4670	29058	0.89	0.60	5.44

Source: Dakshina Kannada District at a Glance – 2011-12, DHFW.

By all standards, it appears on lower side. Taluk-wise, it varies from 0.47 in Belthangady to 1.23 in Mangaluru taluk. Inter-taluk disparity is very wide. Similarly, the district has average nurse- population ratio of 0.60. However, it varies widely between taluks. In Puttur, it is 0.82 and Bantwal, 0.23. Even in Mangaluru, where health infrastructure is more concentrated, it is below one. As regards availability of hospital beds, the total number of hospital beds in the district, as shown in Table 5.3, is 11367. The population-bed ratio at the district level is 5.44 people per 1000 bed which is one of the lowest in the state.

The population served by a sub-centre varies from 2426 in Sullia to 4631 in Mangaluru taluk. Similarly, the population served by PHCs varies from 23048 in Belthangady to 36261 in Mangaluru taluk. The analysis of indicators of health facilities clearly shows that in spite of remarkable growth in the health infrastructure in the district, all is not well in the availability of health services and the district has a long way to go to provide quality health services to people.

5.6 ANC Coverage and Anemia among Pregnant Women

Maternal health care is the major component of reproductive health (RCH) services provided through PHCs and sub-centres in the rural areas. In urban areas, the government and private hospitals and clinics provide maternal health care facilities. The iron deficiency is the main reasons for anemia among married women in the age group 18 - 49. This is mainly caused as a result of inadequacy of diet and nutritional imbalance. In India about 42 percent of women in the reproductive age are found to be anemic. RCH program implemented by the government include provision of full ANC package, which includes supply of iron and folic acid tablets, tetanus (TT), and three ANC visits to all pregnant women registered.

The number of pregnant women receiving full ANC coverage and also information on pregnant women affected with severe anemia (excluding normal) in different taluks in the district is shown in Table 5.6.

Table 5.6
Full ANC Coverage and Anemia among Pregnant Women: 2011-12 (percent)

Taluk	Pregnant Women receiving Full ANC	Pregnant women with Anemia
Bantwal	88.82	42.36
Belthangady	74.06	26.80
Mangaluru	89.17	37.87
Puttur	80.14	41.52
Sullia	85.05	21.29
District	85.11	33.96

Source: Dakshina Kannada DH & FWO & DD Women and Child

Anemia during pregnancy was observed in 33.96 percent of cases of pregnancy in the district during 2011-12. Nearly, 85.11 percent of pregnant women covered under full ANC. The comparative figure at the state level is 39 percent for incidence of severe anemia and 92 percent for receiving full ANC. The relative poorer performance of the district in the coverage of pregnant women receiving full ANC is a matter of serious concern.

Belthangady taluk followed by Puttur are worse in this regard. The proportion of pregnant women received ANC was 74 percent in Belthangady and 80 percent in Puttur. As against this, Mangaluru and Bantwal, it was 89 percent. In Sullia, it was slightly lower (85 percent). The incidence of severe Anemia was the highest In Bantwal (42.4 percent) and Puttur (41.6 percent) and lowest in Sullia (21 percent) and Belthangady (27 percent). In Mangaluru taluk, it is as high as 38 percent. In spite of high coverage of pregnant women under full ANC, incidence of anemia of this magnitude is an area of concern.

5.7 Institutional Delivery

Another important objective of the RCH programme is to ensure 100 percent safe delivery through health institutions in hygienic conditions and under supervision of trained health professionals. Safe delivery is important for both the health of mother and new-born child. To ensure safe delivery, easy access to health institutional facilities and affordability are critical. In the past, due to absence of health institutional network in rural areas and difficulties to access, deliveries took place in the district mostly at home under the supervision of untrained Aayas. The district has now good network of both private and public, health institutions. With the improved transportation and communication as well as improved education level among women, the scenario now changed. The need for safe delivery through hospitals is now well recognized, in the district among all communities.

In Table 5.7, Taluk-wise position of institutional deliveries is analysed. The analysis of the data clearly shows that institutional delivery in the district was almost 100 percent.

Table 5.7
Taluk-wise Institutional Deliveries: 2011-12 (Percent)

Taluk	Institutional Delivery
Bantwal	99.91
Belthangady	99.93
Mangaluru	99.90
Puttur	99.90
Sullia	99.93
District	99.92

Source: Dakshina Kannada DH & FWO

There may be few exceptions as a result of deliveries that took place either in transit or delay in hospitalization. Even in such cases, most of the deliveries took place under the supervision of ANM/LHE or trained Aayas. The district does not have any record of delivery conducted by the untrained Aayas. The institutional delivery percentage in the district is slightly higher than state average of 97 percent. Inter-taluk differences in the proportion of institutional deliveries are almost negligible. The data in the Table clearly demonstrate that there exists already a strong awareness among married couples about the necessity of safe delivery through health institutions.

5.8 Immunization of Children

Immunization of children is important for child survival. Immunization against six serious diseases viz. tuberculosis, diphtheria, pertussis, tetanus, poliomyelitis and measles is

important for reducing the mortality and morbidity among infants and young children. The state government's universal immunization programme includes administration of nine doses of vitamin A, for prevention of night blindness, and iron folic acid solution for iron supplementation. The package includes immunization through D.P.T., Polio, BCG, Measles, TT and Hepatitis B injections. Table 5.8 contains taluk-wise information on the children immunized during 2011-12.

From the Table, it may be seen that in the year 2011-12, more than 24000 children were immunized in the district. The percentage of children fully immunized for the district works out to 78.02 percent. Taluk-wise, it varies from 66 percent in Mangaluru to 89.7 percent in Sullia. Compare to the state level figure of 125.9 percent, the performance of all taluks in the district is disappointing. The lower percentage of fully immunized children may be due to

Table 5.8
Taluk-wise Immunization of Children: 2011-12 (Number)

Taluk	D.P.T.	Polio	BCG	Measles	TT	Hepatitis B	Children fully immunized (percent)
Bantwal	5250	5250	5605	5241	5753	5470	88.76
Belthangady	3721	3721	3826	3572	3956	3674	87.41
Mangaluru	9911	9911	9887	9521	4130	9280	66.12
Puttur	3958	3958	4090	3820	2147	3961	88.26
Sullia	2057	2057	2021	1996	10389	1963	89.74

Source: Dakshina Kannada Dist.- DH & FWO

migration of population and non-record of privately immunized.

5.9 Children born Under-weight and BMI Ratio

The weight of an infant at birth is an important measure of the nutritional status of the mother and an indicator of the child health and survival rate. An infant with birth weight lower

than 2.5 Kg is considered at high risk. The mother's nutritional status also determines the weight of child born. As shown in the Table 5.9, the district has relatively lower percentage of children born underweight in the state². The proportion of underweight children at birth for the district is 5.26; male children 2.72 and female children, 2.54. At the state level, it is found to be 11.5 percent.

Table 5.9
Taluk-wise Status of Underweight Children and Malnutrition: 2011-12 (Percentage)

Taluk	Percentage of Children born Underweight			Percentage of Children Malnourished
	Male	Female	All	
Bantwal	2.95	2.00	4.95	19.06
Belthangady	2.44	2.26	4.70	25.59
Mangaluru	3.05	3.34	6.39	17.89
Puttur	3.83	3.54	7.37	22.89
Sullia	2.31	2.42	4.73	31.54
District	2.72	2.54	5.26	21.23

Source: Dakshina Kannada District - DH & FWO

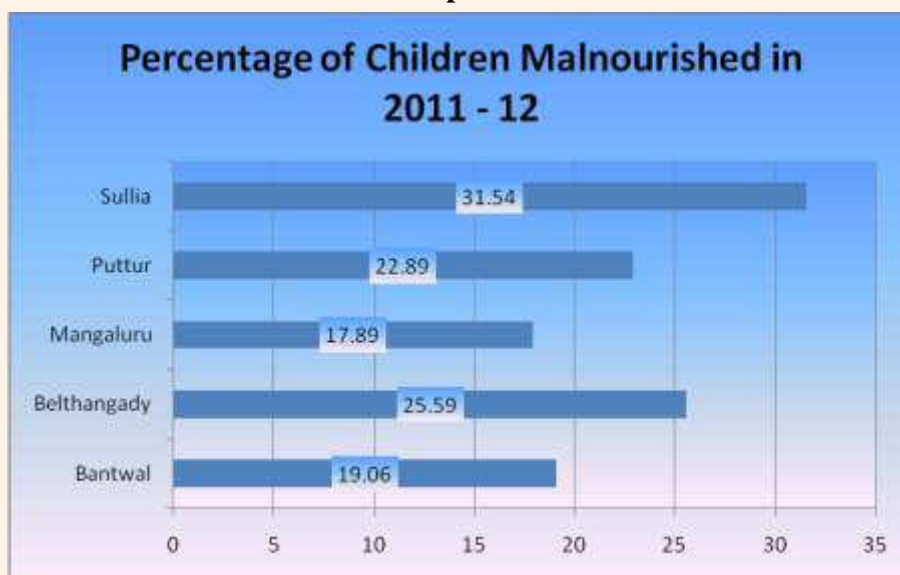
Taluk-wise, there are no wide differences in the proportion of underweight children. Puttur has the highest underweight children (7.37 percent), followed by Mangaluru (6.39 percent). Belthangady has the lowest percent of underweight children (4.70 percent). Bantwal has 4.95 percent and Sullia, 4.73 percent underweight children.

The children malnutrition is another important area under RCH programme. The data in the table shows that the district has one of the highest percentages of malnourished children in the state. It is 21 percent. The comparative data for the neighbouring Udupi district is 0.62 percent. Taluk-wise, it varies from 17.9 percent in Mangaluru to 31.5 percent in Sullia. The high malnutrition among children in all taluks is, thus, a serious issue faced by the health system in the district.

5.10 Communicable and Non-Communicable Diseases

The common communicable diseases in the district are malaria, leprosy and tuberculosis. Malaria was, once, eradicated in the district. However, in recent years, the incidence of malaria is increasing particularly in urban centres. In recent years, the cases of Chikungunya, Dengue Fever, Japanese Encephalitis and Lymphatic Filariasis were emerging communicable diseases in the district. In the case of leprosy, 58 cases were diagnosed during 2011-12, out of which 39 males and 19 females. Most of them (36) are from Mangaluru taluk. Bantwal and Puttur have also reported 7 cases each. Other two taluks have only 4 cases identified as suffering from leprosy. Compared with other districts, the incidence of malaria and leprosy in Dakshina Kannada district is one of the lowest.

Graph 5.3



² The proportion of underweight children estimated by HDD, PD is significantly higher than the actual data provide by the DHWF, For computation of CTDI, the estimates provided by the HDD, PD are used to fall in line with other districts. The table contains the actual data on underweight children provide by the DHWF,



Doctor examining the patient in Primary Health Centre, Kollamogaru

The RNTCP program running in the district reported around 1868 cases of TB during the year 2011-12. All the TB patients diagnosed are put on DOTS which has a comparatively decent compliance rate than other districts in Karnataka. The total number of TB patients cured during the year 2011-12 was 650. Most of the people affected by TB were men. The maximum number of reported TB patients was from Mangaluru taluk.

Another major communicable disease is AIDS caused by the HIV virus, which adversely affects the body's immune system and leads to death through secondary infections. The incidence of HIV cases in the district has been increasing during the last ten years. During 1987-2003, 415 HIV and 37 AIDS cases were recorded. In 2011-12, a total of 902 patients were tested for HIV infection, which included 576 males and 326 females. During the year, 107 people died of AIDS. Comparing to

neighbouring Udupi district, the incidence of HIV/AIDS in the district is very low. Taluk-wise, out of 902 cases, 795 were from Mangaluru. In other taluks, the incidence of HIV/AIDS varies from 16 to 34. The incidence is high in the age group of 30 – 39 years, which is the most productive period of human life.

Table 5.10 shows the percentage of people affected by the major communicable diseases in the district.

Though the percentage of people affected by the major communicable diseases is marginal, in terms of number, it is 32598 people. Bantwal taluk has the highest percentage of people affected by major communicable diseases, followed by Mangaluru and Sullia. Belthangady has the lowest incidence of communicable diseases.

Major non-communicable diseases include hypertension, diabetes, asthma,

Table 5.10
People affected by major Communicable Diseases
(Percentage)

Taluk	2010-11	2011-12
Bantwal	2.36	2.20
Belthangady	0.84	0.96
Mangaluru	1.48	1.55
Puttur	1.24	1.16
Sullia	1.67	1.46
District	1.55	1.56

Source: Dakshina Kannada District at Glance / DH & FWO

bronchitis, cancer, accidental injuries and mental diseases. As a natural corollary of modern life style, food habits and development, the district is witnessing an overall increasing trend in the occurrence of non-communicable diseases. Statistics available from hospitals clearly demonstrate that the cases of hypertension, cancer, diabetes and asthma have increased over the years. Similarly, there is an upward trend in the incidence of mental diseases. With the changing composition of population and aging process, this trend is likely to continue in the future. This has serious implications on the burden of treatment as the cost involved for these treatments is significantly high. In the same vein, there is an increasing trend in unnatural deaths such as suicidal and accidental deaths.

5.11 Performance of Various Health Schemes

Health is critical for well-being of people. A healthy community is an asset upon

which an economically viable and vibrant society can be built. The Government of India and the State Government initiated several programs for improving availability, accessibility and affordability of provision of good health care services since independence. The government of India's National Rural Health Mission (NRHM) launched in 2005 was the most important programme to improve health care of the rural population. Other important national and state health programs of public health importance in the provision of comprehensive healthcare services to the people are: Janani Suraksha Yojane for RCH services to BPL, SC and ST families, Madilu to provide post natal care for mother and child, Universal Immunization, Bhagyalakshmi Scheme for girl children, Arogya Kavacha108, Suvarna Arogya Chaitanya and School Health Program focusing on health care of school age children. For control of communicable diseases, the Government launched specific programmes. They include National Leprosy Eradication Programme,

National Programme for control of Blindness, National Vector Borne Disease Control Programme, National Filariasis Control Programme, Japanese Encephalitis Control Programme and Aids Awareness and Surveillance Programme. All these programs are implemented by the Department of Health and Family Welfare (DHFV). The Government has also initiated various health insurances for poor and vulnerable citizens to support them financially for their medical concerns, like the: Vajapayee Arogyashree Scheme, Yashaswini Health Insurance Scheme and Sampoorna Suraksha Scheme, Rashtriya Swasthya Bima Yojane

Under various health programs initiated by the Government of India and the Government of Karnataka, the district has made remarkable overall progress in the health status. The DHFW has achieved targets set under the various National Health Programmes which include *inter alia* RCH programme, Malaria Eradication Programme, Filariasis Control Programme, Tuberculosis Control Programme, Leprosy

Control Programme, Blindness Control Programme, Programme for Control of all Communicable Diseases and School Health Programme. Interestingly, one of the most successfully running health programmes in Dakshina Kannada is the RCH programmes under NRHM. The outcome of the performance is clearly reflected in significant improvement in all RCH and health indicators such as IMR, MMR, institutional delivery, extent of full immunization, full antenatal care etc. It may be noted that Dakshina Kannada district is in the forefront in accomplishing the UNMDGs in the health sector in the state. Dakshina Kannada is also ranked number one in most of the health indicators and in the overall health index in the Karnataka HDR 1999 and 2005.

The District Health Action Plan was prepared in accordance with the national guidelines to achieve NRHM and RCH goals and objectives. With a view to ensure universal health care services, a holistic approach is adopted, which includes: (i) new interventions under NRHM, (ii) RCH programs to achieve the



Health Awareness Campaign during the World Health Day Celebrations

relevant goals, (iii) strengthening routine full immunization, (iv) disease control and surveillance program and (v) inter-sectoral convergence of activities such as nutrition, safe drinking water, and sanitation for poor and vulnerable section of the society. Under NRHM, the focus of intervention would be to strengthen PHCs and improve delivery of health care services in the rural areas. Improvement of rural health infrastructure and rural family welfare would be also the main focus under state sponsored health programmes.

5.12 Per Capita Expenditure Analysis on Health sector

In health sector, the government is a major player in rural areas in the district. As against this in urban areas, the private sector is the dominant player. With the implementation of NRHM and other state sponsored health programs, there was steady increase in public expenditure on health during the Eleventh Plan. In spite of this, the total public expenditure incurred on health by centre and states during the

Eleventh Plan period amounted to less than one percent of GDP. This is by international standard is very low. The Twelfth Five Year Plan, therefore, aimed at increasing the total public expenditure on health to 2.5 percent of GDP.

The total public expenditure incurred in the health sector during the year 2011-12 was Rs.3972 lakh. As a share of district GDP, it works out to only 0.04 percent as compared to state level ratio of one percent. Despite the importance of public healthcare services in rural areas, expenditure on health and family welfare in the district is apparently very low. The major portion of expenditure was for of RCH and NRHM activities followed by rural family welfare initiatives through PHCs and sub-centres. Among disease control programs, communicable disease control programs such as TB, leprosy and vector borne disease control programs received higher allocation due to various government schemes.

Taluk-wise information on total public expenditure incurred on health services and per capita public health expenditure worked out is given in Table 5.11.

Table 5.11
Taluk-wise Public Expenditure on Health in the District (Rupee)

Taluk	2001-02		2011-12	
	Total	Per capita	Total	Per capita
Bantwal	24980985	69.09	75201276	190.20
Belthangady	23045380	93.49	69217168	259.64
Mangaluru	24433186	27.68	117661417	118.30
Puttur	20644206	77.59	70471682	244.82
Sullia	23735443	168.63	64657965	445.22
District	116839200	61.57	397209508	190.10

Source: Dakshina Kannada district DH & FWO

From the table, it may be seen that there is a 3.4 fold increase in the total expenditure incurred on health in the district during the period between 2001-02 and 2011-12. The per capita expenditure increased from Rs 61 to 190 during this period. Taluk-wise, it is the lowest in Mangaluru and highest in Sullia. Inter-taluk variation is significantly high.

5.13 Radar Analysis for Health

In this chapter, an attempt is also made to apply the radar technique to portray graphically intra and inter taluk disparities in various health

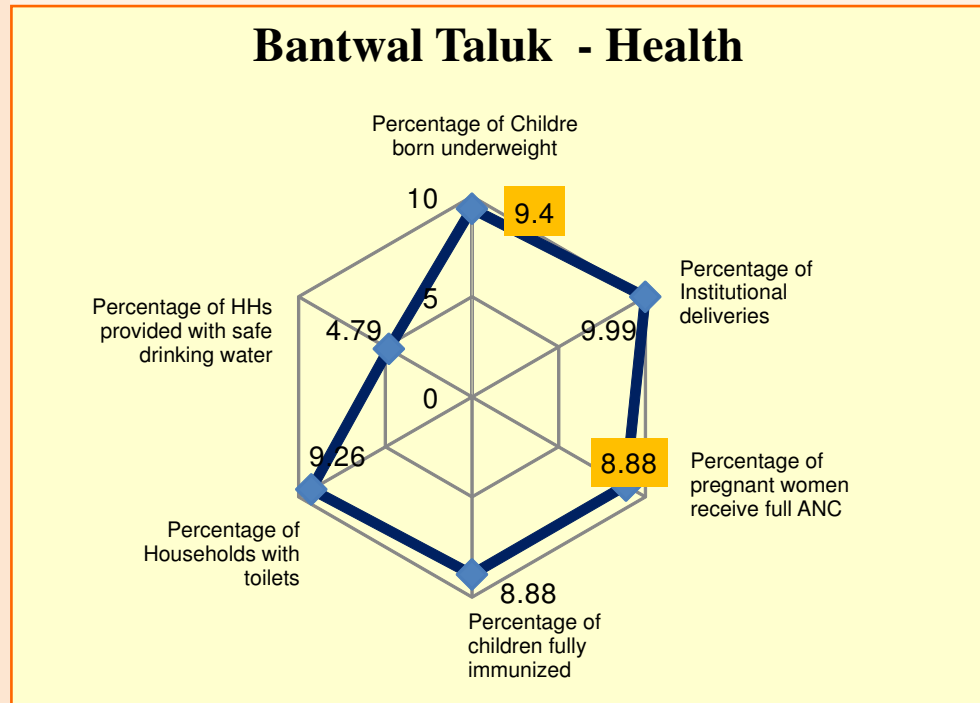
indicators. Six health indicators selected as proxy to portray health status through radar analysis. They are: percentage of children born underweight, percentage of institutional deliveries, percentage of women using full ANC, percentage of children fully immunized, percentage of households with toilets and percentage of households provided with safe drinking water facility. Table 5.12 contains the actual values of these indicators and indices constructed for these indicators for radar based on Census data and the data collected from various government departments on 10-point scale.

Table 5.12
Health Indicators : Values and Indices: 2011-12

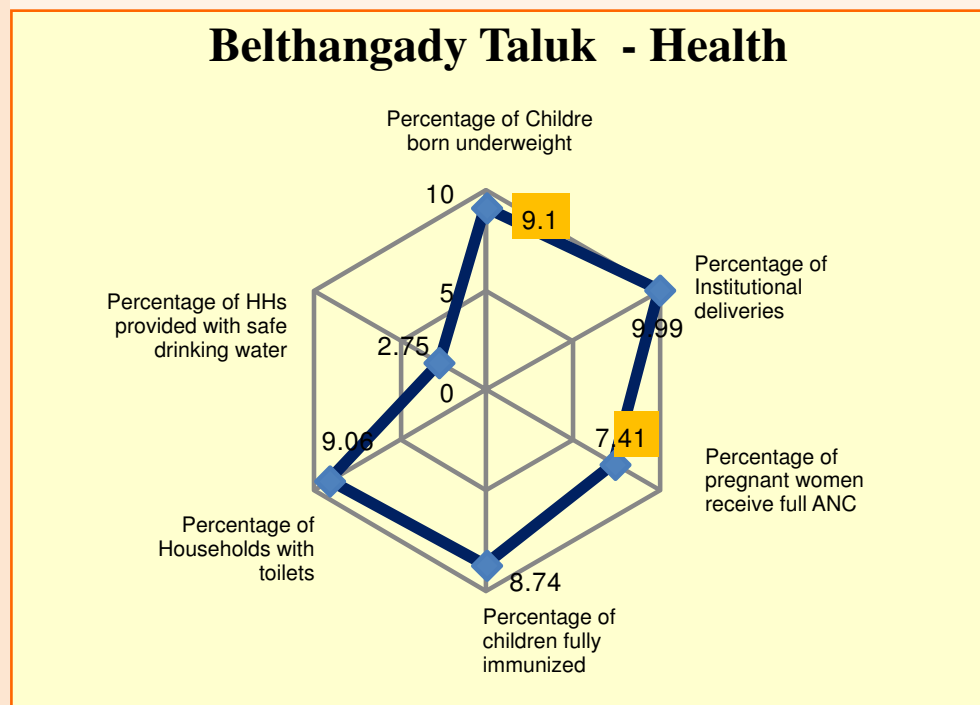
Indicators	Bantwal		Belthangady		Mangaluru		Puttur		Sullia		District	
	Value	Index	Value	Index	Value	Index	Value	Index	Value	Index	Value	Index
Percentage of children born underweight	5.90	9.40	9.24	9.10	20.73	7.90	10.41	9.00	15.04	8.50	12.26	8.77
Percentage of Institutional deliveries	99.91	9.99	99.93	9.99	99.90	9.99	99.90	9.99	99.93	9.99	99.92	9.99
Percentage of pregnant women receive full ANC	88.82	8.88	74.06	7.41	89.17	8.92	80.14	8.01	85.05	8.50	85.11	8.51
Percentage of children fully immunized	88.76	8.88	87.41	8.74	66.12	6.61	88.26	8.83	89.74	8.97	78.02	7.80
Percentage of Households with toilets	92.58	9.26	90.65	9.06	96.33	9.63	88.02	8.80	80.01	8.00	92.66	9.27
Percentage of HHs provided with safe drinking water	47.87	4.79	27.46	2.75	64.83	6.48	45.33	4.53	29.18	2.92	51.77	5.18

The radar charts drawn for each taluk and the district based on the index values of various health indicators are presented below.

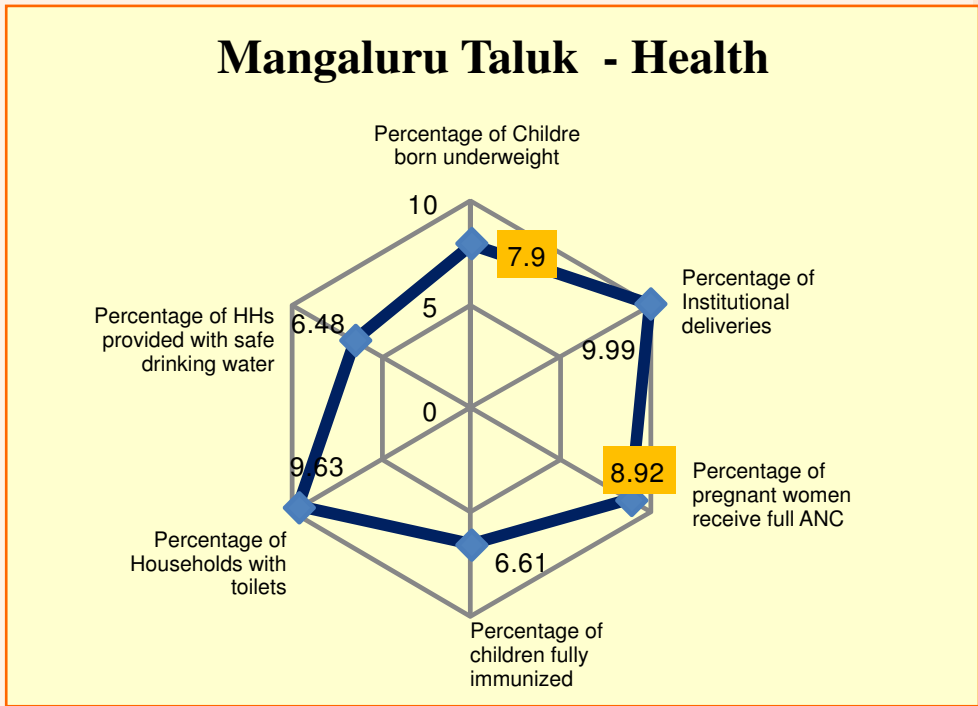
Graph 5.4 – Radar Chart



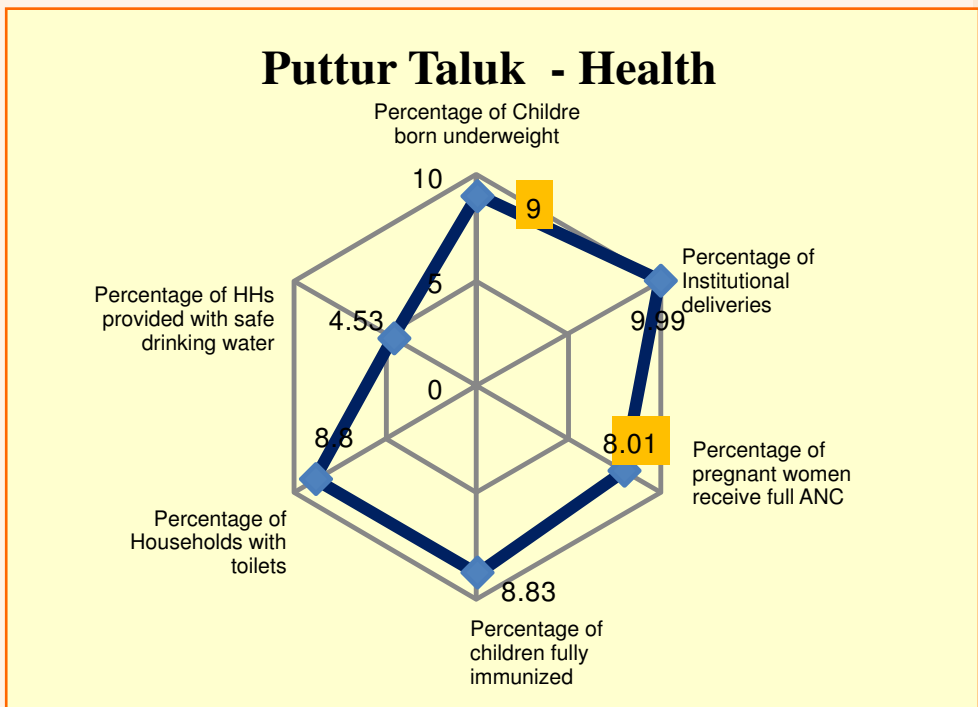
Graph 5.5 – Radar Chart



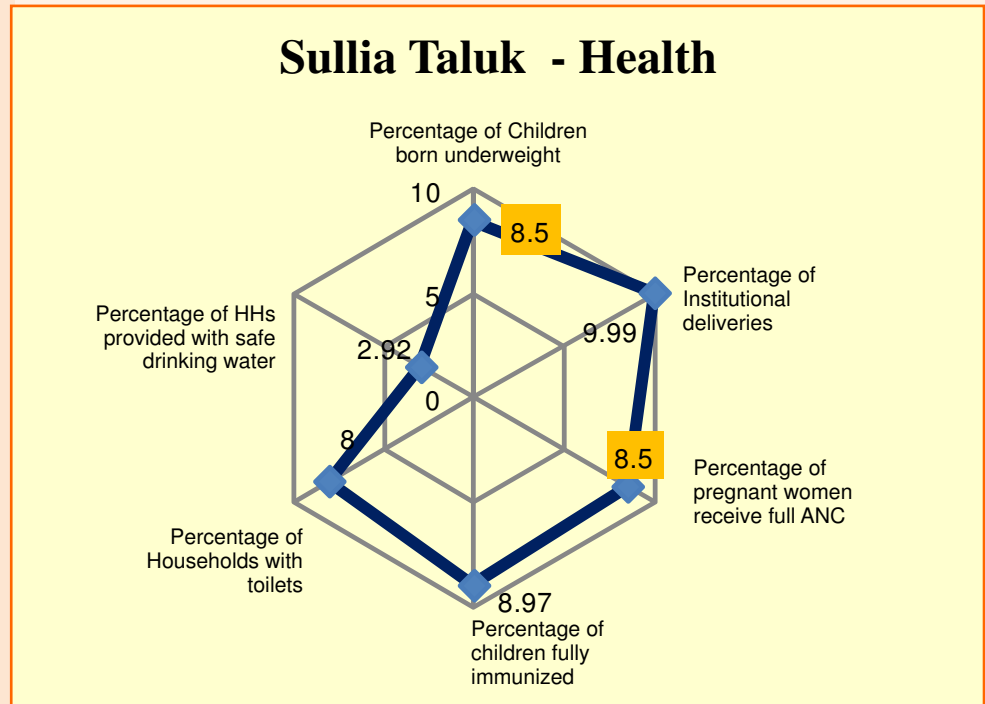
Graph 5.6 – Radar Chart



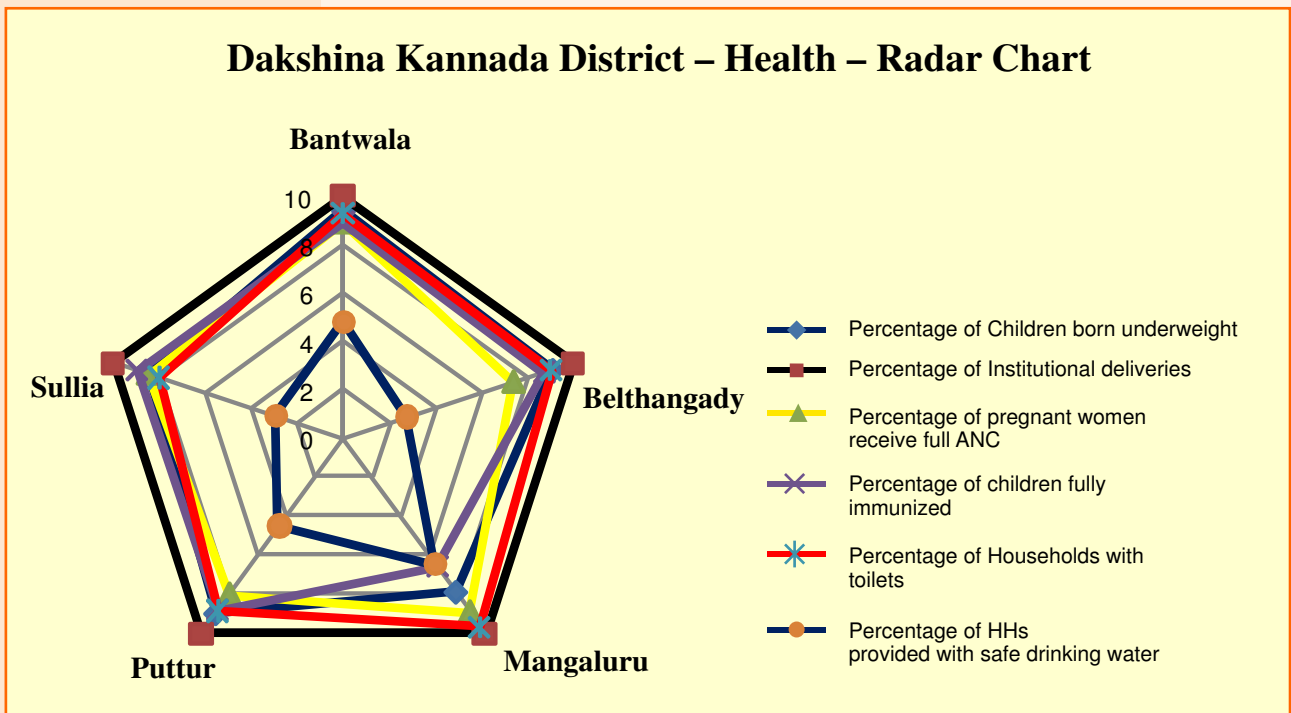
Graph 5.7 – Radar Chart



Graph 5.8 – Radar Chart



Graph 5.9 – Radar Chart



The radar charts evidently show marginal the intra and inter taluk disparities in the health status in respect of the identified six health indicators. The performance metrics of all indicators are nearer to maximum values except drinking water. As a result the health status of all taluks is relatively at higher radar scale.

5.14 Micro-Study on Health Problems in Endosulfan Sprayed Areas in Dakshina Kannada District:

5.14.1 Rationale and Objective of the Study

Endosulfan is a broad spectrum organochlorine insecticide and acaricide recommended for control of agricultural pests for fruits, cashew plantations and vegetable crops. Karnataka Cashew Development Board (KCDB) carried out aerial spraying in Bantwal, Belthangady, Puttur and Sullia taluks where they owned large track of cashew plantations during 1980 to 2000. They also extensively used the pesticide for ground spraying. Villagers in these zones also have undertaken ground spraying by using this pesticide during this period.

The extensive use of this pesticide resulted in various chronic health problems for the people in the endosulfan sprayed areas. In early 2009, unusual density of various illnesses was found in endosulfan sprayed areas like Kokkada, Nidle, Patrame of Belthangay taluk and Kadaba and Koila in Puttur taluk. The Directorate of Health & Family Welfare Services, Government of Karnataka, based on the complaints of people on various chronic health problems of persons residing in the sprayed areas, directed the DHFW, Dakshina Kannada district

to study the issue and take necessary actions. Recognizing the seriousness of the health problem, The DHFW has carried out a diagnostic survey of the affected areas in the district in 2012.

The survey was undertaken with the following specific objectives:

- To identify the villages affected by the endosulfan infected diseases.
- To diagnose specific illness caused as a result of endosulfan spraying
- To assess the dimension and seriousness of the endosulfan infected health problem.
- To determine health care measures required to cope up with this health problem and,
- To compile baseline data for evidence based planning for future activities.

In view of the seriousness of the endosulfan infected health problem, which is threatening the life of large number of families in Puttur, Sullia, Bantwal and Belthangady taluks, it was decided to undertake a micro study on health problems of people living in endosulfan sprayed areas in the district. Since the DHFW has already carried out a detailed survey for identification of specific illnesses of people living in endosulfan sprayed areas in the district in 2012, the micro study aimed at recapitulating its findings and looking into the measures undertaken to cope up with the emerging health problems in endosulfan sprayed areas.

5.14.2 Methodology

The study aimed at covering all villages affected by endosulfan spraying in four taluks namely

Taluks	PHCs (number)	Sub-centres (number)	Villages (number)	Population (number)	Teams (number)
Belthangady	6	18	22	77166	77
Puttur	11	36	36	138411	139
Sullia	3	11	14	29429	30
Bantwal	3	13	5	43229	43
Total	23	78	77	288235	289

Bantwal, Belthangady, Puttur and Sullia. Accordingly, a PHC level survey involving the health workers of the PHCs and ASHA and Anganwadi workers was carried out to compile basic data in the affected villages. They were trained regarding the objectives and methodology of the survey. The structured schedules/formats were used for collection of the requisite data. The survey envisaged covering all households in all villages affected. Junior Health Assistants (Female) were made responsible for supervision of the survey activities in their respective areas. The coverage and teams involved in the survey are as given above.

The survey was carried out from 16th October to 30th October 2012. The survey was conducted by 289 teams of 23 PHCs and 7 sub-centres covering 77 villages with total population of 288235. The findings of the survey were consolidated both at PHC level and taluk level. In the second phase, the DHWF organized specialists' camps in the affected villages to identify actual endosulfan infected individuals and diagnose their illnesses. For specialists' help, the DHFW has sought the

assistance of Kasturba Medical College, Mangaluru and other institutions. The specialists' camps were organized in Kokkada (covering Kokkada, Patrame and Nidle villages of Belthangady taluk) and Koukrady (covering Nellyadi, Golihottu, Koila, Alankaru and Kadaba villages of Puutur taluk).

5.14.3 Findings and Measures undertaken

Endosulfan residue is transmitted through a variety of environmental media viz. air, surface water, ground water, soil and sediments. The most likely way for people to be exposed to endosulfan is eating the contaminated products. It can be also absorbed via lungs through air and skin. It causes acute and chronic toxicity. Central nervous system is the main target in endosulfan toxicity. Endosulfan is a neurotoxin, haematotoxin, genotoxin and nephrotoxin. It has been linked to congenital physical disorders, reproductive organs disorders, mental disabilities and deaths.

The survey identified individuals who came under the given criteria for suspected endosulfan affected population. Taluk-wise identified cases are as follows:

Taluks	Suspected endosulfan related illness Cases (number)	Completely bed ridden cases (number)
Bantwal	680	26
Belthangady	2445	53
Sullia	726	39
Puttur	1372	61
Total	5223	179

Most affected areas are: Kokkada, Patrame and Nidle villages of Belthangady taluk and Kadaba, Alankar, Kuntur, Nelyadi, Golihottu, Balya, Koukradi and Koila in Puttur taluk. The study identified 5223 people suffering from various ailments as a result of endosulfan spraying. Out of 5223 cases, 179 are completely bed-ridden cases. The families of the individuals suffering were informed of specialists' camps to be conducted, date and venue. An orientation camp was conducted for specialist doctors who participated in the camps. The designated camp Medical Officers were bestowed with responsibilities of coordinating and organizing the various camps as and when required.

The study findings reveal higher incidence of neurological disorders including mutism, heart diseases and limb disabilities, reproductive ailments including infertility and skin disorders and asthma among the affected people. As per the study, the following illnesses are attributed to the spray of endosulfan:



An Adult Victim of Spraying of Endosulfan

1. Still birth
2. Abortions
3. Brain tumour
4. Hemiplegia
5. Lower limb deformities
6. Mental retardation
7. Deafness
8. Deaf-mutism
9. Mutism
10. Epilepsy
11. Blindness
12. Hand disability
13. Heart diseases
14. Joint Swelling
15. Handicap of limbs
16. Caliver
17. Strility
18. Mental disorders and others.

Specialists from KMC, KSHEMA, Father Muller's Medical College, Yenapoya Medical College, A.J. Medical College and KVG Medical College, Sullia were deputed to various camps. In each camp, a team of specialists participated include Physician, Pediatrician, Psychiatrist with clinical Psychologist, Orthopedician, Surgeon, Ophthalmologist with refractionist, ENT Surgeon, Dermatologist, Gynecologist and General Duty Medical Officer. Eleven camps were organized in the severely affected areas in Puttur, Belthangady, Sullia and Bantwal taluks and out of 4986 individuals inspected, 1907 were identified as endosulfan affected patients. Six camps were organized at Puttur, Sullia, Kokkada, and Vittla to certify the identified persons for various disabilities. The patients identified were given compensation of Rs.50000. Presently, 134 people with 75 percent and more disability are receiving RS.1000 per month, 95 people with disability between 40 and 75 percent are receiving Rs.400 pe month.

Based on the findings of the study, the DHFW has set up two Day-care centres at Kokkada and Koila for rehabilitating the people suffering. The Day-care centres are being run in collaboration with Dharmasthala Gramabhivridhi Sangha. The facilities provided in these centres include besides providing compensation, provided food, physiotherapy, occupational counselling and vocational training, treatment at nearby PHCs. The District Administration also took the assistance of specialists from all medical colleges in the district to face the menace of this dangerous pesticide on the health of people. A General Body and Executive body for rehabilitation of endosulfan were formed with the following



Victim of Endosulfan Spray

objective:

- To identify victims of endosulfan spray.
- To distribute Smart Card to avail free health facilities
- To provide transport arrangement for the disabled to avail medical facilities
- To provide home based palliative care by staff nurse at GP level to bed ridden victims
- To establish mobile medical unit to reach in remote areas
- To provide free ration to the families of victims

The findings of the study are quite revealing and a wake up call for not only users of pesticides

but also health administration as well as policy makers. Though agriculture needs use of pesticides to control pests, the agriculturists are usually not sensitized the ill health effects of the most of the pesticides presently used. The multinational companies who are the main producers of these pesticides aggressively promote their use. In absence of effective regulatory framework, this will continue. When the health effects of endosulfan was known, how a public sector organization like Karnataka Cashew Development Board could undertake extensively aerial spraying over a decade? Now the real victims are the innocent small and marginal farmers and people belonging to weaker section living in the villages. Who is accountable for their life long suffering; this is real issue to think about.

5.15 An Overview: Performance and Inadequacies of Healthcare System

Dakshina Kannada district is blessed with good health infrastructure and enviable public-private initiatives in provision of quality healthcare service. The district has 11 privately run medical and dental colleges and a number of Para-medical and nursing colleges. All of them played a catalytic role in building up necessary infrastructure and delivery of high quality health care services in the district. The government play dominant role in rural health services. Public sector health care infrastructure through PHCs, CHCs and taluk and district level hospitals renders health care services to weaker section of the community especially rural poor and vulnerable section of the community throughout the district. Good ambulatory facility, qualified and responsive health

personnel, good road networks and communication facility, the timely support from NGOs and finally, health conscious population - makes the district's health system an example of laudable success when compared to other districts in the state. Under the NRHM initiatives, the district could make remarkable progress in most of the RCH indicators like IMR, CMR and MMR and stands out as one of the districts to achieve the UN millennium development goals in time.

Despite these remarkable achievements, the district is faced with unrelenting burden of the old and emerging new threats of diseases. There are also problems, some of which are institutional in nature and others emanate from the changing environment, aging population and modern life style and food habits. Institutional problems which affect adversely universal access to health care services are mainly due to urban orientation of private health infrastructure, scarcity of qualified doctors in rural areas, unscientific geographical distribution of PHCs, scarcity of paramedical staff and absence of networking between PHCs/CHCs and tertiary hospitals at taluk and district levels. The private sector health facilities and the public tertiary health facilities mainly concentrated in urban centres, while in rural areas, only available healthcare services are from primary public health facilities. They are unevenly spread across the district and lacking qualified doctors and nurses as well as timely supply of required medicines. They also do not provide health services to rural people round the clock. There is, thus, a growing rural-urban divide in the provision of healthcare services, which creates stumbling blocks towards achieving the dream

of 'health for all' and universal comprehensive quality health coverage.

Though good progress was achieved in RCH indicators, the maternal and child health care and nutrition still continuing to be a problem among weaker and marginalized section of the population. The revival of malaria and filaria, rising incidence HIV/AIDS, aging population, chronic non-communicable diseases such as diabetes, hypertension, heart ailments, growing mental diseases, alcoholism among the youth and increasing unnatural deaths such as road accidents and suicides are the main emerging new health problems in the district. Even though the public health programs in the district have succeeded in controlling communicable diseases such as malaria, tuberculosis, filaria, leptosperofin etc. their reappearance once again in recent years, particularly in urban areas has posed a challenge. Morbidity and mortality rates among the marginalized SCs/STs, migrants and other vulnerable sections of the society in urban slum areas are still unacceptably higher. They have a very poor health profile compared with the other communities. Implementation of any public health care packages has limited impact unless their problem of poverty is properly tackled. The health situation is also compounded by ignorance, prejudice and discrimination. The current influx of massive number of floating migrant workers because of the rapidly growing urbanization and acute shortage of labour and resultant increase in urban slums without basic amenities is also breeding ground for communicable diseases.

The Twelfth Plan strategy envisages achievement of Universal Health Coverage (UHC) over next two or three plan periods. The

ultimate goal of UHC is to guarantee affordable easy access to a required package of quality health services to all citizens. With a view to provide universally accessible quality health services at affordable costs and efficiently in the district, there is a need to consider the following health strategies:

- Considering the prevailing mixed institutional health system in the district, there is a need for public and private sectors to work in tandem to provide appropriate, equitable and affordable health care services at all levels. Besides regulating affordability of private medical services, there is a need to link the private medical colleges with Taluk and District Hospitals to ensure access to quality and super specialty health services in public sector system.
- The primary health care in rural areas should be strengthened to provide comprehensively preventive, curative and rehabilitative health care services. This requires upgradation of PHCs and CHCs as per IPHS standards. Every PHC should have one doctor, a staff nurse, a pharmacist, a health inspector and other supporting staff. The PHC should have a vehicle to provide mobility support to the doctor to do the field work. Every PHC sub-center should have its own building and one staff nurse.
- It is worth considering the Tamil Nadu Model of mapping geographically and setting one Junction Hospital for a group of PHCs instead of CHCs. The Junction Hospital should have specialist doctors and adequate number of nurses and their services should be made available to the rural people round the clock. Such junction hospitals

should be linked to Taluk Hospitals through 108-Arogya Kawacha.

- In order to ensure rural people easy and affordable health services at tertiary level, there is a need for network linking through IT in all Government health services viz. PHCs, Junction hospitals and Taluk and District Hospitals in order to ensure prompt referral system, close interface, robust surveillance and timely treatment.
- Most of the rural poor are not aware of medical insurance coverage of *Vajpayee Arogyashree Scheme, Yashaswini Health Insurance Scheme, Sampoorna Suraksha Scheme, Manipal Health Card, Rastriya Swastya Bhima Yojane* etc. There is a need for periodical awareness campaign in this regard.
- Special Health services through Mobile Units to remote tribal areas, forest areas, Naxalite affected areas should be considered to ensure easy access and effective reach to the needy vulnerable section of the society.
- Awareness campaigns and Medicare camps should be organized periodically for chronic diseases like diabetes, hyper-tension, blood pressure etc. in rural areas to educate rural people about these diseases and also provide on the spot medical check-up and treatment
- Urban health care comes under ULBs, which do not have, at present, Health Departments. With growing urbanization, there is an urgent need to set up Health Department in each ULB for taking care of urban health care needs.



Blood Donation Camp being organised at Govt. Hospital

Chapter 6

INCOME, POVERTY AND EMPLOYMENT



**MANGALORE REFINERIES AND PETROCHEMICALS LTD (MRPL) –
AN ONGC UNDERTAKING AT MANGALURU**



6.1 Introduction

The standard of living is the third most important core dimension of human development. A reasonably decent standard of living depends mainly on people's command over resources needed. The real per capita income is considered as proxy for measuring the standard of living as a dimension of HDI. Adequate income enables people to acquire required resources to improve standard of living. It is a critical means for enlarging people's choices, capabilities and well-being. It is an input for other two dimensions of the HDI via, health and education. The ability to lead a long and healthy life and to be knowledgeable depends, to a large extent on income. In fact, these parameters interact and reinforce in important ways; improving both health and education increases income earning potential and low achievement in education and health causes low income and lower standard of living and vice versa. Freedom of being able to meet basic needs to survive such as ability to avoid starvation, undernourishment, escape preventable morbidity or premature mortality etc centers around access to income.

The per capita income, as proxy to standard of living, however, does not capture non-market basic requisites of livelihood and quality of well-being such as housing, basic amenities, clothing, nutrition, sanitation and safe drinking water. Employment and unemployment, income distribution, inequality of income and expenditure, and poverty and human deprivation are among the many other areas that also need to be considered while considering income as a proxy for standard of living. The drawbacks of per capita income only

as a measure of well-being and its failure to capture inequality, poverty and deprivation are well known and aptly summarized by the Report of the Commission on the Measurement of Economic and Social Progress (Stiglitz et al, 2009).

Considering the multi-dimensional characteristic of human development, there is a need for broadening the HDI beyond these three core dimensions. Recognizing the critical importance of some of the above indicators of standard of living, the Government of Karnataka decided to consider them while preparing District Human Development Reports. In this chapter, an attempt is, therefore, made to examine in depth the issues relating to income focusing on sector-wise contribution to GDP and per capita income growth, pattern of employment and dimension of poverty in the district and at taluk levels.

6.2 District and Taluk Income

The GDP measures total market value of goods and services during a given year. Gross National Income (GNI), on the other hand, includes besides GDP, income accruing to domestic residents from abroad. There are international standards for its computation. The GDP is estimated at both current market prices and constant prices with a given year as base. Per capita GDP or per capita income is the income per head derived by dividing GDP by the total population. The Central Statistical Organization (CSO), Government of India estimates and publishes national and state level GDP and per capita income every year. Karnataka has been a pioneer in estimating district income and the first estimates were made in 1960-61. Since then,

district estimates have been computed at ten year intervals till 1990-91 and thereafter, annual estimates are being worked out regularly by the Directorate of Economics and Statistics (DES), Government of Karnataka. An attempt is also recently made to estimate GDP and per capita income at taluk level in the state.

For estimating GDP, the economy of the district/taluk is divided into three sectors on similar line as adopted for computing the national/state GDP as under:

- A) **Primary Sector:** includes agriculture and allied activities such as horticulture, livestock, forestry and fishing and mining and quarrying.
- B) **Secondary Sector:** includes manufacturing both registered and un-registered, construction, electricity, gas and water supply.
- C) **Tertiary or Service Sector:** includes transport, storage and communication, trade, hotels and restaurants, banking and insurance, real estate, ownership of dwellings, business and legal services, public administration and other services.

The GDP of Dakshina Kannada district was Rs.19673 crore at current prices and Rs.14036 crore at 2004-05 constant prices during the financial year 2010-11³. The per capita income was Rs. 84030 at current prices and Rs.67169 at constant prices during the same year. The primary sector has contributed Rs 2126 crore at current prices and Rs. 1374 crore at constant prices. The share of the primary sector in total GDP works out to 10.8 percent. The contribution of the secondary sector was Rs.4024 crore at current prices and Rs. 2778 crore at constant prices. Its share in the district GDP is 21.9 percent. The tertiary sector, on the other hand

contributed Rs. 11703 crore at current prices and Rs.8534 crore at constant prices. Its share in the district GDP works out to 67.3 percent. Compared to state level average per capita income of Rs.61073, the district per capita income is 38 percent higher at current prices. The district ranks third in per capita income among 30 districts in the State. Its contribution to the state GDP works out to 5.2 percent at constant prices. In 1990-91, the district's contribution to the total state GDP was 5.7 percent and in per capita income, it ranked second in the state. There was a slight decline in the share of district's contribution to the state GDP.

The recent trends in the district's GDP and per capita income together with the annual growth rates during the Eleventh Plan period: 2006-07 to 2010-11 is shown in Table 6.1. Dakshina Kannada district witnessed a slightly lower average annual economic growth of 7 percent as against the state average of 8.8 percent during the period between 2006-07 and 2010-11. However, it should be noted that except 2008-09 and 2009-10, in other three years, the district witnessed significantly lower annual growth. During 2010-11 the annual growth was 2.5 percent as against the state level growth of 8.9 percent.

The district's per capita income at constant prices has increased from Rs.51153 to Rs.67169 during the Eleventh Plan period, accounting an increase of 30 percent. The comparative state level increase in per capita income was 32 percent. An analysis of the sectoral growth in Table 6.2 clearly shows poor performance of agriculture and allied activities in particular and primary sector in general during the last five years.

³ Economic Survey of Karnataka: 2012-13, DES, GOK.

Table 6.1
Growth of District GDP and Per capita Income

Year	Total GDP (Rupees in crore)		Per capita Income (Rupee)		District GDP Annual Growth Rate (Percent)	State GDP Annual Growth Rate (Percent)
	At Current Prices	At Constant Prices	At Current Prices	At Constant Prices		
2006-07	11567	10404	56869	51153	3.77	10.00
2007-08	11933	10791	58008	52453	3.72	12.60
2008-09	14197	11561	68253	55583	7.14	7.10
2009-10	17735	13690	85728	66175	18.41	5.20
2010-11	19673	14036	94145	67169	2.53	8.90

Source: Directorate of Economics and Statistics, GOK. Note: 2010-11 figure provisional estimate. Growth rate is based on constant prices. Per capita is based on 2011 census population data for 2011.

There is no steady positive growth in the primary sector. As against the state average growth of 5.6 percent per annum, the district has recorded only 2.7 percent average annual growth in agricultural sector. The high growth achieved in the primary sector during 2007-08 and 2009-10 was probably due to good monsoon, increase in the contribution of forestry, fisheries and

mining and quarrying. The performance of secondary sector is also relatively disappointing. The secondary sector witnessed an average growth rate of 5.8 percent as compared to the state average of 8 percent growth per annum. In tertiary sectors, the district achieved relatively higher growth rate during the Eleventh Plan period. The average growth of tertiary sector

Table 6.2
Sector-wise Annual Growth Rate of GDP (Percentage)

Year	Primary	Secondary	Tertiary	Overall
2006-07	-3.59	8.01	3.16	3.78
2007-08	9.33	9.89	-1.74	3.72
2008-09	1.71	25.54	-4.72	7.14
2009-10	12.45	-10.11	47.72	18.41
2010-11	-6.42	-4.14	8.51	2.53
District Average Growth Rate (percent)	2.69	5.84	10.59	7.12
State Average Growth Rate (percent)	5.62	8.12	10.28	8.76

Source: Directorate of Economics and Statistics, GOK.

was 10.6 percent as against the state average of 10.3 percent per annum. The high growth in tertiary sector was mainly due to better performance in transport, trade and hotels and banking and infrastructure sub-sectors. Between 2006-07 and 2010-11, the district has an overall average annual GDP growth of 7 percent as compared to 9 percent at state level. Thus, during

the Eleventh Plan period, the economic growth performance of the district lagged behind the state level performance.

With the economic development, there is normally structural shift in favour of initially secondary and thereafter, tertiary sector. The data in Table 6.3 demonstrate the change took place in sectoral composition of the GDP.

Graph 6.1

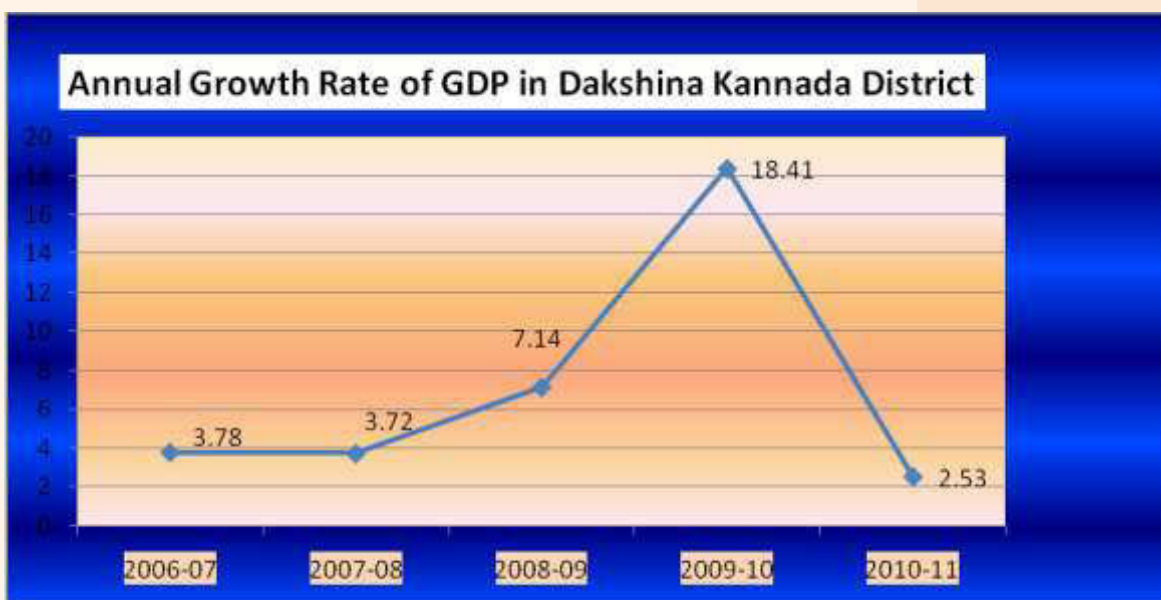


Table 6.3
Change in Sectoral Composition in District GDP (at constant prices)

	Sector	1999-00	2006-07	2010-11
Dakshina Kannada	Primary	22.47	13.51	10.94
	Secondary	24.19	42.35	22.46
	Tertiary	53.34	44.14	66.60
Karnataka	Primary	28.30	17.41	16.83
	Secondary	24.30	30.63	27.71
	Tertiary	47.40	51.96	55.46

Source: Directorate of Economics and Statistics, GOK.

The primary sector which contributed 22.5 percent to the district's GDP in 1999-00 now contributes only 10.9 percent. As against this, the share of industrial sector, which increased from 24 percent in 1999-00 to 42 percent in 2006-07, declined to 22 percent in 2010-11. The tertiary sector dominated the district's economy. Its share in 1999-00 was 53 percent. Though it declined to 44 percent in 2006-07, it steadily increased to 67 percent in 2010-11. The pattern of change in the structure of the district economy is almost similar to the pattern of change at the state level. However, it is important to note the significant decline in the contribution of primary sector and also decline in the contribution of secondary sector to the district GDP. This has serious economic implications particularly in terms of income distribution and employment.

Table 6.4 provides taluk-wise net income (NTDP) and per capita income at both current and constant prices for the year 2010-11.

The analysis of income data in the table shows wide inter-taluk disparity in the per capita income. Mangaluru taluk has per capita income at current prices RS.121317 and at constant prices, Rs. 87906. This is more than double of Bantwal taluk's per capita income and almost double of Puttur taluk's per capita income. The highest per capita income of Mangaluru taluk is apparently due to Mangaluru City. Surprisingly, Bantwal has the lowest per capita income of Rs.52711 at current prices and Rs. 36442 at constant prices. Puttur has the next lowest per capita income of Rs.61313 at current prices and Rs. 44659 at constant prices. It is worthy to note that Sullia, which is mainly agricultural based economy, has the highest per capita income next to Mangaluru. It is mainly due to plantation crops like areca nut and rubber. Similarly, Belthangady, which is also agricultural based, has significantly higher per capita income than Puttur and Bantwal.

Table 6.4
Taluk-wise Net Income (NTDP) and Per capita Income: 2010-11

Taluk	Taluk Net Income		Per capita Income	
	<i>Current Prices (Rs in Lakh)</i>	<i>Constant Prices (Rs. in lakh)</i>	<i>Current Prices (Rupee)</i>	<i>Constant Prices (Rupee)</i>
Bantwal	208409	144083	52711	36442
Belthangady	242146	156515	90831	58710
Mangaluru	1206618	874319	121317	87906
Puttur	176490	128537	61313	44654
Sullia	134356	96759	93203	66626
District	1968019	1400213	94179	67007

Source: Dakshina Kannada ZP. Note: Taluk net income computed as Net Taluk Domestic Product (NTDP).

The analysis of the data in Table 6.5 shows that there is a significant difference in the overall sectoral composition of GDP.

Table 6.5
Sectoral Composition of Taluk NTDP: 2009-10 (percent at constant prices)

Taluk	Agriculture	Primary	Secondary	Tertiary	Total GDP
Bantwal	10.74	13.77	23.55	62.67	100.00
Belthangady	13.97	17.87	9.22	72.92	100.00
Mangaluru	1.00	5.27	30.33	64.39	100.00
Puttur	10.10	15.50	17.16	67.33	100.00
Sullia	38.18	41.10	14.65	44.24	100.00
District	6.85	10.97	24.98	64.05	100.00

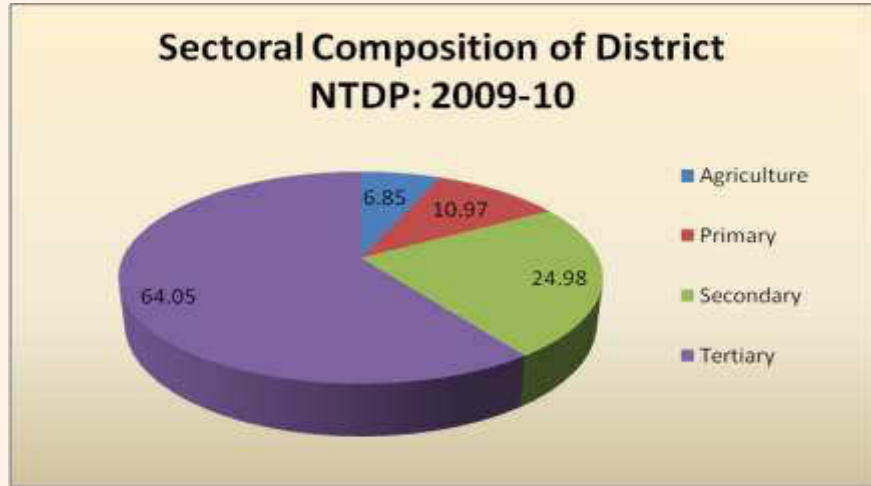
Source: Dakshina Kannada ZP.

Although the economy in all taluks is driven by service sector, there is a wide inter-taluk difference in sectoral composition of NTDP. In Sullia taluk, Agriculture contributes 38 percent and primary sector, 41 percent to taluk net income. Similarly, in Belthangady, the contribution of agriculture is 14 percent and primary sector, 18 percent. As against this, Mangaluru taluk, has the lowest contribution of agriculture (1percent) and primary sector (5 percent). The shares of agriculture and primary sector are almost similar in the case of Bantwal and Puttur. In the case of secondary sector, Mangaluru taluk dominates with 30 percent contribution, followed by Bantwal (24 percent). Belthangady is industrially lowest developed in terms of its contribution to NTDP (9 percent). Puttur and Sullia are slightly better than Belthangady in contribution of secondary sector. In tertiary sector, except Sullia, others have its contribution above 60 percent. Surprisingly, Belthangady has the highest (73 percent) contribution from service sector. This may be

due to religious tourism of Dharmasthala.

While discussing the district-income of Dakshina Kannada district, the role of remittance cannot be ignored. The district is one among the five districts having the highest out-migrant populations in Karnataka State. There has been continuous intra and inter-district, intra and inter-state and outside country migration of people in the district. The remittances from migrant people play a major role not only in maintaining a higher standard of living but also assisting households in investing in housing, health and education in the rural areas. Along with neighbouring Udupi district, the district's economy is considered as “money order economy”. The flow of remittance takes place in a number of ways viz. through money order, bank transfer, bank drafts, NRI deposits, cash payments and *benami* transactions. Besides cash, households receive several things in kind – clothing, ornaments, jewellery and other household things. No reliable data on remittance income inflow at the district level is available.

Graph 6.2



Box 6.1: Growth in Income in Dakshina Kannada District

Achievements	Areas of Concern
<p>District ranks 3rd in total GDP and 3rd in per capita income in the state.</p>	<p>Average annual growth of district's income lags behind state level average. Primary sector's GDP contribution declined to 10 percent but people living in rural areas are 52 per cent., it is still very high. Secondary sector growth also witnessed decline. Tertiary sector contribute 67 percent to GDP and people depending on them are only small proportion of the population. This has serious implications on rural-urban income disparity.</p>
<p>With traditional industries like tiles, beedi rolling, cashew nut processing and emergence of MRPL, MCF, CAMPCO and various industrial estates, the district was the hub of industrial development in the past. Setting up economic zone also expected to boost industrial development. The district has good also good potential for agro-processing with backward and forward linkages with farming community.</p>	<p>Traditional industries like tiles are facing crisis due to lack of demand. Beedi industry is almost closing stage. Cashew nut processing, rice mills and other agro processing depend mainly on outside importation of raw materials without benefitting local farmers. MSMEs in industrial estates are in problem due to recession. All these will affect adversely the scope for future growth. There is also growing resistance of people for setting up large scale industries.</p>
<p>Contribution of tertiary sector for district's growth was significant. The district is known for banking, good network of transport, education and health infrastructure and highly educated young generation. The district has very good potential in tourism, software, tertiary activities in rural areas and to become hub of medical tourism, religious tourism and higher education.</p>	<p>In spite of beautiful coastal belt, lush green Western Ghats, known historical forts and good scope for religious pilgrimage, tourist potential remained unexploited. In spite of international airport and port facility, expected boost for various tertiary activities have not taken place, Banking and education sector are becoming very competitive and scope for further expansion limited.</p>

6.3 Agriculture: Cropping Pattern, Irrigation, Livestock and Fisheries

The majority of the population lives in rural areas of Dakshina Kannada district. Out of total population of 20 lakh, 10.94 (52 percent) people either directly or indirectly dependent for their livelihoods on agriculture and allied activities – be it crop farming, horticulture, animal husbandry or fisheries. As shown in Table 2.6 in chapter two, out of 2.09 lakh farmers, 1.53 lakh farmers (73 percent) are marginal farmers with land-holding less than 1ha. Small farmers with 1 to 2 ha constitute 18 percent of farmers and together, they account for 91 percent of farming community. The average size of land-holding works out to 0.85 ha. Challenge before the district is how to increase income of the marginal and small farmers, who constitute the majority of farming community, to improve their standard of living.

i) Cropping Pattern

The scope for increasing agricultural income through expansion of crop production appears to be limited. Crop production in the district is mainly concentrated on paddy. Other food crops

grown are pulses. Pulses grown are black gram, horse gram, green gram and cowpeas. Sesamum is the only oilseed grown in the district. Besides seasonal food and oilseed crops, the cropping pattern in the district also includes sugarcane, plantation and fruits and vegetable crops. Plantation crops grown are coconuts, areca nuts cashew nuts and rubber. Major fruit crops grown are mango, banana, pineapple, sapota, lemon and guava.

As already explained in the chapter 2, the district witnessed deceleration in the cropped area during the last two decades. The area under food production is steadily declining. During the period between 2001-02 and 2011-12, the cropped area under paddy declined from 62979 ha to 55166. The area under pulses declined from 3769ha to 3277 ha during this period. The district has one of the lowest cropping intensity. It is 1.18. It declined from 1.21 in the crop year 2001-02. The declining trend in food grains production in the district is almost similar in all taluks. Farmers in the district are abandoning food crop production mainly because of labour scarcity, high cost of cultivation and non-viability of growing these crops. Sugarcane which was grown in more than 500 ha is now almost abandoned due to the closure of the sugar factory in Brahmavar. Thus, viewed from long term perspective, the present mono-crop dominated cropping pattern does not hold the promise of propelling higher growth in farmers' income.

The district is known for plantation crops such as coconut, areca nut, rubber, cocoa and cashew nut. The cultivated areas under these crops are: areca nut, 27734ha, coconut, 16077 ha, rubber, 10564 ha, cocoa, 952 ha and cashew,



Cashew Plantation

30967 ha. The district also grows variety of fruits and area under fruit crops is 6141 ha. Vegetables flowers and spices are grown in about 3217 ha. Sugarcane is grown only in 44 ha. The area under plantation crops witnessed significant increase during 1980s and 1990s. In recent years, except rubber, the areas under other plantation crops are almost remain stagnant and even some of them started declining due to wide fluctuation and uncertainty of product prices and increasing production costs. The area under fruit and vegetables also witnessed deceleration.

The district has good scope for horticulture crops. Only way to increase farmers' income in agriculture depends on the sustaining

the horticulture development in the district. All taluks have suitable agro-climatic conditions to grow horticulture crops like areca nut, coconut, cashew, cocoa, rubber and variety of fruits, spices and vegetables. There is also good scope for growing medicinal plants. There is a growing demand for ayurvedic medicine both in domestic and export markets. Since all taluks have well connected road network to international airport and sea port at Mangaluru, the promotion of fresh vegetables, fruits and medicinal plants provide good scope for export and thereby improving farmers' income. There is also a large scope for value addition in crops like fruits, cashew nuts, coconuts and spices. Though

Box No. 6.2: Varanashi Farm: Water Conservation – A Success Story

Varanashi Research Foundation (VRF) – a charitable trust promoted by Dr. Varanashi Krishna Moorthy for promoting agriculture and allied fields through research, education and extension with emphasis on promoting eco-friendly and sustainable organic technologies. The Foundation is governed by dedicated research experts from different agricultural disciplines drawn from Agricultural Universities, Government Research Institutes and private organizations. The Foundation has farm land owned by Varanashi family to undertake field experiments. The farm grows besides rice and pulses, cashew, areca nut, coconut, cocoa, vanilla, pepper and several forest plants. The farm is 100 percent organic. It has also microbiology and chemistry laboratory units. It has also sister concern: Varanashi Agro Sustainable Technology (VAST) centre to provide required services.

The achievement of the VRF includes:

- Improvement in cultivation methodology of oyster mushroom;
- Development of eco-friendly efficient technology to recycle organic wastes like coir pith, rice mill wastes, cocoa husks, coffee husks, etc. for composting.
- Eco-friendly artificial pollination in areca nut.
- Developing bio-control measures and using manures to combat pepper wilt.
- Developing measures to control *Kole roga* (fruit rot) in areca and coconut.
- Development of eco-friendly VRF method of composting.

With the support of GOK, the VRF has worked on a model organic village project during 2005-08 which benefitted 360 farm families. In 2006, VRF formed Varanashi Organic Farmers Society. With the financial assistance from the National Centre for Organic Farming, Government of India, it helped 1500 farmers from Dakshina Kannada district. In 2006, it won state level “APJ Abdul Kalam” environmental award. The State Government has also honoured shri Moorthy with “Krishi Pandith” award and also best organic farmer awards.

the district has number of cashew nut processing industries, they, at present, depend, for more than 50 percent of their raw cashew on exports from African countries. They do not provide forward and backward linkages to farmers in the district to increase their production and thereby increase their income.

ii) Irrigation

The lowest cropping intensity in the district is mainly due to lack of irrigation facilities. Out of 157683 gross cropped areas, only 26237 ha are under double cropped area through irrigation. In the case of food grains crops, the proportion of irrigated area works out to only 20 percent of total cultivated area. The total area irrigated in the district is 72378 ha, most of which is used for horticulture crops like coconut and areca nut. Out of 72378 ha irrigated area, 41104 ha (57 percent) is irrigated by open wells and 9916 ha (14 percent) by tube-wells. The lift irrigation accounts for 2147 ha (3

percent). The remaining is mainly through tanks and check dams. Taluk-wise, Belthangady has the highest (20626 ha) irrigated area, followed by Bantwal (16308 ha). Sulla has the lowest irrigated area (11340 ha). Mangaluru taluk has 12124 ha and Puttur, 11980 ha cultivated area under irrigation. In spite of many rivers flowing and good scope for irrigation, there is no any medium or major lift irrigation schemes in the district.

iii) Livestock

Another important agriculture allied activity for increasing farmer's income in the district is animal husbandry. The district was, once, considered unsuitable for livestock development based on the agro-climatic conditions,. The situation has now changed. During the last two decades, the district witnessed white revolution. Recognizing the economic benefits of dairy, the small and marginal farmers and other weaker sections of



Vented Dam - Source of Perennial Water Supply to the Agriculture Feilds

the rural community have taken up dairy as a viable option for their livelihood. Formation of self-help groups particularly women and availability of bank finance gave a fillip to the dairy development in the district. Household managed mini-dairies not only provided gainful family employment but also supplemented assured daily family income to improve their livelihood.

According to livestock census 2012, the district has 229838 indigenous cows, 166771 cross-bred cows and 15119 buffaloes. Compared to 2002 livestock census data, there was a significant decline in number of indigenous dairy cows and buffaloes and increase in the number of cross-bred cows. As

per 1997 census, the district had 355130 indigenous cows and 57209 buffaloes. The livestock census 2002 records 230445 indigenous cows, 109047 cross breed and 26062 buffaloes. Taluk-wise, Mangaluru has the highest number of cross-bred cows (47713), followed by Puttur (40545). Sullia has the lowest number of cross breed cows (18113). Milk is procured from farmers by The Karnataka Milk Federation which has a dairy processing plant at Mangaluru. It has net work of more than 300 Milk Produces Societies and cooling centres in the district and procures and processes more than two lakh litres per day. There are also private milk processing units in the district for procurement and processing of milk.

Box No. 6.3 Dairy as an Enterprise or Self-employment

Muslims in the district usually engage more in petty trading activities in rural areas. Ahmed Mustapha, son of Abdul Khader of Golthamajalu village, after his graduation was persuaded by his father to enter his trading business. Mustapha wanted to stand on his own leg and do something on his own. He was very much interested in agriculture. He decided to start his own dairy. Though he did not have experience, he started the dairy by purchasing four cows. Initially he has to face many teething problems and income generated from the dairy was too inadequate for a full time job. He contacted the Government veterinary doctor at Kalladka and obtained information about dairy and facilities available from the government and banks for setting up commercial dairy. With his advice, he approached Corporation Bank, Panemangaluru. The Bank, on his request, has approved a loan of Rs.5 lakh. Under the guidance of the Government veterinary doctor, he constructed modern cowshed and other facilities required as well as purchased eight high yielding cows. Understanding the importance of green fodder, under the guidance of Veterinary Department, he started to grow green maize, green grasses like N.B. 21, B.H.18 etc in one ha. In 2010, through Corporation Bank, he got additional loan of Rs.1.25 lakh to expand his dairy. With the income generated from his dairy, he could diversify to set up organic coconut, areca nut and other crop enterprises.

At present he has 20 milk yielding cows and supplies 180 litres of milk daily to local milk society. He has mechanized milking and harvesting of grasses and cutting. His farm has become now a model for other youths to emulate. He proudly says that his success was mainly due to timely assistance and guidance he gets from the government's veterinary department.

Source: Animal Husbandry and Veterinary Department, Mangaluru.



Dairy Farming – Source of livelihood for the deprived

Other animal husbandry activities include goat rearing and poultry. The meat production in the district is, now, very negligible, one of the lowest in the state. As per livestock census data, the district has 25749 goats, 307 sheep and 5332 pigs. There is a growing demand for meat production in the district. The district mainly depends on other districts for supply of meat animals. With the increase in meat price, a few commercial goat rearing farms have recently come into operation. In the case of poultry, the district has 13.23 lakh

poultry birds. Traditionally, the backyard poultry keeping was very common in the district and not now. Except a few commercial poultries, there is no expansion in the poultry sector. The district depends on outside supply for poultry birds and eggs. The major problems faced by the sector include shortage of fodder, increasing cost of livestock feed, difficulties of getting bank credit for other than dairy, inhibition among some communities particularly goat rearing and absence of modern abattoirs and processing facility.

Box 6.4: Milk Societies led White Revolution and 'Nandini' a Brand.

Agro-climatically, Dakshina Kannada district was, in the past, not a favoured destination for promoting dairy. The monsoon heavy rainfall, extreme weather and hilly geographic terrain, all these were considered unsuitable for high milk yielding exotic pure bred cows. The indigenous-bred cows were low yielding with long dry period and commercially uneconomical. With urbanization and growing demand for milk, many efforts were made in the past following the pattern of 'AMUL' for the development of dairy but they failed miserably. The formation of Dakshina Kannada Milk Producer's Union in 1980, in fact, paved the way for ushering white revolution in the district. A 100000 litre capacity milk processing plant was set up in Mangaluru city to start with. In 1990s, milk producers cooperative societies were formed and milk collection centres were set up in almost all villages. The artificial insemination was used on local breeds to bring out high yielding indigenous cross-bred cows. Small and marginal farmers and other weaker sections of the community were encouraged to set up mini dairies with cross-bred cows with the help of government subsidy and bank finance. Self-help Groups of women were promoted to undertake mini dairies. All these efforts led to white revolution in the district. The milk collection which was 2500 litres per day in early 1990s increased to more than 2lakh litres per day. The District Milk Union today processes 2.70 lakh litres of milk per day and produces other milk products like ghee, butter, curds, butter milk, pada and other sweets. All these products are sold under brand name of 'Nandini', which is now popular brand for milk in the district. The district has at present network of artificial insemination centres throughout the district. Almost all villages are covered by more than 300 Milk Producer's Cooperative Societies. The beneficiaries of milk revolution mainly belong to weaker section of the society including SCs and STs. Today mini-dairies provide gainful family employment, daily assured income, nutritional security to the family and revolutionized livelihood pattern of weaker section of the community in rural areas. This achievement was made in a short period of last two decades. The role played by the Department of Animal Husbandry, District Milk Union (KMF) Stree-shakti self-help groups and the nationalized Banks was critical in this achievement.

Source: KMF, Mangaluru.

iv) Fisheries

The coastal belt of 42 km comprises of 21 fishing villages in the district. Out of 53584 people living in the fishing villages, 30651 engage directly in fishing activity for their livelihood. The annual fish catch has increased from 47912 tonnes in 2001-02 to 138506 tonnes in 2011-12. As stated in chapter 2, the district has network of 60 purse-seiner boats, 890 mechanized traveller boats, 1206 gillnets, 60 ice plants and 11 cold storages. There are 22 fishermen cooperative societies and 4 fisherwomen cooperative societies with membership of 30651. There is, thus, good

scope for increasing fish catch and processing for value addition. There is also good scope for inland fish production as the district has 207 tanks for fisheries and many river tributaries. The annual inland fish production is around 1150 tons. With a view to promote inland fishing to increase farmers' income, the district's Fisheries Department has set a fish breeding centre at Pilikula. Considering the critical importance of fisheries for nutritional security, employability and livelihood of a vast majority of coastal community and earning foreign exchange, the government has initiated a number of fishermen welfare schemes, details of which are given in Box 6.5.



Auction of Fish harvested

6.5: Government's Fishermen Welfare Schemes

1. **Mathsyavahini:** Assistance to fish marketing - Financial assistance from banks is provided for purchase of bicycle and insulated boxes with government subsidy of 50 percent subject to maximum limit of Rs.2000 per head and for two-wheeler with insulated box with subsidy of 25 percent subject to limit of RS.10000 per head. To SHGs and cooperative societies, for purchase of 3-wheeler tempo, 25 percent subsidy with maximum limit of Rs.30000 and for 4-wheeler vehicle, 25 percent subsidy with maximum limit of Rs.34000.

2. **Motorization of Traditional Fishing Crafts:** Under centrally sponsored scheme, 50 percent of cost is provided as subsidy subject to the maximum limit of Rs.30000 and the balance provided by bank finance.

3. **Modernization of Fish catch:** Assistance to purchase fishing requisites to motorized/traditional boats: 100 percent subsidy with limit of Rs.5000 per boat for purchase of nylon nets, ropes, sinkers floats etc.

4. **Matsya Mahila Swavalambana yojane:** A revolving fund of Rs.10000 is provided to SHGs of fisherwomen involved in fishing activities like marketing.

5. **Matsya Ashraya Scheme:** To provide houses to houseless fisher family at a cost of Rs.60000.

6. **Group Accident Insurance Scheme:** Under this centrally sponsored scheme, premium of Rs.14 per head is paid to the National Federation of Fisheries Cooperative Ltd. New Delhi towards insurance coverage of Rs.100000 in case of death and Rs.25000 in case of partial disability as a result of hazards of natural calamities during fishing.

7. **Distress Relief Fund:** To provide Rs.50000 per head as relief to fishermen and their dependents in case of death/permanent disability while fishing.

Source: Department of Fisheries, ZP

The main constraints for development of fisheries sub-sector in the district are: lack of infrastructure facilities such as hygienic landing facilities, hygienic auction ward, water supply, drainage, electricity, ice plant and cold storage, unorganized market dominated by exploitative middlemen, over-exploitation of inshore fishing, absence of value addition through fish processing, encroachment from deep fishing enterprises in the offshore fishing and lack of freezing container facilities for shipment. The Coastal Regulation Zone (CRZ) Act provisions also adversely affect the livelihood security of

the traditional fisher community living in 'no development zone'. The CRZ Act prohibits development activities such as setting up and expansion of any industry, operation or processes and manufacture or handling or storage and construction of new houses in 200 metres from high tide line on the landward side in the case of seafront and 100 metres along tidal influenced water bodies or width of creek. Consequently, the fisher community living in these areas is deprived of any development activities to improve their livelihood.



Mechanized Fishing

6.4 BPL Households, MGNREGA

Poverty usually refers to deprivation of income that is essential for obtaining a minimum basket of goods and services that are required for human existence. In broader sense, poverty is multidimensional⁴. Besides income deprivation, it should include social deprivation like shortfalls in health and education, inadequacy of shelter, vulnerability and exposure to risks and social marginalization and exclusion due to rigidities in social stratification. In human development perspective, it refers to deprivation of capabilities that provide a person access to education, health, income, freedoms, choices and opportunities to lead the life one values most. Thus, poverty refers to not only low income and consumption but also low achievement in education, health, nutrition, and other areas of human development. Considering the multidimensional nature of poverty, UNDP has introduced the Multidimensional Poverty Index (MPI) in its 2010 HDR. Eradication of poverty is also the first and foremost important goal specified in the UN Millennium Development Goals for developing countries.

The goal is to reduce poverty by half between the base year 1990 and reference year 2015.

Poverty in Karnataka is one of the highest among the states. Incidence of poverty line estimated by the Planning Commission based on NSS 66th round consumer expenditure data (2009-10) shows that Karnataka has poverty ratio of 18.5 percent with 10.87 million poor. In rural areas, the poverty ratio was 15.8 percent with 5.87 million poor and in urban areas, 23.5 percent with 5.09 million poor. The district level poverty estimates as given in the Economic Survey of Karnataka 2011-12, shows that Dakshina Kannada district has the poverty ratio of 2.5 percent in rural areas and 14.1 percent in urban areas. In other words, according to this estimates, the poverty in the district is more an urban phenomenon rather than the rural.

Under public distribution system (PDS), in order to ensure food security to the people below poverty line (BPL), the Government of Karnataka directed districts to identify BPL families based on 14 eligibility criteria. The eligibility criteria to qualify as BPL families included *inter alia* exclusion of income tax



Stage 1



Stage 2



Stage 3

Pond Reconstruction Work under MGNREGS

⁴ There are lot of controversies on definition of poverty and poverty line. No reliable data are available on poverty line at the district and Taluk level. Without going into intricacies and measurement problems, an attempt is made to assess poverty incidence in the district, based on data available on broad poverty indicators.

payers, government/public sector/private sector employees, professionals, land holders above 3 ha dry land or having irrigated land, two/three/four-wheeler vehicle owners, house-rented income earners and those who have monthly electricity bill above RS.450. Based on the district's survey, the BPL families identified and cards issued are taluk-wise given in Table 6.6.

The total number of BPL Card holders in the district is 175314. The percentage of BPL families eligible for BPL card in the total number

of families in the district works out to 50.13 percent. Mangaluru taluk has the highest number of BPL cardholders (68024), but as proportion of total families, it has the lowest percentage (40.8). Bantwal has the second highest number (39492) and percentage of households (64) with BPL cards. Sullia has the lowest number of BPL card holders (14978).

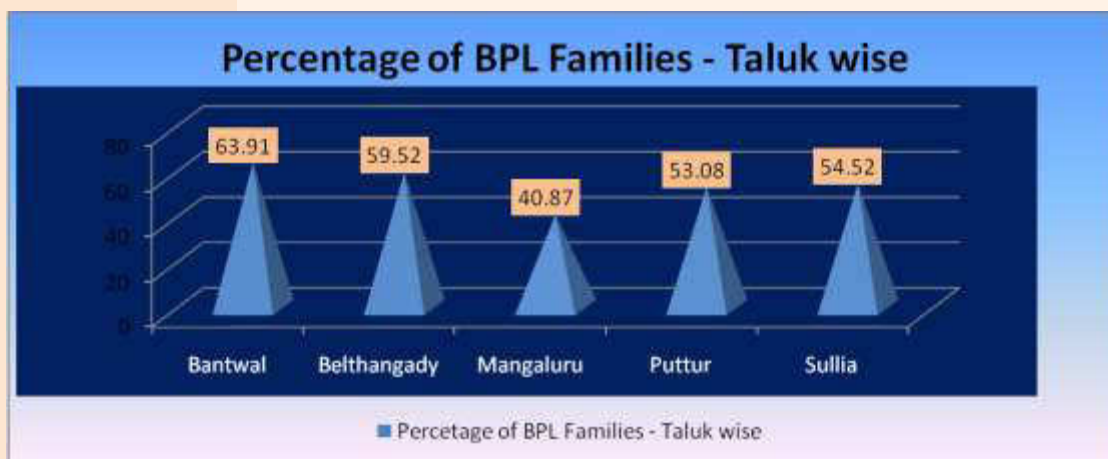
The proportion of BPL cardholders to total families in Sullia works out to 54.5 percent. In Belthangady, it is 59.5 percent and in Puttur, 53 percent.

Table: 6.6
Taluk-wise BPL Families in the District

Taluk	BPL Families (Number)	Total Families (Number)	Percentage
Bantwal	39492	61789	63.91
Belthangady	27002	45367	59.52
Mangaluru	68024	166424	40.87
Puttur	25818	48642	53.08
Sullia	14978	27473	54.52
District	175314	349695	50.13

Source: Food and Civil Supplies Department, ZP, Dakshina Kannada. Total families from Census of India - 2011

Graph 6.3





Well Constructed Under MGNREGS

Table 6.7 analyses different categories of BPL cardholders in different taluks. Anthyodaya Anna Yojana (AAY) covers poorest of poor and considered those who are not able to afford two square meals per day.

Table 6.7
BPL Card Holders in Dakshina Kannada District: 2011-12(number)

Taluk	Anthyodaya	others	Total	Anthyodaya as % of Total BPL Cards	BPL card holders as % of Total Ration Cards
Bantwal	3184	36308	39492	8.06	55.35
Belthangady	3068	23934	27002	11.36	52.24
Mangaluru	5018	63006	68024	7.38	42.26
Puttur	2753	23065	25818	10.66	46.42
Sullia	1858	13120	14978	12.40	49.25
District	15881	159433	175314	9.06	47.38

Source: Food and Civil Supplies Department, Dakshina Kannada.

They are the poorest segment of the BPL population and mainly included landless agricultural labourers, households headed by widows, terminally ill persons, family affected by HIV and elderly persons with no specific income. In Dakshina Kannada district, they are found to be 15881 households, which constitute 9 percent of the total BPL cardholders and 4.5 percent of total households. Taluk-wise the percentage of AAY card holders in BPL cardholders varies from 7.4 percent in Mangaluru to 12.4 percent in Sullia. The BPL card holders, on the other hand, constitute 47 percent of the total ration card holders in the district. Taluk-wise, it varies from 42 percent in Mangaluru to 55 percent in Bantwal.

With a view to alleviate poverty, the National Rural Employment Guarantee Act was enacted in Parliament in August, 2005 to provide 100 days guaranteed wage employment per year

to every rural poor household⁵. The Act is now known as Mahatma Gandhi Rural Employment Guarantee Act (MGREGA). The objective of the Act is to enhance livelihood security in rural areas by providing employment entitlement of at least 100 days every year to one adult member of a poor household at a minimum wage. As per the Act, the programme is to be implemented on demand-driven basis and if the work is not provided, within 15 days of the demand for work by the applicant, then unemployment allowance at the rate of 25 percent of the minimum wage for the first 30 days and 50 percent for the remaining period has to be paid. The MGNREGA program is implemented as a centrally sponsored scheme on cost sharing basis between the centre and the state. With the guaranteed work and assured income, starvation deaths, malnutrition and related sufferings can be avoided among poorest of the poor.



Road Construction Work under MGNREGS

⁵ The rural poor include those unemployed who are willing to work at a low level of productivity and wages. They have no or low assets, no skill, poor risk bearing capacity, and poor credit worthiness, and labor as only asset.

The MGNREGA programme came into effect in 2008 in Dakshina Kannada district. In the first two years of implementation, the progress achieved under the program was negligible as the GPs who were to implement the program were not prepared for implementing such a scheme. Even thereafter, however, the programme has not taken off as expected. Table 6.7 highlights the performance of the programme during 2011-12.

During the year 2010-11, the district has issued 94884 job cards under the programme. Out of those issued job cards, only 19124 ((20 percent) demanded employment under MGNREGA. Though, almost all who demanded worked under the programme, hardly 904 availed mandated 100 days employment. Taluk-wise comparison of implementation of MGNREGA program shows that Bantwal has performed better than other taluks. Out of 25321 job cards issued, 5521 demanded employment

and 5517 actually worked under the programme. The number of families benefitted from the mandated 100 days employment was 449. In Mangaluru taluk, out of 15103 job card holders, 3629 have worked and only 261 benefited from 100 days employment. In Belthangady, Puttur and Sullia, the performance under the programme is relatively worse

The main reason for poor performance in implementation of MGNREGA programme in the district is mainly due to the prevailing labour market condition. With the acute shortage of labour in rural areas and resultant high wage rate in the district, there is no demand for work at minimum wage rate. As against the prevailing daily market wage rate ranging between Rs.250 to Rs.400, the minimum wage rate under the MGNREGA was Rs.204 per day⁶. The program does not take into consideration diversity of labour market conditions prevailing in different districts. The statutory minimum wage rate does not recognize the inter-district variations in

Table 6.8
Dakshina Kannada District: Implementation of MGNREGA Programme - 2011-12

Taluk	Job Cards Issued (Number)	Households demanded employment (Number)	Persons/ Households worked (Number)	Families availed 100 days employment (Number)
Bantwal	25321	5521	5517	449
Belthangady	25660	4036	4033	92
Mangaluru	15103	3644	3629	261
Puttur	16163	2917	2916	25
Sullia	12637	3006	2999	77
District	94884	19124	19094	904

Source: ZP, Dakshina Kannada.

⁶ Now the wage rate under MGNREGA is revised to Rs. 204

wage rates. Other reasons are: delays in allocation of work to those who registered, delay in wage payments and bureaucratic hassle. In general, the MGNREGA program has not made any significant impact on poverty reduction, empowerment of women and improvement in livelihoods of rural people. Instead, it has indirectly benefitted the rural poor by causing significant increase in rural wage rate in real terms.

6.5. Landless Households

The land is the main income generating asset in rural areas. Poverty is also closely related to ownership of assets. For the landless people, the labour is only their asset and wage employment is the only source of survival. In rural areas, the landless households usually belong to landless agricultural labourers and

include SCs and STs. No reliable data is, however, available on landless households. The agricultural labourers in the district, as per 2011 census, are 24854. All agricultural labourers cannot be treated as landless. The land holding distribution pattern in different taluks in the district is analysed in detail in chapter 2. The marginal farmers cultivating below 1ha constitute 73 percent of farming community. The average size of land holding of marginal farmers is 0.38 ha. With the present mono-cropping pattern and cropping intensity, these farmers would not be in a position to earn a net income of even US\$1.25 per day, which is the World Bank's indicator of poverty line for classifying the poorest of the poor in the world. Since the marginal farmers in the district have to depend on labour for their livelihood, they can be considered as constituent belonging to landless households.



Cow Shed Construction Under MGNREGS



Landless Agriculture Labourers

An attempt is also made to estimate landless households in the rural areas as the difference between total rural households and number of agricultural land holders. Table 6.9 sets out taluk-wise data on the landless households.

At the outset, it should be noted that there is a possibility of one family owning more than one agricultural land holding and to that extent, the estimates of landless households are underestimated. The total number of landless households in the district as per this estimate is 16146, which works out to 7 per cent of the total rural households. Taluk-wise Belthangady and Mangaluru taluks have the highest number of landless households. Puttur has the lowest number of landless households. Sullia has 2195 households without land. It is also important to

note that among 20416 SC households in rural areas, SC cultivators are 10959. Nearly 9457 SC households are landless. Their percentage works out to 46.3 percent. In the case of STs, out of 13111 households, 9618 households are cultivators and 3493 are landless. The percentage of ST landless households works out to 26.6 percent. The landless households in STs mainly belong to Koraga community who are the poorest of the poor in Dakshina Kannada district.

6.6. Employment and Unemployment

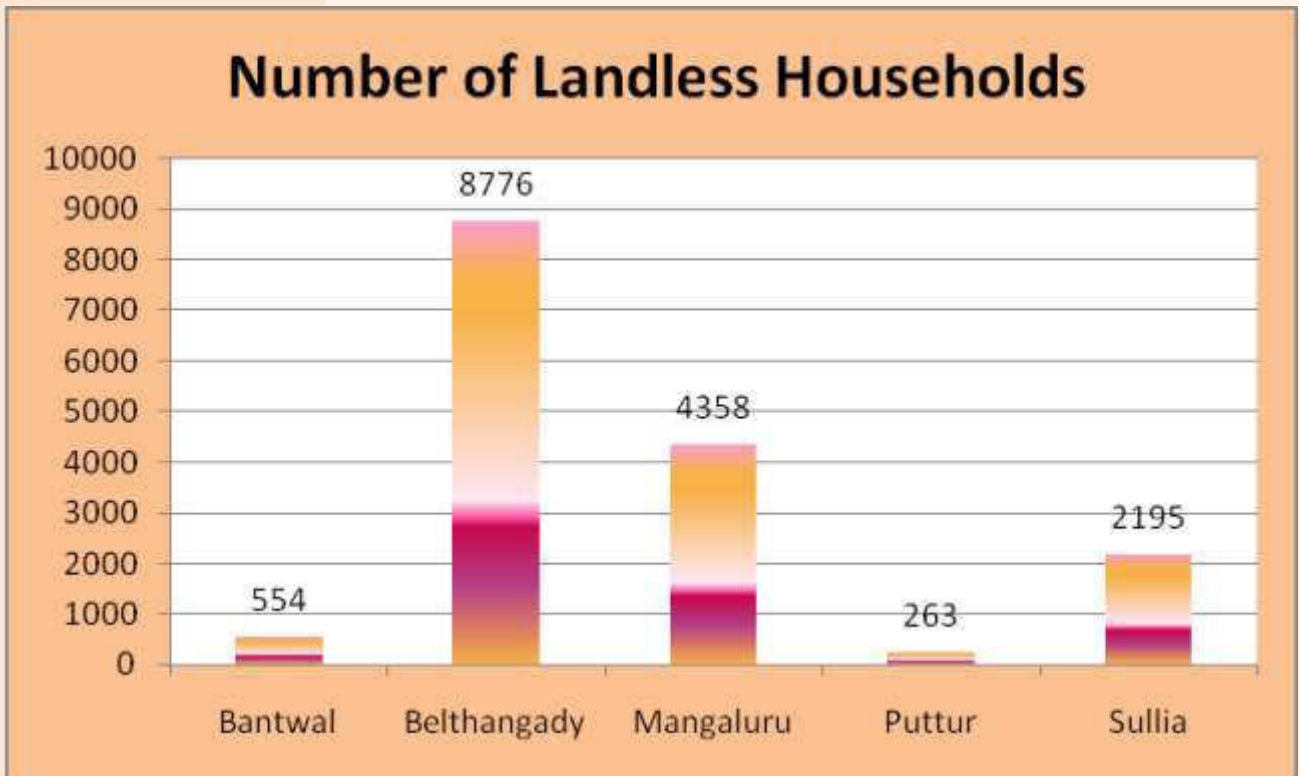
Employment is the cornerstone of economic and social empowerment. Growth has meaning only if it is translated into gainful job opportunities for the people to improve their livelihood. Since employment is the means to

Table 6.9
Landless Households in Dakshina Kannada District

Taluk	Total Rural Households (Number)	No of Agricultural land holders (Number)	Landless Households
Bantwal	54562	54008	554
Belthangady	52151	43375	8776
Mangaluru	44003	39645	4358
Puttur	46647	46384	263
Sullia	27880	25685	2195
District	225243	209097	16146

Note: Landless households include urban households.

Graph 6.4



secure livelihood entitlement, it is a crucial link between the growth and human development. Besides its critical importance for individual well-being, it is the integral part of the many broader social objectives, such as poverty reduction, productivity growth, social cohesion and inclusive development. For growth to be broad-based and inclusive, it must create adequate livelihood opportunities through employment commensurate with the expectations of a growing work force. Employment is thus transformational – economy grows as people get productive and quality employment opportunities and work their way out of poverty and hardship through better livelihoods not only for themselves but also for future generation. As labour is the main asset for a majority of the people, unless growth is employment oriented, it will not contribute to well being of people.

Dakshina Kannada district witnessed increase in population from 18.98 lakh in 2001 to 20.90 lakh in 2011 (Table 2.4 in Chapter 2). During the decade (2001-11), the district's

population increased by 191919. The decadal growth rate in population works out to 10 percent. The relatively lower population growth was mainly due to the high out- migration of young people. There was a decline in population living in rural areas from 1168428 to 1093563; accounting for decline of 6.4 percent in the decade. As against this, the urban population in the district has increased from 729302 to 996086; accounting for an increase of 36.6. The proportion of the urban population in the total population increased from 38.4 percent to 47.7 percent. It is gratifying to note that contrary to past trend of migration to outside district, the migration during the decade is taking place from rural areas to urban areas within the district.

Taluk-wise comparison, however, shows that the rapid trend towards urbanization has taken place more in Bantwal and Belthangady taluks. In these taluks, urban population more than doubled. Mangaluru taluk, on the other hand, witnessed only 30.5 percent increase in urban population. Increase in urban population in Puttur and Sullia is only marginal; 27 percent

Table 6.10
Growth of Work Force in Dakshina Kannada District

Details		2001		2011		Decadal Growth Rate
		Number	Percent	Number	Percent	Percent
Dakshina Kannada District	Male	546404	57.74	620903	62.23	13.63
	Female	399986	42.26	376818	37.77	-5.80
	Total	946390	100.00	997721	100.00	5.42
Karnataka State	Male	15235355	64.74	18270116	65.55	19.92
	Female	8299436	35.26	9602481	34.45	15.70
	Total	23534791	100.00	27872597	100.00	18.43

Source: Census- 2001 and 2011

and 11 percent respectively. Surprisingly in the district, there was no significant change in the gender composition and their growth. While in rural areas, there was a decline in growth of both male and female population, in urban areas, there was an increase in both men and women population. Taluk-wise, this trend is observed only in the case of Bantwal and Mangaluru taluks. In other taluks, there is an increase in male and female population both in urban and rural areas.

The dynamics of demographic profile of the district as shown above more or less determine the composition, work participation and the pattern of employment in the district. Table 6.10 sets out the growth in the workforce in the district during the decade 2001-11.

The concept “work force” is different from the concept “labour force”. The labour force includes all people in the age group of 16 to 60 years, who are working and those seeking or available for work. The workforce, on the other hand, includes only people who actually participate in work. It refers to employment ; those who are fully or partially employed and

does not include unemployed. As shown in the table, the total workforce in the district has increased from 9.46 lakh in 2001 to 9.98 lakh in 2011. The decadal increase in employment works out to 5.4 percent. It is significantly lower than the state decadal growth rate of 18 percent. This is a matter of serious concern.

The composition of the workforce in the table shows that while the proportion of male workers in total work force increased from 58 percent in 2001 to 62 percent in 2011, there is a decline in the share of female workers from 42.3 percent to 37.8 percent during this period. In the state as whole, no such change in the gender composition of employment has taken place. It is also important to note that while the decadal growth of male employment increased is 13.6 percent, the female employment declined by 5.8 percent during this period. Contrary to this at the state level, the employment of both male and female workers increased at 19.9 percent and 15.7 percent respectively.

The analysis of the data on growth rate of workforce in different taluks in the district in Table 6.11 clearly demonstrates wide inter-taluk

Table 6.11
Taluk-wise Growth of Work Force in Dakshina Kannada District

Taluk	2001 (number)			2011 (number)			Decadal Growth (percent)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Bantwal	106244	93180	199424	119378	85925	205303	12.36	-7.79	2.95
Belthangady	70721	57218	127939	81262	56804	138066	14.90	-0.72	7.91
Mangaluru	242507	152804	395311	286488	151797	438285	18.14	-0.66	10.87
Puttur	83140	67298	150438	88803	58226	147029	6.81	-13.48	-2.27
Sullia	43792	29486	73278	44972	24066	69038	2.69	-18.38	-5.79
District	546404	399986	946390	620903	376818	997721	13.63	-5.79	5.42

Source: Census 2001 and 2011

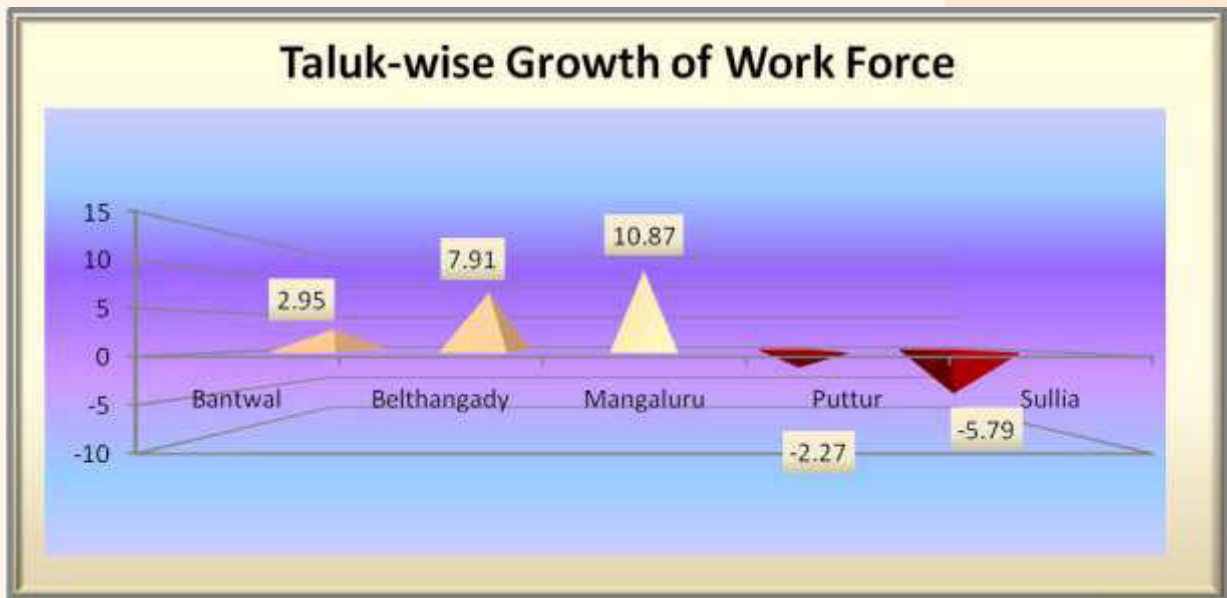
gender disparities in the employment of men and women during 2001-11. In all taluks, women employment declined, while employment of men increased significantly during the last decade. Sullia and Puttur witnessed highest decline in women employment, whereas in Mangaluru and Belthangady, the decline in women employment was only marginal.

In the case of male employment, Bantwal, Belthangady and Mangaluru have achieved higher growth, whereas Puttur and Sullia witnessed lower growth. In the case of female employment, Belthangady and Mangaluru have witnessed lower decline, while Puttur, Sullia and Bantwal have higher decline. For the district as a whole, there was an employment growth of 14 percent in the case of men, while women employment witnessed a decadal decline of 6 percent.

During 2001-11, the district recorded a decline in the rural workforce from 632222 to 568551, accounting for a percentage decline of

10 percent. As against this, the urban workforce increased from 314168 to 429170, representing an increase of 37 percent during this period. The gender-wise employment data shows that the rural areas witnessed decline in both male and female workforce. The women workforce declined from 289109 in 2001 to 232812 in 2011 and the male work force declined from 343113 to 335739 during the same period. However, it should be noted that the decline in women employment is significantly higher (19.5 percent) than men employment (2 percent). Contrary to this, in urban areas, there was a significant increase in employment of both male and female workforce. While men employment increased from 203292 to 285164, accounting for an increase of 40 percent, the women employment increased from 110877 to 144006, reflecting an increase of 30 percent. The decline in the rural workforce and increase in urban workforce, in the dynamics of economic development, is a welcome trend.

Graph 6.5



Unemployment occurs when people who are eligible, available and seek work but have not been able to find suitable gainful employment. Usually, it is estimated as the difference between labour force in the productive age group of above 16 years and below 60 years excluding those studying and workforce actually employed. The unemployment rate is the percentage of persons not having work or unemployed in the total labour force. National Sample Survey, the only source of unemployment data, does not provide district-wise data. In the absence of these data, it is very difficult to determine the extent of unemployment prevailing in rural and urban areas in the district. The Census 2011 provides data on non-workers. It includes children, students and retired aged people, who cannot be considered as unemployed. In absence of data on age-wise distribution of the population, at present, it is also not possible to determine the non-workers in the age group of 16 to 60 years.

Notwithstanding above the census data on non-workers shows to some extent the

magnitude of dependent and unemployed people. Hence it can be considered as proxy to unemployed. Table 6.12 sets out taluk-wise data on non-workers in the district.

From the table, it may be seen that in the district as a whole, the total number of non-workers increased from 9.51 lakh in 2001 to 10.92 lakh in 2011. The decadal growth among non-workers in the district works out to 14.7 per cent. It is significantly higher than the decadal growth in population (10 per cent). It is also slightly higher than the state average of 13 per cent. Out of 10.92 lakh non-workers in 2011, 5.25 lakh (48 per cent) are in rural areas and 52 per cent in urban areas. The women constitute 61 per cent of the total rural workers. In urban areas, women form 63 per cent of urban non-workers. The taluk-wise analysis of the data shows inter-taluk differences in the growth of non-workers. Puttur witnessed highest decadal growth of 22 per cent; followed by Bantwal, 17 per cent. Belthangady has the lowest decadal growth of 8 per cent. Mangaluru and Sullia have growth percentage 14 and 13 respectively.

Table 6.12
Taluk-wise Growth of Non-workers in Dakshina Kannada District

Taluk	2001 (number)	2011 (number)	Decadal Growth (percent)
Bantwal	162130	190077	17.24
Belthangady	118555	128523	8.41
Mangaluru	487545	556317	14.10
Puttur	115634	140822	21.78
Sullia	67476	76189	12.91
District	951340	1091928	14.78

Source: Census 2001 and 2011

6.7 Main and Marginal Workers

In the Census Data, the workers are classified as the main workers, who are engaged on full time basis and marginal workers, who are part-time workers. Table 6.13 shows the comparative data on the composition of workforce in the district and the state.

The analysis of the data in the table reveals the change in composition of the workforce. In 2001, the district had 89 percent Main workers and 11 percent marginal workers. The share of the main workers in 2011 increased to 92 percent. The share of marginal workers in total workers reduced to 8 percent. During the decade 2001-11, the numbers of main workers increased by 9 percent, while the number of marginal workers declined by 21 percent. The growth of total workforce in the district took place mostly in the increase in the main workers. The comparative data at the state level shows that there was only marginal increase from 82 percent to 84 percent among the main workers and the marginal workers declined from 18

percent to 16 percent. However, it is important to note that the decadal growth of main workers in the district (9 percent) is significantly lower than the state average (20 percent).

The gender composition of the workforce shows that while the share of male workers among main workers increased from 60 percent in 2001 to 64 percent in 2011, the share of women workers in the main workers declined from 40 percent to 36 percent during the decade. In the case of marginal workers, on the other hand, the share of the male workers increased from 39 percent in 2001 to 46 percent in 2011, the proportion of female workers declined from 61 percent to 54 percent during this period. The decline in the share of women in both main and marginal workforces was mainly due to decline in the number of women in the total work force. There was a decline of female workers in the main workers category by 1 percent and in marginal category, by 30 percent. As against this, the number of male workers in the main category increased by 15 percent and in marginal category

Table 6.13
Composition of workers and their Growth

Gender	2001 (number)			2011 (number)			Growth rate (Percent)		
	Main	Margl.	Total	Main	Margl.	Total	Main	Margl.	Total
District									
Male	505962	40442	546404	582498	38405	620903	15.1	-40.4	13.6
Female	335547	64439	399986	331978	44840	376818	-1.1	-30.4	-5.8
Total	841509	104881	946390	914476	83245	997721	8.8	-20.6	5.4
State (000)									
Male	13897	1338	15236	16350	1920	18270	17.6	43.5	19.9
Female	5468	2832	8299	7047	2555	9602	28.8	-10.8	15.7
Total	19365	4170	23535	23397	4475	27872	20.8	7.3	18.4

Source: Census: 2001 and 2011- Margl. = marginal

declined by 40 percent. The gender composition of main and marginal workers in the district is more or less on similar pattern as observed in the state level.

The rural and urban composition of main and marginal workers is presented in Table 6.14.

The analysis of the data in the table shows that during the last decade, the number of main workers in rural areas declined while in urban areas it has increased significantly. Similar trend is observed in the category of marginal workers. The decline in women workers in both the category is significantly higher than male workers in rural areas. In urban areas, on the other hand, though significant increase of both male and female workers in the main and marginal categories took place, the increases in the case of male workers are more than female workers. The move towards urban employment is inevitable process with increasing urbanization.

The data in Table 6.15 analyses taluk-wise gender composition of both main and marginal workers in the district during 2011.

During 2001-11, all the taluks witnessed increase in the number of workers in the main category. In the case of marginal workers, except Mangaluru, all other taluks witnessed significant decline. Inter-taluk differences are very wide in both the cases. In the category of main workers, Belthangady recorded 13 percent increase, followed by Mangaluru, 10.6 per cent and Sullia, 9.8 percent. Bantwal and Puttur have the lowest increase of 5 percent each. As against this, among marginal workers, Mangaluru recorded 14.6 percent decadal increase, while all other taluks witnessed decline ranging between 17 percent in Bantwal and 72 percent in Sullia. From the table, it is also clear that the composition of main and marginal workers in total workers and gender composition differ widely among taluks.

Table 6.14
Rural and Urban Composition of Main and Marginal workers in the District (Number)

Details		Main Workers			Marginal Workers			Total Workers		
		2001	2011	Percentage Change	2001	2011	Percentage Change	2001	2011	Percentage Change
Rural	Male	312367	312594	0.07	30746	23145	-24.22	343113	335739	-2.14
	Female	233571	200115	-14.32	55538	32697	-41.13	289109	232812	-19.47
	All	545938	512709	-6.02	86284	55842	-35.28	632222	568551	-10.07
Urban	Male	193595	269904	39.42	9696	15260	57.38	203291	285164	40.27
	Female	101976	131863	29.31	8901	12143	36.42	110877	144006	29.87
	All	295571	401767	35.93	18597	27403	47.35	314168	429170	36.60
Total	Male	505962	582498	15.13	40442	38405	-5.04	546404	620903	13.63
	Female	335547	331978	-1.06	64439	44840	-30.42	399986	376818	-5.79
	All	841509	914476	8.67	104881	83245	-20.63	946390	997721	5.42

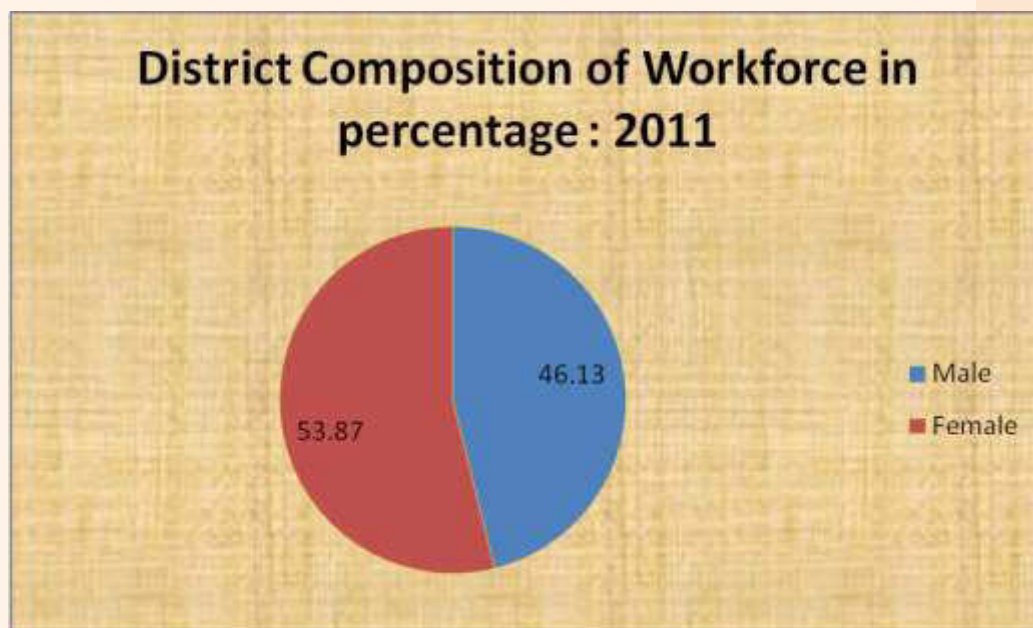
Source: Census 2001 and 2011.

Table 6.15
Taluk-wise Composition of Workforce: 2011

Taluk/ District	Gender	Main Workers		Marginal Workers		Total Workers
		Number	Percent	Number	Percent	Number
Bantwal	Male	111901	59.14	7477	46.50	119378
	Female	77323	40.86	8602	53.50	85925
	Total	189224	100.00	16079	100.00	205303
Belthangady	Male	75379	60.43	5883	44.12	81262
	Female	49353	39.57	7451	55.88	56804
	Total	124732	100.00	13334	100.00	138066
Mangaluru	Male	267945	66.21	18543	55.22	286488
	Female	136758	33.79	15039	44.78	151797
	Total	404703	100.00	33582	100.00	438285
Puttur	Male	83762	64.44	5041	29.58	88803
	Female	46225	35.56	12001	70.42	58226
	Total	129987	100.00	17042	100.00	147029
Sullia	Male	43511	66.10	1461	45.54	44972
	Female	22319	33.90	1747	54.46	24066
	Total	65830	100.00	3208	100.00	69038
District	Male	582498	63.70	38405	46.13	620903
	Female	331978	36.30	44840	53.87	376818
	Total	914476	100.00	83245	100.00	997721

Source: Census: 2001 and 2011.

Graph 6.6



The above analysis of data on the employment evidently reveals that the changes in employment pattern in rural and urban areas and also gender-wise are consistent with the dynamics of economic development of the district. With the urbanization, employment pattern in the district is moving towards main category of wage employment. There is a steady decline in marginal employment category as well as rural employment. This is a healthy trend.

6.8 Work Participation Rate

The work participation rate (WPR) is usually computed as the proportion of total number of workers to the total labour force. Since no data on age group 16 to 60 available, total population is taken into consideration as proxy for computing work participation rate. In Table 6.16, the trend in the WPRs for male and female workforce for the district is compared with the state.

It is important to note that in Dakshina Kannada district, while there was a consistent improvement in the WPR of male workers

during last two decades, there was a significant decline the WPR of female workers during 2001-11. It declined from 42 percent in 2001 to 36 percent. This decline took place in spite of a significant increase in WPR of female workers during 1991-2001 from 32 percent to 42 percent. The gender gap in WPR, which was reduced from 17 percent in 1991 to 16 percent in 2001, increased to 24 percent in 2011. This is a matter of serious concern. In the same vein, though during 1991, the district witnessed significant increase in WPR of all workers from 41 percent to 50 percent, during last decade, it witnessed decline from 50 percent to 48 percent. Compared to the state's average, the district has higher WPR in both male and female workers.

The analysis of the rural and urban work participation rates in Table 6.17 shows that the WPR for both male and female workforce in rural areas is considerably higher than those of the urban areas. Interestingly, the female WPR in rural areas was significantly higher than the female WPR in urban areas. However, it is important to note that while WPR of the male workers increased from 60 percent to 62 percent, the WPR of women workers declined from 49

Table 6.16
Work Participation Rate in Dakshina Kannada District (Percentage)

District/State	Gender	1991	2001	2011
Dakshina Kannada District	Male	49.76	58.22	60.00
	Female	32.41	41.70	35.72
	Total	41.00	49.87	47.75
Karnataka State	Male	54.1	56.60	59.00
	Female	29.4	32.00	31.87
	Total	42.0	44.50	45.62

Source: Census: 1991, 2001 and 2011.

percent to 42 percent. As against this, in urban areas, the WPR of male workers increased from 56 percent to 58 percent, whereas the WPR of women workers declined from 30 percent to 29 percent. Similar changing pattern in WPR took place at the state level.

Table 6.17
Rural and Urban Work Participation Rates in Dakshina Kannada District (Percentage)

District/State	Gender	2001		2011	
		<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>
District	Male	59.71	55.88	62.00	57.82
	Female	48.69	30.33	42.17	28.64
	Total	54.10	43.08	51.99	43.09
State	Male	58.10	53.85	59.76	57.81
	Female	39.87	16.37	38.75	20.81
	Total	49.09	35.67	49.38	39.66

Source: Census: 2001 and 2011

The district has, however, relatively higher WPRs for both male and female workers as well as both in rural and urban areas. What is disappointing is that with more urbanization, the work participation of female workforce was

expected to increase but it has not taken place in the district.

The inter-taluk comparison in the WPRs of both male and female workforce is made in Table 6.18.

Table 6.18
Taluk-wise Work Participation Rates in Dakshina Kannada District (Percentage)

Taluk	2001			2011		
	<i>Male</i>	<i>Female</i>	<i>All</i>	<i>Male</i>	<i>Female</i>	<i>All</i>
Bantwal	59.47	50.95	55.16	60.64	43.25	51.92
Belthangady	58.31	45.70	51.90	61.58	42.19	51.79
Mangaluru	55.79	34.10	44.78	58.37	30.13	44.07
Puttur	62.61	50.49	56.54	62.05	40.23	51.06
Sullia	61.68	42.27	52.06	62.35	32.92	47.54
District	58.23	41.70	49.87	60.00	35.77	47.75

Source: Census 2001 and 2011

From the analysis of the data, it may be observed that there is no significant inter-taluk variation in the work participation pattern. In all taluks, the WPR of male workers is significantly higher than the WPR of female workers. The gender gap is very wide and differs significantly. While the WPR of male workers increased significantly, the WPR of female workers declined in all taluks during 2001-11. Though Mangaluru taluk is more urbanized, surprisingly, it has the lowest WPR for both male and female workers among taluks, Sullia has the highest WPR (62.35) for male workers, followed by Puttur (62.05) and Belthangady (61.58). Among women workforce, Bantwal has the highest WPR (43.25), followed by Belthangady (42.19) and Puttur (40.23). Mangaluru has the lowest WPR (30.13) for women, followed by Sullia (32.92). What is disheartening is the significant decline in the WPR for women workers and the gap between two is widening in all taluks. It is also surprising that urbanization has not impacted to improve WPR of women workforce in the district.

In Table 6.19, an attempt is made to

analyse taluk-wise work participation rates of male and female workers in rural and urban areas.

The data analysis in the table shows that Sullia has the lowest WPR for both male and female workers in both rural and urban areas in the district. Bantwal has the highest WPR for female workers both in rural and urban areas. For male workers, in rural areas, Puttur has the highest and in urban areas, Bantwal has the highest WPR. It is also important to note that contrary to general belief, in all taluks, the WPRs for both men and women workers are significantly lower in urban areas than rural areas. The WPRs for both male and female workers in both rural and urban areas in all taluks are higher than state average. The major areas of concern are the lower WPR for female workers in urban areas, wide gender gaps in the WPRs in all taluks and the inter-taluk differences particularly among women workers.

6.9. Occupation Pattern

The qualitative composition of the employment has been analyzed in terms of broad

Table 6.19
Taluk-wise Rural and Urban Work Participation Rates: 2011(Percentage)

Taluk/District	Rural			Urban		
	<i>Male</i>	<i>Female</i>	<i>All</i>	<i>Male</i>	<i>Female</i>	<i>All</i>
Bantwal	61.35	45.55	53.40	59.01	37.69	48.36
Belthangady	61.87	42.67	52.17	56.61	34.20	45.26
Mangaluru	60.62	40.24	50.24	57.78	27.37	42.41
Puttur	63.37	43.28	53.26	57.15	28.84	42.94
Sullia	63.54	34.74	49.10	54.67	21.75	37.75
District	62.00	42.17	51.99	57.82	28.64	43.09
State	59.76	38.78	49.38	57.81	20.81	39.66

Source: Census 2011

employment status of the workforce. The census classified occupation into broadly four categories: cultivators, agricultural labourers, household industry workers and others. Cultivators and agricultural labourers constitute workforce engaged in agriculture and other two categories, primarily are non-agricultural labourers. In Table 6.20, an attempt is made to assess the occupation pattern and the change took place during the decade 2001-11. In 2001, cultivators constituted 5.2 percent of total workers, agricultural labours, 4.5 percent; those engaged in household, 21.2 percent and others 69 percent. Thus, agricultural workers constituted 10 percent and Non-agricultural

workers, 90 percent of the total work force in the district. There was a significant decline in the number of cultivators and agricultural labourers during 2001-11. The number of cultivators declined from 49684 to 33810, accounting a decline of 32 percent. Agricultural labourers, also declined from 42566 to 29274, recording a decline of 31 percent. Consequently, the share of agricultural workers in the total workforce declined from 10 percent to 5 percent. Among non-agricultural workers, there was a decline of 6 percent in household industries. As against this, other category of workers witnessed an increase of 14 percent.



Basket Weaver

Table 6.20
Occupation Pattern of Workers in Dakshina Kannada District: 2011
(Numbers)

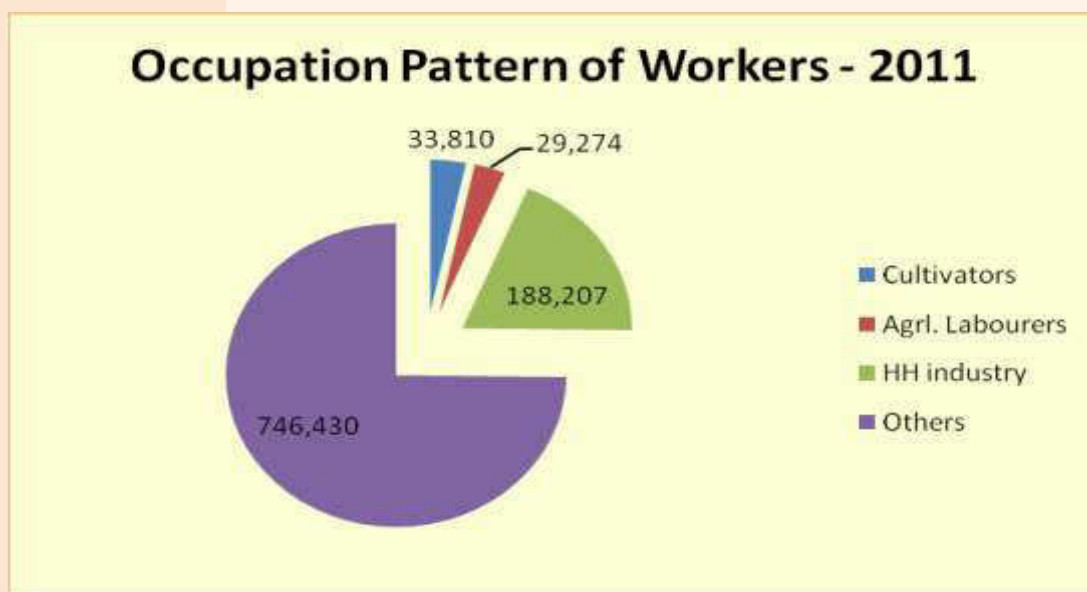
Occupation	2001			2011		
	Male	Female	Total	Male	Female	Total
Cultivators	35310	14374	49684	25302	8508	33810
Agrl. Labourers	28046	14520	42566	21384	7890	29274
HH industry	15985	184262	200247	16149	172058	188207
Others	467063	186830	653893	558068	188362	746430
Total	546404	399986	946390	620903	376818	997721

Source: Census 2001 and 2011

It is also important to note that the decline was more among the female cultivators and female agricultural labourers as compared to male cultivators and agricultural labourers. In the case of cultivators, as against decline of 28 percent of men, women cultivators declined by 41 percent. Similarly, the number of women agricultural labourers declined by 46 percent as

against 24 percent among men. The decline in agricultural labourers has adversely affected not only the availability of labour supply and forced farmers to abandon agriculture in the district but also livelihood of rural women labourers. From this, it is also evidently clear that agriculture in the district is no more the main source of employment for the population.

Graph 6.7



In the dynamics of economic development the structural shift from agriculture to non-agricultural sector in employment is an inevitable process. In the category of non-agricultural labourers, there was a marginal decline in employment in household industries and significant increase in others, which are mainly industrial and service sector employments. The disaggregated analysis of the data shows that there was a 7 percent decline among women workers in household industries, while among men there was an increase of one percent. It is important to note that there was a decline in the share of women workers in household industries from 92 percent in 2001 to 91 percent in 2011. Men have increased their

share in the total employment in the households industries. Similarly, in the category 'others', the number of men workers employed has gone up by 20 percent while, there was an increase of 0.8 percent among women workers. The decline in employment of female workers in the non-agricultural labour has serious implications. With the increasing number of self-help groups of women, the employment of women in household industries was expected to increase. Only plausible explanation for this would be the decline in women employment in beedi rolling. Similarly, though there was a significant increase in employment in other category, the main beneficiaries were men workers and not female workers.



A View of Infosys Mangaluru

The District has potential to increase employment in secondary and tertiary activities. The present main employment generating industries are cashew nut factories, textiles, mechanical engineering, electric and electronics, food processing, automobile workshops, printing, ceramics and rubber and plastics. The district has also large industries like MRPL, MCF and software companies like

Infosys. The employment in tertiary sector are mainly in financial institutions, wholesale and retail trade, restaurants, transport and communication, education, health services and public administration. With the setting up economic Zones, establishment of international airport, rejuvenation of port facilities, and encouragement to tourism, the district has good scope for increasing employment in industry and service sectors.

Box 6.6: Problem of Migrant Workers

Dakshina Kannada district has growing migrant working force. With the acute shortage of unskilled labour due to growing out-migration of local young people, significant decline in the working force in rural areas and rapid urbanization, the increasing flow of migrant population from outside is an inevitable process and required for sustaining the economic development of the district. Mostly, they migrate from Vijayapur, Bidar, Kalaburgi, Bagalkot, Rayachur and Koppala districts of North Karnataka and Tamilnadu. In recent years, increasing number of people come from Chattisgarh, Bihar and north-east. Most of them semi-literates belonging to poor SC/ST and OBC communities. Occupation-wise, they can be categorized into three groups: (i) permanently settled more than five years, (ii) Seasonal migrants, who return back when agricultural season starts, and (iii) Contract labourers moving from one place to others.

They are mainly engaged in building construction, road works, mining, small industries, agriculture, hotels and other informal activities as casual or contract workers without job security and terminal benefits. Women are mainly engaged in construction and household works. Their average family income is below Rs. 10000 per month. They stay in slums in the outskirts of Mangaluru city and other towns without any basic amenities. They are also deprived of BPL entitlement benefits as they have no permanent residency. They live in a pathetic condition and their livelihood problems are matter of serious concern from the human development perspective.

The taluk-wise occupation pattern based on Census data is analyzed for the year 2011 in Table 6.21.

Table 6.21
Taluk-wise Occupation Pattern: 2011 (Number)

Taluk/ District	Gender	Cultivators	Agricultural Labourers	Household Activity	Other Activity	Total Workers
Bantwal	Male	7032	7010	5618	99718	119378
	Female	2272	1719	53183	28751	85925
	Total	9304	8729	58801	128469	205303
Belthangady	Male	8120	7076	2546	63520	81262
	Female	2039	2680	33040	19045	56804
	Total	10159	9756	35586	82565	138066
Mangaluru	Male	8180	6117	5904	266287	286488
	Female	3040	2997	53342	92418	151797
	Total	11220	9114	59246	358705	438285
Puttur	Male	1507	1007	1661	84628	88803
	Female	846	377	28285	28718	58226
	Total	2353	1384	29946	113346	147029
Sullia	Male	463	174	420	43915	44972
	Female	311	117	4208	19430	24066
	Total	774	291	4628	63345	69038
District	Male	25302	21384	16149	558068	620903
	Female	8508	7890	172058	188362	376818
	Total	33810	29274	188207	746430	997721

Source: Census: 2011

Broadly the occupation pattern is same in all taluks. However, in terms of relative composition, there exist inter-taluk variations. For example, agriculture (cultivators and agricultural labourers) provides employment to only 1.5 percent in Sullia, whereas in Belthangady, it is 14 percent. In other taluks, it varies from 5 percent in Mangaluru to 9 percent in Bantwal. The employment in non-agricultural occupations dominates the employment scenario in all taluks. Sullia has the highest percentage (98.5 percent) followed by Mangaluru (95 percent) and Puttur (94 percent) Belthangady has the lowest percent of workers

engaged in non-agricultural occupations. There also exists inter-taluk variation in gender composition in the occupation pattern. In the case of cultivators, Sullia has the highest percentage of women cultivators (40 percent) followed by Puttur (36 percent) and Bantwal (28 percent) the other two taluks had relatively lower percentage of women cultivators (38 percent). Among agricultural labourers also, Sullia has the highest percentage of women (40 percent), followed by Mangaluru (33 percent) and Bantwal has the lowest (20 percent). In all taluks, women workers dominate in household industries and men workers, in others.

Box 6.7 : Employment Scenario in Dakshina Kannada District : Major Highlights

Achievements	Areas of Concern
Population growth rate of 1.0 percent per annum	Employment growth 0.54 percent per annum as against the state average of 1.84 percent
Employment in agriculture and household industries declining and secondary and tertiary sectors at annual growth of 1.4 percent.	Decline in the share of agriculture to total GDP (10 percent) and 52 percent of people still live in rural areas.
Significant increase in male work participation rate among main workers	Significant decline in women work participation rate among main workers.
Dakshina Kannada has one of the highest percentages of women cultivators in the state.	District witnessed significant decline in women cultivators and also agricultural labourers which marginalize rural poor women.
Work participation of SC/ST workers is higher than other category workers.	Problem of underemployment is mainly a rural phenomenon and mainly among marginalized community
15 percent decadal growth among non-workers as against population decadal growth of 10 percent. Nearly 62 percent of non-workers are women	Significant increase in women (21 percent) as against only 5 percent men among non-workers particularly in rural areas.

6.10 Child Labour

Today's children are the future citizens of the country. A healthy child is a valuable asset of the nation. The UN Convention on Rights of the Child has, therefore, set universal legal standards for protecting children against neglect, abuse and exploitation and guaranteeing basic human rights ranging from survival to development and full participation in social, cultural, educational and other process necessary for their growth and well-being. International Labour Organization (ILO)

defines child labour as any work by a child under age 12 or, for a child above age 12, any work that impedes education or is damaging to health and personal development. The Constitution of India bans employment of children below 14 years. The Child Labour Control and Prohibition Act 1986 also prohibit child labour below 14 years. In reality, however, the child labour, in one or other forms, is a persistent problem in India.

Child labour affects schooling, health, behaviour and personal development. Children are forced to work for diverse and complex

reasons. They range from household poverty, illiteracy, compulsion of traditional community occupation practices, the preferences of families or parental compulsion and influence of urbanization. All child work is, however, not child labour. For example, agricultural activities and household enterprises usually generate more demand for family labour which often includes child labour. They not only contribute to the acquisition of skills but also do not come in the way of schooling. The children can participate in these activities along with family members at their leisure and attend schools also. According to ILO, prohibited child labour includes hazardous work or worse form of labour, which include any work that jeopardizes the health, schooling, safety, morals of a child or all forms of slavery, bondage, military conscription, trafficking, or other illicit activities.

With the objective of making the state child labour-free, the State Government initiated number of pro-child development programs besides strict enforcement of laws. The programmes include awareness campaign, rehabilitation of affected children, compulsory and universal primary education, setting up special schools, mid-day meal, financial help for the affected families etc. The Government has also recently set up a Child Labour Law Board and Child Labour Planning Committee to ensure strict enforcement of law on expeditious basis and rehabilitation of children affected.

The district has as per 2011 Census, 208297 children of age group 0-6, out of which 101312 are female and 106985 are male. They constitute 10 percent of the total population of the district. As regards child labour, no reliable statistics are available. The district is, however, considered as one having the lowest number of

child labour. Child Rights and You (CRY), a NGO recently carried out a survey of child labour of age group 5 – 9 and 10 – 14 throughout the state has found Dakshina Kannada district free from abuse of child labour. The district is, under the National Child Labour Removal programme, running schools with hostel facilities for rehabilitation of children affected by child labour. Moreover, with one or two child norm and universal access to primary and secondary education, the district is not facing a serious menace of exploitation of child labour. However, with increasing migrant population and acute shortage of labour, the exploitation of child labour in unorganized sector particularly in urban areas in the district cannot be ruled out.

6.11 Radar Analysis for Living Standard

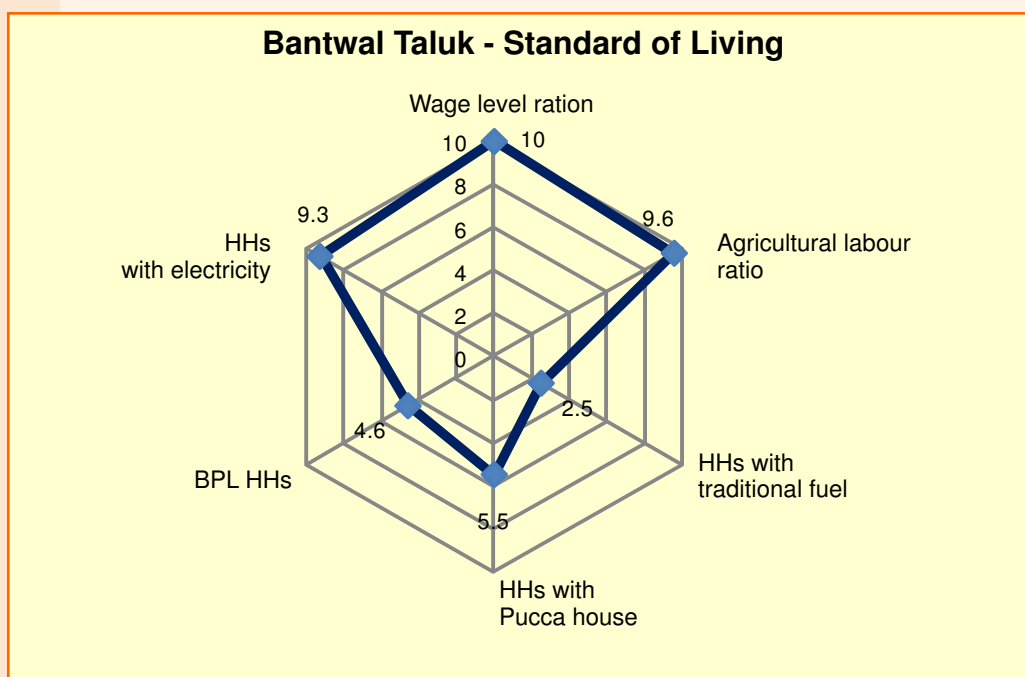
With a view to graphically portray the status of standard of living in different taluks, the radar analysis is used by taking into account six basic livelihood indicators viz. ratio of average prevailing agricultural wage rate to the state prescribed minimum wage rate, percentage of agricultural labourers to total workers, percentage of households dependent on traditional fuel type, percentage of households having pucca houses, percentage of BPL households and percentage of households having electricity connection. The indicators like agricultural labourers, traditional fuel and BPL households have negative influence as higher the percentage value, lower the development and vice versa. Other indicators are positive in nature. Higher percentage indicates higher development. The actual values of the respective indicators and indices based on 10-point scale of these indicators are set out in Table 6.22.

Based on the indices of six livelihood indicators, radar graphs are drawn for each taluk separately and for all taluks taken together in the district to give a graphical comparative position on status of living standard.

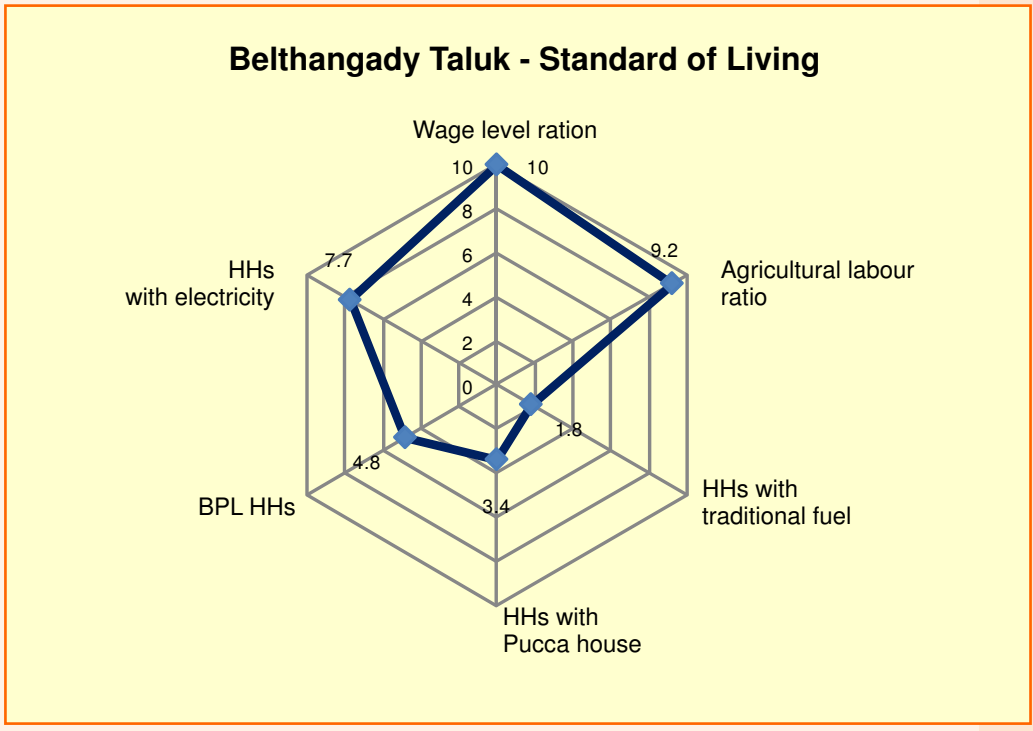
**Table 6.22
Radar Analysis of Standard of Living**

Indicators	Bantwal		Belthangady		Mangaluru		Puttur		Sullia		District	
	Value	Index	Value	Index	Value	Index	Value	Index	Value	Index	Value	Index
Wage level ratio	1.66	10.0	2.35	10.0	2.35	10.0	2.41	10.0	2.36	10.0	2.38	10.0
Agricultural labour ratio	4.25	9.6	7.07	9.3	2.08	9.8	0.94	9.9	0.42	9.9	2.93	9.7
HHs with traditional fuel	75.14	2.5	81.62	1.8	36.27	6.4	76.42	2.4	84.86	1.5	57.98	4.2
HHs with Pucca house	54.54	5.5	34.55	3.4	73.30	7.3	48.28	4.8	44.57	4.5	59.52	5.9
BPL HHs	55.35	4.6	52.24	4.8	42.26	5.8	46.42	5.4	49.25	5.1	47.38	5.3
HHs with electricity	93.46	9.3	77.31	7.7	96.73	9.7	84.94	8.5	80.10	8.0	90.83	9.1

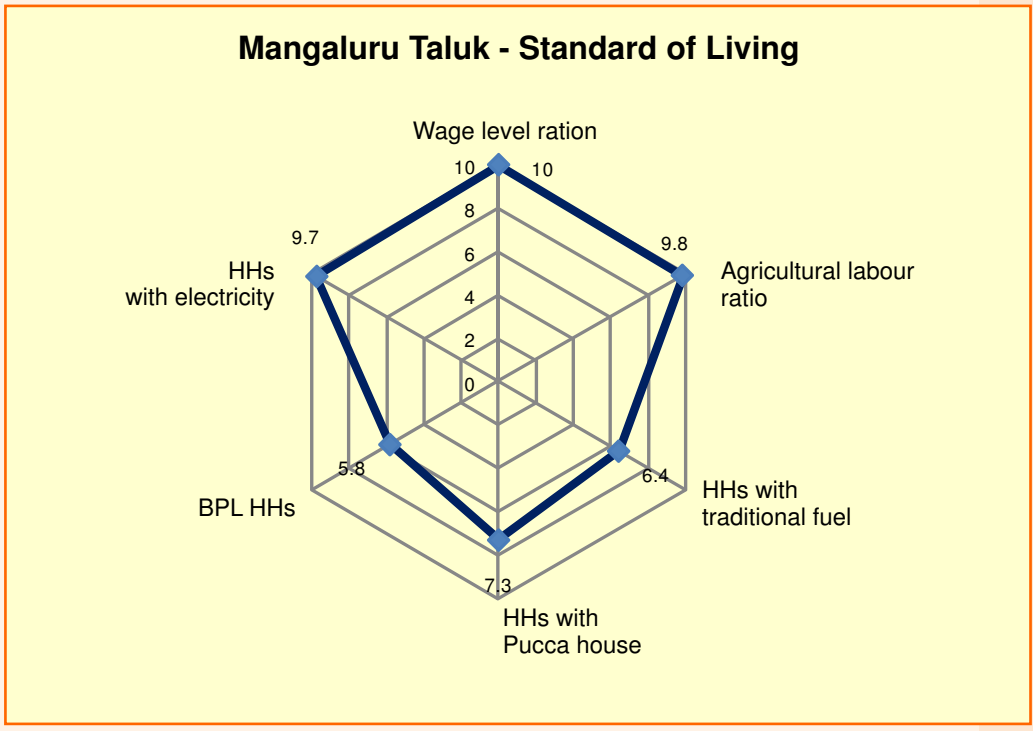
Graph 6.8 – Radar Chart



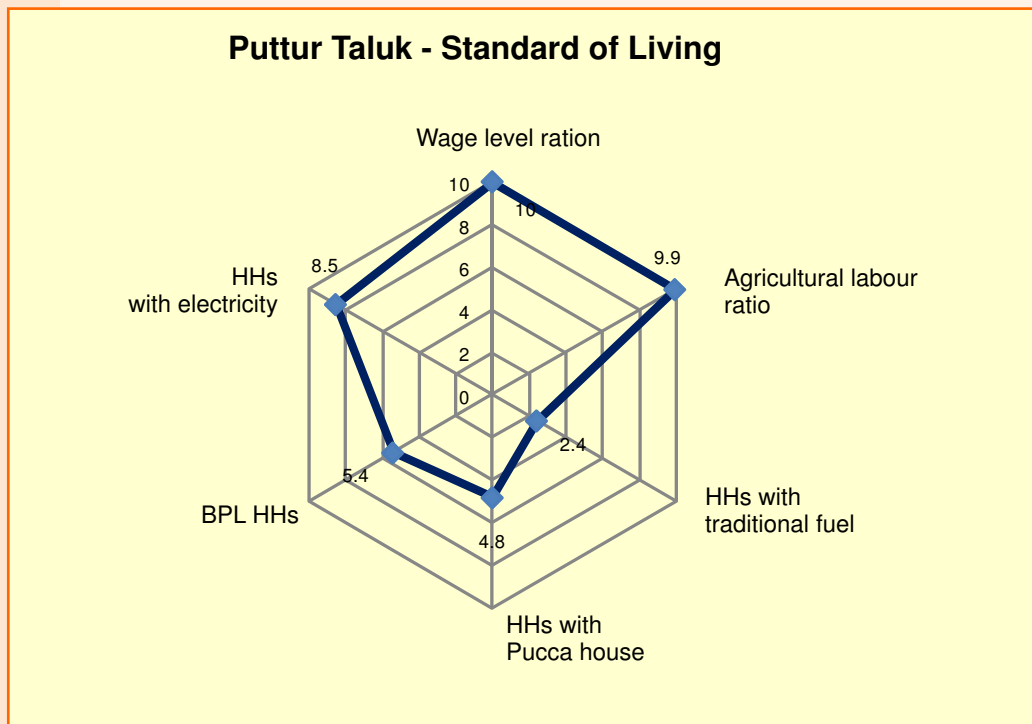
Graph 6.9 – Radar Chart



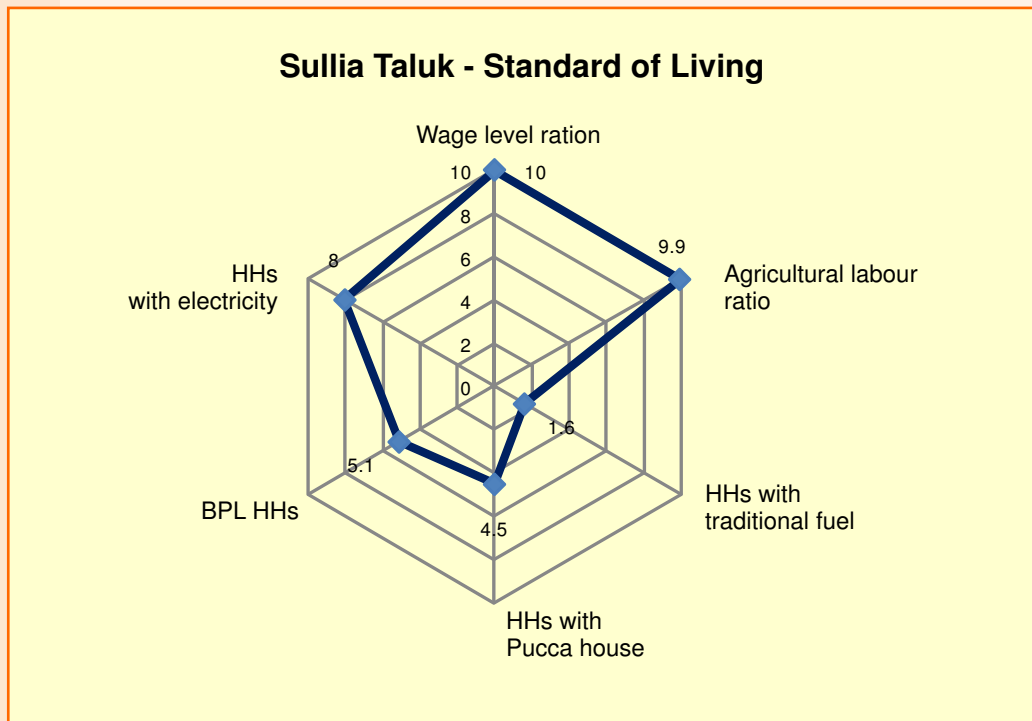
Graph 6.10 – Radar Chart



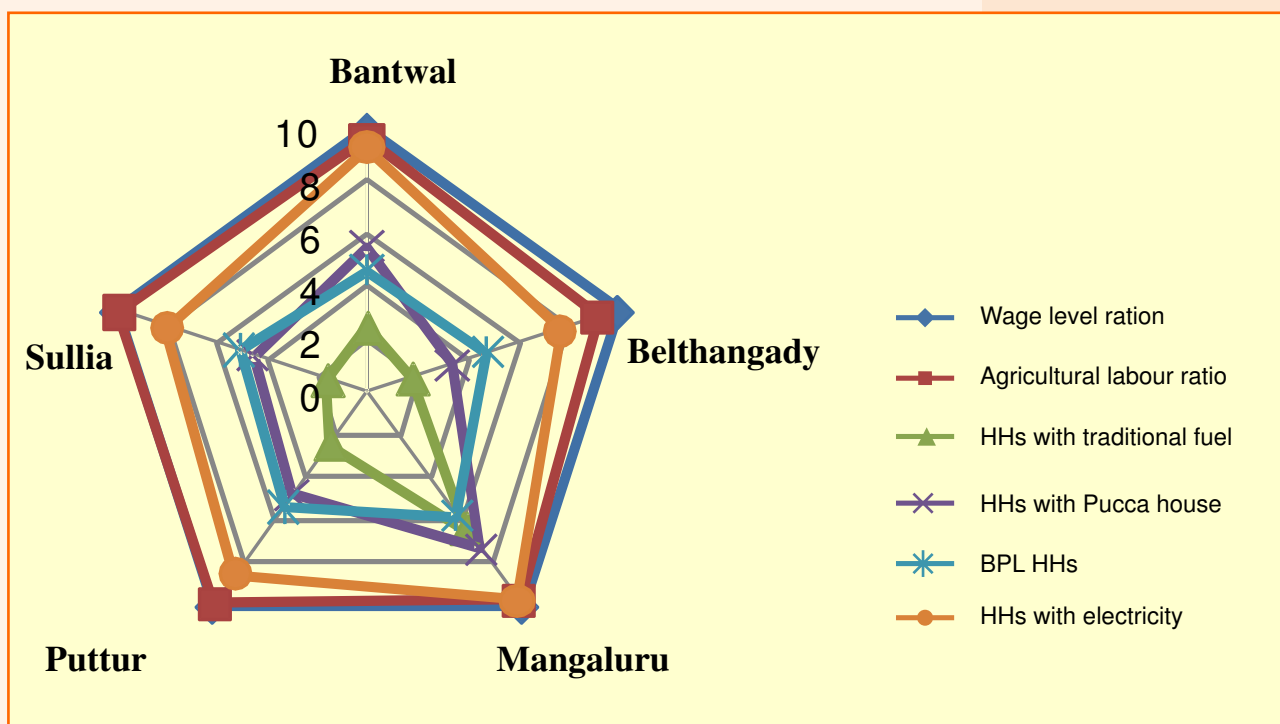
Graph 6.11 – Radar Chart



Graph 6.12 – Radar Chart



**Graph 6.13 – Radar Chart
Dakshina Kannada District – Standard of Living – Radar Chart**



The inter-taluk radar charts evidently show that the standard of living status in Mangaluru taluk is comparatively better than other taluks. Among other taluks, Bantwal and Sullia are better than Belthangady and Puttur. All the three taluks are, however lagging in reaching the maximum norms in regard to use of cooking fuel, access to pucca housing and poverty reflected in proportion of BPL households. In the case of other three livelihood indicators namely, electricity, wage level, and proportion of agricultural labourers to total workers, all taluks are nearer to maximum norms.

6.12 Concluding Remarks

Dakshina Kannada district ranks third in both per capita income and in total GDP among 30 districts in the state. The per capita income of the district was Rs.84306 at current prices and

Rs.59429 at constant prices during 2010-11. During the Eleventh Plan period (2006-11), the district witnessed lower economic growth of 5 percent per annum as against the state average of 7 percent per annum. The major areas of concern are the deceleration in growth in agriculture as well as secondary sector. As against this, it is gratifying to note that the tertiary sectors witnessed remarkably higher growth than the state average during the Eleventh Plan period. The primary sector now contributes 10.9 percent to the district GDP and the secondary and tertiary sectors, 22.5 percent and 66.6 percent respectively. Taluk-wise, Bantwal has the lowest per capita income, followed by Puttur. Mangaluru has the highest per capita income.

Though poverty incidence in Dakshina Kannada district is considered as one of the lowest in the state, BPL families as per the

eligibility criteria stipulated by the state, constitute nearly 50 percent of the families in the district. Most of them are in rural areas and concentrated among marginalized rural communities, such as marginal farmers, agricultural labourers, SCs and STs. With the deceleration in agricultural GDP growth, most of the families depend on the remittances, which play major role not only in maintaining a higher standard of living but also assisting households in investing in housing, health and education in the rural areas.

As regards employment is concerned, the major area of concern is the significant decline in the work participation rate among women and significant increase in women non-workers. Men dominate in the workforce and the gap between men and women in WPR is very wide. The employment in the agricultural sector decelerated and in the secondary and tertiary activities, it increased. The decline in number of cultivators and agricultural labourers has created acute shortage of labourers in rural areas, which adversely affected the development of



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agriculture in the district. Though the structural shift in the occupation pattern towards secondary and tertiary sectors is a healthy sign, the area of concern is the decline of agricultural sector as source of employment when 52 percent of the district population still lives in rural areas. With the demise of traditional industries like beedi and tiles factory, without the entry of new industries, the secondary sector provides limited scope for employment generation.

Considering the geographical potential, the long coastal belt and the availability of qualified and talented human resources, the district provides a challenging potential for diversification of agriculture into high value addition, setting up agro-processing industries, re-energization of small scale and tiny industries, and tertiary activities such as tourism, soft-ware and bio-technological park, infrastructure development, communication services, transport, construction etc. With the Konkan railway, opening up of Mangaluru

airport for international airways and commencement of Economic Zones, the district has challenging potential for rapid economic growth and increase in employment in the future.

The recent technological spread of communication technology to rural areas has opened up opportunities to foster a variety of secondary and tertiary activities in rural areas. In the district, several rural centres have, in recent years, emerged as rural towns. This process of semi urbanization and associated improvements in infrastructure also provide non-farm employment opportunities both in the secondary and in the tertiary sectors in the surrounding rural areas. The formation of self-help groups of women and promotion of micro finance in rural areas can also play a crucial role in encouraging women's participation in household industries. This seems to be the only way to arrest out migration and improve women work participation in rural areas in the district.

Chapter 7

STANDARD OF LIVING



The Guttu House



7.1 Introduction

It is difficult to define standard of living and what constitute good life. The conventional approach followed by economists to measure standard of living focuses on people's command over resources in terms of income. Standard of living has, in fact, many dimensions. Income is definitely an important determinant of living standard. It determines purchasing power to access resources required for a decent standard of living. But, it alone cannot capture the various basic dimensions of well-being of people. The quality of living is a broader concept than mere income and consumption. It includes a range of both material and non-material factors which are basic and influence value in living. There is now a general consensus that standard of living depends not only on income and consumption but also on access to basic amenities such as health, education, housing, water supply, sanitation, security and freedom. A good shelter is a basic need for household security as well as to raise families. Similarly, access to safe drinking water, electricity and sanitation is essential to lead a healthy and decent standard of living. In view of the critical importance of these basic amenities for quality life, this chapter

focuses on these dimensions of human development in Dakshina Kannada district.

7.2 Housing Status

Good housing is a prerequisite for good living. It provides shelter, security, amenities and privacy which are essential for decent standard of living. A pucca house is required to protect family from adverse environmental factors and to raise families. The availability and quality of housing affects the physical and mental well-being of occupants. The National Housing and Habitat Policy, 1998 recognizes housing activity as a basic necessity for the well-being of people in the country and provides the framework for the implementation of housing programmes in the country. Under the growing population pressure, meeting the housing needs of all the families is a real challenge. This is more so particularly for the poor for whom good housing could be beyond reach. They do not own land and the cost of housing materials and construction is beyond their affordability. Nearly 90 percent of the housing shortage relates to the poor and there is a need to increase the supply of affordable housing to low income

Table 7.1
Rural-Urban Housing Status in Dakshina Kannada District (Percent)

Housing Status	2001			2011		
	Rural	Urban	District	Rural	Urban	District
Good	37.82	57.75	45.62	55.53	72.11	63.51
Livable	55.16	38.97	48.82	40.76	26.28	33.79
Dilapidated	7.02	3.28	5.56	3.71	1.61	2.70
All	100.00	100.00	100.00	100.00	100.0	100.00

Source: Census 2001 and 2011

groups. Housing for the poor and down-trodden assumes greater importance both in rural and urban areas in housing policy of the state.

According to the 2011 census data, Dakshina Kannada district has 439733 households, of which 214490 are in urban areas and 225243 in rural areas. In Table 7.1, based on the census data, an attempt is made to compare the housing status in the district for the year 2001 and 2011.

In 2001, the district had 45.6 percent good houses, 48.8 percent houses livable and 5.6 percent dilapidated houses. As against this, 2011, the data shows significant improvement in the housing status in the district. The proportion of good status houses improved only by 18 percent; from 45.6 percent in 2001 to 63.5 percent in 2011. The resultant decline in liveable houses is from 48.8 percent to 33.8 percent

during this period. There was also decline in dilapidated houses from 5.6 percent to 2.7 percent. In absolute number, still the district has 12268 dilapidated houses, where people live. In spite of various government housing scheme, still substantial number of households live in dilapidated is a matter of serious concern.

It is also important to note from the table that both rural and urban areas witnessed significant improvement in housing condition. While in urban areas, the proportion of good houses increased from 57.8 percent in 2001 to 72 percent in 2011, in rural areas, it increased from 37.8 percent to 55.5 percent during the same period. In the case of livable status houses, the urban areas have recorded reduction from 39 percent to 26 percent and rural areas, 55 percent to 41 percent. Similarly, in urban centre, the proportion of dilapidated houses declined from

Graph 7.1
Housing Status in Dakshina Kannada District



3.2 percent to 1.6 percent, while in rural areas, the reduction in dilapidated houses was from 7 percent to 3.7 percent. The rural areas have still more dilapidated houses than urban areas.

As regards tenure status, 94 percent of families in the district live in their own houses. In rural areas, more families live in their own houses than urban areas. In rural areas, 96 percent of families live in their own houses, whereas in urban areas, it is 84 percent. In the district areas, 11 percent of houses have one dwelling room, 22.8 percent have two rooms and 63 percent of households have three or more rooms. Only 2.2 percent have no exclusive rooms. In rural areas, 10.7 houses have one room, 22 percent have two rooms and 2.2 have no exclusive room. Comparative housing status in urban areas is that 11.5 percent have one room, 23.7 percent have two rooms and 1.7 percent has no exclusive room. There no much rural and urban differences in regard to number of dwelling rooms. In both rural and urban area, almost all houses have kitchen. Similarly, in rural area, 92 percent of houses and in urban areas, 98 percent of houses have bath rooms.

In 2011 Census, houses are classified

based on predominant materials of roof and wall. The pucca house has machine made tiles, bricks, stone slate, G.I.metal/asbestos sheets, and concrete roof materials. In the case of wall materials, the pucca houses envisage use of stone packed with mortar, GI/metal/asbestos sheet, burn bricks and concrete materials. Based on pucca roof materials, 59.52 percent of houses in the district can be classified as pucca houses. The remaining houses have roof materials like grass, thatch, bamboo, wood, mud, plastic polythene or handmade tiles as roof materials and grass, thatch, bamboo, plastic polythene mud unburnt brick or wood as wall materials. Taluk-wise, Mangaluru has the highest percent of pucca houses (73.3), followed by Bantwal (54.5 percent). Belthangady has the lowest percent of pucca houses (34.5 percent). Puttur has 48.3 percent pucca houses and Sullia, 44.6 percent.

7.3 Siteless Households

The problem of housing ultimately centered around availability of land and ownership of sites for construction of houses particularly in the case of weaker sections of the

Table 7.2
Taluk-wise Houseless Households: 2011-12 (Percentage)

Taluk/ District	Site -less Households	Households provided with house sites	Houses Constructed for houseless
Bantwal	33.31	10.14	52.18
Belthangady	25.89	27.53	57.25
Mangaluru	41.35	2.60	24.74
Puttur	16.46	11.82	36.66
Sulla	18.29	11.76	68.28
District	30.76	11.74	47.80

Source: Dakshina Kannada Zilla Panchayat.

community. Land in urban areas is not only scarce, but also beyond the reach of many. Absence of required houses results in formation of slums. Housing being a basic need for survival of human being, there is no justification for existence of home-less families in any modern society. The problem of site-less and home-less families, therefore, requires serious and priority consideration in any government policy.

The position of siteless households, households provided with house sites and houses constructed for allotment to houseless poor in different taluks is shown in Table 7.2.

Surprisingly, there are about 135262 households in the district, who do not have house sites for construction of houses. They constitute 30.8 percent of the total households in the district. They are homeless families. The majority of the siteless and houseless households belong to the weaker sections of SCs, STs and OBCs. Mangaluru taluk has the highest percent of households without house sites (41 percent), followed by Bantwal (33 percent). Puttur has the lowest percentage of

siteless households. Belthangady has comparatively higher percent of households without sites (26 percent).

The Government, under various schemes, provided sites to 15880 siteless householders to construct houses. Their percentage works out to 11.74 percent of total siteless households. Though Mangaluru taluk has the highest percent of siteless households, only 2.6 percent of siteless households were given sites for construction of houses. Belthangady has the highest site less household beneficiaries in allocation of house sites. In other taluks, the beneficiaries range between, 10 percent and 12 percent. The Government has also constructed 33282 houses for allotment to houseless poor. Their percentage in the total houseless families in the district works out to 40.87 percent. Sullia, Belthangady and Bantwal were the main beneficiaries in terms of allotment of houses. Mangaluru has the lowest percentage of houses construct by the government for weaker section of the community. The district, however, still needs to provide houses to 86200 families to make the district free from the problem of homelessness.



Cleaning Awareness Campaign

7.4 Schemes for Housing Facility

Housing being considered as the basic necessity for human existence, the State government has implemented various housing schemes. A total of 33182 houses were constructed and allotted to nearly 48 percent of the homeless families in the district. The various housing programs implemented by the Government for providing houses to the houseless poor and down-trodden families and the number of houses constructed for the benefit of various social groups are shown in Table 7.3.

From the table, it may be seen that the

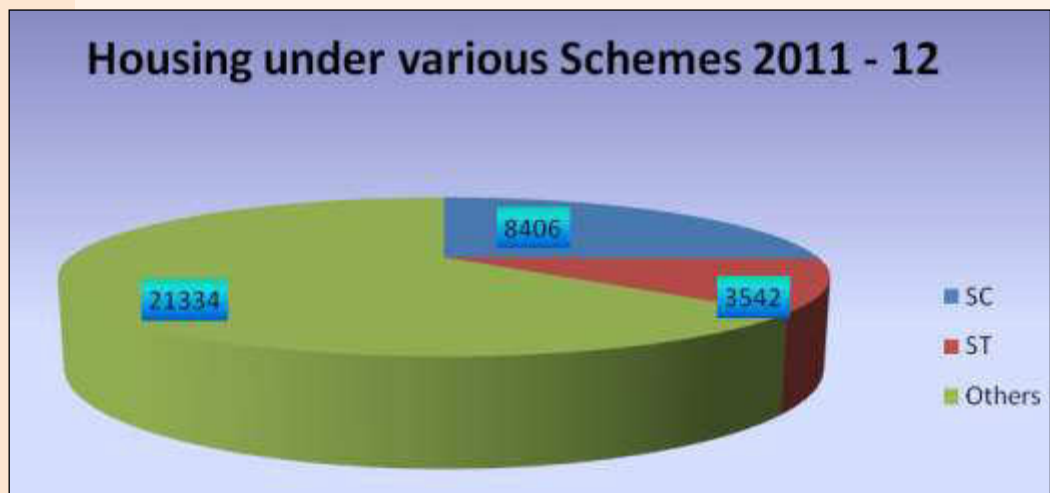
focus of the government housing programs is to provide good houses to SCs and STs. Out of 33282 houses constructed under various schemes, 8406 are for SCs families, 3542 for STs and 21334 for others including OBCs. The SC and ST beneficiaries account for 36 percent of Houses constructed. By taking into account the total SC and ST households in the district, the percentage of household-beneficiaries works out to 31 percent in the case of SCs and 27 percent in the case of STs. Others include mainly backward community and weaker section of other social groups.

Table 7.3
Dakshina Kannada District: Housing under various Schemes: 2011-12 (Number)

Programs	SC	ST	Others	Total
Indira Awas Yojana	1845	751	3217	5813
Dr. B.R, Ambedkar Scheme	1450	459	-	1909
Ashraya Scheme	5107	2327	18016	25450
Special Fisheries Scheme	4	5	69	78
Karnataka Housing Board	-	-	32	32
Total	8406	3542	21334	33282

Source: Dakshina Kannada Zilla Panchayat

Graph 7.2



Out of 33282 houses constructed, 25450 (77 percent) houses are under the centrally sponsored Indira Awas Yojane. The state sponsored Ashraya scheme contributed 5813 houses, Ambedkar Housing Scheme, 1909 houses Fisheries Special Scheme, 78 houses and Karnataka Housing Board's Housing programme, 32 houses. Ambedkar Housing Scheme is exclusively for SCs and STs. Table 7.4 shows the taluk-wise housing under various government schemes.

Bantwal taluk, followed by Sullia, has the highest number houses constructed under various housing schemes. Out of 33282 houses constructed, 9533 houses are in Bantwal talk. Sullia has 7881 houses. Puttur has the lowest number of 4898 houses. The respective number of houses for Mangaluru and Belthangady are 5457 and 5413.

7.5 Households and Asset Status

Shelter is a broader concept beyond dwelling unit. It includes basic amenities which are essential for enhancing the quality of life of people. In the present modern context, the

household assets such as radio, television, telephone, bicycle or motor cycle etc have become necessity for comfortable livelihood. In Table 7.5, census data on the proportion of the households having different basic household assets in the district for the year 2001 and 2011 are given.

The analysis of data in the table clearly demonstrates the rapid transformation taking place in the basic amenities and life style of the people in both rural and urban areas in the district. In 2001, nearly two-third in rural areas and more than half of the households in the district were having radio or transistor as it was then considered a basic necessity for news, information and entertainment. Now the scenario changed and radio was substituted by Television. As per Census 2011 data, there is a significant reduction in the households using radio or transistor in both rural and urban areas. The percentage of households having radio/transistor was reduced from 66 percent to 41 percent in rural areas and from 59 percent to 28 percent in urban areas during 2001-11. As against this, the percentage of households

Table 7.4
Taluk-wise Housing under various Schemes: 2011-12 (number)

Schemes	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
Ashraya	8087	4230	4774	3457	4902	25450
Ambedkar	801	101	54	136	817	1909
Indira Awas	623	1172	575	1295	2148	5813
Fisheries	10	10	34	10	14	78
KHB	12	-	20	-	-	32
Total	9533	5413	5457	4898	7881	33282

Source: Dakshina Kannada Zilla Panchayat

Table 7.5
Dakshina Kannada District: Households having Modern Amenities (Percentage)

Household Assets	Rural		Urban		District	
	2001	2011	2001	2011	2001	2011
Radio/Transistor	65.59	40.89	58.84	27.85	62.93	34.82
Television	21.48	53.35	62.91	81.93	37.80	67.09
Telephone	12.80	84.60	39.96	92.48	23.50	88.39
Bicycle	9.45	18.96	12.00	13.72	10.46	16.44
Two Wheeler	7.98	17.36	21.09	28.98	13.15	22.95
Car, Jeep and Van	3.7	7.36	9.16	15.34	5.85	11.20

Source: 2001 Census and 2011 Census. Two wheeler includes Scooter, motor-cycle, and Moped

having Television has increased from 21 percent to 53 percent in rural areas and from 63 percent to 82 percent in urban areas during the same period. The shift from radio to television took place significantly in urban areas. Earlier, Television was a luxury and now it is a necessity even for rural households.

Similarly revolutionary change took place in use of telephone. In 2001, only 23 percent of households had telephone in their houses in the district. As per 2011 Census, the percentage of households having telephone

increased to 88 percent. In the case of rural areas, it increased from 13 to 85 percent and in urban areas, from 40 percent to 92 percent. Interestingly, the gap between the rural and urban is fully narrowed down. In the case of bicycles, scooters and motor cycles, though no such revolutionary change took place, there is significant improvement in the percentage of households having these assets in both rural and urban areas. The rural-urban differences in the case of these household assets still remain very wide. The comparison of the state level data and the district data reveals that the district has

Graph 7.3
Households having Modern Amenities

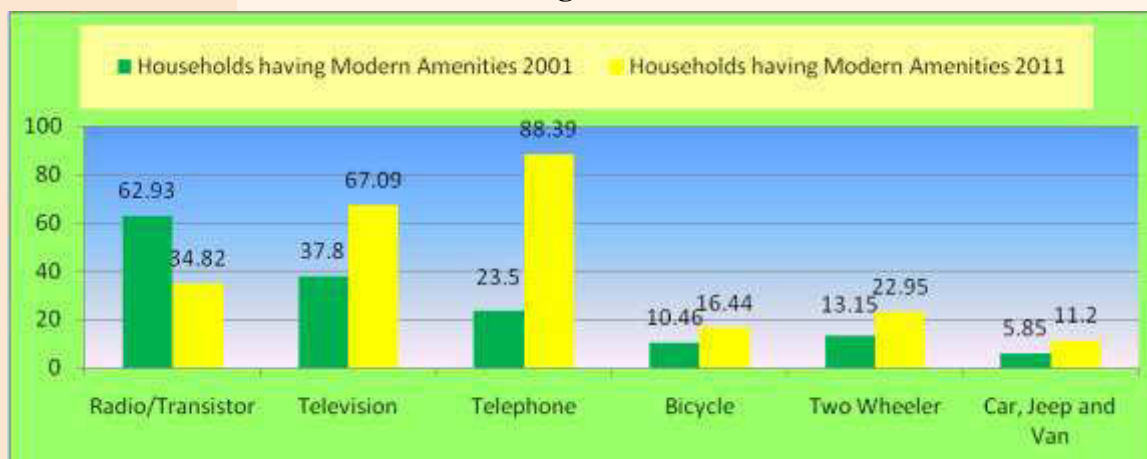


Table 7.6
Taluk-wise Household Assets: 2011(Percent of Households)

Household Assets	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
Radio/Transistor	37.94	43.20	28.50	39.55	43.37	34.62
Television	62.35	48.00	80.21	54.67	48.17	67.09
Telephone	87.18	85.10	91.49	85.00	82.55	88.39
Bicycle	16.59	23.52	13.29	20.39	17.61	16.44
Two - Wheeler	14.53	18.88	27.08	23.03	22.61	22.95
Car/Jeep/ Van	6.84	7.63	14.08	10.37	10.34	11.20
No Assets	6.08	7.24	4.13	7.05	8.88	5.62

Source: 2001 and 2011 Census

higher proportions of the households owning these household assets than those of the state average.

The comparative taluk-wise data on the households having these basic household assets based on 2011 Census data are analysed in Table 7.6.

The taluk-wise comparison of the data on proportion of the households owning various household assets shows wide inter-taluk variation. Mangaluru taluk has relatively higher percentage of households with television, two-wheeler and four-wheeler. Belthangady and Sullia have still higher proportion of households with radio/transistors. In bicycle, Belthangady has highest households owning it. In four-wheeler, next to Mangaluru, Puttur and Sullia have higher proportion of households. Surprisingly, Bantwal has the lowest household percentage. Only 5.6 percent of households in the district do not have any of these assets. The proportion of households without any assets is highest in Sullia (9 percent) and lowest in Mangaluru (4 percent).

7.6 Drinking Water

Access to safe drinking water is another basic necessity for existence of human beings. It is required for a healthy life. Several diseases like diarrhea, hepatitis, round-worm, hook-worm infection, trachoma and guinea worm are water related. In recent years, water quality has deteriorated due to rapid industrialization and resultant increasing quantities of industrial waste water, population growth and increasing domestic waste water and agricultural run-off. Water being life line for survival of mankind, the access to drinking water should be looked into in terms of availability throughout the year, proximity to water supply and quantity and quality of water for safe drinking. In Dakshina Kannada district, traditionally, the main sources of drinking water are open well, ponds, spring, river and lakes. With the urbanization, change in life style and increasing pressure of population, there is a growing demand for potable water particularly in urban areas. The National Policy for drinking water stipulates a norm for providing potable drinking water of 40 litres per capita per day (lpcd) within 500 metres of the place of residence⁷.

Table 7.7 provides data on main sources of drinking water and its location.

Table 7.7
Dakshina Kannada District:
Households by Main source of Drinking water and Location (Percent)

Source of water	2001	2011
Tap Water treated	20.37	31.90
Tap water Untreated	10.65	11.80
Covered Well	2.50	2.50
Uncovered Well	54.65	40.70
Hand pump	2.30	0.70
Tube well/Bore well	5.23	8.20
Spring	0.41	0.50
River/Canal	0.61	0.50
Tank/Pond/Lake	2.52	2.00
Other sources	0.76	1.20
Total	100.00	100.00
Within Premises	-	79.30
Near Premises	-	13.50
Away	-	7.20
Total	-	100.00

Source: 2001 and 2011 Census. Note: Percentage based on total households.

Historically, households in the district, both in urban and rural areas, were dependent on open well water for drinking. Most of the houses had their own well within their premises for supply of drinking water. As per 2001 census data, 57 percent of the households in the district used open wells for drinking water and 31 percent used both treated and untreated taps for supply of drinking water. As against this, there is a significant increase in treated tap water supply user-households from about 20 in 2001 to 32 in 2011. There is also reduction in open well user-households. The households depend on tube

well/bore well also increased from 5 percent to 8 percent during the same period. As regards location of drinking water source, 2011 Census categorized: 'within premises', where drinking water source within premises of house, 'near premises' where drinking water source is located beyond 100 meters from the premises of houses and 'away' if the drinking water source is located beyond 500 metres. It is gratifying to note that nearly 79 percent of the households have access to drinking water within premises, 13 percent, near premises and only 7 percent away from premises.

⁷ Based on provision of 3 litres for drinking water, 5 litres for cooking, 15 litres for bathing, 7 litres for washing utensils and domestic appliances and 10 litres for ablution.

As per Census definition, the safe drinking water covers only treated tap water, covered well, hand pump and tube/bore well sources only. It excludes uncovered open wells as well as other sources such as river, ponds etc. As per this definition, the safe drinking water in the district is enjoyed by only 220173 households out of total households of 425291 (51.77percent) in the district. Nearly 105118 households still do not have safe drinking water sources. Thus, the problem of drinking water in the district is not the access but the quality of the water, which is a serious worrisome issue. In terms of safe drinking water supply, The district is also comparatively in a worse position in the state.

Among the social groups, as per 2011 Census data, SCs and STs have higher percentages of households using safe drinking water sources such as tap waters, hand pumps and tube well/bore well. In the case of SC households, 46.6 percent use tap water, 2 percent hand pumps, and 8.5 percent tube wells. The percentage of households using open wells is 35.5 percent. Only 7 percent depend on other

sources. In the case of STs, 30.7 percent use tap water, 0.7 percent hand pumps, 7 percent tube wells/bore wells and 50 percent open wells. Those who use other sources constitute 12 percent of the total ST households. Implementation of various schemes to provide safe drinking water to these communities by the state has made this difference.

The position of taluks regarding supply of safe drinking water is given in Table 7.8

The analysis of the data in the table shows wide inter-taluk differences in access to safe drinking water. Mangaluru taluk has the highest percentage of households (64.8 percent) covered under safe drinking water, followed by Bantwal (47.9 percent) and Puttur (45.3 percent). Belthangady has the lowest percentage of 27.5. Sullia has 29 percent households with access to safe drinking water. Except Sullia, there were significant improvements in access to safe drinking water during 2001-11 in all taluks. In Sullia, still 71 percent of households depend on unsafe sources of drinking water.

It is really matter of concern that in spite

Table 7.8
Taluk-wise Households by Safe Drinking Water (Percent)

Taluk	2001		2011	
	Safe Drinking Water Source	Unsafe Drinking Water Source	Safe Drinking Water Source	Unsafe Drinking Water Source
Bantwal	31.57	68.43	47.87	52.13
Belthangady	17.72	82.28	27.46	72.54
Mangaluru	54.79	45.21	64.83	35.17
Puttur	29.92	70.08	45.33	54.67
Sullia	27.35	72.65	29.18	70.82
District	38.55	61.45	51.77	48.23

Source: 2001 and 2011 Census.

of various government schemes for providing safe drinking water in both urban and rural areas, nearly 50 percent of the households do not have access to safe drinking water sources in the district. The comparative state level position is 64 percent. The State Government has been giving priority to rural drinking water supply over the last three decades. In 1980s, the emphasis was on bore-wells with hand pumps as main source of water supply in rural areas. With the depletion of groundwater level, most of the bore-wells installed then have dried up. Currently, the emphasis is on tap water schemes in rural areas. But impact seems to be only marginal.

According to the Drinking Water Status Survey conducted during 2011, 43 habitations have 0-25 percent, 68, 25-50 percent, 615, 50-75, percent, 876, 75- below 100 percent and 1869 with 100 percent coverage⁸. Thus, out of 3592 habitations, only 1873 habitations (52 percent) in the district have drinking water as per the norms of 40LPCD with 100 percent population coverage. As per this survey, the water quality affected habitations were 121. It is also important to note that the district has 79 percent of households having access to drinking water within premises and 14 percent near premises. The problem is not the access to water supply but the quality of water in the open wells. It is surprising why only a small proportion of the open wells now covered when it is required to ensure quality of water for drinking.

Besides the quality problem, another important problem in the district is the availability of adequate drinking water during summer. Though the district receives an annual precipitation of around 3500 mm on an average,

75 percent of it runs as surface water and reaches the sea through streams, rivers, rivulets etc. Water holding capacity of the soil (laterite) is poor. With the overexploitation of ground water for irrigation in recent years through bore wells, the ground water table in the district is depleting resulting drying up of open wells, which creates acute water scarcity during summer months. The other major problem faced by the district with regard to drinking water supply is contamination of water and salinity in coastal areas. In most of the coastal belt, the well water becomes saline during summer. This poses a serious problem for safe drinking water in coastal areas.

7.7 Electricity

In modern age, electricity for lighting is another essential requirement for well-being of people. The district receives power supply from Varahi and Sharavati power stations. It also now receives power from Udupi Power Corporation Limited (UPCL) and Suzlon projects. Mangaluru Electricity Supply Company (MESCOM) distributes electricity through electric sub-stations spread out through-out the district. The National Electricity Policy (NEP) stipulated energization of all villages, hamlets, Harijan bastis and thandas

As per the data available, all 331 inhabited villages in the district have been electrified. As regards Hamlets, out of 2311 inhabited hamlets, 2277 (98.5 percent) are electrified. 34 hamlets in Belthangady taluk are not yet electrified due to extreme difficulties in extending the grid to these hamlets. These hamlets are located near Western Ghats. In Table 7.10, the data on households using electricity and other sources for lighting in the district during 2001 and 2011 are examined.

⁸ A habitation is a locality in a village where a cluster of 20 families totaling 100 persons reside.

Table 7.9
Dakshina Kannada District: Households by Main Source of Lighting (Percent)

Source of Lighting	2001	2011
Electricity	71.45	90.83
Kerosene	27.85	8.41
Solar Energy	0.38	0.40
Others	0.16	0.14
No lighting	0.18	0.20
Total	100.00	100.00

Source: Census-2001 and 2011

The district has made significant progress in extending electricity at household level during the last decade. In 2001, only 71 percent of households were electrified, which in 2011 increased to 91 percent. The number of households using kerosene for lighting declined from 28 percent in 2001 to 8 percent in 2011. The households using solar energy are negligible; in 2001, they were 0.38 percent and in 2011, they were 0.40 percent. In spite of efforts by solar companies and banks, solar energy for lighting has not yet become popular in the district. The

district has, however, 850 households living in darkness without any source of lighting.

As per Census data, in 2001, 39 percent of SC and 47 percent ST families were using electricity for lighting. The scenario has now changed significantly. In 2011, 67 percent of SC and 77 percent of ST households adopted electricity for lighting. This change is also reflected in significant reduction in number of households using kerosene for lighting during the decade. In 2001, 60 percent of SC and 52

Table 7.10
Taluk-wise Households by Main source of Lighting – 2011
(Percent)

Taluk/District	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
Electricity	93.46	77.31	96.73	84.94	80.1	90.83
Kerosene	6.04	20.52	2.9	14.49	17.59	8.41
Solar Energy	0.09	1.60	0.05	0.21	1.73	0.40
Others	0.13	0.23	0.10	0.08	0.32	0.14
No lighting	0.26	0.33	0.13	0.22	0.24	0.20
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Census-2011

percent of ST households used Kerosene for lighting. In 2011, it reduced to 32 percent in the case of SCs and 20 percent in the case of STs. This clearly demonstrates that most of the houses electrified during the last decade belong to weaker section particularly SCs and STs.

Taluk-wise distribution of houses by sources of lighting is given in Table 7.10.

From the table, it may be seen that there is still wide inter-taluk gaps in electrification at household level. In Belthangady and Sullia, only 77 percent and 80 percent of households are electrified, whereas in Mangaluru, it is 97 percent and in Bantwal, 94 percent. In Puttur, it is 85 percent. Belthangady, Puttur and Sullia are below the district average of 91 percent. In these taluks, still a significant proportion of households depend on kerosene for lighting. In Mangaluru taluk only 3 percent of households use kerosene for lighting. Belthangady (0.33 percent) has the highest number of houses without lighting, followed by Bantwal (0.26 percent). Mangaluru has the lowest percent of households living in darkness.

7.8 Cooking Fuel

Fire-wood, crop residuals, cow-dung cake, charcoal, and kerosene are traditionally used for cooking in the district. In rural areas, the most common fuel for cooking was fire-wood. In urban areas, besides fire-wood, cow-dung cake, charcoal and kerosene were also used. In recent years, with the increasing income, modern life style and more urbanization, the modern sources of energy like LPG is gradually replacing the use of firewood as cooking fuel. In fact, the transition from the use of traditional bio

fuels like fire wood to modern fuels is an inevitable process with the increase in income and urbanization as well as on the ground of environmental conservation and health. The LPG is the fuel of choice for cooking because it is easy to use, clean and efficient. Firewood is difficult to use and it emits smoke, which is health hazard, requires storing space, human labour for cutting, transportation etc. and not environment friendly.

Table 7.12 contains comparative data on distribution of households according to the type of fuel used for cooking in the district for the year 2001 and 2011.

Table 7.11
Dakshina Kannada District:
Households using different type of
Fuel for Cooking (Percent)

Type of Fuel	2001	2011
Fire wood	67.13	55.67
Kerosene	5.06	1.51
LPG	25.17	41.21
Electricity	0.10	0.04
Bio -gas	0.83	0.77
Others	1.72	0.78
Total	100.00	100.00

Source: Census-2001 and 2011

From the analysis of data in the table, it is clear that the firewood still continue to be the main type of fuel for cooking in the district. As per 2001 Census data, 67 percent of households were using firewood as fuel for cooking. Only 25 percent were depending on LPG. The proportion of households using fire- wood for cooking is now reduced to 56 percent. The share of households using LPG, on the other hand, has gone up to 41 percent. Compared to the state level average of 32.5 percent, the district has a higher percentage of households using LPG/PNG. Contrary to general belief that in rural areas, with the government subsidy and concessional bank loan, the biogas was replacing the fire wood as fuel for cooking, the data shows that the proportion of households using bio-gas has declined from 0.83 percent in 2001 to 0.77 percent. In the case of kerosene, there is a significant decline from 5 percent in 2001 to 1.5 percent. Kerosene is mainly used in the urban areas.

Taluk-wise data on type of fuel used for cooking for the year 2011 is given in Table 13. The comparative analysis of the data shows the rural urban divide in type of fuel use for cooking.

Mangaluru taluk, where the district head quarter Mangaluru city is located, has the highest proportion of households using LPG for cooking. Nearly two-third of households uses LPG for cooking in Mangaluru taluk. As against this, in all other taluks, LPG users constitute less than a quarter. In Sullia, only 13.6 percent and in Belthangady, 17 percent of households use LPG. More than three-quarter of families in these taluks continue to depend on traditional type of fuel like fire wood for cooking. Except Mangaluru taluk, where 2.8 percent of households use kerosene, in other taluks, only negligible percentage of households uses kerosene for cooking.

At the outset, it should be noted that most of the households who use traditional fuel for cooking both in rural and urban areas belong to weaker section of the community. The main reasons for this are inaccessibility and unaffordability of modern fuel supply/services particularly in rural areas. The rural areas do not have good network of distribution of LPG. Without easy access to modern energy sources for cooking, it is impossible to achieve the Millennium Development Goal in this regard.

Table 7.12
Taluk-wise Households using different type of Fuels for Cooking(percent)

Type of Fuels	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
Fire wood	73.87	80.57	32.65	75.55	83.87	55.57
Kerosene	0.45	0.15	2.80	0.26	0.26	1.51
LPG	23.92	17.02	63.35	22.27	13.61	41.21
Electricity	0.02	0.02	0.06	0.03	0.02	0.04
Bio -gas	0.90	1.33	0.31	1.27	1.49	0.77
Others	0.82	0.85	0.80	0.60	0.72	0.78
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Census-2001 and 2011

The goal of ensuring easy and affordable energy access for the unreached and the vulnerable sections of the society are imperative from both gender development and human development perspective.

7.9 Sanitation

Sanitation broadly means safe disposal of waste. Cleanliness and sanitation go hand in hand in ensuring good health and hygienic conditions and thereby, well-being of the community living in a particular area. Moreover, access to toilet facilities within the home premises provides privacy, dignity, and a sense of security to family members especially female members. With the increase in population and urbanization, human waste is the main source of waste posing a big menace and nuisance leading to health hazard. Faecal contamination is the

prime cause for diarrhea, cholera, typhoid, and other infectious diseases. Hence, the provision of sanitation facility has been recognized as one of the basic needs for well-being of people.

The Millennium Development Goal (7) aims at halving by 2015 the proportion of people without improved sanitation facilities from 1990 levels. The Government of India has launched “Total Sanitation Campaign” (TSC) in the year 2005 with the objective of achieving sanitation for all. The primary objective of TSC is to eradicate open defecation particularly in rural areas by providing access to toilets for every household in rural areas, schools and anganwadis to render the villages clean and manage solid and liquid waste efficiently. The scheme also aims to create awareness among public about disadvantages of unhygienic habits to motivate them to construct and use toilets and keep their environment clean.



Toilets Designed Exclusively for Anganavadi Children

Till the 1990s, no concerted efforts were made to improve sanitation at district level. In 1991, only 34 percent of households had toilets. In rural areas, it was 20 percent and urban areas 69 percent, According to 2001 census data, the proportion of households with toilets has increased to 62 percent. In rural areas, it has gone up to 47 percent and in urban areas, to 86 percent. In other words, more than 50 percent of the rural households did not have toilet facilities. With the commissioning of the TSC, a lot of importance was given to improving the sanitary conditions in the rural areas. The State Government has launched Nirmala Grama and Swatchata Grama schemes to be implemented through GPs. BPL families were given Rs.3700 as incentive amount for construction of toilets. Awareness campaigns were organized by the ZP in all taluks

with regard to sanitation and cleanliness. As a result of various initiatives implemented by the government, the district has made reasonably good progress in sanitation as shown in Table 7.13

The analysis of the data in the table shows that nearly 93 percent of the households in the district have now latrine facilities within the premises. Only 7 percent depend on latrine facility outside their premises. It is also important to note that out of 425291 households, 29345 (6.9 percent) households still depend on open defecation. However, it is worthy to note that 71.5 percent of the households in the district have flush latrine as against the state average of 37 percent. It clearly shows that the progress achieved during the last decade in sanitation in rural areas is remarkable. Notwithstanding the

Table 7.13
Dakshina Kannada District: Households by Type of Latrine Facilities (2011)

Location/Type of Facilities	Number	Percent
Within Premises:	394245	92.7
Flush latrine -Piped sewer system	52736	12.4
Flush latrine -Septic tank	248370	58.4
Flush latrine -Other system	2977	0.7
Pit latrine -Slab/ventilated pit	89736	21.1
Pit latrine -Open pit	425	0.1
Night soil disposed into open drain	0	0.0
Service latrine -removed by human	0	0.0
Service latrine - serviced by animal	425	0.1
No latrine within Premises:	9782	2.3
Public latrine	1701	0.4
Open	29345	6.9

Source: 2011 Census

remarkable progress achieved in sanitation, 29345 mainly rural households defecating in open create problems of health and cleanliness, apart from experiencing shame and loss of dignity.

Taluk-wise status of sanitation is more or less reflects the district's position. All taluks have made significant progress in sanitation. Mangaluru taluk has the highest percentage households having toilets within premises (96.3

percent). The respective percentages for Bantwal and Belthangady are 92.3 and 90.6. Sullia has relatively the lowest percentage of 80.8 and Puttur has slightly higher percentage of households with toilets within premises with 88 percent.

Under Rural Development and Panchayat Raj programs, the toilets constructed were 95010 for rural households, 70 community toilets, 1236 school toilets and 505 anganawadi

Box 7.1: Hosangadi GP: A Clean Village Initiative

Hosangadi GP in Belthangady taluk has two villages in its jurisdiction with a population of 4402. Under the State Government's Nirmala Grama and Swatcha Grama Schemes, the GP has decided set a mission to achieve *Swatcha Grama Arogya Dhama* through 'Model House and sustainable self-sufficient community' (*Madari mane –Susthira Swavalambi Samudaya*). It set the following objectives to achieve this goal:

- * Every house to ensure cleanliness – Clean House
- * Every house should have a toilet within their premises with regular water facilities, buckets and other cleaning materials and ensure regular its use.
- * Proper arrangement for solid waste segregation and collection - a compost well to convert natural waste into manure.

The GP decided to undertake the programme with active involvement of local community. It involved the Youth and women groups, women SHGs and other youth groups as well as Grama Sabha to carry out awareness campaign, undertake workshops and participatory meetings to educate people, make them aware the need for making village free from open defecation, unhealthy practice and uncleanliness and also free from the menace of plastic and other solid wastages. The GP also held Grama Sabha meetings to discuss the need to make their village clean. It has set up 18 plastic soudha to help people use these soudhas to dump plastic and other solid wastes. With the help of government financial assistance, it has achieved 100 percent sanitation. All families have now the toilets within their premises. The GP was awarded Nirmala Grama Puraskar in 2010-11. It was also recognized as a model village for cleanliness and total sanitation by the State Government. Netherland Rural Development team, Orissa Government Rural Development Study Group, Andhra Pradesh Rural Development Study Team and various committees and officials of Government of Karnataka visited GP and commended their initiative. The Government of India also recognized the GP as a model GP for total sanitation.

Source: Dakshina Kannada Zilla Panchayat.

toilets. The highest numbers of toilets constructed for rural households are in Bantwal, (23439) followed by Belthangay (20563) and Mangaluru (18585). Sullia has the lowest number of 13935. The number of toilets constructed in Puttur is 18488. Since rural houses in the district are spread out, the drainage is not a serious problem in the rural areas. It is a serious problem only in urban areas, which has been discussed separately in chapter 11.

With a view to encourage 100 percent coverage of total sanitation, the Government of India has instituted the Nirmal Grama Puraskar award at Grama Panchayat, Taluk Panchayat and Zilla Panchayat levels. The criterion for such puraskar is 100 percent toilet construction and their use by households, schools, and anganawadis and efficient management of solid and liquid wastes. The State Government instituted Nirmalya Award to encourage Grama Panchayats, Taluk Panchayats and Zilla Panchayats for acceleration and sustainability of TSC. The awards range from Rs.1 lakh to Rs. 19 lakh for GPs, Rs.10 lakh to Rs.20 lakh for Taluk Panchayats and Rs.30 lakh for the ZPs. During 2006 – 12, out of 203 GPs, 203 were awarded Nirmal Gram Puraskar by the Central Government.

7.10 Concluding Remarks

Dakshina Kannada district has made significant progress in housing status, electrification of villages and households and sanitation. The quality of housing in terms of materials used for roofing and walls and quality in terms of availability of dwelling rooms, kitchen and bathroom in the district is comparatively better than most of the districts in

the state. This remarkable progress was mainly due to various government housing schemes for the weaker section in rural areas. The government's pro-active and pro-poor housing policy significantly contributed in this regard. Thus, the district is already reaching the goal of houseless households in all sections of the community.

As regards drinking water, the district, historically, relied on open well. Nearly two-third of rural households still depends on open wells for drinking water. However, the water quality of which is considered unsafe for drinking. The tap water treated is mainly available in urban areas. Besides the quality problem of open well water, the district is also faced with the problem of availability of adequate drinking water during summer. With the overexploitation of ground water for irrigation through bore wells, the ground water table is depleted and open wells dry up during summer months, which creates acute shortage of water for drinking during summer. Thus, the problem of safe drinking water centred not on access but on quality and adequate supply particularly during summer.

There exists wide rural and urban gap in the types of fuel used for cooking. In rural areas, nearly three-fourths of the households depend on traditional bio-fuels like fire-wood for cooking, whereas in urban areas, more than two-thirds of the families use modern fuel type mainly LPG. Inaccessibility and unaffordability of modern fuel supply/services in rural areas pose real problem in this regard. Rural based bio-gas was expected to replace traditional fuel for cooking, but it has not taken off.

In the area of sanitation, the district has

made a remarkable progress in both rural and urban areas. The majority of households including weaker sections have flush latrine in their own premises. The Government's enabling and entitlement policy and programs facilitated this achievement. However, the menace of

emerging slums with the increasing number of floating migrant labour families in and around urban centres has potential to pose serious threat to the sanitation in the district unless the corrective steps are taken now.



Surathkal - Mukka Lighthouse



Chapter 8

GENDER AND DEVELOPMENT



THE MEMBERS OF NAVODAYA SHG INVOLVED IN THE GROUP ACTIVITY



8.1 Introduction: Gender as a Concept

Conceptually gender has broader meaning. It refers to the economic, social, behavioral and cultural attributes, expectations and norms associated with being a woman or a man. Gender equality refers to how these aspects affects women and men relation to each other and to the resulting differences in rights, entitlement, resources, social and economic status and power between them. Gender equality or gender balance is therefore a core human development objective in its own right. According to Sen (1999), the development is a process of expanding capabilities, opportunities and freedom equally for all people without discrimination. The World Development Report 2012 also advocates that gender equality matters intrinsically because the ability to live the life of one's own choosing and be spared from absolute deprivation is a basic human right and should be equal for everyone, independent of whether one is a male or female. Gender balance, thus, shapes one's life chances and one's role in the home, in society and in the economy irrespective of whether one is man or woman. Since women are historically the most deprived and discriminated, the gender development and equality cantered around mainly empowering the women. Women constitute nearly half of the society and hence, greater gender equality can be enhanced only by ensuring well-being of women.

By definition, the gender issues emanate from the unequal gender relations between men and women in respect of rights, decision making process, resources, access to basic facilities, power and institutional representations. The effect of the unequal gender relations are *inter*

alia skewed sexual division of labour, absence of property rights, unequal access of women to basic resources, discrimination in education and health, a limited political representation of women, sexual violence against women and other deprivation. All these not only constitute women's subordinate position in the society, but also affect a woman's access to and control over resources, her active and productive participation in society and her ability to exercise her rights and lead a life she values most. Persistence of gender inequalities or disparities between individuals, groups, and communities on the basis of their gender identity like other forms of social discrimination is, thus, a major area concern in human development.

Empowerment has recently emerged as key policy strategy for gender development and equality. Empowerment is a process by which the powerless or marginalized not only get control over the circumstances of their lives but also involves changes in access to resources and understanding of one's rights and entitlements and conviction that gender equality is possible. In this sense, the gender empowerment addresses the issue of power and powerlessness that the unequal gender relations perpetuate. No country can be developed if half of its female population excluded or severely disadvantaged in terms of basic needs, livelihood options, and access to resources, health, knowledge and political voice. Economic, social and political empowerment of women is therefore essential to guarantee women equal opportunities to development. All these would require policies and programs aiming at addressing gender bias and imbalances existing if any, and empowering

women, giving them greater choices, putting them in charge of their future and making them self-reliant and confident. The gender concerns and issues, therefore, need to be mainstreamed in human development approach and government's developmental programs.

The Constitution of India confers equal rights and opportunities to men and women in the political, economic and social spheres. The universal adoption of Convention on the Elimination of the Discrimination against Women (CEDAW) in 1993 and thereafter, the Beijing Declaration as well as the Platform for Action (1995) laid down critical areas of concern for women development, which include women and poverty, education and training, health, violence against women, women in armed conflict, women in power, and decision making, human rights etc. In pursuit of these goals, the Government of India announced the National Policy for the Empowerment of Women in 2001 to bring about the advancement, development and empowerment of women by eliminating all forms of discrimination against women and ensuring their active participation for sustainable development. The 2010 Millennium Development Goal (MDG) summit adopted a resolution calling for action to ensure gender parity in education and health, economic opportunities and decision making through gender mainstreaming in development policy making. In view of the critical importance of gender issues, UNDP, since 1995 made Gender related Development Index (GDI) and now Gender Inequality Index (GII) as an integral part of human development index with a view to measure gender disparities across countries.

In this chapter an attempt has been, therefore, made to empirically examine patterns and trends in gender disparities and assess how effective the government's policies and programs are in empowering women and redressing gender inequalities at the taluk and district levels. The focus is more on highlighting gender inequalities wherever existing in various dimensions of livelihood, in order to bring out issues and problems faced by women in the district.

8.2 Gender Differentials in the District

The demographic differentials show the comparative profile of male and female in terms of number, growth and sex ratio. As per 2011 census, out of the total population of 2089649 in the district, 1034714 were males and 1054935 females (Table 8.1). Women in the district constitute 50.5 percent of the total population as against the state average of 49.3 percent. The sex ratio works out to 1020 as compared to state level 973. In 2001, the sex ratio in the district was 1022. There was a slight decline in the sex ratio and resultant decline in the share of female population in the total district's population during the census decade. Though the sex ratio is higher than state average, it is significantly lower than neighboring Udupi district (1095) and Kerala State (1058). In neighboring Udupi district females constitute 52.3 percent of the total population as compared to 50.5 percent in Dakshina Kannada district. The child sex ratio (0-6 age group), which has also witnessed a decline from 952 in 2001 to 947 in 2011. The share of female children in the age group 0 – 6 is 48.6 percent. In neighboring Udupi district, the comparative sex ratio is 958.

Table 8.1
Key Indicators of Demographic Gender Differentials: 2011

Taluk	Population (Number)			Share of female	Sex Ratio	Sex Ratio in 0-6	Decadal growth (2011 over 2001)	
	Male	Female	Total	Percent	Number	Number	Male	Female
Bantwal	196708	198672	395380	50.25	1010	945	10.10	8.63
Belthangady	131967	134622	266589	50.50	1020	962	8.80	7.52
Mangaluru	490797	503805	994602	50.65	1027	941	12.90	12.42
Puttur	143116	144735	287851	50.28	1011	945	7.78	8.59
Sullia	72126	73101	145227	50.34	1014	967	1.59	4.79
District	1034714	1054935	2089649	50.48	1020	947	10.26	9.97
State (Lakh)	309.67	301.29	610.95	49.31	973	948	15.12	16.09

*Source: Census – 2001 and 2011 * Sex Ratio of females per 1000 males.*

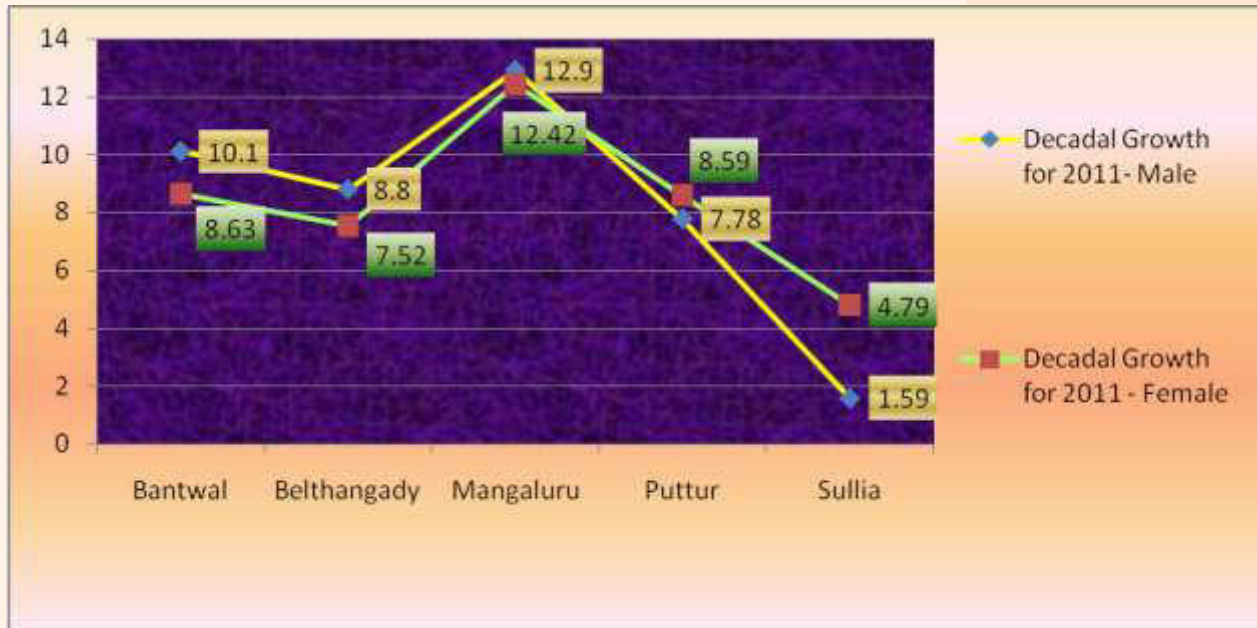
Interestingly, in rural areas, the sex ratios are higher than urban areas. It is 951 as against in urban areas, 942.

Taluk-wise, Mangaluru has the highest adult sex ratio (1027) and Bantwal has the lowest (1010) adult sex ratio. In the case of child sex ratio, Sullia has the highest (967) and Mangaluru has the lowest (941). Taluk-wise differentials are, however, not very wide. Besides declining child sex ratio, what is disturbing is the differential observed in the decadal growth in male and female population. While at the state level, decadal growth of women is higher than men, in Dakshina Kannada district, it is lower. As against 10.3 percent decadal growth in male population, the decadal growth in female population is 9.97 percent in the district. At the state level, the decadal growth of men population is 15 percent and female population, 16.1 percent. The comparative analysis of taluk level data shows that Sullia and Puttur have higher decadal growth of female population than men, while in other three taluks, the male population has higher decadal growth than women. All these trends have serious

demographic and economic implications for the future.

Health profile is another important area, which reflects the well-being and quality of life of women. As per the data available for the year 2001-02, the life expectancy at birth for women in the district was 68.5 years, which is higher than men (65.9 years). There is, usually, no practice of child marriage in the district. The mean age at marriage of women in the district is 22 years as against mean marriage age of men of about 28 years. The IMR in the district is one of the lowest (19) in the state. The comparative figure for the state is 38 and for the nation, 47. Similarly, the child mortality below 5 year age and MMR in the district are relatively lower. The child mortality rate in the district is 22 and MMR, 89. The MMR at the state level is 178. The district has also the lowest fertility rate in the state. As against the state average fertility rate of 2.4, the district fertility rate is below 1.5. Institutional delivery is almost 100 percent in the district. All these clearly indicate that gender discrimination in demographic and health dimensions is less in the district.

**Graph 8.1
Gender Wise Decadal Population Growth**



8.3 Patterns of Literacy and Enrolment

Education is critical for gender empowerment and gender equality. The education of women is also linked to capability and job skill development, freedom of choice, social, cultural and political participation, health status and ability to fight against any discrimination. The empirical studies have also shown that education of women closely correlated with reduction in fertility, delay in marriage age, small family size and education of children and more importantly ensuring well-being of the family life. Table 8.2 brings out gender gap in literacy rates and various education parameters.

As per 2011 census data, the literacy rate of male population was 93.13 percent and female 84.13 percent in the district. The respective state average is 82.5 percent for male and 68.1 percent for female. The gender gap in

literacy works out to 9 percent in the district as against the state gap of 14.4 percent. The gap between the district level and state level female literacy rates is 16.03 percent. The gender gap in literacy rate between 2001 and 2011 Censuses has narrowed down from 12.5 percent to 9 percent. Dakshina Kannada district has the highest literacy rate for female population next to Bengaluru Urban (84.8 percent). The decadal growth in female literacy was 9 percent as compared to decadal growth 3.8 percent in the case of male literacy. It is gratifying to note that the gender gap in literacy rate is narrowed down and in next five years will be completely wiped out.

As regards rural-urban gender disparity in literacy level, according to 2011 Census, the female literacy rate in rural areas is 79.83 percent as against male literacy of 90.97 percent. In urban areas, female literacy is 88.83 percent as against male literacy of 95.5 percent. The

Table 8.2
Gender Gap in Literacy and Education (Percentage)

Indicators	Male	Female	Gap
Literacy Rate	93.13	84.13	-9.00
Literacy rate in rural area	90.97	79.83	-11.14
Literacy rate in urban area	95.50	88.83	-6.67
Decadal growth in literacy rate	3.82	8.98	5.16
Literacy Rate in Bantwal	92.60	81.02	-11.58
Literacy Rate in Belthangady	89.99	77.99	-12.00
Literacy rate in Mangaluru	95.31	88.15	-7.16
Literacy rate in Puttur	90.71	80.51	-10.20
Literacy rate in Sullia	91.34	81.44	-9.90
GER at Primary Education	101.03	100.36	-0.67
NER at Primary Education	95.89	95.06	-0.83
Drop-out at Primary Education	1.22	0.55	0.67
GER at Secondary Education	96.02	101.20	5.18
Drop-out at Secondary Education	14.23	5.38	8.85
Pass in S.S.L.C.	66.52	82.69	16.17
Teachers Ratio	39.19	60.81	21.62
PUC: Students Ratio	46.46	53.54	7.08
Pass in PUC	82.08	89.36	7.28
Higher General Education Student ratio	47.88	52.12	4.24

Source: Census 2011.



Morarji Desai Residential School for Empowering the Girls

rural-urban gender disparity in literacy is significantly high. It is 11.14 percent in rural areas and 6.7 percent in urban areas. The comparative data at the state level is 59.7 percent female literacy and 77.6 percent male literacy in rural areas and 81.4 percent female literacy and 90 percent male literacy in urban areas. The rural – urban disparity is 9 percent for female and 4.5 percent for males. Even in rural – urban female literacy levels, the district is relatively ahead of most of the other districts in the state.

Though taluk-wise pattern in the male and female literacy status is almost same, there is a wide inter-taluk difference in gender disparity. Mangaluru has the highest literacy rates for rural females (84.67 percent) and urban females (92.7percent). Belthangady has the lowest female literacy rate (77.7 percent) in rural areas and Bantwal has the lowest (86.2 percent) in urban areas. The rural-urban gender disparity is the highest in Puttur (10.14 percent), followed by Belthangady (8.93 percent). Bantwal has the lowest rural-urban gender inequality (5.8 percent). The disparity between rural-urban female literacy in Sullia is 8.2 percent and in Mangaluru taluk, 8.04

As regards education parameters in terms of enrolment, drop-out and education attainment are concerned, the gender disparities are only marginal and in some areas, girl students' performance is better than male students. The enrolment at primary education level is universal and hence no gender disparity. The enrolment of girls in the secondary and higher education increased significantly during the last decade. The girls' GER in secondary education was 101 percent as against boys' GER of 96 percent. The drop-out of girl students at

secondary education is 5.4 percent as against boys, 14.2 percent. The girls' pass out in SSLC was higher than boys. Similarly, in PUC and higher general education, the girl student's participation ratio is higher than boys' participation ratio. In PUC, they constitute 53.5 percent of total student population. In higher general education, they constitute 52 percent of the student population. SSA stipulates a norm of 50 percent female teachers at primary education level. The district has 2287 female teachers out of total 3761 teachers. The proportion of female teachers works out to 61 percent. All these trends evidently demonstrate that the district has overcome gender discrimination in education in the district.

Notwithstanding the above, in professional education such as engineering, medical etc., the participation of girls is significantly lower than boys. The reasons for this may be high fees structure for professional courses, parental bias in favour of males for professional courses, preferences of girls to conventional higher education, non-availability of professional jobs locally for women, hindrance to start self-employment etc. However, compared to the past, it is encouraging to note that in recent years, there is a significant improvement in the enrolment of girl students in professional education in the district.

8.4 Work Participation Trends

Women work participation provides insights on the key issues involved in women's economic empowerment, their ability to access resources required for well-being, exercise some degree of personal freedom and share in decision making process. In Chapter six, the work

participation and occupation pattern were analyzed in detail and hence, the discussion here mainly focuses on gender inequality in work participation.

Women in the district constitute slightly more than half of the total population. Their share in the total workforce is at present 37.8 percent. Out of 997721 workers, 376818 are women workers. During the decade 1991-2001, the total workers in the district increased from 6.79 lakh to 9.46 lakh, accounting for an increase of 39 percent. The number of female workers increased from 2.71 lakh to 4.00 lakh, representing an increase of 48 percent during this period. The women work participation rate also increased significantly from 32 percent to 42 percent during this period. In 2011, the total workers increased to 9.98 lakh and the decadal growth in workforce was 5.5 percent. While there was an increase of 13.7 percent in male workforce, the women workforce witnessed the decline of 6 percent; from 4 lakh to 3.77 lakh. As a result, there was a significant decline in the WPR of women workforce from 42 percent in 2001 to 38 percent in 2011 (see Table 6.16).

Contrary to this, at the state level, the share of female workforce increased from 31 percent to 34.4 percent during this period. The downward trend in women work participation in the district is indeed a matter of serious concern.

Table 8.3 shows the gender gap in the workforce measured as difference between the share of male and female in total workforce in different taluks.

During the decade 2001-11, all the taluks witnessed decline in the number of women workers and increase in male workers (see Table 6.16). The gender gap in workforce is the highest in Mangaluru (30.74 percent), followed by Sullia taluk (30.28 percent). Bantwal has the lowest gender gap in workforce (16.3 percent). Puttur taluk has 20.8 percent and Belthangady, 17.7 percent gender gaps. The district as a whole, it works out to 24.5 percent. Taluk-wise, the work participation rate (WPR) for female workers is the highest in Bantwal taluk (48 percent), followed by Belthangady (47 percent). Mangaluru taluk has the lowest WPR (33 percent). The respective WPRs for Puttur and Sullia are 45 percent and 36 percent. For the

Table 8.3
Gender Gap in work Participation in Dakshina Kannada District

Taluk	Male Workers		Female Workers		Total	Gender Gap
	Number	Percent	Number	Percent	Number	Percent
Bantwal	119378	58.15	85925	41.85	205303	16.30
Belthangady	81262	58.86	56804	41.14	138066	17.72
Mangaluru	286488	65.37	151797	34.63	438285	30.74
Puttur	88803	60.40	58226	39.60	147029	20.80
Sullia	44972	65.14	24066	34.86	69038	30.28
District	620903	62.23	376818	37.77	997721	24.46

Source: Census-2011

district as a whole, the WPR is 39.5 percent. As against this, the taluk-wise WPRs for male varies from the lowest 66 percent in Sullia to the highest, 69.5 percent in Puttur. The WPR for male workers in the district works out to 67 percent. The district level gender gap in WPR is 27.4 percent.

The gender composition of workforce in rural and urban areas (see Table 6.17) evidently shows rural-urban divide in employment of women workers. While in rural areas, there was a significant decline in the share of women in the total workforce to the extent of 20 percent, the urban areas witnessed 30 percent increase in their share. In terms of number, the rural women workers declined from 289109 in 2001 to 232812 in 2011. In urban area, their number increased from 110877 to 144006 during this period. This clearly shows the downward trend of the female employment in rural areas and upward moving trend of urban women employment in the district. Though in the dynamics of economic development, it is a welcome trend, it is important to note that there was a significant decline in the WPR from 48 percent in 2001 to 42 percent in 2011 for rural women workers. As a result, the gender gap in WPR in rural areas increased from 11 percent to 20 percent. In urban areas, it only marginally increased from 26 percent to 28 percent.

The district is also undergoing structural shift in employment pattern of women. In 1991, about 24.4 percent of the women workforce was engaged in agriculture and 76 percent in household and other non-agricultural occupations. As against this, in 2001, the women workforce engaged in agriculture was reduced to 7.2 percent and their employment in household

and other non-agricultural occupations has increased to 92.8 percent. In 2011, in agriculture, women employment is further reduced to 4.3 percent. In 1991, the district has 24872 women cultivators, which was reduced to 14374 in 2001 and 8508 in 2011. They now constitute 25 percent of the total cultivators in the district. Similarly, there is a declining trend in women agricultural labourers. In 1991, there were 28561 women agricultural labourers. In 2001, their number was reduced to 14520. As per 2011 census, the district has now only 7890 agricultural labourers.

agricultural activities has gone up but marginally. As against 186830 employed in 2001, the number of women workers in other industries increased to 188362 in 2011. As against 13.6 percent increase in the employment of men, the employment of women declined by 6 percent during this period. Though there exist inter-taluk variations in the gender composition in occupation, the pattern is almost the same in all taluks. Though in the dynamics of economic growth, the pattern of employment is naturally expected to shift structurally in favour of secondary and tertiary activities and decelerate in the agricultural activities, the decline in women employment is a worrisome matter.

8.5 Marginalization of Women's Works

The gender composition of the workforce shows that the share of male workers among main workers increased and the share of women workers in main workers declined during the decade 2001-2011. The share of men workers in total main workers increased from 58 percent in 2001 to 62 percent in 2011, while the share of women workers in the main workers

declined from 42 percent to 38 percent during the same period. Among marginal workers, on the other hand, the share of the male workers declined by 5 percent and female workers by 30 percent. The share of female workers in total marginal workers declined from 61 percent to 54 percent during this period. The decline in the share of women in both main and marginal workforces was mainly due to decline in the number of women in the total work force. The total women workers declined from 4 lakh in 2001 to 3.77 lakh in 2011; accounting a decline of 6 percent, while total men workers increased by 14 percent.

There was a significant increase in women non-workers during 2001-11. In 2001,

women non-workers were 5.59 lakh, which was increased to 6.78 lakh. This accounts for an increase of 21 percent. As against this, men non-workers increased by only 5 percent; from 3.92 lakh to 4.14 lakh. Taluk-wise trend is also the same. The growth in main workers was mainly due to significant increase in the male workers in all taluks. The share of women workers in both main and marginal workers declined in all taluks. Similarly, all taluks witnessed significant increase in women non-workers. The decline in women workforce both main and marginal categories and significant increase in non-workers category, thus, evidently shows marginalization and pauperization women workforce in the district.

Box 8.1: Women Employment in Beedi Rolling

Dakshina Kannada district is historically known for 'Mangalore Beedi'. Beedi rolling is mainly done by women workers sitting at home on outsourcing basis. More than one lakh women were engaged in beedi rolling in the district. They belong to poor and weaker sections of the society mainly in rural areas. The beedi manufacturing companies have network of collection centres who provide raw materials at the door-step of women workers and collect beedi rolled on daily basis. The women workers at their leisure time do beedi rolling. The rolled beedies are collected by the nearby centres. They are paid based on number of beedi rolled. It is highly labour intensive and gender-friendly. Notwithstanding its health hazard effects, the Beedi industry, in fact significantly contributed to alleviate poverty and improve the standard of living of rural poor in the district. Beedi working women are organized and get certain benefits such as provident fund etc. With the decline in demand, the industry is now facing crisis and rural poor women workers are faced with the problem of unemployment. Despite the harmful effects of beedi rolling, its contribution towards economic empowerment of rural women cannot be overemphasized.



Beedi Rolling – The Gender Friendly Profession on the verge of Extinction

The gender disparity in wages is another manifestation of gender discrimination and gender bias in labour market. It mainly emanates from an inequitable gender division of labour, segregation in economic activity and feminization of job market. The disparity between wages among men and women in rural and urban areas still persists and is widening. The average daily wage rate for agricultural labour for men varies from Rs.300 to Rs.350 and for women Rs.200 to Rs.250. In urban areas, daily wage rate for men range from Rs.300 to Rs 500 and for women, it varies from Rs.300 to Rs.400. The difference of Rs 50 to Rs 100 in the daily wage rates of men and women still persists in both rural and urban areas.



Woman at Work in a Home Industry

In rural areas, women are mostly engaged in agricultural labour, dairying, poultry keeping and in informal household activities. In urban areas, they are mainly involved in construction activities and informal business employment. In most of skilled job opportunities, the women still lag men in both rural and urban areas. The gender difference in access to employment market is still persisting mainly due to gender-wise segregation of economic activity and entrenched gender bias in functional roles and social norms. Equal employment opportunities and equal earnings for men and women at grass root level is required in order to avoid gender discrimination, gender inequality and marginalization of women works space.

With deceleration in agricultural sector's growth, agriculture is no more a major source of employment for rural women workforce. The main employment providing industries for women workforce in the district are traditionally beedi making, cashew nut processing and tile factories. The decline of beedi making and tile industries, in recent years adversely affects the women employment particularly in rural areas. Other gender sensitive industries in the district are readymade garments, food processing, paramedical services, education, banking etc But only a small percentage of the families in the district have working women in the organized sector. The need for engendering women employment in secondary and tertiary sectors therefore needs hardly any emphasis.

8.6 Trends in Political Participation

The equality in gender participation at all levels of power and decision-making in the

governance is very crucial for gender empowerment and development. In a democratic set up, political space belongs to all citizens on equal terms without any discrimination. The Indian Constitution reiterates equal rights and opportunities for both men and women in the political, economic and social spheres (Article 14). Since historically, women were deprived of equal rights and opportunities in political arena, it becomes imperative for the government to bring quota for women in the political representation at all levels of governance. The increased representation of women in public life and in leadership roles can also bring necessary changes and progress in their development and empowerment. Karnataka was the first state in providing reservations for women in all local bodies under Zilla Parishad, Mandal Panchayat Act of 1983. The 73rd and 74th Constitution Amendment in 1993 and 1994 also provided reservation of one-third of the seats for women at every level of

local government. Following these directives, in this section, an attempt is made to evaluate the extent of women representation at different level of governance.

The three-tier structure of Panchayat Raj in Dakshina Kannada district consists of Zilla Panchayat (ZP) at district head-quarter, Mangaluru city, five taluk panchayats (TPs) at Bantwal, Belthangady, Mangaluru, Puttur and Sullia, 203 Grama Panchayats (GPs), one City Corporation, 4 Town Municipal Councils (TMCs) and 3 Town Panchayats (TPs) Table 8.4 provides the gender-wise data on prevailing representation of men and women in the local governing bodies.

It is worthy to note that the participation of women in the local governance since inception of the Panchayat Raj system in the district was relatively very good. From the table, it may be seen that out of the total representative members of 3271 in 203-GPs at present, 1475

Table 8.4
Gender-wise Representation in Panchayat Raj in Dakshina Kannada District: 2011-12

Institutions	Male Members		Female Members		Total
	Number	Percent	Number	Percent	Number
Zilla Panchayat	17	48.57	18	51.43	35
Bantwal TP	15	45.45	18	54.55	33
Belthangady TP	11	45.83	13	54.17	24
Mangaluru TP	19	51.35	18	48.65	37
Puttur TP	9	40.91	13	59.09	22
Sullia TP	5	38.46	18	61.54	23
Grama Panchayats	1796	54.91	1475	45.09	3271
Mangaluru City Corporation	36	60.00	24	40.00	60
Town Municipal Councils	65	61.90	40	38.10	105
Town Panchayats	24	52.17	22	47.83	46

Source: Dakshina Kannada at Glance-2011-12

are elected women members. This constitutes 45 percent as against 33 percent reservation quota for women. At the taluk panchayat level, the proportion of women representatives is more than men in four taluks. Only in Mangaluru TP, it is 48.6 percent. The districts as a whole, out of 139 TP members, 80 are women. Their representation constitutes 57.6 percent. In the case of Zilla panchayat, women representatives are 18 out of 35; accounting 51.4 percent representation as against 33 percent quota. Thus, in the three-tier panchayat raj system, the gap between men and women representation is only marginal.

In the case of urban governance, in Mangaluru City Corporation, out of 60 members, 24 are women. Their representation constitutes 40 percent. In TMCs, out of 105 members, 40 are women, accounting 38 percent.

Similarly out of 46 TP members, 22 are women (47.8 percent). Though the women representation in urban governing bodies is above the quota, the gap between men and women representation is significant. It does not consistent with their share in total population. It is also important to note that there is only one woman representation in State Assembly and no representation in Parliament.

In the overall analysis, the political women representation in the district is one of the best in the state. With experience and self-confidence gained, the women representatives at all levels participate actively in the decision making process and contribute significantly for the development of the district. The women representation in political arena has also become a powerful agency and pressure group for improving the status of women in the district.



Young Girls at Marathon – The Changing Perspectives

8.7 Community Attitudes and Social Prejudices

The community attitudes, social norms and code of conduct and historically deep rooted social prejudices or gender biases have serious implications on women's rights and freedom, empowerment, access to resources and gender equality. They also influence the way women function and exercise their rights in a social set up. The life expectations, values, behaviours and gender outcomes broadly depend on them. They may vary based on castes, tribes and religions and their influence may also differ widely. Culture also has influence on them. Every caste or religion or tribe have traditionally embedded social norms on acceptable behaviour for women, their access to resources and role, codes of modesty and code of honour as well as beliefs about their safety in public spaces. The deeply rooted general belief is that the women's role and primary responsibility associate with housework, childrearing, caring for sick and elderly etc while men's main role is that of provider and care-taker. This belief is still directly or indirectly constraining women's ability to make choices and control their lives. There is also general community prejudice suggesting that biologically, women are less able than men to perform some functions. All these come in the way of gender development and equality.

The district had historically highest respect for women from time immemorial. The matriarchal family system is in vogue among the majority of the community. It accords more importance to women in inheritance of property rights and family decision making process. Under matriarchal system, the succession is

through the 'female line'. The ownership of land by women under matriarchal system has contributed significantly in empowerment of women in the district. Without the consent of women, men cannot sell inherited landed properties. Women headed households are very common in the district. In all important economic decision making processes, men and women are equal partners. There is no practice of child marriage and also 'sati'. The widow marriages were practiced even in the past. The girls' education is on parity with the boys. In fact, girls' performance is better than boys in S.S.L.C. and P.U.C. pass results. The health parameters such as MMR, institutional delivery, fertility rate etc also demonstrate absence of discrimination in access of health care. The district has one of the highest number women cultivators (30.6 percent) in the state. The women's representation in panchayat raj institutions is more than reservation and in some cases more than men.

There are, however, some customs such as dowry, system of marriage etc which play significant role in causing gender differential. The dowry payments at the time of their daughters' marriage are very common among most of the communities in the district. In recent years, it is increasing at an alarming scale. It has become highly competitive and poses a serious problem for marriage of girls among weaker section of the community. There are also gender biases, though relatively in minor form persists. The preference of male child, professional education for boys, bias in employment opportunities, lack of access to credit for women etc are among the few. Though with education and empowerment of women, these biases will

be minimized, it is not easy to prevent gender discrimination in some of these areas. The gender inequities as a result of traditional social customs also exist in different forms in rural areas and among illiterates and weaker section of the community.

Compared to those in the other districts in the state, the community attitude and social prejudices against women are minimal and do not come in the way of women development in the district. This is evidently reflected in their access to property rights, increasing enrolment in primary, secondary and tertiary education, high sex ratio, small size of family, late marriage, more number of women in both self and wage

employment, entrepreneurial nature of women, number of organizations run by women, political representation, and participation in family and social matters. The gender-friendly environment prevailing in the district has, in fact, enabled women to rise from the age old traditional status to a modern status. Various government interventions for women empowerment also facilitated this process.

8.8 Crimes against Women

The UN *Declaration on the Elimination of Violence against Women (1993)* defines 'violence against women' as any act of gender-

Box No.8.2 Gender Friendly and Enabling Factors in Dakshina Kannada District

1. Matriarchal family system historically provided women dominant role in family matters and inheritance of property rights.
2. The district has highest respect for women from time immemorial.
3. Historically favourable sex ratio and importance given to girl child.
4. Good education infrastructure, easy access and equal importance to girls education
5. Very good health infrastructure and health delivery system in the district.
6. Gender-specific and gender-friendly job opportunities in traditional beedi rolling, tile factories and cashew processing
7. No restrictions to mobility of women
8. Gender equality in social participation
9. Ample opportunities for Women participation in entertainment and social and religious festivals
10. District has one of the highest number of women-headed households.
11. Cradle of banking paved way for educated women getting employed
12. Strong NGOs movement
13. Good network of womn SHG movement promoted by NGOs and government
14. .Good network of communication and transport network
15. High rate of out-migration

based violence that results in or is likely to result in, physical, sexual or mental harm and suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life. By this definition, violence against women can manifest in many ways and covers a wide range of offences ranging from dowry deaths or harassment, spousal abuse, rape, trafficking in women, sexual harassment etc. They are the most pervasive forms of human rights abuse. All these have root in historically manifested men's economic and social domination and social prejudices. Karnataka State implemented the Protection of Women from Domestic Violence Act in 2007, which goes a long way in protecting women from oppression.

In the past, Dakshina Kannada district had one of the lowest registered crime data against women in the state. In spite of the high level of dowry system, the district had no dowry

deaths and very few divorces. The district had also the lowest number of molestation and rape cases. As per KHDR 2005, in the year 2003, only 2.64 crimes per one lakh female population were reported as against the state average of 7.16. In the same year, the women suicide cases were 11.89 per one lakh women population. As against this, men suicide cases were 43.44 per one lakh men population. But the trend has in recent years slightly changed. Table 8.5 contains number of cases registered on crime against women during the last three years.

The year-wise data shows the increasing trend in the crimes committed against women. The highest number of crimes against women relate to physical violence. In 2009-10, the number of cases registered was 24 which increased to 36 in 2011-12. Other major crimes against women as per the registered cases were sexual violence and harassment of women. In 2011, 28 rape cases were registered in

Table 8.5
Crimes against Women Registered in Dakshina Kannada District (Number)

Type of Crime	2009-10	2010-11	2011-12	Total
Physical violence	24	20	36	80
Mental torture	0	25	21	46
Financial harassment	0	0	0	0
Dowry related crime	4	15	27	46
Adultery	0	0	0	0
Family quarrel	0	0	0	0
Divorce	0	0	0	0
Rape	5	28	16	49
Property dispute and quarrel	0	0	0	0
Court cases registered	0	9	17	26
Sexual violence	0	24	27	51
Others	31	44	49	124
Total	64	165	193	422

Source: Police Department.

Mangaluru city. Surprisingly, 16 cases of harassment of women for dowry in the district have been reported during last three years. 46 cases were also registered in the case of mental torture. It is possible that in the past most of such cases were not reported but now with setting up Women Counseling Centres in taluk and improved education level of women, the reporting of such cases will increase.

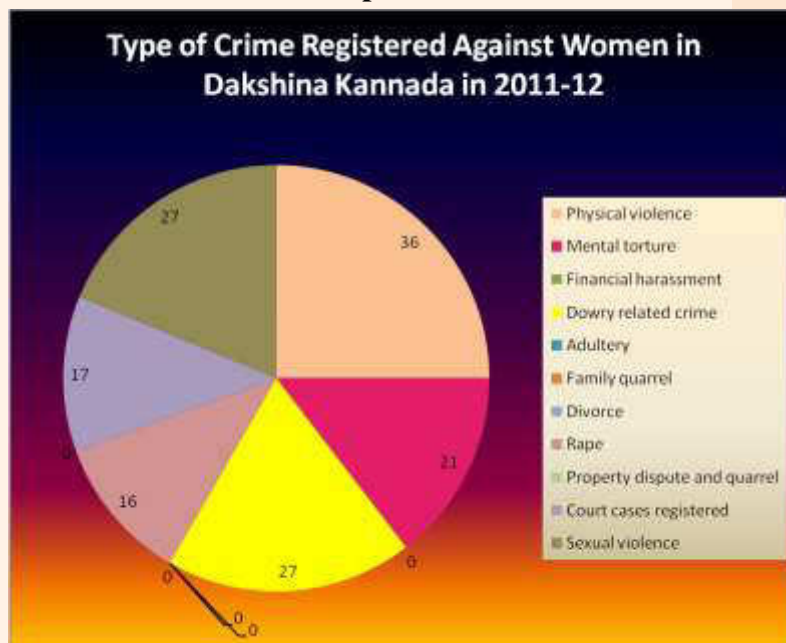
With the implementation of Domestic Violence Act of 2007, women have better protection of law as the Act is stringent and punitive. It goes a long way in achievement of gender equality and saving women from oppression. In order to provide shelter, protection, counseling and free legal help, the WCD Department of ZP has short stay homes and Women Counseling (santwana) centres. One Protection Officer has been provided for this purpose in each taluk. The WCD Department also organizes awareness programs for SHGs, and local government bodies on women

protection, trafficking of women, violence against women etc on regular basis.

8.9 Role of Women's Groups and SHGs

The provision of financial services to the rural poor particularly women was the major area of concern for a long period. They were, in the past, considered not creditworthy and bankable. The NABARD, as an apex body for rural finance, conceptualized and operationalized self-help groups (SHGs) as instrument for provision financial service to empower the poor and women. The formation of SHGs of rural poor and women and linking them with banks was considered cost effective, transparent and appropriate besides solving problems faced by banks viz. recovery of loans, high transaction costs and inadequacy of collateral security for loan. Box 8.3 contains the operational guidelines issued by the RBI/NABARD for formation of SHGs for banking linkage.

Graph No. 8.2





Kabaddi – Empowered Women

Box 8.3: Operational Guidelines issued by RBI/NABARD for formation of SHGs

- SHGs are informal groups formed on voluntary basis to attain certain collective goals, both social and economic.
- Membership of the SHG group could vary between 10 and 20.
- The Group should be in existence for at least six months with successful savings and credit operations from their own resources.
- The Group would be free to decide on selection of borrowers, interest rates and other terms and conditions of loans to members.
- The bank should finance Groups as distinct entities, quantum of loan related to savings could be up to 4:1 without any collateral and savings should precede credit in the group
- Support from voluntary/promotional institutions for group formation, training in group dynamics, accounting, cash management and technical skills should be used.
- The group is expected to meet regularly and all members are expected to participate in decision making.

Three broad models of SHG-Bank Linkage propagated are as under:

Model-I: SHGs formed and credit linked by banks directly. Bank takes initiatives in forming the groups, motivating and training them till they graduate to become eligible for bank financing. Bank acts as both facilitator and financier.

Model-II: SHGs formed by NGOs, other agencies and government after graduation, become eligible for bank credit linkage. Promoting agencies acts as facilitator and Bank as financier.

Model-III: SHGs formed and financed by NGOs directly with financial assistance from banks. NGO acts as facilitator and financial intermediary. Bank lends to NGOs for on-lending to the SHGs.

Source: NABARD

One of the laudable objectives of the SHG initiatives is the gender empowerment and economic development of poor rural women. The emergence and rapid multiplication of women SHGs for microfinance is now gaining increasing importance as strategic instrument for social and economic empowerment of women among the weaker section of the community. The State Government also considers SHGs as conduit for routing a wide range of government sponsored schemes. NGOs have adopted SHGs as a strategy to bring women together for micro finance and other poverty alleviation initiatives. As a result of forming SHGs, the poor women can come together, form solidarity group, open savings accounts with the banks and deposit regularly and access bank credit to meet their credit needs without any collateral security. With the regular meeting and accessing credit, SHG movement enables the resource-poor women in rural areas socially and economically empowered.

The SHG movement in the district is primarily a women's movement of weaker section of the community in rural areas. The main agencies involved in promotion of women

SHGs are state government through the Women and Child Development (WCD) Department of Zilla Panchayat, NGOs and Banks. The Stree Shakthi Programme launched by the State Government aimed at empowering rural women through the formation of SHGs. The WCD Department is actively involved in promotion of Stree Shakthi SHGs in the district. It provides revolving fund for formation of groups and enabling them to undertake income generating activities. It also undertakes training for capacity building and facilitates bank linkage for credit access. In Table 8.6, the taluk-wise position of SHGs promoted by the Department and number of SHG members belonging to different social groups is given.

As on 2011-12, the WCD Department has promoted 3663 Stree-Shakthi SHGs with total membership of 52439. Among members, 4953 were SCs, 3659, STs and 43827 belong to OBCs. Total savings deposited in the bank by these SHGs amounted to Rs.3292.94 lakh. They availed total loan amount of Rs.16462.64 lakh and benefitted from subsidy amount of RS.177.05 lakh. Taluk-wise, Bantwal has the highest number of SHGs (1237) with

Table 8.6
Stree-Shakthi Women SHGs in Dakshina Kannada District: 2011-12 (Numbers)

Taluk	Number	Members			
		SC	ST	Others	Total
Bantwal	1237	1126	1518	14582	17226
Belthangady	514	879	606	6352	7837
Mangaluru	860	863	307	12552	13722
Puttur	766	1517	835	7952	10304
Sulla	286	568	393	2389	3350
District	3663	4953	3659	43827	52439

Source: WCD - Zilla Panchayat, Dakshina Kannada District.

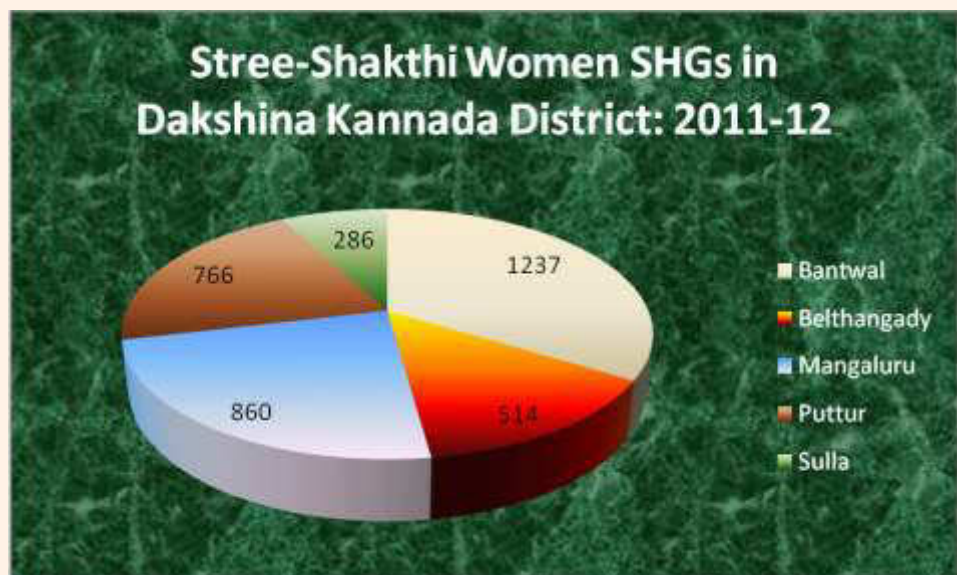
membership of 14582 followed by Mangaluru taluk (860) with membership of 12552. Sullia has the lowest number of SHGs (286) with members of 3350. Other Government Departments involved in promotion of SHGs are Watershed Department, RDPR Department and Urban Development Department under SGSY. The Urban Development Department has promoted 96 women SHGs under SGSY.

Among NGOs in the district, Shri Kshetra Dharmastala Rural Development Project (SKDRDP) plays active role in organizing rural women into self help groups for implementing their rural development initiatives. The SKDRDP not only involved in promotion of SHGs but also involved in financing, training, monitoring and even arranging marketing of the products produced by the SHGs. The members are encouraged to undergo training programs in subjects of vital importance such as nutritious food, child care, health and hygiene, community welfare and adult education besides capacity building in

income generating activities. Micro-credit through SHGs provided opportunities for the rural poor women to invest in income generating activities and thereby become self-reliant and free from poverty. The SKDRDP set up *siri* as a unified marketing wing with a view to assist the women SHGs to market their products. Besides improving their wellbeing, the membership of SHGs has brought changes in their attitudes, communication skills, self-confidence, entrepreneurial ability and aspirations. The SKDRDP provided a full range of livelihood assistance to their SHG members through microfinance. In the district, as on 2012, the SKDRDP has 18016 SHGs with total membership of 181349. The total savings of these SHGs amounted to Rs.4115 lakh and the loan amount outstanding, Rs.27844 lakh.

South Canara District Central Cooperative Bank (SCDCCB) has launched in the year 2000 Navodaya SHG Project with primary objective of social and economic empowerment of poorest of the poor in rural

Graph 8.3



areas. Under this initiative, the SCDCCB during the last 15 years nurtured 7402 women SHGs with total members of 85398 in the district. In this initiative, the SCDCCB was supported by Navodaya Grama Vikas Charitable Trust, an NGO, located in Mangaluru. The trust has played significant role in motivating and drawing rural poor women in SHG movement and enabling them to access bank finance to improve their livelihood. It also provides capability building training for undertaking income generating activities. With their

initiatives and need based approach, the rural poor women developed self-confidence, thrift habits and financial self-reliance by engaging themselves in income generating activities. The Navodaya Project has, thus, proved as one of the most successful experiment in social and economic empowerment of rural poor women.

The public Sector Banks have implemented SHG-Bank Linkage programme since late 1990s. They have now 3614 SHGs credit linked with the loan amount outstanding of Rs.16.6 crore.

Box 8.4: Shree Gajanana Navodaya SHG, Mangaluru – A success Story

Sree Gajanana Navaodaya SHG is a SHG of urban poor women. Smitha Shenoy, who lost her husband at early age with a child to take care of, without any means of livelihood, was the original initiator for forming the SHG. Her determination and self-confidence inspired and motivated others in the neighborhood in Mangaluru to join the group. The group was formed on 15th August 2007. It has 18 women members. The Group was supported by the Navodaya Grama Vikas Charitable Trust, an NGO located in Mangaluru in providing initial training in group dynamics and financial management. The Group meets every fortnight, collects savings from members and deposit the amount collected with the SCDCCB branch. After six months of its savings, it was credit linked to SCDCCB.

From the beginning, the members discussed about income generating self-employment ventures to overcome their poverty. Smitha Shenoy, as a team leader, first obtained a loan for setting up a self-employment venture of preparing variety of flower garlands and decorative flower products. From childhood, she was very much interested in preparing flower garlands. Now she decided to make it a business venture. There was a growing demand for flower garlands for daily usage by ladies and occasional uses like marriage and other ceremonies, flower decoration of brides, flower decoration of marriage and religious ceremonies, etc. Mangaluru being a city, marketing of flower garlands was not a problem. She trained other women-members to make them partners in her business. The group also encouraged members to obtain loans for undertaking other income generating activities such as manufacturing *pappad*, *sandige*, *chakkuli* and other consumer products. Some members after obtaining training from NGVCT, undertook tailoring and preparation of artificial women jewellery items like *haralina hara*, *muthina hara* etc. One member also took loan for setting up a shop.

As a result of her entrepreneurship, innovativeness and hard work, what started as hobby of interest, now became a growing profitable business proposition. With the income earned, she purchased a new house and educated her son as engineer, who is now working abroad. Other members also benefitted from this venture and improved their standard of living.. All members are now engaged in income generating enterprises and doing very well. It is also worth noting that all these activities are undertaken in their home. Self-confidence and determination of the members are the key to success of this SHG.

Source: SCDCCB

Box 8.5: Navodaya Grama Vikas Charitable Trust, Mangaluru

Navodaya Grama Vikas Charitable Trust (NGVCT) was formed as an NGO on Oct. 2004 in Mangaluru. It was promoted by Dr. M. N. Rajendra Kumar, a dynamic and well-known leader of cooperative movement in Karnataka State. The main objective of the NGVCT was to organize the rural poor into voluntary self-help groups (SHGs), empower them by training and enable them to access credit from the bank for income generating activities. The other objectives set out include social empowerment through conducting awareness campaign, health check-up camps, provision of financial help to poor patients suffering from cancer, cardiac diseases, kidney failures etc, organizing exhibitions and fairs to market commodities produced, education program etc. In a short period of ten years, the NGVCT successfully formed 27747 SHGs consisting 280865 members in five districts viz. Dakshina Kannada, Udupi, Dharwad, Uttar Kannada and Shimoga. Out of the 280865 members, nearly 2 lakh (72 percent) are women. Most of the women members belong to landless agricultural labourers, SCs and STs. The total savings of the women groups is approximately Rs 104 crore. They have availed loans amounting more than 150 crore for emergent needs such as education of children, repairs of house, medical expenses and various income generating micro enterprises. The NGVCT has received best award for the year 2006-07, 2007-08, and 2008-09 for best organization and management of SHGs in Karnataka State.

Source: A Century of Creditable Banking: History of South Canara District Central Cooperative Bank Ltd, SCDCCBank, 2015.

8.10 Concluding Remarks

The district is considered as one of the most progressive districts in the state with regard to women and their empowerment. This is mainly due to prevailing gender-friendly enabling factors such as matriarchal system, favourable sex ratio, high literacy amongst men and women, better infrastructure and access in education, health, transport and communication, scope for employment in labour intensive and gender sensitive traditional industries like beedi rolling, tile factories and cashew-nut processing, a strong SHG movement and higher level of out-migration. Karnataka Human Development Report-2005 has ranked the district second in Gender Development Index (GDI) after Bengaluru Urban among then 27 districts in the state.

The various government intervention schemes such as Bhagya Laxmi Programme to provide insurance cover for new born girl's education and marriage of poor families, free education for girls in government schools up to the secondary level, provision of bicycles to secondary school girls, Stree Shakthi SHG model for empowering women and reservations in political representation local governing bodies contributed significantly in minimizing gender imbalance and improving gender equality in the district. Under Bhagya Laxmi Scheme, 17216 girl children were covered and out of them 12448 were already given LIC bonds. The district has 2102 Anganawadis to take care of nutritional requirement of children, pregnant and adolescent women of the poor section of the society. A good network of



Women SHG Members Involved in Income Generating Activities

banking system, NGOs such as SKDRDP and NGVCT and good local governance also played a pro-active role in social and economic empowerment of rural poor women.

Notwithstanding these achievements, the following gender related discrimination and inequalities still persists and come in the way gender balanced development in the district:

- Traditionally rooted gender biased social norms and customs on women's roles, codes of modesty, code of honour and dowry system as well as beliefs about women's genetic ability to do some functions, which men do still persists and it is more so among rural community and SCs and STs.
- The declining child sex ratio and its demographic implications in future.
- Preference of parents to boys rather than girls in professional education.
- Declining female work participation and casualization and marginalization of women's employment in rural areas with the declining of agriculture and beedi rolling and demise of tile factories.
- Increasing employment of women in informal sector such as construction, shops, hotels, and domestic servants etc. without security of jobs and terminal benefits, which endanger their vulnerability.
- With the disintegration of joint family and in the absence of any social security measures, the life of widows and single old women in poor families becomes miserable.
- With the growing out-migration of married men and increasing divorce, the number of single woman living is increasing, leading to the problem of insecurity.
- As a result of out-migration of married men, the possibility of poor and young women at

the productive age getting infected with HIV/AIDS is more.

- Increasing alcoholism among young generation results in family quarrels, spouse abuse etc.
- Recent increase in theft, violence against young women, sexual harassment,

molestation, abduction of young girls etc.

- Increasing migrant families who are faced with the lack of basic amenities, malnutrition etc.

The sustainability and vulnerability of women SHGs in future may adversely affect social and economic empowerment of rural poor women.



Education Inspired with Nature



Chapter 9

STATUS OF SCHEDULED CASTES AND SCHEDULED TRIBES



Basket Weaving by the Members of Koraga Community



9.1 Introduction

Human development approach is people-centric and inclusive and hence it has to take into consideration well-being of all stratas of society irrespective of caste, tribe, colour, class or religion. The sustained human development can be achieved only when all individuals or social groups including the historically deprived groups harvest the benefits and access the opportunities generated through development in various spheres of society. In India, the caste system is historically in vogue and determines the hierarchical social order of the society⁹. Scheduled Castes (SCs) and Scheduled Tribes (STs) are the most disadvantaged and deprived social groups in the caste system¹⁰. Because of their lowest status in the traditional caste hierarchy, they were exposed to an oppressive life characterized by 'untouchability' and a blatant deprivation of choices and opportunities for development. The Indian Constitution, therefore, accorded special status to the SCs and STs with a view to bring them on par with other communities. The life of dignity, freedom of choices and well-being of these communities could be ensured only when they are brought into the mainstream in consonance with the social and economic justice, equality and fundamental rights guaranteed by the Constitution of India.

Several steps have been taken over the years to bridge the gap between the SCs/STs and the rest of the population. In the Eleventh and Twelfth Five Year Plans, the inclusiveness has been a major concern and made a primary objective along with achieving sustainable

higher growth. Inclusive development is viewed in terms of better health, quality education, employment, access to basic amenities such as housing, electricity, drinking water, sanitation, banking facilities etc. Karnataka Government, in its endeavour towards ensuring "faster, sustainable and more inclusive growth" has committed to itself for improving capabilities and productive endowments among the economically disadvantaged and socially marginalized SCs and STs. In this direction, the Government is implementing several multi-faceted and multi-pronged programs for welfare of SCs and STs. In spite of all these efforts, the gaps still persist and become a major area of concern. This chapter, therefore, focuses on the status of the historically marginalized SCs and STs in Dakshina Kannada district with particular reference to basic dimensions of human development.

9.2 A Demographic Profile of SCs and STs

The 'Scheduled Castes' refer to castes, races or groups within such castes, races or tribes as are deemed under Article 341 of the Constitution of India. The 'Scheduled Tribes' are tribes or tribal communities as are deemed so under Article 342 of the Constitution. The Constitution of India authorizes the President of India to specify castes or tribes to be notified as SCs/STs. The Scheduled Castes, in Dakshina Kannada district, are people belonging to Ajila, Bakuda, Bhaira, Godda, Holey, Mogera, Mundala, Nalkedaya, Parava, Pambada, Raneyar and Samagara. They are traditionally involved in such pursuits like scavenging, leather work and agricultural labourers.

⁹ A caste forms a homogenous group in terms of ritual status, customs and beliefs, food habits, habits and occupations. Common belief is that families belonging to a caste descend from a common ancestor.

¹⁰ Schedule caste nomenclature was first time contained in the Government of India Act 1935.

Amongst these communities, Nalkedaya, Parava, Pambada and Raneyar are supposed to be the most backward. They live in the villages with others. Nalkedaya, Parava and Pambada communities are the main communities who participate in Bhoota Kola (act as possessed one in spiritual tradition). Generally, Nalkedaya population do not own lands, whereas, some Paravas are landowners. They are mainly involved in their traditional family pursuits (Bhoota Kola) during 4-5 months in a year. Rest of the time, they earn their livelihood through labour. Amongst Raneyar community, majority are labourers and work mainly as masons and construction workers. This community is relatively in small number.

The STs in the district include mainly



“Bhootaradhane”

Koragas, Malekudiyas and Marathi Naikas. Koragas are known as the original natives of erstwhile Dakshina Kannada district. They are distinctly different from others in the district in life style, cultural habits and traditional practices. They are described as a primitive tribe of basket makers, a quiet and inoffensive race, small and slight and black skinned. Their principal occupation is basket making. Normally they live on the outskirts of the villages. In towns, they work as scavengers in the sanitary departments. The women also engage themselves in manufacturing of handicrafts such as cradles, baskets, cylinders to hold paddy, winnowing and sowing baskets, scale pans, boxes, rice-water strainers, ring stands for supporting pots, coir (coconut fibre) rope, brushes for washing cattle etc.

The other two ST communities in the district are Malekudiyas and Marathi Naiks. The Malekudiyas mostly live in the periphery of Western Ghat slopes in Belthangady and Sullia taluks. Their population in the district is very small. They are cultivators and plantation workers. They have skill in making baskets, mats etc bringing raw materials from the forest like honey. They are hardworking people. Marathi Naiks are originally from Goa and were serving army traditionally. They came as members of troops and gradually settled in different parts of the district. Marathi Naiks are very hard working people and mainly depend on agriculture. They are better in social hierarchy compared to other two tribes.

In Tables 9.1 and 9.2, the comparative data on gender-wise composition of population of SCs and STs according to 2001 and 2011 censuses are analysed together with decadal growth in different taluks.

Table 9.1
Demographic Profile of SCs in Dakshina Kannada District

Taluk	2001 (number)			2011 (number)			Sex Ratio*		Decadal Growth
	Male	Female	Total	Male	Female	Total	2001	2011	Percent
Bantwal	8465	8499	16964	9585	9675	19260	1004	1009	13.53
Belthangady	11018	11257	22275	12426	12890	25316	1022	1037	13.65
Mangaluru	20633	20745	41378	24262	25013	49275	1005	1031	19.08
Puttur	15877	15132	31009	17102	16938	34040	953	990	9.77
Sullia	9825	9709	19534	9949	10338	20287	988	1039	3.85
District	65818	65342	131160	73324	74854	148178	993	1021	12.97
State (lakh)	43.40	42.24	85.64	52.64	52.10	104.75	973	990	22.31

Source Census: 2001 and 2011. * Sex ratio per 1000 males

Table 9.2
Demographic Profile of STs in Dakshina Kannada District

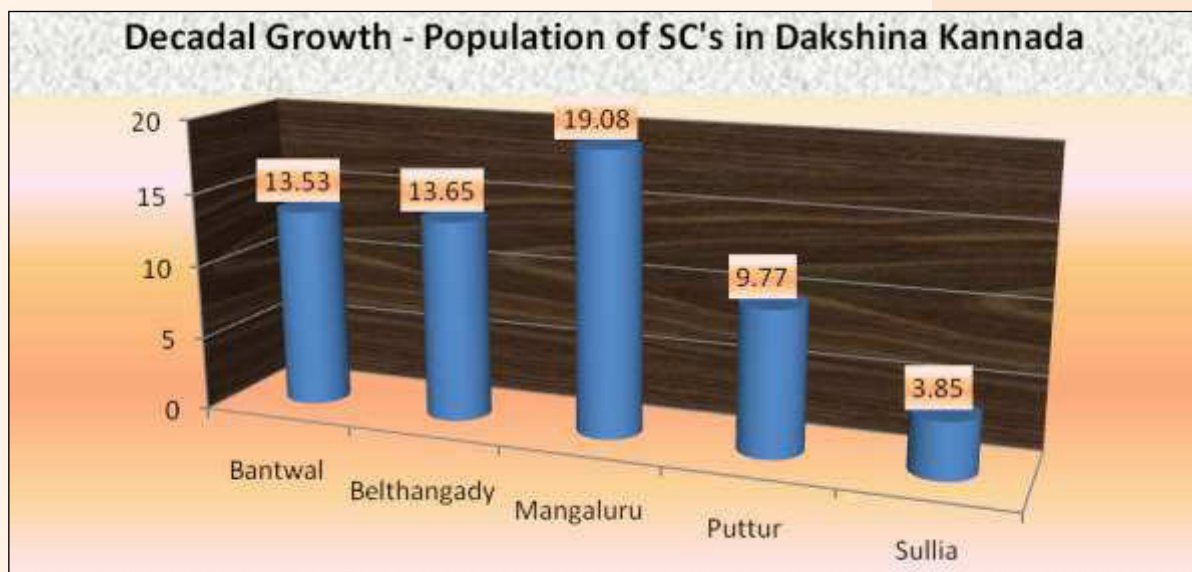
Taluk	2001			2011			Sex Ratio		Decadal Growth
	Male	Female	Total	Male	Female	Total	2001	2011	Percent
Bantwal	7460	7389	14849	10486	10426	20912	990	994	40.83
Belthangady	6334	6382	12716	7733	7909	15642	1008	1023	23.01
Mangaluru	5809	5730	11539	8137	8109	16246	986	996	40.79
Puttur	6563	6493	13056	8773	8854	17627	989	1009	35.01
Sullia	5413	5363	10776	5832	6009	11841	991	1030	9.88
District	31579	31357	62936	40961	41307	82268	993	1008	30.72
State (lakh)	17.56	17.08	34.64	21.35	21.14	42.49	973	990	22.66

Source Census: 2001 and 2011. * Sex ratio per 1000 males

According to the 2011 census, the district has 148178 SC populations and 82268 ST populations. They constitute 7.09 percent and 3.94 percent of the total district population. The respective comparative figures at the state level are 17.2 percent and 6.9 percent. The decadal growth in the SC population works out to 13 percent and for the ST population, 31 percent. The comparative decadal growth of total population in the district was 10 percent.

Incidentally, while the decadal SC population growth in the district is significantly lower than the state average of 22.3 percent, in the case of ST population, the decadal growth at the district level is significantly higher than the state average of 22.6 percent. The district has one of the lowest percent of the SC and ST population among 30 districts in the state. Out of a total number of 4.40 lakh families, the SC families are 26918 and the ST families 13111.

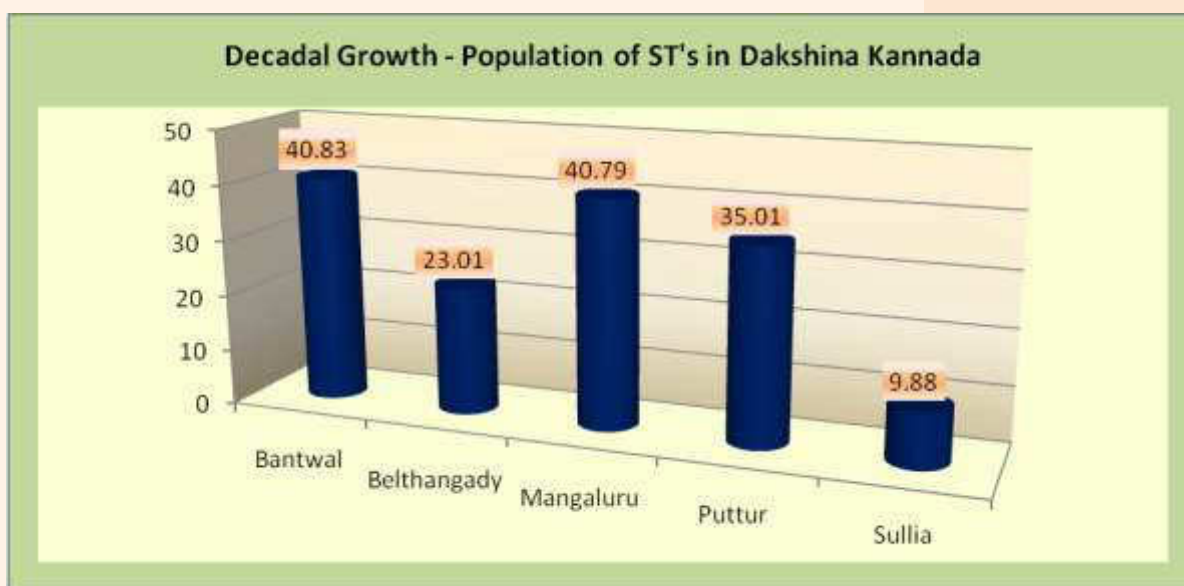
Graph 9.1



The women constitute 50.5 percent of total SC population and among STs, they are 50.2 percent of total ST population. The gender composition of SCs and STs is almost on parity with the general population (50.5 percent). The sex ratio of SC population is 1021 and ST population 1008. They are relatively better than

the state average for SC and ST populations (990). However, in the case of ST population, it is significantly lower than district's general population (1020). While the sex ratio of the general population slightly declined from 1022 in 2001 to 1020 in 2011, in the case of both SCs and STs, it has improved from 993 to 1021 and 993 to 1008 respectively during this period.

Graph 9.2



Taluk-wise, Mangaluru taluk has the highest percentage of the SC population (33 percent), followed by Puttur (23 percent) and Belthangady (17 percent). Bantwal has the lowest SC population of 13 percent. Sullia has slightly higher SC population (13.7 percent). As regards STs, Bantwal has the highest population (25 percent), followed by Puttur (21 percent) and Mangaluru (20 percent). Belthangady has 19 percent and Sullia has the lowest, 14 percent. As regards the decadal growth is concerned, it is interesting to note that while in the case of SCs it varies from 4 percent in Sullia to 19 percent in Mangaluru, in STs, it ranges from 10 percent in Sullia to 41 percent in Bantwal and Mangaluru.

Surprisingly, inter-taluk variation in sex ratio is very wide in both SCs and STs. In the case of SCs, Belthangady, Mangaluru and Sullia have higher sex ratios than the district average of 1021. But Bantwal and Puttur have lower sex ratios of 1009 and 990 respectively. Similarly, for STs, Sullia has the highest sex ratio of 1030, followed by Belthangady (1023) and Puttur (1009). Mangaluru and Bantwal have the lowest sex ratios of 996 and 994. It is, however, important to note that there was a significant improvement in the sex ratio of both SC and ST population in all taluks in the district. In Table 9.3, the distribution of the SC and the ST population in rural and urban areas in the district as per 2011 Census is given.

Table 9.3
Rural – Urban SC/ST Population: 2011

Taluk		Rural (number)		Urban (number)		Decadal Growth (percent)			
		S. C.	S. T.	S.C.	S.T.	Rural		Urban	
						SC	ST	SC	ST
Bantwal	Male	7904	9289	1681	1197	1.15	28.44	158.22	425.00
	Female	7948	9185	1727	1241	1.01	28.14	173.69	461.54
	Total	15852	18474	3408	2438	1.08	28.29	165.83	442.98
Belthangady	Male	11736	7520	690	213	10.97	20.98	56.11	80.51
	Female	12187	7703	703	206	12.74	23.01	57.27	71.67
	Total	23923	15223	1393	419	11.86	22.00	56.69	76.05
Mangaluru	Male	7956	3129	16306	5008	-9.60	5.67	37.80	75.84
	Female	8019	3150	16994	4959	-8.23	0.64	41.53	90.73
	Total	15975	6279	33300	9967	-8.92	3.09	39.68	82.95
Puttur	Male	14524	7552	2578	1221	5.53	30.07	21.95	61.29
	Female	14248	7594	2690	1260	9.22	31.04	28.89	80.52
	Total	28772	15146	5268	2481	7.33	30.56	25.40	70.51
Sullia	Male	8962	5292	987	540	1.12	6.78	2.60	18.16
	Female	9253	5430	1085	579	5.65	10.50	14.09	28.95
	Total	18215	10722	2072	1119	3.37	8.63	8.31	23.51
District	Male	51082	32782	22242	8179	2.54	20.6	38.99	85.54
	Female	51655	33062	23199	8245	4.95	21.24	43.89	101.69
	Total	102737	65844	45441	16424	3.74	20.95	41.45	93.31

Source: 2011 Census

The majority of SC/ST populations live in rural areas. 69 percent of the SCs and 80 percent of the STs are in rural areas. The comparative share of rural population in total population is 52.3 percent, which clearly shows that SCs and STs are more rural based than general population. Relatively, the proportion of the SC population in urban areas is more than STs. Between 2001 and 2011, the district witnessed significant shift from rural areas to urban areas in the SC and ST population in line with the change took place in the total population. In 2001, only 24.5 percent of the SCs and 13.5 percent of STs lived in urban centres. As per 2011 Census, 31 percent of the SCs and 20 percent of the STs are now in urban areas. The decadal growths of both SC and ST population are more in urban areas than rural areas and interestingly it is more among females than

males. However, compared to urbanization of general population (48 percent), their urbanization are still on lower side. It is also important to note that the decadal growth of SCs in both rural and urban areas is lower than STs.

Taluk-wise comparison shows that out of 45441 SC people living in urban areas in the district, 33300 or 73 percent live in Mangaluru taluk. Similarly out of 16424 ST people living in urban centres, 9967 or 61 percent live in Mangaluru taluk. Next to Mangaluru, Puttur has the highest number of SCs (5268) and STs (2481) in urban areas. Belthangady has the lowest number of SCs (1393) and STs (419). In rural areas, Puttur has the highest number of SCs (28772), followed by Belthangady (23923). Bantwal has the lowest SCs (15852). In the case of STs in rural areas, Bantwal has the highest number (18474), followed by Belthangady



A Shop Established by the ST Community Member with the Assistance of Govt. Subsidy.

(15223). Mangaluru has the lowest number (6279). Mangaluru witnessed negative decadal growth in SCs and lowest decadal growth in STs in rural areas. In rural areas, Belthangady has the highest decadal growth (12 percent) in SCs and in STs, Bantwal has the highest decadal growth (28 percent). In urban areas, Bantwal has the highest decadal growth both in SCs and STs, followed by Belthangady. Sullia has the lowest decadal growth in both groups.

In both SCs and STs, there are sub-castes having distinctly different traditions and culture and hereditary pursuits. They are not socially and economically same. Some sub-castes are of higher status compared to some others. No data are, however, available on these sub-castes. Among the STs Communities, the Marathi Naikas constitute the majority of the total ST population. Next to them, Malekudiyas and the number of their families are about 1474 in the district. Koragas are the lowest in the social and economic hierarchy in the district. They are

considered as primitive tribe. As per 2001 census, the total population of Koragas in the district was 6337. In 2012, the ITDP, ZP carried out a survey of Koraga community in the district and as per their study the taluk-wise distribution of the Koraga community is as given in Table 9.4.

Nearly 70 percent (3406) of the community live in Mangaluru taluk. Sullia has the lowest number of Koraga families (32). Bantwal has 187 Koraga families, followed by Puttur (113). Sullia has the lowest number of Koraga families (32). Bantwal has 187, followed by Puttur, 113 families and Belthangady, 100 families.

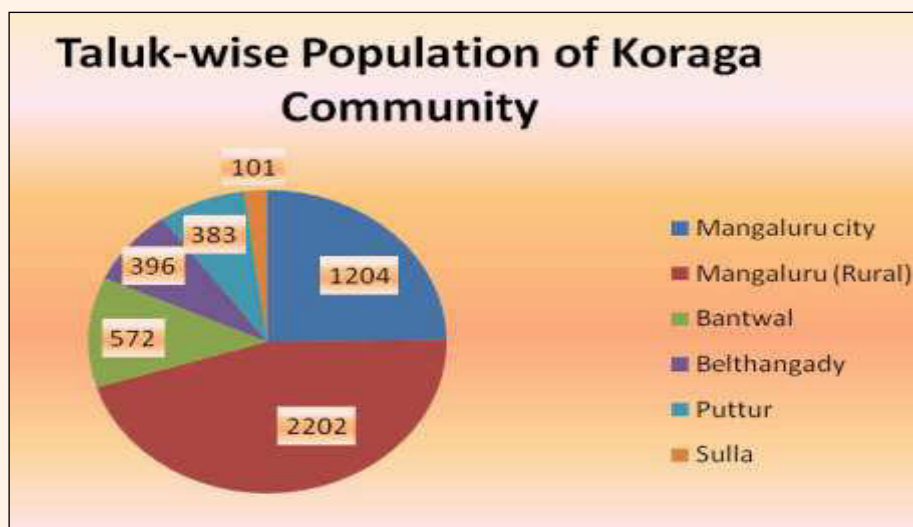
Since they were the original forest staying tribe, they were granted by the State Government forest rights to cultivate in the forest where they stay. Since they were the original forest staying tribe, they were granted by the State Government forest rights to cultivate in the forest where they stay.

Table 9.4
Taluk-wise Population of Koraga Community

Taluk	Families (number)	Population		
		Male	Female	Total
Mangaluru city	271	621	583	1204
Mangaluru (Rural)	503	1088	1114	2202
Bantwal	187	294	278	572
Belthangady	100	206	190	396
Puttur	113	195	188	383
Sullia	32	61	40	101
District	1206	2465	2393	4858

Source: I.T.D.P. Zilla Panchayat, Dakshina Kannada District.

Graph 9.3



Box 9.1: Malekudiya: A Tribal Community living in Forest

Malekudiyas are the people living mainly in Dakshina Kannada, Udupi and Chikamagaluru districts. In Dakshina Kannada they live mostly in Belthangady taluk at the hill slope of Western Ghats forests. 'Male' means mountain; 'Kudi' means top. They were historically living in forest in isolation as community with distinct culture and life style. They were declared by the Government as STs in 1956. As they were living in forest, in the past, they were deprived from access to all modern facilities like roads, health, schools, electricity, water supply and other basic livelihood amenities. They were mainly engaged in agriculture, rearing pigs, poultry and cattle besides forest products for their livelihood. They were also plantation workers. They are not economically very poor. Unlike Koraga community, they are not socially deprived or discriminated. Their mother tongue is Tulu. They have their own life style, traditional beliefs and cultural practices. Being a small community, marriages within bali, in addition to inter-bali marriages have become common among them. They worship Goddess Kali and Bhutas. Divorce and widow marriages are permitted and the dead are mostly buried. Dr. Shivaram Karanth, a noted Kannada writer, wrote his novel "Kudiyara Koosu" wherein he brought out lucidly their culture and traditions.

The problem of Malekudiyas is not social discrimination, but their refusal to leave forest and settle to become a part of mainstream society. Since they were the original forest staying tribe, they were granted by the State Government forest rights to cultivate in the forest where they stay. The ITDP, ZP, has implemented number of programs to provide them basic amenities like proper housing, roads, schools and health facilities. Since the areas they live are naxalite affected area, there are also special programs for socio-economic welfare of this community. In the past, they suffered from alcoholism and smoking. Now, with awareness campaign of SKDRDP, they are getting free from alcoholism and smoking. Under SKDRDP, they also formed *Pragati Bandu* to undertake agricultural activities. They are now sending their children to schools by using the Government hostel facilities. All these, in fact, revolutionized their living style and brought them on par with other communities.

Source: Compiled from Karnataka State Gazetteer and Various other sources.

Box 9.2: Koraga Community: Poorest of the poor

Koraga community is considered as 'adivasis' (aboriginal natives) of erstwhile undivided Dakshina Kannada district. In 1956, the community was declared as STs and in 1986; they were treated as *Primitive Tribal Group* (PTG). They lived in isolation mostly outskirts of the village near the forest. Their principal occupation was basket-weaving and food gathering. They have distinctly different life style, food habits, cultural habits and traditional practices. Regarding origin of Koragas, there are a few legends. Once upon a time, they were believed to be the rulers of the district. They were enslaved around 6th A.D and made to live in isolation. They were the followers of female dominated matriarchal family system and lived jointly. They were worshippers of spirits. Their *daiva* is called *Koraga Thaniya*. They also worship major Hindu deities. They have sub-groups such as *Onti-Koraga*, *Soppu-Koraga*, *Mudu-Koraga*, *Kada-Koraga*, etc. Divorce and widow marriage are common among them and they bury their dead. Though they speak Tulu, they have their own dialect. 'Ajalu paddathi' was one of the traditional practices followed by Koraga tribe. It included drum beating at the outskirts of temples and at the time of funeral of other communities, collection of left-over food during social and ritual functions, etc. This practice has now been abolished. Koraga men beat drums, play flute and dance during socio-religious functions. In recent years, they are employed by the sanitary department as scavengers in urban areas.

With a view to bring the Koraga community to the mainstream and for all round development economically and socially, the State Government has undertaken following programs:

- Allotment of housing site and houses and Rs1.25 lakh for housing facilities.
- Establishment of Koraga community colony with all basic amenities and infrastructure.
- Allotment of agricultural lands and financial help to get engaged in agriculture.
- Anthyodaya cards to all Koragas.
- Nutritional Food (include pulses, millets, jaggery, edible oil and egg) for six months from June to December to reduce malnutrition.
- Free Medicare: all medical expenses born by the Government.
- Free education even for higher and professional education:
- Promotion of SHGs of Koragas to take up income generating self-employment ventures.
- Janashree Insurance has been extended to all Koragas.
- Alcoholic-free awareness campaign/ workshops to minimize the consumption of alcohol, gutka etc which is common among Koraga community.

In spite of all these government interventions, Koraga community remained poorest of the poor in the district, suffering from malnutrition, alcoholic habits, severe anaemia among women, unhealthy life style and traditional beliefs.

Source: Compiled from Various sources.

9.3 Education Profile and Levels of Enrolment and Dropout Rate

SC and ST populations were historically deprived of access to formal education opportunities. Since they are resource poor communities, education only plays an enabling role to improve capabilities and employability endowments and thereby improve the well-being of these communities. Since independence, the Government pursued pro-active and affirmative intervention policies to improve the education status of the SC and ST communities. A number of initiatives and several programmes were implemented by the State Government, which include free education, hostel facilities, free accommodation and boarding, running special residential schools, awareness and special training programmes, post-metric scholarships, providing admission to meritorious students in prestigious schools etc.

Dakshina Kannada district has witnessed a remarkable progress in education status among all social groups since independence (Table 9.5). The literacy rate of SCs increased from 54.90 in

1991 to 66.14 in 2001 and in 2011, it is 68.78 percent. The literacy rate of that of STs increased from 62.70 to 72.95 during 1991-2001 and in 2011, it has gone up to 73.73 percent. During this period, the literacy rate for total district's population increased from 76.74 percent to 88.57 percent.

The gaps between the literacy rate of general population and that of the SCs and the STs which were 22 percent and 14 percent respectively in 1991, was narrowed down to 17 percent and 10 percent in 2001. In 2011, in the case of SCs, the gap has further widened to 19.8 percent instead of narrowed down. As regards STs, it is 14.8 percent interestingly; the literacy rate of STs is higher than SCs. The district's literacy rates of the SC and the ST populations were not only significantly higher than the state averages for these communities, but also more than the state average literacy rate for all population. The district has, next to Bengaluru Urban, the highest literacy rates for both the SC and the ST populations among 30 districts in the state. However, what is important to note is that in spite of pro-active efforts and remarkable

Table 9.5
Literacy Status of SCs and STs in Dakshina Kannada District (percentage)

Details		1991			2001			2011		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
District	S.C.	63.60	45.90	54.90	73.89	58.36	66.14	74.42	63.26	68.78
	S.T.	71.50	53.70	62.70	80.20	65.69	72.95	78.90	68.60	73.73
	All	84.88	68.84	76.74	89.70	77.21	83.35	93.13	84.13	88.57
State	S.C.	49.70	26.00	38.10	63.75	41.72	52.87	74.03	56.58	65.33
	S.T.	47.90	23.60	36.00	59.66	36.57	48.27	71.14	52.98	62.00
	All	67.26	44.34	56.04	76.10	56.87	66.64	82.47	68.08	75.36

Source: Census of India 1991, 2001 and 2011

progress during last six decades, the literacy rates of SC and ST populations still remained significantly lower than literacy rate of the general population.

The gender-wise literacy status among the SCs and the STs also significantly improved during last two decades. In 1991, SC male literacy rate was 63.6 percent and female literacy rate, 45.9 percent. There was a gender gap of 17.7 percent. In 2001, literacy rate of SC male population increased to 73.9 percent and female literacy rate to 58.4 percent. The gender gap was reduced to 15.5 percent. In 2011, the SC male literacy rate was 74.42 percent and female literacy rate, 63.26 percent. The gender gap was reduced to 11.46 percent. Similarly, in the case of STs, the gender gap in literacy rates in 2011 is 10.3 percent. The gap in literacy rates between the ST population and total population is 14.23 percent in men's literacy rate and 15.53 percent in women literacy rates. Comparative literacy rates of total population were 93.13 for male population and 84.13 percent for female population. The gender gap is 9 percent. The need for bringing the SC and ST literacy rates for both males and females on par with other community needs hardly any emphasis.

The SC students constitute 6.9 percent and ST students, 4 percent of total student population at elementary education. In secondary education, SC students form 5.3 percent and ST students, 3.9 percent of total student population. At PUC level, SC students were 9.5 percent and ST students, 1.8 percent of total students enrolled. From this it clear that at primary and secondary levels, both SC and ST student's ratios are on par with their shares in total population. At PUC level, surprisingly, SC student ratio is higher and ST student ratio is significantly lower. Table 9.6 provides the data on social category-wise enrolment of students in primary and secondary educations in the district.

The analysis of the data evidently shows that the enrolment ratios of the SCs and the STs are more or less on par with other community. It is encouraging to see that in both primary and secondary education, the enrolment is almost universal in both the SCs and the STs and comparable to other social groups.

The above trend is also reflected in Table 9.7, which compares taluk-wise the gross enrolment ratios of SC and ST students in primary and secondary schools with the general category students.

Table 9.6
Enrolment of SC and ST Students: 2011-12(number)

Social Groups	Primary (1-7)			Secondary (8-10)		
	Boys	Girls	Total	Boys	Girls	Total
SC	9602	9091	18693	3593	3654	7247
ST	5057	4803	9860	2023	2044	4067
OBC	98606	92182	190788	42529	39842	82371
Others	7686	7391	15077	4645	4754	9429
Total	120951	113467	234418	52820	50294	103114

Source: Sarva Shikshana Abhiyana/DSE

The taluk-wise and gender-wise comparison of enrolment of the SC and the ST school children shows only marginal inter-taluk variations in enrolment ratios of SC and ST students. There are also no inter-taluk differences in gender-wise enrolment among SCs and STs and also in comparison with other category of students.

The district has also one of the lowest drop-out rates in primary education among 30 districts in the state. In the year 2011-12, the total drop-out students numbered only 137, which accounts for 0.06 percent of total enrolled students (Table 4.9 in Chapter 4). Out of 137 dropouts, the dropouts of SC students were 51. The STs have the lowest dropout of only 6. The number of drop-out of boys was more than girls in both SCs and STs. Among 51 dropouts in the case of the SCs, 29 were boys and 22 were girls.

Of the 6 ST drop-outs, 4 are boys and 2 are girls. Among taluks, the highest drop-out was in Mangaluru; 27 SC students and 5 ST students. Interestingly, there are no dropouts in SC girl students in Bantwal and Puttur, while in the case of STs, Bantwal, Puttur and Sullia have no drop-outs in both ST boys and girls.

The drop-out rates in secondary education level is the highest among SC and ST community. The proportion of drop-out is also quite high among SC and ST boys and girls; it is 15.49 percent among boys and 12.36 percent among girls. Comparable figure for other communities is 14.23 percent for boys and 5.38 percent for girls. During the year 2011-12, the district has 89.55 percent pass in SSLC results. Comparatively, the STs have the lower result of 79.45 percent and the SCs, 79.64 percent in SSLC pass results. Though there was no much

Table 9.7
Taluk-wise GER of Students by Social Groups At Primary and Secondary Education: 2011-12 (Percentage)

Taluk		SC		ST		Others	
		Primary	Secondary	Primary	Secondary	Primary	Secondary
Bantwal	Boys	97.89	96.45	95.89	93.56	99.54	97.59
	Girls	98.12	95.45	94.89	93.12	98.89	97.58
Belthangady	Boys	97.89	95.89	94.86	92.54	98.12	96.23
	Girls	98.46	96.12	92.49	90.47	99.15	97.41
Mangaluru	Boys	99.56	98.46	101.02	98.51	105.45	100.60
	Girls	99.94	98.96	101.96	98.45	104.56	100.40
Puttur	Boys	99.79	96.25	100.89	98.36	104.69	99.56
	Girls	99.71	97.96	99.89	98.79	100.98	99.92
Sullia	Boys	97.45	95.45	95.46	94.12	97.42	96.45
	Girls	97.59	95.13	94.56	93.78	96.48	96.45
District	Boys	99.45	97.52	98.16	96.42	103.24	99.89
	Girls	99.24	97.92	97.46	95.92	101.32	99.35

Source: Sarva Shikshana Abhiyana/DSE

difference between results of SC and ST students, the gap between the results of SC and ST students in SSLC is very wide; almost 10 percent. This is an area of concern.

Among taluks, Mangaluru taluk has the highest SSLC pass result for SCs and Belthangady taluk has the highest for ST students. As against this, Sullia has the lowest results in the case of SC students and Puttur has the lowest for ST students. Inter-taluk variation in the SSLC results in both the cases is not very significant. The worrisome issue is that in all taluks, the performance of SC and ST students in SSLC is significantly lower than other community students.

Since the data are not available as regards the enrolment of SCs and STs in higher education and professional courses, it is very difficult to arrive any conclusions as to their performance in higher education. From the findings of the various studies undertaken, it is evident that enrolment of SCs and STs in higher education and professional courses is relatively not on parity with other community students. The attrition rates of SC and ST students in PUC level itself are found to be very high. This is a

matter of concern because high-end jobs in all fields are linked to higher education. However, there are a few success stories in the district: 272 SC students and 221 ST students graduated in Engineering, 36 SC students and 34 ST students became medical doctors.

Education is the chief variable in social and economic empowerment of hitherto marginalized SCs and STs. The State Government has, therefore, implemented number of affirmative programmes through Department of Social Welfare, Integrated Tribal Development Program and the SC and ST Development Corporations. In the field of education, besides providing free education up to secondary level, special incentive allowances, pre and post metric scholarships, free hostel facilities, special grants, training programs, free higher education for students of Koraga community, admission of meritorious ST students in prestigious schools/colleges are provided during the last ten years. Table 9.8 shows the number of the SC and the ST students, who are provided with the hostel facilities and residential school both at pre and post-metric level.

Table 9.8
Government Hostels for SC and ST Students in the District (2011-12)

Details		SC Hostel		ST Hostels		Morarji Desai Residence School		Ashrama School
		<i>Pre-Metric</i>	<i>Post-Metric</i>	<i>Pre-Metric</i>	<i>Pre-Metric</i>	<i>Pre-Metric</i>	<i>Post-Metric</i>	
Boys	Hostels (No)	11	4	6	1	3	-	12
	Students (No)	690	324	270	75	563	-	421
Girls	Hostels (No)	8	4	3	1	-	-	-
	Students (No)	620	319	125	75	375	-	341
Total	Hostels (No.)	19	8	9	2	-	-	-
	Students (No)	1310	643	395	150	938	-	762

Source: Department of Social Welfare/ITDP

The district has 19 pre-metric, 8 post-metric hostels exclusively for SC students and 9 pre-metric and 2 post-metric hostels for ST students besides 3 residential pre-metric Morarji Residential Schools and 12 Ashrama Schools. During the academic year 2011-12, the total student beneficiaries of these facilities were 2343 boys and 1855 girls. The number of the SC and the ST students benefited from the government scholarship during 2011-12 is given in Table 9.9. During the academic year 2011-12, The SC Student-beneficiaries from scholarship were 16020 at primary level and 6342 at secondary level for SC category. Similarly, 3126 at primary level and 3473 at secondary level ST students benefitted from the government scholarships.

The State Government has also launched under SSA innovative interventions for socially disadvantaged SCs and STs. Chinnara Zilla Darshana is one such programme, which is an educational tour programme, free of costs to the children. This programme is planned with an intention to supplement the classroom learning of the children by integrating school activities with outside world and society. During the year 2011-12, about 2303 SC students and 475 ST students have benefitted under this programme.

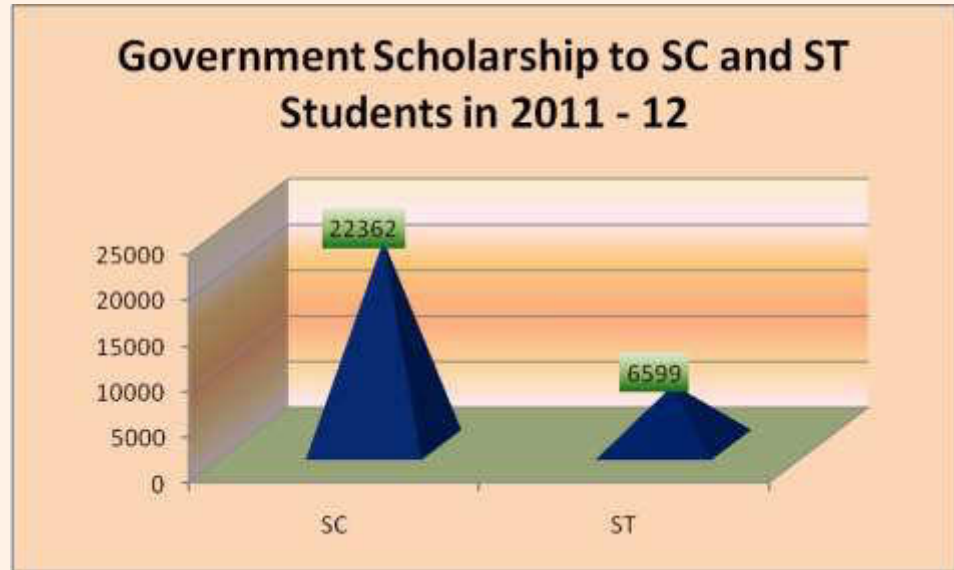
At the outset it should be noted that since among SCs and STs, many sub-groups exist with different socio-economic hierarchy, the beneficiaries of the government programmes may not be same. For example, among the STs, Marathi Naikas are more advanced in education and many are in higher education. They appear to be the main beneficiaries of the Government's programmes. The education status of Koragas and Malekudiyas, who are the most backward ST communities in the district, requires special attention. They are considered very backward educationally. Despite significant improvement in the literacy rate of ST population during the last decade, the education status of Koragas, might not have improved significantly. Non-attendance and drop-out percentage at the secondary level is very high due to poverty, non-accessibility as dwelling areas of Koraga families are far away from high schools apart from the lack of interest by the parent's. It is important to note that the gaps between the literacy rate of Koragas and other ST sub-casts and also the population in general in the district are very wide. This is definitely a major area of concern in a progressive district like Dakshina Kannada district.

Table 9.9
Government Scholarship to SC and ST Students (Number)

Social Group	Level of Education	Boys	Girls	Total
SC	Primary	7952	8058	16020
	High School	2539	3803	6342
ST	Primary	2160	966	3126
	High School	1253	2220	3473

Source: Department of Social Welfare/ITDP

Graph 9.4



1.4 Health Awareness and Institutional Delivery Rate

The health status of the SC/ST families differs widely depending on the socio-economic background of the various sub-castes. For example, the health profile of Marathi Naikas is more or less similar to other communities. As against this, Koragas have relatively poorest health status in the district because of their cultural traditions and livelihood practices. Korgas usually suffer from alcoholic, high consumption of tobacco, malnutrition and higher percentages of infant mortality and maternal mortality rates. In the case of Malekudiyas, who live in forest, they do not have easy access to health facilities. As a result of various healthcare programmes implemented by the Government, there was a remarkable improvement in almost all health indicators of the SC/ST families in the district. Unfortunately, the data on many RCH indicators for the SC/ST families separately are not available.

The Department of Health and Family Welfare Services undertakes health awareness campaign regularly particularly targeting the SC/ST families. The officials from the DHFWS and anganawadi workers also visit at least once in every six months every household. As a result of these health awareness campaigns, the SC/ST families in the district are well aware of healthcare facilities available. The centrally sponsored NRHM programme has focused on improving RCH among weaker sections in rural areas. As a result, the RCH indicators such as IMR, CMR and MMR are relatively lowest in the district. Similarly, the pregnant women receiving full ANC are 85.1 percent, pregnant women with severe Anemia 33.9 percent, children born underweight 12.3 percent, malnourished children 21.23 percent, and child mortality rate 22. From these data, one can deduce that SCs and STs are also the beneficiaries of RCH programmes. Though, some of the RCH indicators might be relatively higher than those of other communities, there

must have significant improvement in their RCH indicators in recent years. The institutional delivery in the district is 99.92 percent, which clearly demonstrates that even among the SC/ST families; the institution delivery is almost 100 percent. The health problems faced by the SC/ST families are mainly centered around non-communicable diseases such diabetes, coronary diseases etc due to inaccessibility and non-affordability.

The DHFW implements various national and state health programs and also provides comprehensive healthcare services targeted particularly SCs and STs. Important among them is the Janani Surakshana Yojane (JSY), which aims at reduction of maternal and infant mortality rate as well as to increase the institutional deliveries of SC/ST families. Under this programme, besides providing maternity services like 3 antenatal checkups and referral transport, cash assistance is given for deliveries taking place in health institutions. In rural areas, cash assistance to the mother for institutional delivery is Rs.700 per mother and in urban areas Rs.600. During 2011-12, the beneficiaries of this programme were 8309 in the district. The Madilu is another scheme launched by the State Government to provide post-natal care for mother and the child. The objective of Madilu scheme is to encourage the SC/ST pregnant women to deliver in health centres or hospitals. Under this program, a kit is provided to women. During the year 2011-12, 4972 kits were provided to the beneficiaries. Under the Prasooti Araike Scheme, the pregnant women of SC/ST families also provided RS.1000 for the first two deliveries to get nutritional food during the antenatal care period. For Koraga community, is indicated in Box 9.2, provide with free medicare

and nutritional food for six months. Since 2008-09, the ITDP provides through anganwadis, from June to November, for each family, 15 kg rice, one kg pulse, 2kg dal, one litre edible oil, 2kg jaggery and 30 eggs with a view to reduce malnutrition among Koraga community. The government has also special arrangement in Wenlock Hospital as well as with recognized private hospitals for medical treatment of Koragas at free of cost.

9.5 Occupational Pattern and Livelihood Opportunities

The livelihood status of SCs and STs depends on their access to productive assets and resources as well as the employment pattern. Traditionally, the SCs were landless bonded agricultural labourers. Their principal asset was their labour. The STs were mainly a tribal community engaged in subsistence farming in forest areas, hunting and gathering forest products and basket making. Nearly 76 percent of the SC families and 85 percent of ST families live in rural areas. At present, in rural areas, nearly 48 percent of the SC families are landless agricultural labourers. Out of 20416 SC rural families, 10539 (52 percent) are having agricultural landholdings. In urban areas, they are mostly involved in sanitation and cleaning and construction works. Among 11087 ST families living in rural areas, 9618 (87 percent) have agricultural land (Table 9.10). The number of agricultural land holders among the STs is more than the SCs mainly because Marathi Naikas and Malekudiyas, who constitute the majority of the ST families in the district, are traditionally agriculturalists. Among Koragas, only few families are agricultural landholders.



"Aati Kalanje" - A folk art performed during monsoon season

Table 9.10
Agricultural Land Holding Pattern of SCs and STs
in Dakshina Kannada District: 2010-11

Size of Land Holding (Ha)	SCs			STs		
	Number	Area (ha)	Average size (ha)	Number	Area (ha)	Average size (ha)
Below 1	9224	3483.23	0.38	7431	3155.77	0.42
1 -2	1171	1569.95	1.34	1825	2474.72	1.36
2 – 4	140	337.46	2.41	336	828.41	2.46
4 – 10	4	18.44	4.61	26	126.36	4.86
10 and above	-	-	-	-	-	-
Total	10539	5409.08	0.51	9618	6585.26	0.68

Source: Dakshina Kannada District at Glance: 2011-12. As per 2010-11 Census

As regards landholding pattern among SCs and STs, 87.5 percent of the SC farmers are marginal farmers with average size of landholding of 0.38 ha. Marginal farmers and small farmers having 1 to 2 hectares together constitute 98.6 percent of total SC farmers. Only 144 SC families have landholding above 2 ha. In the case of ST farmers, 77 percent are marginal farmers with average size of land holding of 0.42 ha. Marginal farmers and small farmers having 1 to 2 ha, together constitute 96 percent of total ST farming community. Out of 9618 ST farmers, only 362 have landholding above 2ha. From this it is evident that almost all SC and ST farmers for their livelihood have to depend on agricultural labour. With the present non-viability of monocropping pattern and the slow-down in the agriculture, the SCs and STs farmers in rural areas are increasingly becoming marginalized and entering into labour market for their livelihood. In rural areas, out of 20416 SC families, 9877 (48 percent) are the landless households. Among STs, their number is 1469 (13 percent). Agricultural labourers constitute 12 percent of the total workers and the bulk of the rural poor. With the declining trend in the number of cultivators and the area under cultivation, the opportunity for agricultural labour is declining and thereby threatening livelihood. The landless households in STs mainly belong to Koraga community who are the poorest of the poor in Dakshina Kannada district.

Since 2011 census data on the SC and ST workforce are not yet available, the discussion to understand the work participation pattern by these social groups is based on the available 2001 census data. Table 9.11 provides the work



Dhol - The Drum Beating

participation rates (WPRs) for SC and ST population for both rural and urban areas in the district.

During the period 1991 and 2001, there was significant increase in the WPRs both among SC and ST labour forces. While the WPR for S.C workers has gone up from 52.7 percent in 1991 to 58.1 percent in 2001, in the case of the STs, it has increased from 48.2 percent to 57.5 percent. The WPRs of both the SCs and the STs in the district are slightly higher than the State average WPRs for these communities. As the labour is the main asset for the livelihood of the SCs and the STs, their WPRs are also significantly higher than other communities,

Table 9.11
Work Participation Rates of the SCs and STs (Percentage)

Details			2001		
			Men	Women	All
Dakshina Kannada District	S.C.	Rural	63.10	58.30	60.70
		Urban	56.70	43.20	49.90
		Total	61.50	54.50	58.10
	S.T.	Rural	64.30	54.20	59.30
		Urban	57.50	34.00	46.20
		Total	63.40	51.60	57.50
Karnataka	S.C.	Rural	55.70	44.30	50.10
		Urban	49.20	20.50	35.10
		Total	54.00	38.40	44.70
	S.T.	Rural	57.60	45.30	51.50
		Urban	52.60	21.90	37.60
		Total	58.30	41.70	49.40

Source: Census Data, 2001/KHDR, 2005

which was 49.9 percent in 2001. Though the female work participation rates in both rural and urban areas were lower than male workers, they were significantly higher than the WPRs of other communities. The work participation rate for male SC workers was 61.5 percent and for female workforce, 54.5 percent in 2001. For the ST workers, the respective WPRs were 63.4 percent and 51.6 percent. The gender-wise work participation rates of both SCs and STs also were considerably higher compared to the WPRs for all other social groups in the district. The higher WPR for SCs and STs evidently reflects their dependence solely on labour for their livelihood. It is also interesting to observe that the WPRs for both the communities and for both male and female workers are significantly higher in rural areas than urban areas.



*Environmental Friendly Hat Making by a
Member of the Koraga Community*

With a view to empower the unemployed youth of STs and encourage them to take up self-employment ventures, the Department of Social Welfare, ITDP and SC and ST corporations, Zilla Panchayat, have undertaken various initiatives for their job skill development. Koraga community members, who are faced with the problem of declining, demand for their basket products and thereby, their livelihood occupation, are encouraged to take up agriculture, dairy and other agricultural enterprises. The district has already 4953 SC women and 3659 ST women in self-help groups. The Department concerned provided seed capital of Rs.1 lakh to each self-help group to take up income generating self-employment ventures.

Notwithstanding the above, it is important to note that the SCs and STs are at present mostly at lower-end formal jobs. In rural areas, they are agricultural labourers. In urban areas, they mainly work in sanitary and construction. Most of them work as casual labourers. In government jobs, while Marathi Naikas and the SCs are relatively well represented, in Koraga community, very few are in government jobs. Even in government jobs, excluding Marathi

Naikas, others are in low-end jobs. The problems that are being faced by the Koraga community include illiteracy, lack of requisite skills, unemployment and underemployment, landlessness and lack of demand for their traditional occupations.

9.6 Housing, Drinking Water Facilities and Sanitation

Access to basic amenities such as housing, drinking water and sanitation is essential for well-being of people. The present status of housing, drinking water, sanitation and other basic amenities in the district is discussed in detail in Chapter 6,. Historically, the SC/ST families were the deprived communities of these basic amenities. They were living in isolation without access to these basic facilities. Some sub-castes of STs were mostly living in forests. They were following primitive livelihood. In order to bring them to mainstream and improve their standard of living, the Government implemented several right based intervention programmes. Table 9.12 shows the housing facilities provided for the SCs and STs under various Government housing programmes.

Table 9.12
Housing for SCs and STs under various programs:2011-12(number)

Programs	SC	ST
House Sites allotted under Ashraya Scheme	497	161
House under Ashraya Scheme	5107	2327
Dr. B.R, Ambedkar Scheme	1450	459
Indira Awas Yojana	1845	751
Special Fisheries Scheme	4	5
Total	8903	3703

Source: Dakshina Kannada Zilla Panchayat

During 2011-12, under the state sponsored Ashraya scheme, 497 housing sites and 5107 houses were allotted to the needy SC families. Similarly, 161 housing sites and 2327 houses were allotted to the ST families. Under Ambedkar Housing scheme, 1450 houses were constructed for SC and 459 for ST families. Indira Awas Yojana, which was a centrally sponsored scheme, provided 1845 houses to the SCs and 751 houses to the STs. Under Special Fisheries Scheme, 4 houses were allotted to SC fisheries families and 5 to the ST fishing family. Thus under the various Government housing schemes, 8903 SC families and 3703 ST families have benefitted. The 2011 Census data on housing status for the SC and ST households is not yet available. Since large number of SC and ST families have benefitted from various government housing schemes, there must have

been significant improvement in the housing status of SCs and STs in the district.

During the last decade, there was a significant improvement in electrification SC and ST houses. In the case of SCs, in 2001, the households using electricity for lighting was 39.23 percent, which increased to 67.23 percent in 2011. The ST households electrified increased from 46.4 percent to 77.17 percent during this period. There was a significant reduction in dependence on traditional sources of lighting among both SC and ST families. Similarly, there was a significant increase use of safe drinking water such as tap waters, hand pumps and tube well/bore well among SC and ST households. SC households using tap water increased from 32.4 percent to 46.6 percent during the decade 2001-11. On the other hand, the ST households

Graph 9.5
Housing for SCs and STs under various programs (In Numbers) : 2011-12



using tap water has gone up from 18.9 percent to 30.7 percent during this decade. Implementation of various schemes by the state government for providing safe drinking water to these communities has made this difference.

As already stated in chapter 7, the State Government launched TSC, Nirmala Grama and Swachata Grama schemes to achieve total sanitation and complete eradication of open defecation. Under these schemes, the SCs STs and other BPL families were given Rs.3700 as incentive amount for construction of toilets within premises. The ZP has organized aggressive awareness campaigns in all taluks and implemented the programme effectively. As a result, the sanitary status in the district improved significantly during the last five years. As per 2011 census, nearly 93 percent of the households in the district have latrine facilities within the premises. Only 7 percent depend on latrine facility outside their premises. Nearly 72 percent of the households have flush latrine.

These data clearly demonstrate that most of the SC and ST households have benefited from these programmes and are now having toilet facilities within their premises. However, the real challenge is the utilization of these facilities and development of healthy practices and hygienic conditions at the community level in rural areas.

9.7 Radar Analysis of Marginalized Groups

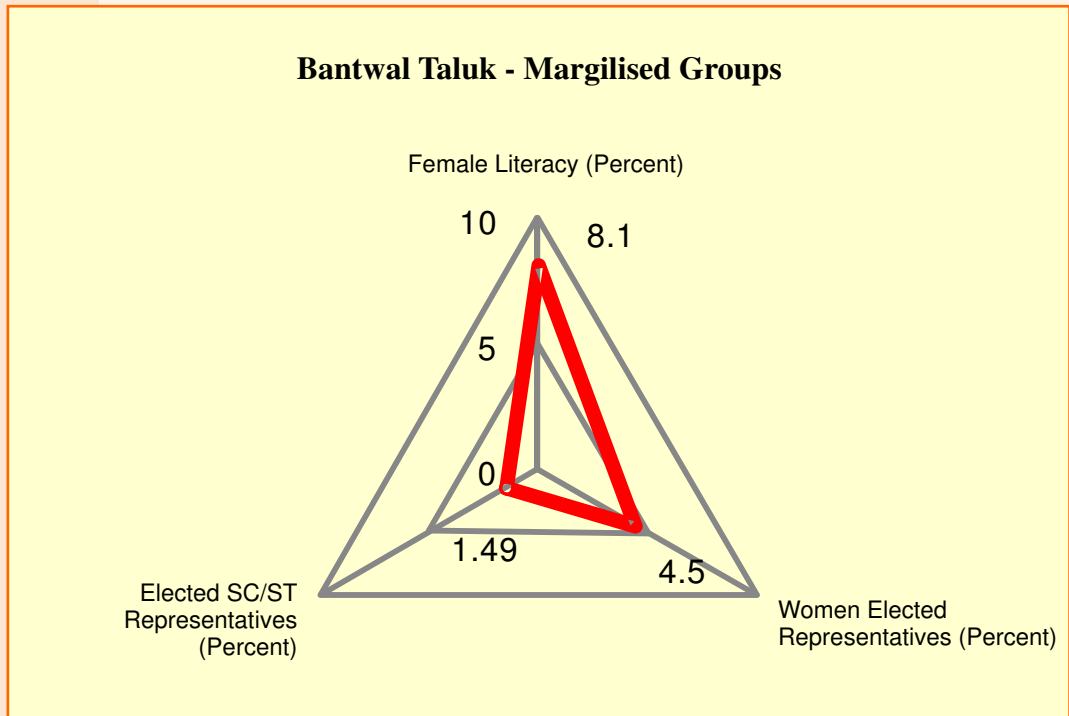
In order to view the status of marginalized groups through graphical portrayal and disparities within taluks as well as between taluks, the radar charts have been drawn by using three indicators reflecting marginalization dimension of human development. The indicators used for computing indices are female literacy, percentage of women elected representatives and percentage of elected SC/ST representatives. Table 9.14 depicts the actual values of these indicators and indices computed based on 10-point scale.

Table 9.13
Marginalized Groups: indicators for Radar

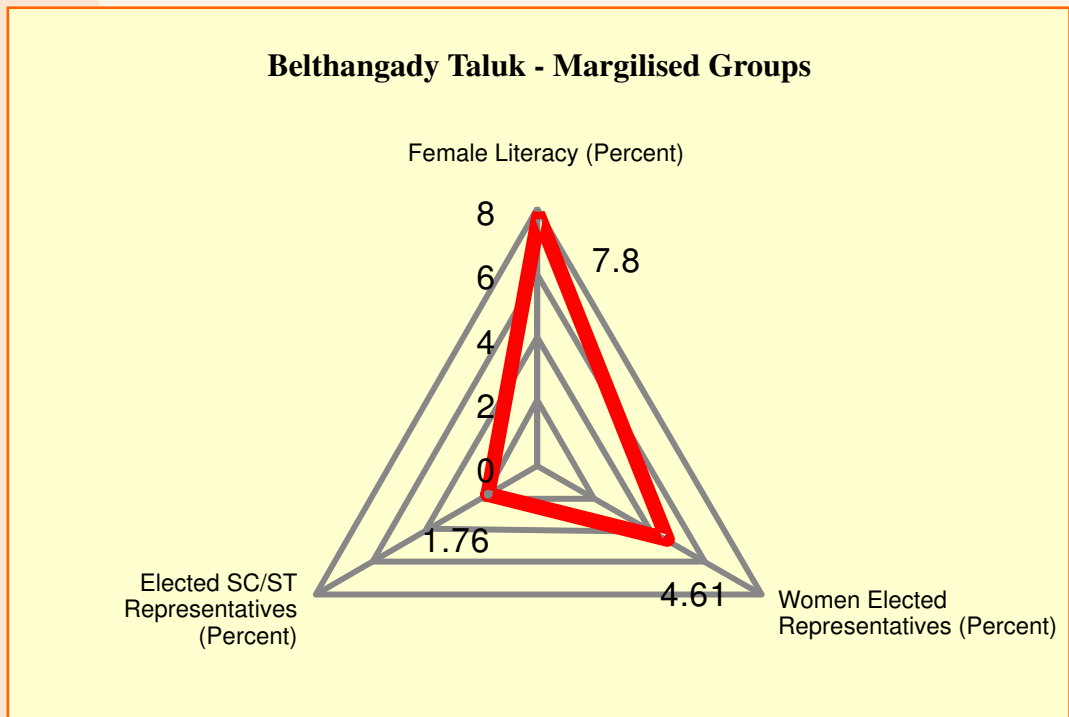
Taluk	Female Literacy (Percent)		Women Elected Representatives (Percent)		Elected SC/ST Representatives (Percent)	
	Actual Value	Index	Actual Value	Index	Actual Value	Index
Bantwal	81.02	8.10	45.60	4.50	14.86	1.49
Belthangady	77.99	7.80	46.14	4.61	17.59	1.76
Mangaluru	88.15	8.82	43.86	4.39	12.18	1.22
Puttur	80.51	8.05	45.18	4.52	20.30	2.03
Sullia	81.44	8.14	49.40	4.94	27.08	2.71
District	84.13	8.41	45.50	4.55	16.74	1.67

The radar charts prepared for each taluks and for all taluks together are shown below:

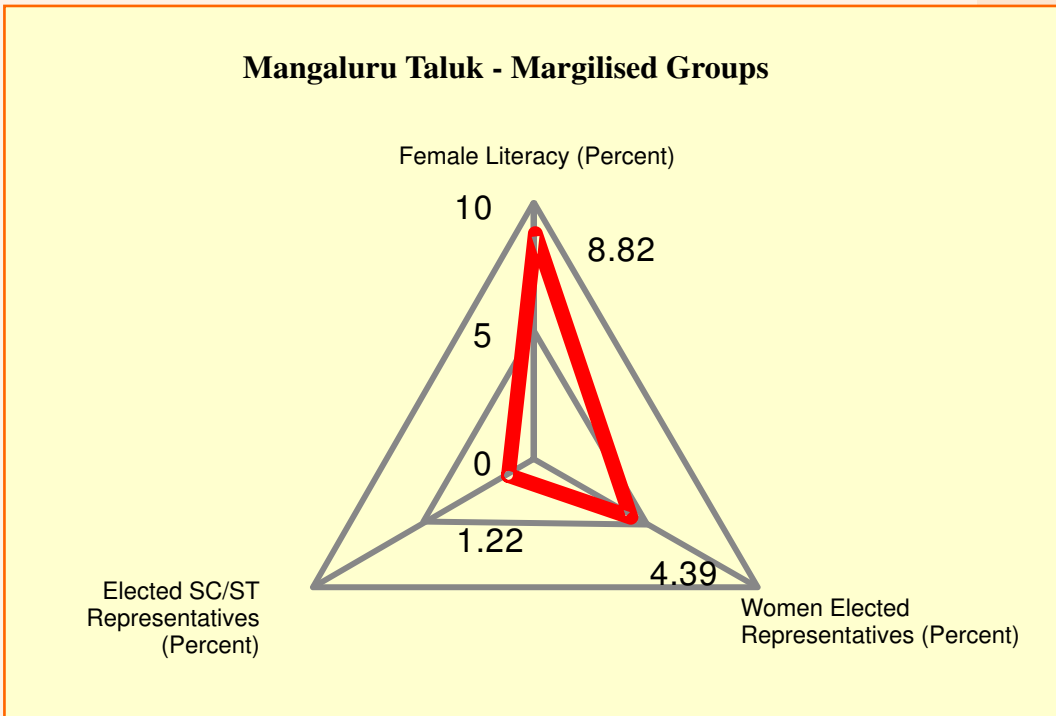
Graph 9.6 – Radar Chart



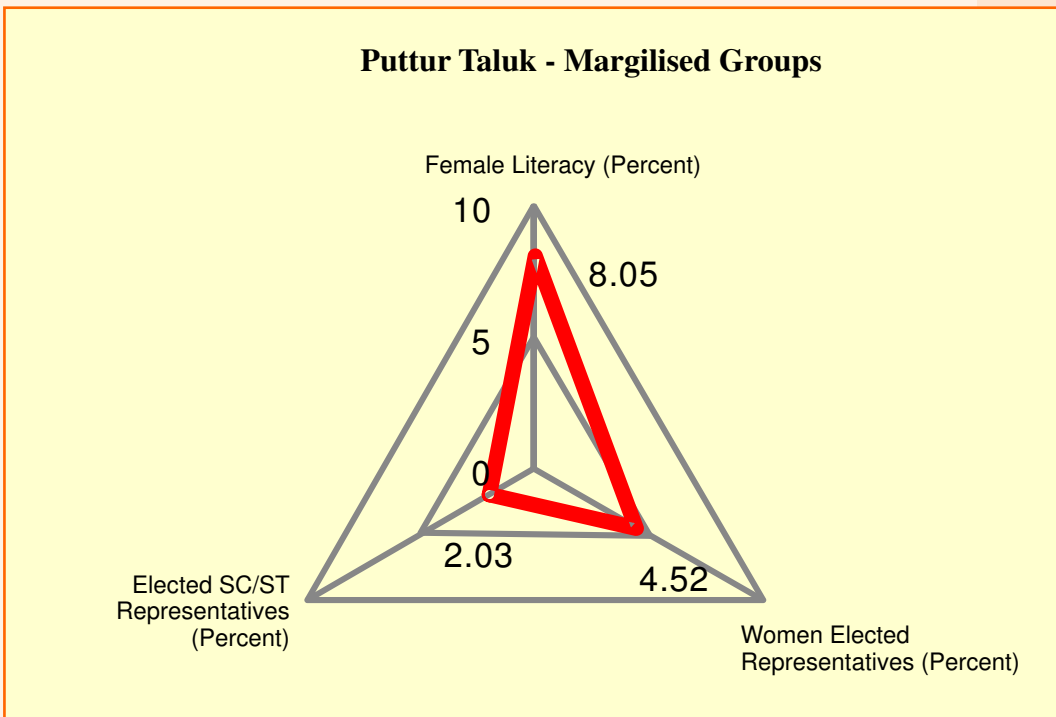
Graph 9.7 – Radar Chart



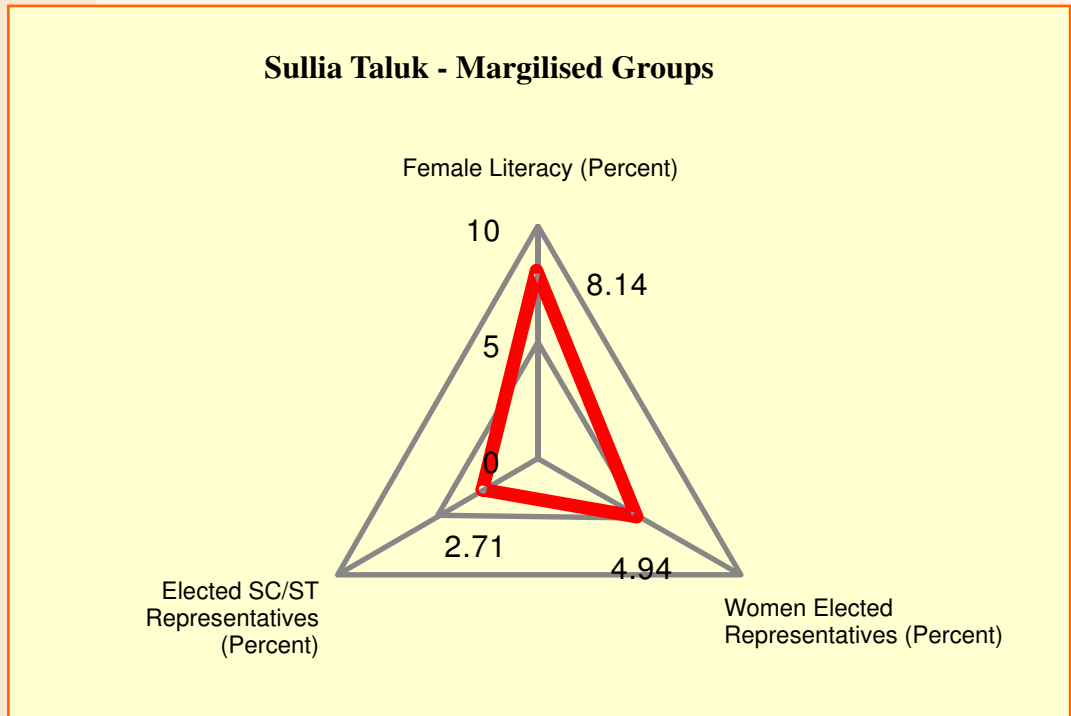
Graph 9.8 – Radar Chart



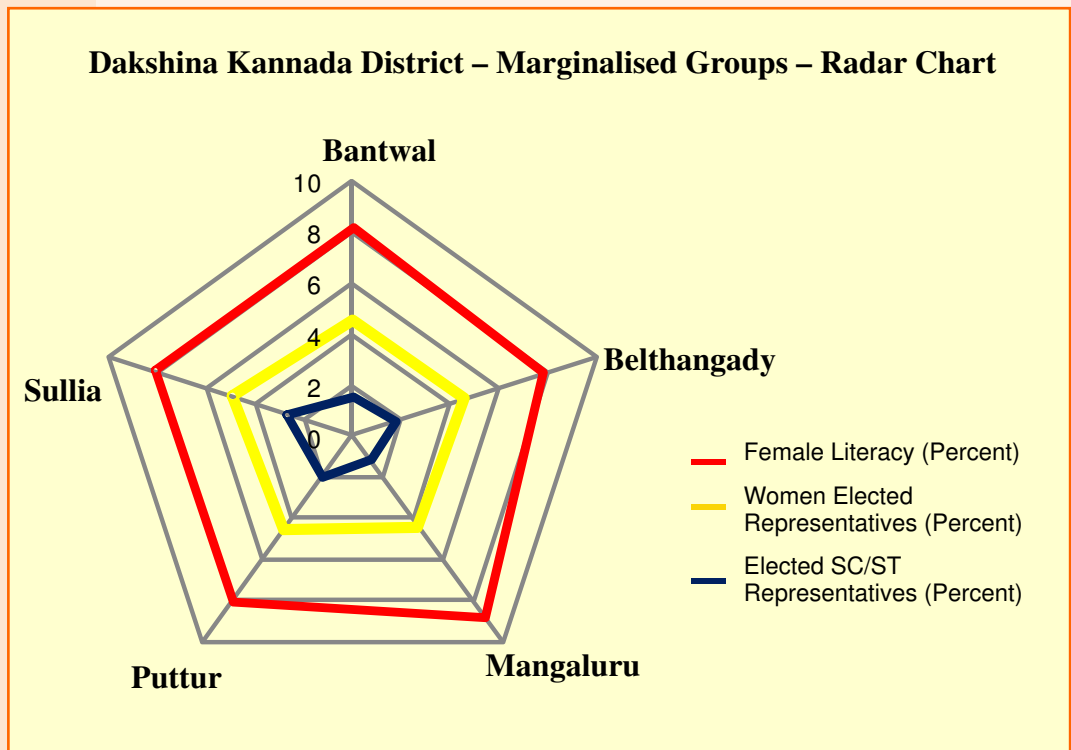
Graph 9.9 – Radar Chart



Graph 9.10 – Radar Chart



Graph 9.11 – Radar Chart



It is evident from radar charts that all taluks have female literacy almost nearer the maximum value and inter-taluk disparities are only marginal. As regards political representation of marginal groups especially the SCs and STs, all taluks are at the bottom ends. It is mainly because the district has one of the lowest percentages of SC/ST population. However, their representation in governance in panchayat raj institutions exceeds their share in the total population. In the case of women, though all taluks have women political representation above quota, it is still below their percentage shares in the total populations. This is not however reflected in the radar charts as indices are computed based on 100 percent representation as maximum value.

9.8 Composite Dalit Development Index (CDDI) – A Case Study

'Scheduled Castes' also referred to as 'Dalit', are traditionally deprived social group involved mainly in such pursuits like scavenging, leather work, and manual labourers. Historically, they were the disadvantaged community and suffered through centuries from social exclusion and discrimination. Socially and economically, they still remain at the lowest rung of the socio-economic ladder. Despite constant, deliberate and conscious efforts to eradicate negative and discriminatory practices, there is still a general perception that the social exclusion and discrimination of Dalit still persist in the society. The Human Development Index (HDI) which measures various dimensions of human development, however, does not capture various dimensions of discrimination and exclusion, which are historically Dalit specific.

These Dalit-specific problems produce disabilities among Dalits and the disabilities, in turn, hinder their capabilities to absorb development opportunities. It is therefore argued that since the Dalit development problems are quite different from mainstream development problems, they should be treated differently. The problems of Dalits mainly centered around: untouchability, social exclusion and social and economic discrimination. These specific problems affect Dalits' institutional, social and economic inclusion, freedom, mobility, choices, opportunities and political, cultural and community participation. All this ultimately lead to their capability deprivation, which adversely affect their human development.

Keeping in mind the need for special attention to Dalits' specific problems, an attempt is made in the DHDR to conduct a case study exclusively on Dalits, selecting one GP and using both primary and secondary data to compute a Comprehensive Dalit Development Index (CDDI) by taking into consideration various dimensions of social, economic, cultural and institutional discrimination and exclusion. For computation of the CDDI, the following six dimensions were taken into account:

- Inclusion: Institutional and Social Inclusions,
- Discrimination: Perception, Protest and Resolution,
- Freedom: Social, Political, Economic and Cultural,
- Standard of Living: Land holding, Non-agricultural source of income, Pucca House,

Electrification, Two-wheelers,

- Gender Dimension: Pre/post delivery rest, institutional delivery, Reproductive support and
- Access to Basic Facilities: Education, Drinking Water, Toilets, and Sanitation.

With a view to measure various dimensions for constructing the CDDI, the following indicators were selected:

- Institution Inclusion: Representation of SCs in Panchayat, School Development and Management Committees (SDMCs), JFMCs, Water Societies, Finance committees and Village Health and Sanitation Committee.
- Social Inclusion: Perception of Dalits on open entry into non-Dalits' residences, address them respectfully like non-dalits, inclusion of Dalits in festivals on par with non-Dalits, free entry to village temples and treatment in hotels like non-Dalits.
- Perception of Discrimination: Perception of Dalits on access to all sources of drinking water like non-Dalits, Treatment of SC children in schools on par with non-Dalit children in matters such as sitting in the class rooms, plates given for mid-day meal, participation in curriculum and extra curriculum activities, sports and cultural activities, discrimination in health matters such as number of visits by health workers, paying attention, delivery of drugs, emergency services, social discrimination in terms of treatment hotels, temples, social and religious functions in matters such as invitation, seating arrangements, plates or glasses used, meals served and disposal of

used plates or glasses and Economic discrimination in terms of treatment on par with non-Dalit in matters such as temple works, all works of festivals, mid-day meal cooking, getting customers to Dalit hotels and getting houses on rent.

- Protest against Discrimination: In the case of discrimination, whether Dalits protested against discrimination in respect of Water, Education, Health, Social and Economic matters.
- Conflict Resolution: If there is discrimination, response of Dalits on resolution of conflicts in respect of Water, Health, Education, Social and Economic factors satisfactorily or not.
- Perception of Freedom: Perception of Dalits on freedom to question all injustices meted out, freedom to protest against discrimination, freedom to mobility, freedom to get all kinds of employment opportunities and freedom to participate in all the cultural activities on par with non-Dalits.
- Gender Dimension of Dalit Development: Rest prior to delivery, Rest after delivery, Rate of Institutional delivery, Health Assistant visit, Reproductive health support on par with Non-Dalits.
- Standard of living: Proportion of Dalits' holding land compare with general population, Ownership of non-agricultural establishments on par with general population, Proportion of the Dalit households having Pucca houses as compared to general population, Proportion of Dalit-households having electricity as compared to general category of the

population, and owning two-wheelers (Bike/Scooter) on par with the general category of the population.

- Access to Basic Facilities: Safe Drinking Water of 55LPCD, Toilets and drainage created in Dalit areas as compared to general population.
- Access to Basic Facilities – Education: Enrolment rate of Dalits as compared with general population, Attendance rate of Dalits as compared with Non-Dalits and Rate of transition of Dalits as compared with General population.

The scoring method was used for measuring various indicators of deprivation of Dalits. The scoring was done based on the perceptions of Dalits on various indicators as compared with non-dalits. If positive responses exceed 70 percent, scoring was given 2, if 50 – 69 percent, scoring was 1 and if less than 49 percent, scoring was zero. The actual value of development attainment was divided by expected maximum value of development attainment to compute the various dimension indices. The expected value of development attainment of indicators was based on development attained by General Population and development benchmarks stipulated by the State and Central Governments. The CDDI is the simple average of all these dimension indices. The difference between one and CDDI is the Dalit Deprivation Index (DDI).

Ajjawar Gram Panchayat (GP) in Sullia taluk was selected for the case study. It is in remote area more than 25 km away from taluk headquarter – Sullia. The selected GP has 90 SC households with population of 484. The total

households in the GP are 1388 and total population about 5300. It is a multi-class GP. Out of 90 SC households, 55 were selected randomly for the study. All 55 SC households were interviewed to collect primary data through structured questionnaire. The secondary data were compiled from the GP. Following the methodology stated above as per the Government Guidelines, indices were computed. Table 9.15 contains the computed indices of various dimensions, CDDI and DDI for the GP selected for the case study.

The analysis of the various dimension indices shows that as regards social inclusion, perception of discrimination, protest against discrimination, conflict resolution, and perception of freedom, the indices are almost one. The implication of this is that the SCs are not facing any social exclusion and discrimination in the GP selected for the study. However it should be noted that these findings are mainly based on the perceptions of the respondents which are obviously subjective. The Dalits, in fact, make every effort to avoid any social discrimination and conflict particularly in cases of entry to non-Dalit houses, participation in festivals and religious functions. By and large, the Dalits are treated on par with other communities in the district. This has been achieved partly due to the Dalit-friendly Government interventions and regulations.

In the case of standard of living, access to basic amenities, the gender dimension of development and education, the indices are below 0.750. Dalits are not comparatively on par with other community. Since most of the Dalits are resource poor and depend on low-end labour jobs for their livelihood, they have still a long

Table 9.14
Composite Dalit Development Index (CDDI)

Dimensions	Maximum Value	Actual Value	Index
Institutional Inclusion	12	6	0.500
Social Inclusion	10	9	0.900
Perception of Discrimination,	10	10	1.000
Protest against Discrimination	10	10	1.000
Conflict Resolution	10	10	1.000
Standard of Living	10	7	0.700
Perception of Freedom	10	10	1.000
Gender Dimension of Development	10	6	0.600
Access to Basic Facilities: Water/ Sanitation	6	3	0.500
Access to Education	6	4	0.667
Total	94	75	7.867
CDDI (Total/10)			0.787
Dalit Deprivation Index (DDI)(1 - CDDI)			0.213

way to catch up with other community in standard of living and access to basic amenities. Similarly, in the case of gender dimension of development since most of them are land less agricultural labourers in rural areas, they could not afford required pre and post delivery rest and leisure. Regarding Institutional Inclusion, the dimension index works out to 0.500. The high institution exclusion of 0.417 can be attributed to the inadequate representation of Dalits in committees such as SDMCs, JFMCs and Village Health and Sanitation.

The comprehensive Dalit Development Index, as shown in the table, works out to 0.787. It can be considered 'very good'. As a result, the Dalit Deprivation index (DDI) is only 0.213. The Dalit deprivation is to the extent of 21 percent. With the increasing education among SCs and Dalit friendly government interventions, whatever the disparities between them and other communities in terms of social and institutional inclusion, which existed in the

past is gradually getting reduced. However, it should be noted that the purpose of this study is to understand the differences between the perception and reality in a limited manner based on a case study of one GP. The outcome of the study therefore shall not be applicable for any similar smaller or bigger geographical areas (village, GP, taluk, district etc.) and for generalization.

9.9 Concluding Remarks

The SCs and STs are historically, socially and economically deprived communities. Hence, the social and economic development of these communities requires prior attention and special treatment. Without right-based or entitlement approach particularly in education, health, shelter and other basic livelihood amenities, the well-being of these communities is not possible. Since independence, both the Central and the State Governments have

implemented several multi-faceted and multi-pronged programmes for social and economic welfare of the SCs and the STs and thereby bring them to the mainstream development. The analysis of the available data clearly has shown that most of the government social programmes implemented have been successful in provision of the basic livelihood amenities to the SCs and the STs. They are not lagging very much behind other communities as regards housing, drinking water supply, electricity and sanitation. The historically existing wide gaps between them and the rest of the population in regard to housing and basic amenities no more exist.

Notwithstanding remarkable progress made in social empowerment, the SCs and STs still lag behind the rest of the population in regard to higher and professional education, access to healthcare facilities, organized job market, access to productive assets and credit, entrepreneurship and business world and standard of living. Most of them remained as resource poor and in low-end labourers. Though there are many government programmes to improve the education and economic status of these communities, the effect is only marginal as regards skill development and economic empowerment. The district has still relatively a larger percentage of the SCs and the STs below poverty level. They have higher dropouts in secondary and PUC education. Their representation in higher-end professional employment is only marginal. The setting up separate colonies for SCs and STs also adversely affects their participation in mainstream society and becoming integral part of the society.

Another important emerging issue is the existence of wide gaps among the sub-castes of

the SCs and the STs. All sub-castes among SCs and STs have not benefitted from government programmes equally. For example, among the STs, Marathi Naikas are more advanced and Koragas are far behind economically and socially. Unfortunately, there is, at present, acute shortage of statistics on livelihood, education and health status, occupation pattern, poverty and other socio-economic indicators of Koraga communities as well as other sub-castes. These data are essential for focused demand driven government interventions for the economic and social uplift of this community. This requires a comprehensive diagnostic study of Koraga community and other sub-castes. The challenge is to recognize such downtrodden sub-castes and prepare a holistic action plan to bring them to the level of the rest of the community.



Malekudiya (ST) Community Members Building a Temple Chariot

Chapter 10

GOVERNANCE ISSUES: GOVERNANCE AND HUMAN DEVELOPMENT



Haleyangadi Grama Panchayat Office, Mangalore



10.1 Introduction

A good governance is defined by the World Bank as “(i) the process by which governments are selected, held accountable, monitored and replaced, (ii) the capacity of the governments to manage resources efficiently and to formulate, implement and enforce sound policies and regulations; and (iii) the respect for the institutions that govern economic and social interactions among them”. The two basic elements of good governance are: i) economic role of the state, which includes enabling, conducive and stable macro environment, provision of essential public goods and services such as healthcare, education and basic infrastructure, protecting vulnerable, legal framework for development and protecting environment and ii) democratic governance, transparency, accountability and decentralization to ensure people's grass roots participation and responsiveness to citizen's needs and aspirations. By this definition, the good governance means effective, efficient and responsive administration that is committed to improving the well-being of life of the people. It also implies providing essential public services such as health care, education and basic infrastructure in a more participatory and transparent manner. Good governance is, therefore, considered a prerequisite for sound and sustainable human development.

Decentralization in governance is important to ensure grass root participation of people in planning and implementation and delivery of public goods and services. The decentralized democratic governance ensures effectiveness, greater transparency and accountability and responsiveness to local needs. With decentralized governance, the ordinary citizen can effectively access the public

services required by them. Instead of a distant bureaucracy, under the decentralized system of governance, the planning and implementation of programmes would be at local level based on resource endowment of the area and local needs and aspirations of the local people and delivery system of public goods and services shifts to an elected neighborhood body. The human development requisites can be easily met efficiently and effectively through such neighborhood governance. The decentralized governance is, therefore considered as the handmaiden of human development at the grassroots level.

In good governance, the role of institutions and non-government organizations (NGOs) also matters. In recent years, the NGOs, community based civil societies and other voluntary agencies are increasingly emerging as key players in various human development endeavors. If motivated by altruism and social commitments, they can become the most suitable catalyst for empowering and promoting the sustainable human development among weaker sections and in the rural areas. In view of the critical importance of good governance for human development, this chapter focuses on analyzing interface between the governance at the panchayat raj institutions (PRIs), Urban Local Bodies' and human development at the district level.

10.2 Local Governance Structure

The 73rd and 74th Constitution Amendments in 1993 and 1994 mandated local self governments in all states. The district administration structure in Dakshina Kannada district is as follows, the Minister-in-charge of the district is overall in charge of the district. The

Deputy Commissioner (DC) is the chief administrator of the district. The DC is responsible for law and order, social justice, revenue administration. The Zilla Panchayat is an elected body for policy making. There are various district level sectoral development departments that come under the Zilla Panchayat. Chief Executive Officer (CEO) Zilla Panchayat, being the administrative head overlooks the administrative aspects concerning the different sectoral development departments. Taluk Panchayats (TPs) are the intermediate second tier in the three-tier panchayat raj set up which also has an elected body. Its role is to act as the facilitator in the various development functions of the GPs. The Grama Panchayats (GPs) are at the bottom of the pyramid structure of the panchayat raj set-up. Under the decentralized set-up, they are the administration units at the village level for planning and implementing development programs as well as delivery of public services in rural areas.

Dakshina Kannada district has 203 GPs, five TPs and eight urban local bodies. The urban local bodies (ULBs) include: Mangaluru City Corporation, Town Municipal Councils (TMCs) at Bantwal, Puttur, Ullal, and Moodabidri and Town Panchayats (TPs) at Belthangady, Mulky and Sullia. They have responsibility for urban planning and development and provision and administration of basic amenities such as drinking water, lighting, roads maintenance and sanitation.

10.3 Panchayat Raj Institutions: Structure and Process

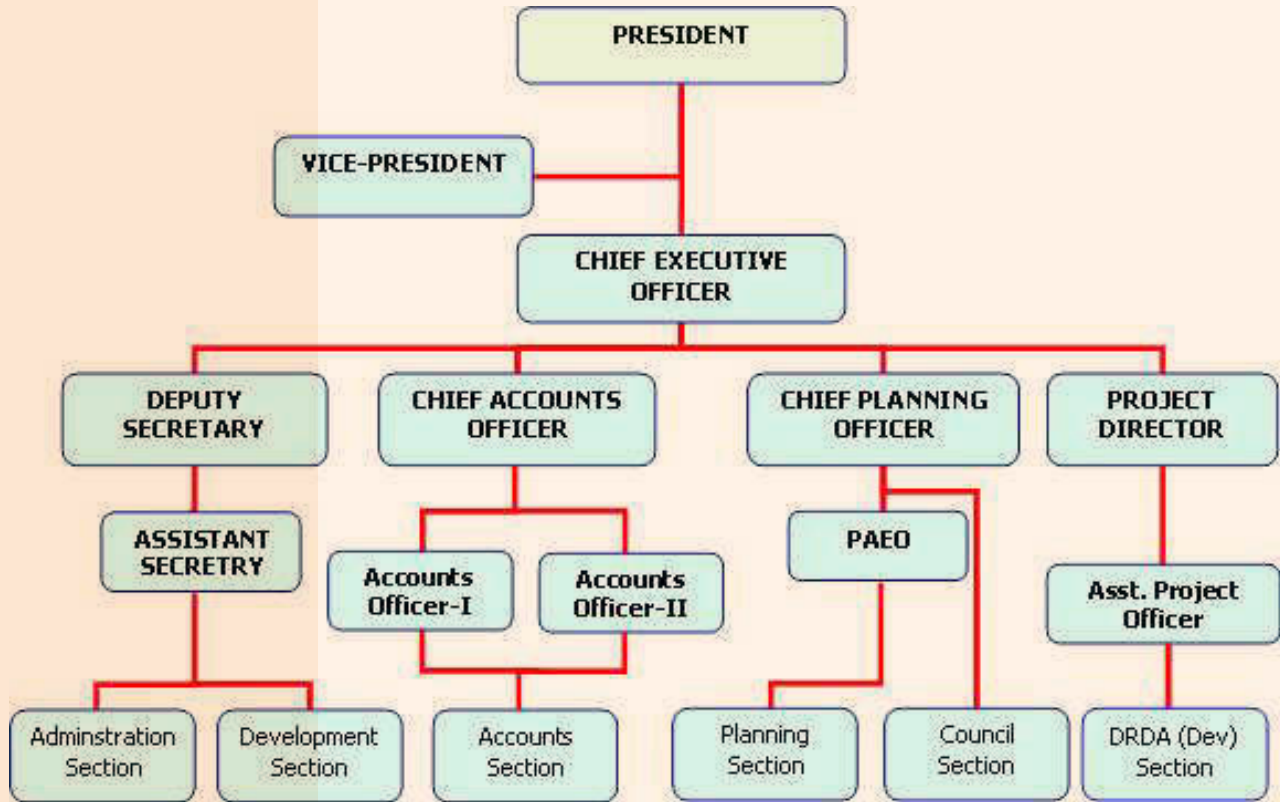
The 73rd Amendment to the Constitution for the first time gave constitutional safeguards and guarantees to panchayat raj institutions for

inter alia financial devolution and seat and authority position reservation for weaker sections. Following the Constitution amendments, Karnataka State passed a new Panchayat Raj Act in 1993 to set up a three tier structure of panchayat raj system: Zilla Panchayat, at district level, Taluk Panchayat at taluk level and Village Panchayat (GP) at village levels. With a view to adopting measures to promote good governance and accountability through “enhanced people's participation, citizen orientation, responsiveness, improved service delivery, improved financial management and greater downward accountability” the Karnataka Panchayat Raj Act, 1993 was amended in October 2003.

At the state level, the functioning of the panchayat raj institutions is coordinated and monitored by the Department of Rural Development and Panchayat Raj (RDPR). Under the three-tier panchayat raj set up, each body has mandated developmental and administrative functions. The ZP is the apex body in the three-tier panchayat raj set-up at the district level. The major developmental functions of all sectoral and other line departments at the district level come under the domain of the ZP. Being an apex body, it has also responsibility for overall coordination in planning and management and providing capacity building and technical support to lower levels of the PRI system. The organizational structure of the ZP is outlined in chart 10.1.

The ZP President is the chairperson of the elected ZP Council, which is the policy making body at the district level. There are Standing Committees represented by the ZP members on finance, audit, general, social

Chart 10.1
District Level – Zilla Panchayat



justice, education and health and Agriculture and Industries. In addition to these Standing Committees, there is a District Planning Committee (DPC). Under Section 310 of the Karnataka Panchayat Act, it is mandatory for the ZP Council to constitute a DPC to consolidate the plans prepared by ZP, Taluk Panchayats, GPs and ULBs and based thereon, prepare a Comprehensive District Development Plan (CDDP) and monitor and evaluate its implementation. Administratively, the Chief Executive Officer is the overall in charge of the ZP. The CEO is assisted by Deputy Secretary on administration, the chief Accounts Officer on finance, the Chief Planning Officer on planning and heads of sectoral departments on sector development.

Taluk Panchayat is an intermediate second-tier and has the responsibility to act as facilitator in the various functions of the GPs. The TP is an elected body chaired by the TP president. Likewise ZP, there are Standing Committees on various matters. Administratively the TP is headed by the Executive Officer (EO). Under him, there are line departments on accounts, planning, Panchayat extension and backward class extension.

The GPs are the administration unit at the village levels, charged with responsibilities of implementing developmental functions and delivering public services directly to the people. The important development functions assigned to them include *inter alia rural* water supply,

Nirmala Grama Yojana, social forestry, housing poor, micro-irrigation, poverty alleviation schemes and implementation of MGNREGA scheme.

The Grama Panchayat Council is chaired by the Panchayat President, supported by Vice President. The Act provides for setting up Grama Sabha (village Assembly) and Ward Sabhas, consisting of all eligible voters of the panchayat. The Grama Sabha and the Ward Sabhas are expected to provide forum to villagers to (i) discuss and review all local developmental problems and programmes formulated and implemented in the village; (ii) select beneficiaries for beneficiary targeted programmes; and (iii) plan for development of the village economy and its people depending on local resource endowments and needs. The Grama Sabha and the Ward Sabha were conceived as a participatory mechanism to provide opportunities to the people to voice their needs and aspirations. They were also to become a platform, where the elected representatives and

the bureaucrats can interface and be made accountable to the people for their actions and to serve as a means of ensuring transparency in administration.

The district has 203 GPs serving 331 villages. Taluk-wise, Mangaluru has the highest number of 49 GPs, followed by Bantwal, 47 and Belthangady, 43. Puttur taluk has 37 GPs and Sullia, 27 GPs. The GPs in the district differ widely in terms of geographical area coverage and population. Some GPs have one village, many GPs, two villages and a few, more than three. As per the mandated functions of the panchayats, the GPs are involved in implementing village specific schemes such as water supply, sanitation, housing of poor and village infrastructure development. During the Eleventh Plan period, the major thrust areas of development undertaken by the GPs in the district were housing for weaker section, rural water supply, rural roads, MGNREGA and sanitation under both central and state sponsored schemes.

The financial devolution and transfer of resources from the state depends on the ability of GPs to raise resources from the sources assigned to them and local needs. The GPs are assigned to levy house tax, non-motorable vehicle tax, factory tax, entertainment tax other than cinema halls, water tax, license fee, fee on fairs etc. Though the record of the resource mobilization by the GPs is not up to the mark, compared to other districts, the performance of GPs in Dakshina Kannada district in resource mobilization is very good in the state.

The three-tier structure of the panchayat raj institutions under decentralized set-up is responsible to implement development



Grama Sabha organised at Grama Panchayat

programs in their respective mandated areas. This calls for both empowerment and accountability of the relevant authorities for effective and efficient implementation of development programs and delivery of public services. They also need to be adequately empowered through devolution of functions, finances and functionaries. Dakshina Kannada district being a progressive district has done quite well in running the panchayat institutions. All GPs are computerized with web-based software... However, the problems faced by them are many which include inadequate and untimely allocation of resources, absence of community interest and participation through Ward Sabhas and Grama Sabha, lack of knowledge and functional capability to plan, implement and deliver services to the targeted groups, political interference and vested interests. The elected members lack orientation and knowledge. There is a need to strengthen the GPs by adequate devolution of functions and

finances. The devolution of functions has to be accompanied by an activity mapping clearly delineating the activities that can be done by different tiers.

10.4 Urban Local Bodies: Structure, Issues and Processes

Dakshina Kannada district is one of the highest urbanized districts in the state. Nearly 48 percent of the population lives in urban areas as against the state average of 39 percent. The district has also witnessed a decadal growth of 37 percent during 2001-11. The rapid process of urbanization is a natural dynamic process associated with the economic growth. With the rapid expansion of urbanization, the development of requisite urban infrastructure and good urban governance pose a real challenge. A unified and effective administrative framework is necessary in urban areas with clear accountability to citizens. The urban governance



Old DC Office, Mangaluru

is therefore very important from the district's human development perspective.

The history of urban local self-governing bodies, commonly called municipalities in Karnataka dates back to more than a century. Now the urban governance process in the state comes under two important Laws: Karnataka State Municipalities Act of 1964 (for city municipalities, town municipalities and town panchayats) and The Karnataka State Municipal Corporation Act of 1976 (city corporations). As per these acts, ULBs were classified as City Corporations with above 3 lakh populations, City Municipal Councils (CMCs) with population ranging from 0.50 - 3lakh , Town Municipal Councils (TMCs) with population ranging from 0.20 – 0.50 lakh and Town Panchayats (TPs) with population ranging from 0.10-0.20 lakh.

The 74th Constitutional Amendment Act 1994 mandated the setting up of elected urban local bodies as the institution of self-government and allocated inter alia responsibility of administration, economic development and social justice. By this amendment, the urban local bodies (ULBs) have become local governments with clearly mandated functional domains. This amendment also transformed the ULBs from being mere service providers to urban development bodies. The mandated functional responsibilities of ULBs include safe drinking water supply, quality all-weather-roads, maintenance of street lights, and scientific way of solid waste disposal, underground sewerage system and cleanliness of the city.

As stated above, Dakshina Kannada district has eight ULBs viz. one city corporation in Mangaluru, four TMCs at Bantwal, Puttur,



Community Hall Built by Balthila Grama Panchayat

Moodabidri, and Ullal and three TPs at Mulky, Belthangady and Sullia. The broad governance structure of ULB set-up is adumbrated in Chart 10.4. The Ministry of Urban Development is the apex body for policy making and oversight administration and monitoring urban governance in the State. The ministry governs Municipal Corporations through the Directorate of Urban Development. The Town Municipalities and town panchayats come under the Department of Municipal Administration. In the district, the DC is over all in charge of the urban governance. The DC's office has an Urban Development Cell, which conducts urban planning and looks after all the district's urban affairs. Mangaluru City Corporation has Commissioner as Chief Executive. Other ULBs have Chief Officers responsible to govern in their respective jurisdictions. Under the Commissioner/Chief Officer, broadly, there are departments such as Administration, Revenue, Works/Engineering, Public Health and Environment Protection, Poverty Alleviation and Community Development, Public Relation,

Finance and Accounts and Town Planning depending on the category of ULB.

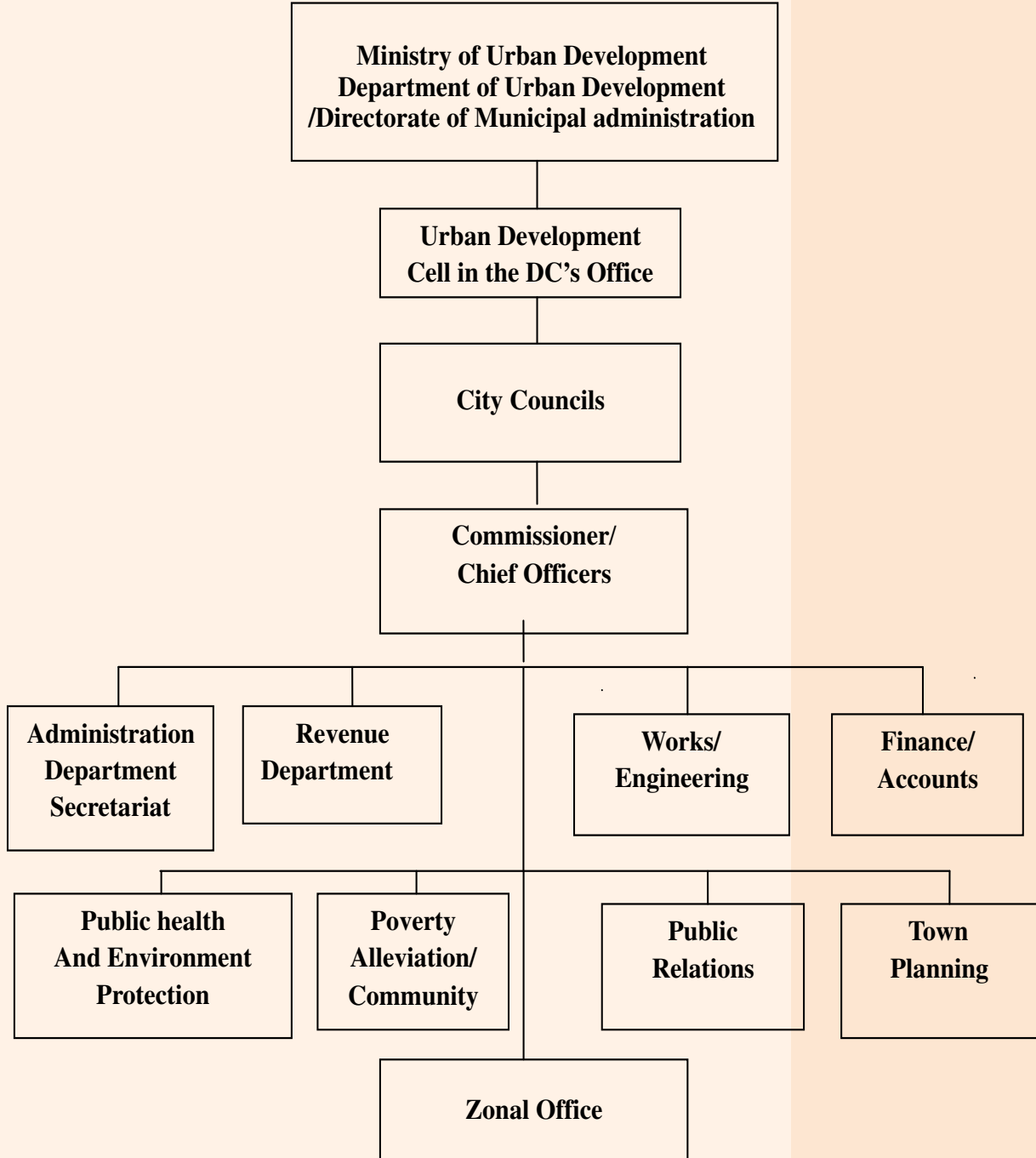
Table 10.1 contains particulars of ULBs in the district. Mangaluru City Corporation has 115036 families with total population of 499487 in the command area of 132.45 sq. km. It has 60 wards with 60 elected members. Ullal TMC, the second biggest town, has population of 53773 in an area of 11.80 sq. km. From the Administrative perspective, it has 27 wards with 27 elected members. Puttur TMC has population of 53061 in its jurisdiction of 36.11 sq. km. It has also 27 wards and 27 elected members in the town council. Moodabidri TMC has population of 29431 in the area of 39.62 sq.km with 23 wards and 23 elected members in the town council. Bantwal TMC has population of 40155 in an area of 27.05 sq.km. It has 23 wards and 23 elected members. Among Town Panchayats, Sullia has the highest population of 19958 in jurisdiction of 6.61 sq.km with 18 wards and 18 elected members. Mulky, the second biggest Town Panchayat, has population of 17274 in the command area of 11 sq. km.

Tale 10.1
Profile of Urban Local Bodies in Dakshina Kannada District

ULBs	Total Area (sq. km)	Wards (number)	Household (number)	Total Population (number)
Mangaluru CC	132.45	60	115036	499487
Bantwal TMC	27.05	23	7939	40155
Moodabidri TMC	39.62	23	6517	29431
Puttur TMC	36.11	27	11378	53061
Ullal TMC	11.80	27	9588	53773
Mulky TP	11.00	17	3962	17274
Belthangady TP	8.87	11	1821	7746
Sullia TP	6.61	18	4194	19958
Total	273.51	206	160435	720885

Source: 2011 Census/Urban Cell, DC Office

Chart 10.2: Structure of Urban Local Bodies



It has 17 wards and 17 representatives in the council. Belthangady has, on the other hand, population of 7746 in the area of 8.8 sq.km. It has 11 wards and 11 elected members in the TP.

10.5 Improving Service Delivery Mechanisms

10.5.1 E-Initiatives

Electronic governance is fast emerging as an important instrument for achieving good governance especially with regard to improving efficiency, transparency and making interface with government user friendly. E-governance involves application of IT to the processes of government functioning in order to bring about better governance. It can reduce delay and

improve ability to get things done on time without waste of resources. E-governance is, therefore, considered 'smart'; simple, moral, accountable, responsive and transparent. It can be used as an important instrument for more effective strategic urban planning initiatives, program management and monitoring and timely delivery of services. It requires providing broad band connectivity, networking, technology up gradation and a package of software solutions. The broad band connectivity should be extended to all ULBs and panchayat institutions to enable much better information flow and allow stronger monitoring of implementation of programs on the ground and delivery of public goods and services to the targeted beneficiaries.



Zilla Panchayat President Receiving the Award of Nirmal Gram Puraskar by Hon'ble President of India

In Dakshina Kannada district, all ULBs have computerized the system and implemented the following initiatives in regard to E-governance:

- Double entry accrual based financial accounting. All ULBs in the district have adopted web-based E-Gov Financials for municipal accounting based on the NMAM (National Municipal Accounting Manual) prepared by the Comptroller Auditor General (CAG) and Ministry of Urban Development, Government of India. This system is fully internet-enabled and automates the end-to-end financial operations of an urban local body by providing an integrated system that manages budgeting, asset management, daily operational accounting and reporting. The system is fully integrated to the ULB city portal, which enables the ULB to provide citizens information they require.
- Geographic Information System (GIS) based property tax collection system: The e-GIS Property Tax system computerized the revenue operations and fully integrated with eGOV Financials. It automatically calculates the property tax demand, maintain property database, monitor revenue collection and provide up-to-date reporting of tax collections. Important internal processes like web-based project monitoring, payroll, procurement process, payment of bills, file movement and fund based accounting system as per Karnataka Municipal Accounting and Budgeting Rules (KMABR) 2006 have been computerized enhancing transparency and administration.
- Public grievance and redressal system: With a view to effectively handle public grievance, eGOV PGR was adopted. Under

this system, citizens can register their complaints with ULBs either through internet, phone or through writing. The complaints are properly structured, auto-routed to the concerned redressed officer and track the complaint.

- The Right to Information (disclosure of information by authorities providing municipal services) Rules 2009: All ULBs have taken measures for periodic voluntary disclosure of mandated municipal service related indicators.
- An online 'Tulana' for improving service delivery levels: Under this system, all ULBs disclose performance levels with 49 monitorable indicators set against benchmarks on yearly basis in seven sectors.
- Birth and Death registration system: all ULBs are implementing the eGOV Birth/Death IT module for birth/death registration and certification. For successful execution, this, however, requires on-line hospital integration.
- City Portal: All ULBs in the district have websites with state server maintained at MRC. But broad band connectivity and networking have not been put in some places. Unless these developments take place, the optimum benefit of E-governance cannot be realized.

10.5.2 Capacity Building

With the growing urbanization and emerging urban issues, the urban governance is increasingly becoming more and more complex process. The range of functions that the ULBs are expected to discharge are widening and

becoming too technical. The administration and management of urban development have to become professional and competent. The district has eight ULBs. It is common knowledge that without a continuous development of capabilities and competencies of employees, no organization can function well. Human resource development is, in fact, a process by which the employees of an organization are required to continuously and in a planned way acquire and sharpen their capabilities and competencies to perform various functions effectively and efficiently. Training and retraining is a very critical not only to perform their functions efficiently but also to cope up with emerging urban issues. The capability building also required to be extended to the elected members

of the Municipal Councils as they come from diverse backgrounds. The elections to the ULBs usually held once in five years but these bodies must be invigorated and enabled to discharge their responsibilities.

As regards the three-tier structure of rural governance, Zilla Panchayat at district level, five Taluk Panchayats at taluk level and 203 GPs at village level are responsible to plan and manage development programs in their respective areas as per the Amendment of the Constitution. Unfortunately they have not been able to perform their respective mandated functions as envisaged therein mainly due to lack of capability particularly at panchayat level. The ZP has technically qualified professional staff in sectoral departments as well as in its



A Service centre and Rajiv Gandhi Seva Kendra at Kolthige Gram Panchayat - Puttur

office. The Taluk Panchayat as an intermediate tier can easily avail the needed technical and professional support from the ZP. The GPs at the grass root level do not have required professional competence to perform their mandated functions effectively and efficiently.

The GPs are the focal points for local planning and delivery of public services. The need for improving governance at the GP level needs hardly any emphasis. Empirical studies revealed that the lack of professional capacity, transparency and accountability at the GP level are the weakest aspects of the Panchayat Raj system. Most of the Secretaries have no professional qualification and capability to administer the task assigned to them. The recent appointment of the Panchayat Development Officers (PDOs), was to some extent filled this void. However, they are new and require requisite skills in grassroots planning, management of development programs and monitoring and evaluation.

Similarly the elected members of the GPs are the key players and decision makers at the grass root level. Production Committees, Social Justice Committees and infrastructural Committees are the most important Standing Committees in GPs. In order to make them effective, the members of the committees require requisite capability in rural development. The Grama Sabhas and Ward Sabhas were conceived as forums to provide opportunities to people to participate in planning and monitoring of development programs. The Grama Sabhas and Ward Sabhas have not yet become effective. The need to develop requisite capability at panchayat level and strengthen the Grama Sabhas and the Ward Sabhas to make

them effective forums in need assessment, priority setting, oversight monitoring and social audit therefore requires hardly any emphasis.

10.5.3 Good Governance Practices

Good governance is about providing an efficient and effective administration that is committed to improving the quality of life of the people in a more participatory and transparent manner. The main ingredients of good governance at grassroots level are: (i) Efficient and effective delivery of public services, (ii) simple, easily accessible and people-friendly rules and procedures, (iii) transparency, accountability and sound financial management, (iv) responsive to local needs and aspirations and (v) stringent anti-corruption measures, absence of rent seeking behaviour and strictly adhere to right to information. Good governance is, thus, a people-friendly, people-caring, people-participatory and responsible and responsive panchayat raj system.

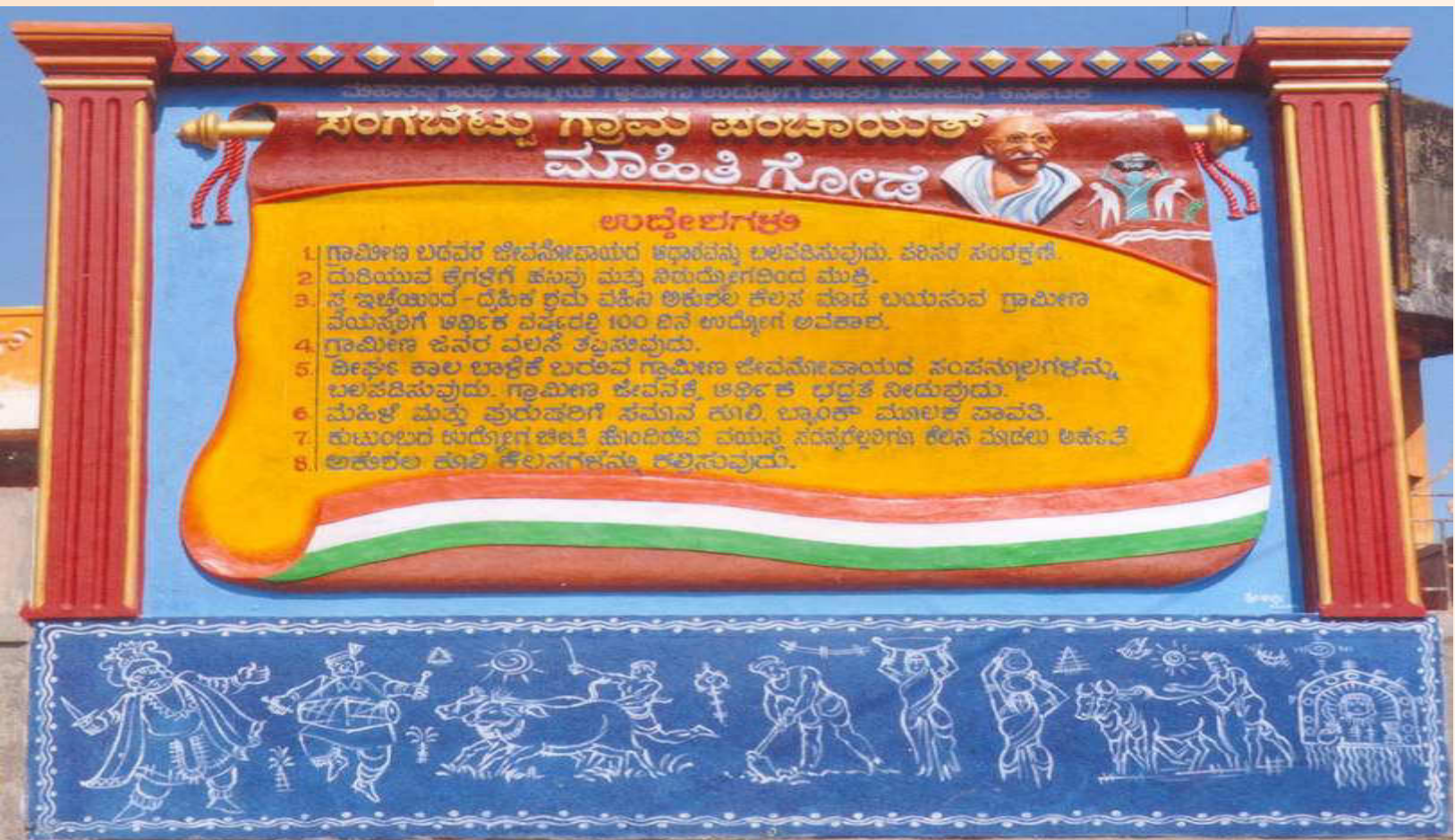
The Constitution Amendment rightly made the PRI system as an appropriate institutional framework for local governance. Under this framework, the decentralized the panchayat raj institutes are expected to ensure people's participation in governance and provide effective, capable and responsive local administration for delivery of public services. Dakshina Kannada district has done quite well in running the panchayat raj institutions as per the Amendment Act. Some of the successful good governance practices adopted in the district are the following:

Successful Total Sanitation Campaign (TSC): Though total sanitation programme was launched in 2000, no progress was made until

2005. In 2005, the ZP undertook a need based diagnostic survey to assess sanitation status and identify families having no toilets. First step the ZP took was awareness campaign and training of the members and officials of GPs. The ZP also took the help of school teachers, anganwadi workers, health workers, SHGs and NGOs in awareness campaign. Since the subsidy of Rs 1200 for BPL family was not enough to construct a toilet, the model adopted by Ira GP in Bantwal taluk of using shramadan of people was propagated. The local cricket team, bajan mandals and other youth groups and SHGs became torch bearers for shramadan. A sanitation policy was drafted for all GPs and was circulated to all households. Some donors were

also persuaded to provide materials for construction of toilets. In Golthamajal GP, a record 110 toilets were constructed in one day through shramadan. By 2009, the district has attained the status of 'open defecation free district' under the TSC programme and all GPs were awarded Nirmal Gram Puraskar. The district also bagged the Nirmal Gram Puraskar Award in 2012.

Sanitation Policy: All GPs have adopted sanitation policy which as a package involves compulsory use of toilets, ensure every house has bathrooms and toilets, proper waste disposal from public premises, hotels and restaurants etc, discourage use of plastic bags and instead encourage use of cotton bags,



Defined Objectives of a Gram Panchayat Painted on a wall at Sangabettu Gram Panchayat, Bantwal

Eco-friendly waste disposal initiative: The ZP took initiative to set up eco-friendly waste disposal units in five GPs viz. Kurnadu, Laila, Golthamajalu, Mennabettu and Kadaba on pilot basis. The waste from residential and commercial places is collected and processed in the bio-plants using organic solutions to produce organic manure. The organic manure produced is marketed with respective panchayat names to generate revenue. Based on the experience, the scheme has been extended to 8 more GPs. Now ZP has prepared an action plan to replicate this initiative in all 203 GPs.

Rural Water Supply System: The ZP initiated metering the rural water supply at GP level. When the ZP received the World Bank funded rural water project, the ZP initiated a pilot project in Kinnigoli, Haleyangadi, Thokur and Golthamajalu GPs. A Water and Sanitation Committees were formed, which held discussion with communities and Grama Sabha regarding metered safe drinking water supply. After obtaining community approval, the GPs included in their bye-laws metered drinking water supply initiative as a programme. The GPs purchased meters and installed them and households were asked to pay in installments the cost. For SCs and STs, the meter cost was met from their welfare fund. The GPs have fixed the water charges to be levied after approval in their general body meetings. The success of this initiative motivated the ZP to implement it in all GPs. All GPs were asked to visit the GPs implemented the pilot scheme and discuss in their general body meeting to initiate metered safe drinking water supply. The ZP also motivated GPs to go for computerized water billing system called 'Jaladhara'. By using

handheld machines linked to computer, the billing is made easy and transparent. 135 out of 203 GPs in the district have successfully adopted metering of drinking water supply so far.

There are, however, many areas of concern which need to be addressed to improve good governance at the panchayat level. The GPs have at present no financial and functional autonomy. The decentralization entails devolution of political, fiscal and administrative powers to grassroots governing institutions. This has not yet taken place. The GPs act as grassroots government body for mere implementing government schemes imposed by the State and Central Government. They have not been empowered to raise resources adequately locally and plan and execute development programs based on local needs and aspirations of the people. Though as per the Act, the GPs are free from politics, divisive politicization of GPs is taking place which come in the way of their effective and transparent functioning. Unless the GPs are empowered and made autonomous in terms of functions, finances and functionaries, the good governance at the GPS level cannot be ensured.

10.6 Role of NGOs and Other Voluntary Groups

Non-government organizations (NGOs) and voluntary groups refer to formal and informal association of people for common good. A strong network of societal organizations is considered essential for holistic and inclusive development. Non-government agencies (NGOs), voluntary agencies and societal associations or groups such as Self-help Groups (SHGs) play vital roles in the process of

development. They are perceived to be motivated by altruism and social commitments, making them the most suitable catalyst for empowering and promoting the sustainable development. Altruistic concern plays important role in education, health, poverty alleviation and development of disadvantaged community. Their contribution in health, education, women empowerment and other social sectors is well recognized worldwide. There are also many social issues which the government alone cannot handle. Hence the comparative advantage of NGOs and voluntary groups in certain areas of development cannot be ignored.

Dakshina Kannada district is blessed with a good number of NGOs, Voluntary Agencies, Mahila Mandals and informal groups such as SHGs. which are actively involved in various developmental initiatives¹¹. The known

NGO's of the district include: Sri Kshetra Dharmasthala Rural Development Project (SKDRDP), Navodaya Grama Vikas Charitable Trust, Nagarika Seva Trust, Bhoomi Foundation Ramakrishna Seva Samaj, Seva Bharati and Child Aid and Research Trust. Some of the NGOs are helping the district/state administration in implementing their programmes particularly related to the weaker section of the society.

The main programmes taken up by these organizations include poverty alleviation, promoting self help groups for microfinance, women's empowerment and executing programmes such as housing, sanitation, creation of awareness and certain services in the field of health, education and vocational training for weaker section of the community.



Paddy Training Camp

The most notable among the NGOs in the district is SKDRDP initiated and supported by DR. D. Virendra Heggade, Dharmadhikari of shri Kshetra Dharmasthala (Box 10.1). The primary focus of the SKP is to ameliorate the living conditions of weaker section of rural community whom the development process has bypassed. Started in 1982 in Belthangady the SKDRDP is spread in most of the villages in Dakshina Kannada district and also as many as 16 districts in the state. The key element of the project is formation of SHGs for men (Pragathi Bandhu) and women (Jnana Vikas). These SHGs have proved to be the most successful 'models' of SHGs in the country. The achievements of these SHGs are remarkable. Pragathi Bandhu – men's SHG has objective of sustainable agricultural development. With the scarcity of labour, agriculture was increasingly abandoned in the district which adversely affected livelihood of farming community. Pragathi Bandhu aims at labour sharing activity to carry out agricultural operations. The members of Pragathi Bandhu work in the farm of members in rotation. This initiative has proved very successful in revival of agriculture in the district. The purpose of women SHGs is to empower socially and economically the women of weaker section in rural areas. In Dakshina Kannada district, the SKDRDP has 18016 women SHGs with the total membership of 181349 in most of the villages as on 2012. The total loan amount outstanding was Rs.27844 lakh. Out of the total members, 9901 are SCs and 5944 are STs. The SHGs under the SKDRDP are

woven into Federations, which are functioning effectively. The most of the SHGs are involved in income generating micro-enterprises. The marketing of their products is done by a centralized marketing agency called *Siri*

Navodaya Grama Vikas Chaitable Trust (NGVCT), an NGO promoted by Shri M.N. Rajendra Kumar and located in Mangaluru, a well-known leader of cooperative movement, has main objective of organizing the rural poor to empower them by training and providing easy access to finance to enable them to undertake income generating activities. The other broader objective set out include social and economic empowerment of women through organizing them SHGs and conducting awareness campaign, health check-up camps, provision of financial help for those suffering from cancer, cardiac diseases etc organizing exhibitions and fairs to market commodities produced. In short period of ten years, the NGVCT successfully formed 15576 SHGs with total membership of 133169, out of which 85398 were women members. Most of the women members belong to landless agricultural labourers, SCs and STs. The NGVCT has received best award from NABARD for the year 2006-07, 2007-08 and 2008-09 for organizing and managing SHGs in Karnataka State.

Nagarika Seva Trust, Guruvayankere, Belthangady taluk, is another known NGO working in the district. It is a Trust established in 1976. The vision of the Trust is to build a peaceful and environment friendly society

¹¹ *Voluntary sector and NGOs are generally understood to be not-for-profit, professional intermediary agencies, which manage programmes in the areas of economic and social development and engage in welfare, relief, rehabilitation and training. Sometimes, voluntary sector organizations and NGOs are synonymously used and sometimes differently under the umbrella of civil society organizations or community based organizations.*

without any discrimination based on caste, class, ethnicity, religion, language, sex and age. To achieve this mission, the Trust undertakes various development initiatives to empower the poor, marginalized and backward people towards self-sustainable development processes and to facilitate the people to secure social, cultural, political, economic justice and human dignity. It has organized women SHGs to

empower them in the district. It has promoted peoples' organizations such as Krishikara Vedike (45,000 members), Karavali Mahila Jagruthi Vedike (25,000 members), D.K. Parisarasakthara Okkoota (300 members). The Trust has given a lot of importance for activities connected with eco-protection. In this connection, it has organized struggles and campaigns on environmental concerns.

Box 10.1: SKDRDP: A NGO Model for Replication

Shri Kshetra Dharmasthala Rural Development Project (SKDRDP) initiated, supported and led by Dr. D.Veerendra Heggade, Dharmadhikari of Shri Kshetra Dharmasthala has completed three decades of its service to integrated rural development. The mission objective of the SKDRDP is to ameliorate the living conditions of the neglected and marginalized weaker section of rural community through integrated rural development. Started in 1982 in Belthangady taluk of Dakshina Kannada, the SKDRDP has spread in the villages in sixteen districts including Dakshina Kannada. The project is now hailed, nationally and internationally, as one of the most successful experiment of rural development initiative in the field of poverty alleviation, women empowerment and integrated rural development implemented by any NGO in the country. The SKDRDP used the self-help groups (SHGs) and microfinance as powerful tools not only to alleviate poverty alleviation and empower the women, but also to reach the hitherto unreached rural poor. Some of the programs implemented under the SKDRDP include:

Pragathi Bandhu: Promote agricultural production through labour sharing by forming SHGs of farmers called Prgati Bandu. In the context of acute shortage of labour and abandoning of agriculture, this programme facilitated revival of agricultural development. Through microfinance, the programme helped thousands of small and marginal farmers in the district. The Government of India approved the model for the implementation of SGSY project. By 2011, as many as 27797 Pragati Bandus were formed with 181837 members.

Pragathi Nidhi: A consolidated fund created for providing credit, both for production and investment through Pragati Bandu SHGs for agriculture, infrastructure development, group enterprises, non-farm sector development, income generating activities and practically all needs of the weaker section of the society and thereby integrated rural development.

Jnana Vikas Kendra: JVK Centres for imparting information for socio-economic empowerment of rural poor women without landed property on health, family welfare, hygiene, children education and income earning opportunities. As on 2011, there were 4580 JVK centers in 6500 villages having membership of 1177909.

Gelathi: Centre for the women who need counselling, motivation and guidance in times of family conflict with a view to promote good family life.

Jana Jagruthi: A program to create awareness and movement to root out alcoholism. This has now become a powerful and successful social movement.

Navajeevana Samithis: A forum for people to come together to express their gratitude to God for liberating them from alcohol and other vices to lead a good life.

Sampoorna Suraksha: A unique micro health insurance scheme for women upto Rs.25000 for meeting unexpected medical expenses. It is integrated with Pragathi Nidhi and Pragathi Bandu

Jeevana Dhama: Program for construction of houses for destitute families

Suraksha: A health and sanitation program

Jnana Deepa: To help primary school going children and teachers to spread the message that knowledge is light.

Compiled from Inclusive Rural Development in Reality: Triumph of SKDRDP by Dr.G.V. Joshi and Dr.Suprabha K.R. JKSH Institute of Management, Nitte, 2012.

The district has also many voluntary organizations such as Rotary Clubs, Lions Clubs etc. They contribute to various social sector areas such as health, education etc. There are also active Youth Clubs and Mahila Mandals in the district.

There are many other NGOs functioning in the district focusing welfare of down-trodden sections of the society. Some are very active in health related matters and others in integrated rural development programmes for the welfare of rural communities. Seva Bharati, Children Aid and Research Society and Nirmal Social Welfare Centre joined hands with other voluntary organizations and the government bodies to provide SHGs as informal voluntary groups have recently emerged as active players in the social and economic empowerment of particularly women. In fact, the SHG movement today represents as a powerful grassroots voluntary agency to reach out to the poor and weaker section and for poverty alleviation, human development and social empowerment. Their coverage, both in terms of geographical and households is very wide. There is scarcely a village in the district, where an SHG has not been functioning. Almost all NGOs are involved in the SHG movement, besides the Government and the banks. A research study undertaken by Justice K.S. Hegde Institute of Management, Nitte for NABARD on micro-finance in Dakshina Kannada and other districts revealed that SHG as an institutional mechanism is found to be the most appropriate and cost effective credit delivery system to reach the rural poor, particularly women¹².

10.7 Representation of Women and Marginalized Sections in Governance

Good governance under Panchayat Raj system implies that local bodies are representative; their functioning is participatory and the decision-making process is responsive to the needs and aspirations of all section of the society. The representation of all section of the society in the governance is therefore very important. Since Indian society comprises of various social groups with diverse social and economic background, it is necessary to ensure representation of all sections of the society particularly of marginalized and disadvantaged section of the society, who were deprived in the past and may not have capability to compete with upper section of the society. In participatory democratic governance, representation to these sections of the society is a must in order to achieve inclusive development. Karnataka Panchayat Act 1993 has therefore mandated reservation of seats to the SCs, STs and OBCs depending on their population and one-third seats to women at all levels. The reservation is also extended to the offices of President and Vice-President in favour of women, SCs, STs and OBCs. After the promulgation of the Karnataka Panchayat Raj Act, 1993, three elections for local government have been held. The last election to GPs took place during 2010. In most of the GPs, the voting was more than 75 percent and in some 100 percent voting was recorded, which clearly shows peoples' interest in local self-governance. Table 10.1 contains the present composition of representatives in GPs by social class in different taluks.

¹² *Microfinance and Rural Employment: An Appraisal of the Potentialities, Research Study submitted to NABARD, Mumbai, October, 2004.*

Table 10.2
Taluk-wise Composition of GP Elected Members: 2012

Taluk		SCs		STs		OBCs		Others		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%
Bantwal	Male	9	1.08	11	1.32	423	50.78	14	1.68	457	54.86
	Female	51	6.12	55	6.60	265	31.81	5	0.60	376	45.14
	Total	60	7.20	66	7.92	688	82.59	19	2.28	833	100.00
Belthangady	Male	18	2.91	5	0.81	121	19.58	192	31.07	336	54.37
	Female	43	6.96	43	6.96	84	13.59	112	18.12	282	45.63
	Total	61	9.87	48	7.77	205	33.17	304	49.19	618	100.00
Mangaluru	Male	16	1.71	4	0.43	189	20.15	319	34.01	528	56.29
	Female	49	5.22	48	5.12	124	13.22	189	20.15	410	43.71
	Total	65	6.93	52	5.54	313	33.37	508	54.16	938	100.00
Puttur	Male	30	5.33	7	1.24	111	19.72	164	29.13	312	55.42
	Female	39	6.93	38	6.75	75	13.32	99	17.58	251	44.58
	Total	69	12.25	45	7.99	186	33.04	263	46.71	563	100.00
Sullia	Male	18	5.64	12	3.76	47	14.73	86	26.96	163	51.10
	Female	30	9.40	28	8.78	29	9.09	69	21.63	156	48.90
	Total	48	15.04	40	12.54	76	23.82	155	48.59	319	100.00
District	Male	91	2.78	39	1.19	891	27.24	775	23.69	1796	54.91
	Female	212	6.48	212	6.48	577	17.64	474	14.49	1475	45.09
	Total	303	9.26	251	7.67	1468	44.88	1249	38.18	3271	100.00

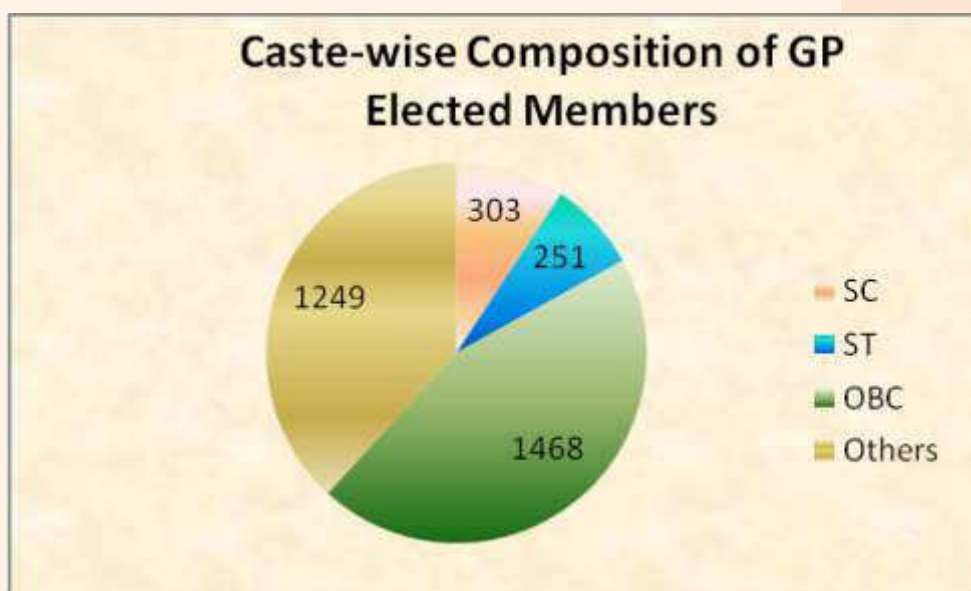
Source: Zilla Panchayath, Dakshina Kannada.

Though, SC/ST population in the district constitutes 11 percent; their representation in GPs in the district as a whole 17 percent. Taluk-wise, in Sullia, their representation is the highest (27.5 percent) and in Mangaluru taluk, it is the lowest (12.5 percent). In Puttur, it is 20.2 percent while in Belthangady and Bantwal it is 18 percent and 15 percent respectively. In all taluks, it is significantly higher than their share in the total population of respective taluks. However, it is still slightly below the minimum of 18 percent prescribed in the ACT. Interestingly, both among the SCs and STs, the women representation is significantly higher than men. As against the men's representation of 4 percent,

the representation of women in all GPs is 13 percent. This trend is found in all taluks. Contrary to this, in the case of OBCs and other communities, the men representation is significantly higher than the women representation. As regards women's representation in GPs, it works out to 45 percent for the district as a whole. Their representation is considerably higher than their one-third quota reservation. The similar trend is found in all taluks.

In the case of Taluk Panchayats, out of total 129 elected members, 16 belong to SC and ST community. Their share in TP representation works out to 12.4 percent. It is slightly more than

Graph 10.1



their share total population. In the case of SCs, they have one male and one female representative in four taluks. In Puttur they have two women representatives beside one male. Among STs, there is only one female representative and no male representative in all taluks. The representations of women in TPs are more than men. Out of 129 elected members, 70 are women. Their share works out to 54 percent. It is not only above stipulated one-third quota but also slightly above their share in the total population. Except Mangaluru taluk, in all other taluks, women representatives are more than men representatives. In ZP also, similar trend is found. In Out of 35 elected members, 18 are women, which works out to 51.4 percent. The SC and ST representation in ZP, on the other hand is found to be higher than their population share in total population. Out of 35 ZP members, 3 are SCs and 2 are STs. Mangaluru taluk has no SC and ST representation, while Sullia has no ST representation in ZP.

In the Mangaluru City Corporation, out of 60 elected members, 4 are SCs and one STs, 12 OBCs and 20 others. The women representatives are 24, above the reserve quota. In Town Municipal Councils, out of 105, five are SCs and five, STs. The women representatives are 40. They constitute 38 percent of total TMC members in the district. In all taluks, their share in TMC representation is above prescribed quota. In Town Panchayats, on the other hand, women representation constitutes 43.5 percent. Out of 46 members, 22 are women. The SC members in TMCs are 4 and STs, 3. Taluk-wise, in Belthangady, out Town Council has 23 members elected; out of them, one each from SC and ST, 8 from OBCs and 13 from others. Women members are 9, which works out to 39 percent as against the reserve quota of 33 percent.

To sum up, Dakshina Kannada district has at all levels of Panchyat Raj institutional set-up more than reserved quota representation for

women and marginalized communities like SCs and STs. However, the representation is one thing and effective participation is another. The challenge is to ensure effective participation of women and other marginalized social groups in the governance and decision making process. Unless they effectively participate, their needs and interests cannot be adequately taken care of in all the development programs implemented and in delivery of public services.

10.8 Concluding Remarks

Good governance is about providing an efficient and effective administration that is committed to improving the well-being of people without discrimination. The basic tenets of good governance accordingly should be efficient and timely delivery of system of public services, simplicity and easy accessibility of systems and procedures, accountability, transparency and sound financial management, active people's participation, autonomy in decision making process and strict enforcement of right to information. Whether the present system of governance fulfils these tenets of good governance is a matter of concern. Though 73rd and 74th Constitution amendments provided a framework for decentralization in governance at local administration level, there has been a very little effective devolution of power, funds and control over functionaries. A fundamental requirement for achieving quality is that the responsibilities should be effectively devolved to bodies responsible for implementing public programs and they must be suitably empowered.

Dakshina Kannada district by all standards has done relatively better in governance than most of other districts in the

state. However, there are many grey areas, which are mainly systemic and require civil reforms. The PRIs have not been able to perform as was envisaged in the Constitutional Amendment of the Act. The ZP, TPs GPs and ULBs are charged with a number of devolved developmental functions and responsibilities, which calls for empowerment, professional competence, accountability and effective monitoring. The devolution of functions and finance has not taken place as expected and as result, they do not have adequate revenue raising powers. The GPs have not yet able to enhance participation and empowerment as effectively as would be desired. Though the Act provided framework for decentralized planning, the top-down approach still in vogue for planning and resource allocation. Consequently, most of the programmes are imposed from the above without considering the area specific needs and feasibility and the ability of the local administration to implement the programmes effectively. Moreover, the local administration that should manage these programmes is not adequately equipped.

The Constitution Amendment Act and The Karnataka Panchayat Act have already laid down the required framework for decentralized governance. What is required is the agenda for improving governance at local administration level. It requires capacity and capability building, leveraging IT technology in governance, devolution of functions and finance, active people participation, involvement of civil society especially voluntary agencies in implementation of programmes and the crucial right to information. The agenda also includes civil service reforms

aimed at improving transparency, accountability, efficiency and procedural reform to make them user-friendly. Special attention should be given to the capacity building at GP level for need assessment, priority setting, formulation of projects/programmes, and effective implementation of programs, sound financial management, transparency and accountability as well as right to information.

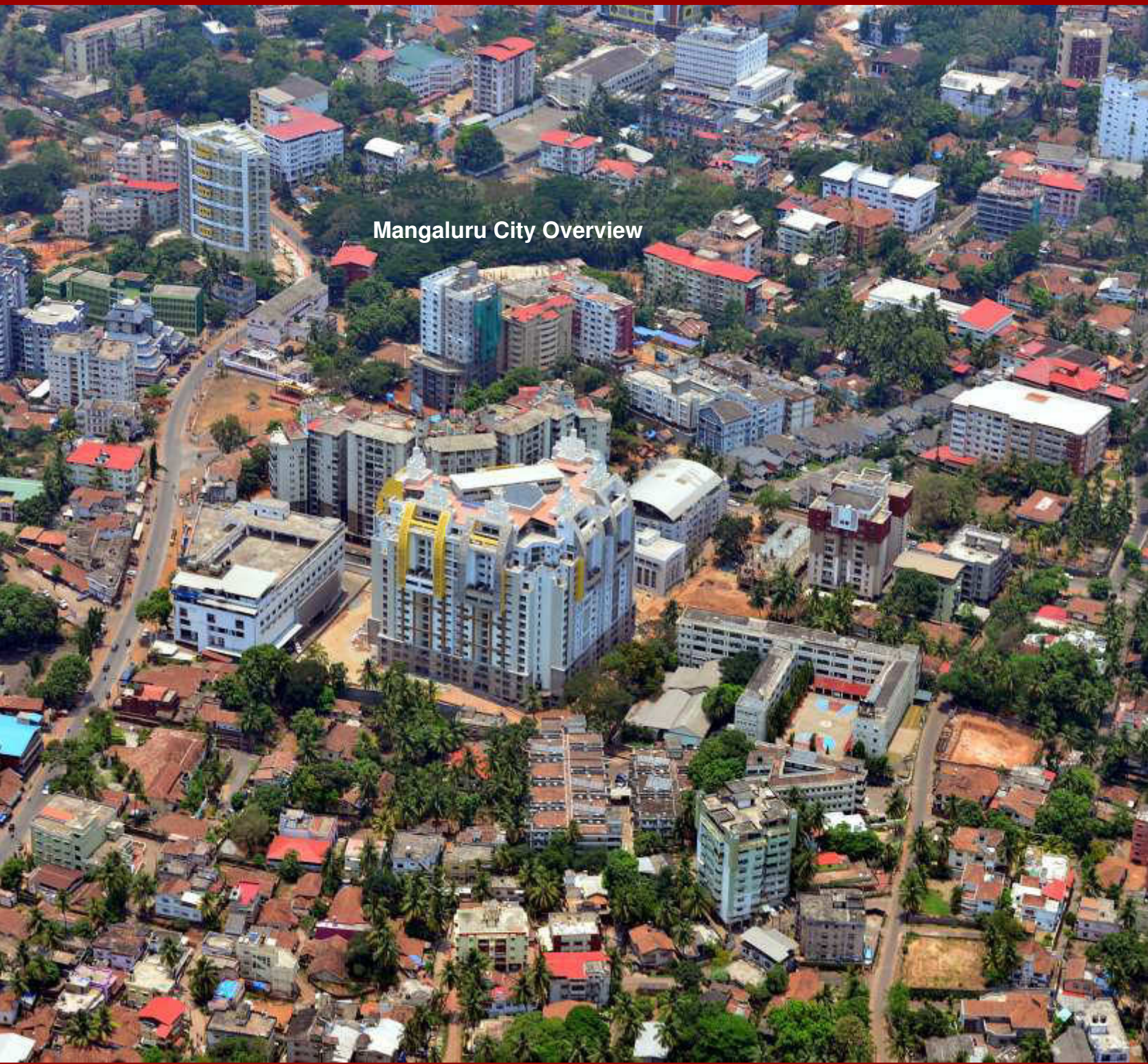
The Grama Sabhas and Ward Sabhas are at present not active. They should be empowered to participate effectively and act as watch-dogs at the GP level. In ultimate analysis, for the inclusive and sustainable human development, what matters are the local governing institutions? They should be made professionally capable, responsible, people-friendly and responsive.



The ZP President Receiving the Award of Senior Citizen Services

Chapter 11

URBAN ISSUES IN HUMAN DEVELOPMENT



Mangaluru City Overview



11.1 Introduction

Urbanization is the driving force for economic development. It stimulates the growth sectors- manufacturing and services. As economy grows, the towns and cities expand rapidly in size both in terms of geographical area and population. The contribution of the urban sector to the GDP and employment also grow as the cities become hub of economic activities. That is why the urbanization is considered as an index of economic transformation from traditional rural economy to a modern industrial one. Though the urbanization is integral to the dynamics of economic development, it presents difficult challenges in terms of civic infrastructure and delivery of basic services such as power supply, water supply, housing, sewerage and drainage, solid waste management, parks, open spaces and transport. The problems of traffic congestion, pollution, poverty, development of slums etc in alarming proportions are closely associated with the urbanization. All these have serious implications for human development. Though urban areas has potential to provide gainful employment in secondary and tertiary sectors and thereby contribute to human development, the sustainability of human development depend on better availability of basic civil services for all sections of the society.

Urbanization in India is fast catching up. India's urban population, which was about 285 million in 2001, has increased to 377 million in 2011. It is projected to go up to over 600 million people by 2030. Karnataka state is one of the five highly urbanized states in the country. About 39 percent of the total population in the state live in urban areas. This is expected to increase to 50

percent in near future. This will create immense pressure on the urban economies with their already massive deficits in infrastructure and civic amenities. Recognizing the critical importance of the urban development, the Government of India has launched number of urban development initiatives under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM). The 74 Constitution Amendment mandated the setting up of Urban Local Bodies (ULBs) as the institutions of self-government and allocated inter alia responsibility of preparation of plans for integrated urban development and social justice. In this chapter, an attempt is made to look into the urban issues in Dakshina Kannada district particularly from the human development perspective.

11.2 Service Delivery Issues

Dakshina Kannada district is heading towards rapid urbanization. It witnessed increase in urban population from 601795 in 2001 to 720885 in 2011. During the last two decades, the urban population increased by 19.79 percent. The annual growth rate of urban population in the district works out to 3.7 percent as against the state level annual growth rate of 3.1 percent. The share of urban population in the total district population increased from 38.4 percent in 2001 to 47.7 percent in 2011. The total population of ULBs constitutes 72.4 percent of the total urban population. The balance 27.6 percent are in the smaller towns in peri-urban areas and not in the statutory eight ULBs in the district.

Table 11.1 shows the growth in population of ULBs in the district.

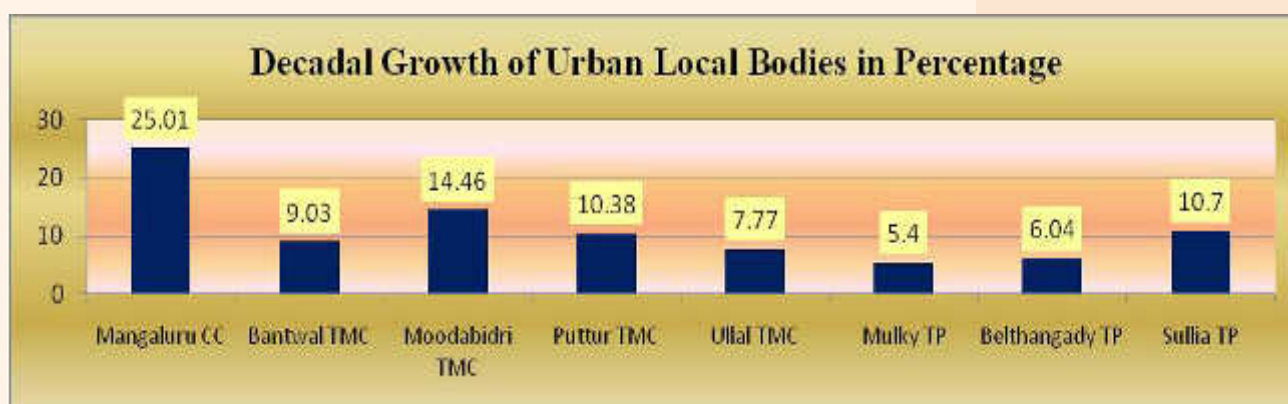
Table 11.1
Growth of Population in ULBs in Dakshina Kannada District

ULBs	2001 (number)	2011 (number)	Decadal Growth (Percent)
Mangaluru CC	399565	499487	25.01
Bantwal TMC	36830	40155	9.03
Moodabidri TMC	25713	29431	14.46
Puttur TMC	48070	53061	10.38
Ullal TMC	49895	53773	7.77
Mulky TP	16389	17274	5.40
Belthangady TP	7305	7746	6.04
Sullia TP	18028	19958	10.70
Total	601795	720885	19.79

Among eight ULBs, Mangaluru city, the district head quarter, has population of 69.3 percent of the total ULB populations. It has witnessed the highest decadal growth in population. The population of Mangaluru city increased from 399565 in 2001 to 499487 in 2011, accounting an increase of 25 percent. It is the biggest urban centre in the district. Among the four TMCs, Moodabidri and Puttur witnessed higher decadal growth in population. Among TPs Sullia has higher decadal population growth. Contrary to this, the population growth in peri-urban towns almost doubled during the census decade. It increased from 1.27 lakh in 2001 to 2.75 lakh in 2011.

Mangaluru city has 115036 households with population of 247903 males and 251584 females. It has 132.45 sq.km areas in its corporation limit with density of population of 3771 per sq.km. Mangaluru is also port city and has international airport. Among TMCs, the number of households living varies from 11378 in Puttur TMC to 6517 in Moodabidri. Ullal TMC has 9588 households and Bantwal, 7939 household. Their jurisdiction range from 11.8 sq.km in Ullal to 39.62 sq.km in Moodabidri. TPs have smaller jurisdictions and lower number of households. Sullia has 4194

Graph 11.1



households, followed by Mulky with households of 3962 and Belthangady, 1821. With the growing population pressure and rapid growth of industrial and service sectors, there is tremendous strain on existing civic infrastructure systems, particularly water supply, sewerage and drainage, solid waste management, parks and open spaces and roads and transports.

The urban agenda for improved liveability centered around provision of basic civic services for creating healthful urban environment. The basic civic services normally required in urban areas are mainly:

- Street lighting and
- Maintenance of city roads and parks.
- Supply of safe drinking water,
- Sewerage collection and disposal
- Sanitation, Improved water management including recycling of waste water.
- Solid waste management,
- Preventive public healthcare and hygiene,

Without these basic services, it is not possible to ensure quality living conditions in the cities. It is also important to ensure that the urban poor have access to these basic facilities at affordable cost. Since urbanization is a dynamic process with migration of people from rural areas and growing expansion of secondary and tertiary sectors, expansion and improvement in the provision of these services on continuous basis is very important. Still recently, ULBs in the district were lacking modern quality basic civic services. With rapid urbanization and growing population, the existing facilities could not cope up with the growing demand. In recent

years, the Government has taken number of initiatives for development of basic infrastructure, improving service delivery standards and improvement of urban governance. The challenge still remains not only of providing high standard basic urban infrastructural facilities for the growing population but also dealing with the backlog from the past. The basic infrastructure such as housing, roads and street lights create a conducive and enabling environment for improving liveability in the cities. Table 11.2 sets out the basic infrastructure indicators of ULBs in the district. In subsequent sections, the status of basic amenities such as supply of drinking water, sanitation and solid waste management is discussed.

At the outset, it should be noted that ULBs in the district are of different categories in terms of population and geographical jurisdiction and hence cannot be compared. From the table it is apparently clear that in terms of physical infrastructure, the ULBs in the district are relatively better than most of the ULBs in the state. In terms of housing, only small numbers of families are either houseless or living in dilapidated traditional houses. Most of them are migrant families. The road net work in Bantwal ULB is the lowest, followed by Belthangady and Mulky TPs. Other ULBs have comparatively better road network. Depending on road network and density, street lights were provided in all ULBs.

11.3 Water Supply and Sanitation

Water is the basic requirement for human living. The problem of water supply is in terms of availability, proximity, quantity and quality.

Table11.2
Basic Infrastructure Indicators of ULBs

ULBs	Households without own or dilapidated houses (Number)	Roads (Km)		Street Lights (number)
		Road Length	Road per Sq. km	
Mangaluru CC	2313	1029	7.77	65231
Bantwal TMC	539	86	3.18	2344
Moodabidri TMC	151	142	5.57	2700
Puttur TMC	423	205	5.68	4234
Ullal TMC	685	269	22.79	4969
Mulky TP	302	47	4.22	1500
Belthangady TP	160	40	4.51	1118
Sullia TP	208	136	20.57	2180

Water is also required for domestic use, industry, and others in urban areas. As per the norms of water supply suggested by the Central Public Health and Environmental Engineering Organization (CPHEEO), the cities with a piped water supply and sewerage collection systems should have a maximum water supply per capita of 135 liters per day. The Government of

Karnataka came out with an Urban Drinking Water and Sanitation Policy in 2002. The main objectives of the policy are to ensure demand based universal coverage of water supply, commercial, domestic, economic sustainability of operations and minimum level of services to all citizens in the urban areas.



Vented Dam at Thumbe - A source of water supply to the Mangaluru city

Table 11.3 shows the coverage of urban households with tap drinking water supply and the per capita water availability per day.

Table 11.3
Households with Tap Water with meter and Per Capita Water Supply (LPCD)

Urban Local Bodies	Households with Safe Drinking Water		LPCD
	Number	Percent	
Mangaluru CC	72748	63.24	135
Bantwal TMC	4546	48.41	100
Moodabidri TMC	4803	49.35	114
Puttur TMC	4297	48.23	100
Ullal TMC	3187	29.00	70
Mulky TP	2560	51.19	70
Belthangady TP	1131	47.14	126
Sullia TP	3272	90.00	100

Source: Urban Development Cell, DC Office

In Mangaluru City, 63.24 percent of households have tap drinking water. Nearly 44254 households still do not have safe drinking water supply in the city. Among TMCs, Moodabidri has the highest percent of households (49.4 percent), followed by Bantwal (48.4 percent). Puttur TMC has 48.2 percent of the households having tap water connections. Ullal TMC has the lowest percent of households with tap water supply. IN the case of TPs, Sullia has the highest proportion of Households (90 percent) with tap water connections. Mulky TP has 51.2 percent houses and Belthangady, 47 percent of houses with tap water supply.

With the growing population, the growing demand for portable treated water is inevitable. Water being lifeline for survival of people, quantity and quality of water has been a matter of concern. At present, the substantial number of households in all ULBs depends for

their drinking water supply on traditional open wells, where the water is not treated. Another area of concern is water supply duration and frequency. The water is not supplied 24 hours in required quantity in Mangaluru city. Though the scheme for 24 x7 supply of water was launched, it still remains unfinished agenda. Mangaluru city gets drinking water supply from Tumbe vented dam. The demand for water per day in Mangaluru city is estimated at 73 million litres. During the summer, when the water source (rivers) for portable water gets dry, the acute water shortage is a serious problem in the city. Similar situation prevails in other ULBs also. There is also the problem of tap water supply for unauthorized migrant settlements (slums). Ensuring the provision of portable treated drinking water 24 hours in required quantity throughout the year for all sections of the communities in all ULBs is the real challenge before the urban authorities in the district.

The well-being of urban community is closely linked to the good practices that prevail in sanitation service. Sanitation services are one of the basic civic and environmental services provided by the Government in urban areas. All ULBs have made remarkable progress in sanitation during the last decade. More than 90 percent of the households have toilets facilities. Mangaluru city has 64 percent of the households covered under sewerage and drainage facility. Even in the case of other ULBs, the households covered under sewerage and drainage facility range from 40 percent in Belthangady to 66 percent in Puttur. As per the Sanitation Plan of the Urban Development Ministry, Government of India, Mangaluru city is the eighth cleanest city in India and Second cleanest in Karnataka. The City Corporation has vision of achieving

“Swatch Hasiru Swatch Mangaluru Nagara” (Clean and Green Mangaluru City).

In spite of remarkable achievement in safe sanitation, ULBs are now faced with the emerging sanitation problem of growing slums of migrant population, who live in make-shift temporary houses without toilet facilities and water supply and defecate in the open. The district has 5515 households with population of 27168 living in slums outskirts of urban centres. The challenge is to provide appropriate infrastructure for sanitation to this population.

11.4 Solid and Liquid Waste Management

It is estimated that the urban area generates per capita waste of 500gm per day. With increasing population in urban areas, the



Solid Waste Management System at Mangalore

coping with the collection and disposal of the ever growing quantity of solid waste generated pose a real challenge to urban authorities. Unless the waste generated is collected and disposed in time, uncollected waste littered all over garbage bins and in open areas make the streets unhygienic and create unhealthy environment coupled with health hazard. Traditional mode of open dumping and garbage burning not only led to air pollution and hygienic problems but also required more and more land for dumping growing waste. Many alternative methods are now propagated for disposal of solid waste collected. They include: aerobic composting, anaerobic composting, bio-methanation and waste-to-energy. However, the success of these methods depends on segregation of waste at primary source. There was also question of efficacy of public sector solid waste management. The public sector management could not alone cope up with the growing task. Since it is a merit good, the government has responsibility to ensure proper solid waste management. The actual implementation can be, however, left to professional private providers. The public-private partnership is now increasingly advocated for effective solid waste management.

The Government of India has come up with Municipal Solid Waste (Handling and Management) Rules, 2000, which require all ULBs to handle their solid waste as per the guidelines issued by the Ministry of Environment and Forestry. Karnataka State was the first state in the country to introduce an integrated solid waste management policy in 2004. In the past, Mangaluru city adopted dumping method and dumped collected waste at

dumping ground at Pachchanady, Vamanjoor. With the rapid expansion of the city, this method could not solve the problem. The huge collected waste and landfills catching fire caused pollution and hygienic problems to the surrounding areas. The city generates on an average 200 tons of garbage every day. It is expected to go up with the growth of the city. With a view to adopt scientific and healthy practices of collecting and disposing solid waste, the city has adopted revolutionary change in solid waste management. It adopted three-package solid waste management scheme wherein professional agencies that are experienced were bought in or day-to-day solid waste management. Under the scheme, 60 wards are divided into south with 31 wards and north zone with 29 wards. The agency contracted collect solid waste from door-steps, transport the collected waste in hydraulic GPS vehicles to dumping yard at Pachchanady, where scientific solid waste disposal plant was set up. The second package of the scheme is mechanized sweeping and cleaning. The successful bidder undertakes the daily task of mechanized street sweeping, vegetation cutting, cleaning roads and beaches and other sanitary works. The third package covers operation and maintenance of solid waste compost plant and landfill site at Pachchanady and disposal of end-products. People do not pay user-fee to contractors for collecting solid waste from their door steps. The user-fee is clubbed in the annual property tax. Mangaluru city was awarded with the Green Leaf Award for improved sold waste management.

This public-private initiative is first of its nature and implemented successfully in Mangaluru city. Under the scheme now

mechanized sweeping of 25 km stretch of roads is done daily in South zone and about 200 tons solid waste is collected from door steps every day and transported to compost solid waste plant at Pachchanady. With implementation of this scheme, door-to-door collection of solid waste instead of dumping in neighborhood and deployment of hydraulic operated vehicles for collection and transportation of solid waste instead of transportation in open trucks came into practice.

The total quantity of solid waste generated in TMCs and TPs ranges from 2 tons per day in Belthangady TP to 16.5 tons per day in Ullal TMC. In TMCs, sanitary method and in TPs, pits methods are adopted for dumping solid waste collected. All TMCs and TPs in the district have landfill sites for treatment and disposal of solid waste. Bantwal TMC has landfill site at Sajipanadu, Moodabidri TMC has in Karinje village, Puttur TMC has at Nekkila, Mulky TP has at Mulki- Bappanadu village, Belthangady TP has in Koyyur and Sullia has at Kalcharpe. Ullal TMC does not contain its own landfill site, instead transport the waste generated to Mangaluru City landfill site for processing and disposal. With effective awareness programme, these ULBs have started doorstep waste collection and achieved a minimum of 70 percent collection efficiency. However, source segregation is still a challenge in these ULBs. Similarly, they have not yet adopted the GPS system for tracking waste transportation.

11.5 Concluding Remarks

During the last two decades, the ULBs in Dakshina Kannada district have achieved remarkable improvement in the development of

urban infrastructure and in the provision of basic civic services. With the outsourcing of water bill collection water supply service has improved. Similarly, by outsourcing, the primary collection of solid waste and mechanized sweeping and cleaning of roads and parks, the cleanliness and healthy environment in Mangaluru city improved significantly. It is gratifying to note that the Mangaluru city and some TMCs earned awards for their best performance in delivery of basic civic services. Notwithstanding the progress already achieved in development of urban infrastructure, there are still some grey areas where the scaling-up of delivery of civic amenities and provision of utilities with emphasis on universal access and quality of services to ensure high standard liveability conditions in cities are required. The following are some of these areas of concern in urban infrastructure development which need immediate attention:

At present, substantial number of the households in all ULBs in the district depend on open well for drinking water. In Mangaluru city, only 63 percent of the households have treated tap water supply. Nearly 42288 households are deprived of the safe drinking water facility. Most of them belong to weaker section of the urban population. In other ULBs also, more than 50 percent of households depend on open well for drinking water supply. There is also question of supply of adequate quantity of water supply throughout the year. The need to ensure that all households in the municipal areas have access to adequate portable treated water supply throughout the year requires hardly any emphasis.

The manual scavenging and open drainage still in vogue in almost all ULBs. Only

about 50 percent of the households are not covered under UGD. The need to cover all households by UGD and use of mechanical device like jetting and sucking machines for cleaning of septic tanks cannot be overemphasized. Though primary collection of solid waste is 100 percent, the segregation of the solid waste at primary source is still a dream in all ULBs. In order to ensure scientific solid waste management and facilitate proper treatment of solid waste, there is a need to ensure scaling up segregation of solid waste at primary source. This requires aggressive awareness campaign. With the acute shortage of labour, increase in migrant population particularly among unskilled labour is an inevitable process. These migrant populations, mostly living in slums, suffer from multiple deprivations that include lack of access to basic amenities such as water supply, sanitation and decent housing. There is an urgent need to address their basic civic service needs.

With rapid urbanization, the ULBs are going to be under immense pressure to meet the

growing demands and aspirations of their citizens. The ULB will grow not only in terms of population growth but also geographically in future. In this changing scenario, the ULBs need to build their capacities in terms of skills, knowledge and resources to cope up with the emerging issues and challenges. It also warrants a unified and effective administrative set up in all ULBs with clear accountability to citizens. This requires empowering the ULBs in planning, management and monitoring. The 'whole city' approach to planning and improvement must be adopted to address systemic issues taking into account all necessary and inter-connected development parameters. Adequate emphasis should be given on long term strategic urban planning to ensure that the agenda is not limited to only 'renewal' mission of ULBs, but also to anticipate and plan for outgrowth and expansion. The administrative focus should be shifted more towards an outcome-based approach based on effective and efficient service delivery rather than an approach aimed at merely management of investment and asset creation.



Mangaluru City Corporation



Chapter 12

The Way Forward





12.1 Introduction

Since the conventional development approach measured in terms of increasing GDP and per capita income did not capture basic aspects of human well-being. UNDP, in its first Human Development Report in 1990 had advocated people-centric development and made the well-being of people as the primary goal of development. Accordingly, the objective of the development is to create an enabling environment for people to lead a long and healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living. The HDI became a yardstick to measure well-being of people across countries. It has taken into account three core dimensions of human development viz. health, education and standard of living. The human development being multi-dimensional, the UNDP 2010 HDR has made HDI broad-based beyond three core dimensions and suggested users to take into consideration other key human development concerns also. The Government of Karnataka brought out the first HDR in 1999 and second HDR in 2005 to high light regional level imbalances in various dimensions of human development in the state. Recognizing the critical importance of human development concerns at grass root level, the State Government has decided to undertake DHDRs in all 30 districts in the state. The main purpose of the DHDRs is to capture all the key dimensions affecting well-being of people at the taluk and district levels. With a view to achieve this objective, a broader approach to take into account most of the key factors affecting human development at taluk level was suggested. Accordingly, Dakshina Kannada DHDR is the outcome of this initiative.

In the earlier chapters, attempts were made to measure present status of various dimensions of human development and to carry out disaggregated analysis of various dimensions of human development. It also brought out disparities and deprivations in human development at the taluk and social levels and emerging key issues thereon from human development perspective. The concluding chapter, therefore, aims at recapitulating the findings and issues and concerns discussed in these chapters and charting out the way forward agenda for enhancing comprehensive, equitable and sustainable human development at taluk level in the district.

12.2 Key Findings & Issues

12.2.1 Outline of Human Development and its Measurement

The computation and analysis of various human development related indices at taluk and district levels are quite revealing and of policy relevance. Six different indices computed together provide a comprehensive view of human development at the grassroots level. The indices computed also bring out disparities and the relative position of taluks in various dimensions of human development within the district. For any planning or policy to succeed, it has to take into consideration prevailing disparities in various dimensions of human development at the grassroots level and tackle them at that level.

The HDI of Dakshina Kannada district works out to 0.687. There exists overall human development deficit of 31 percent in the district. The district has relatively higher index values in regard to education (0.809) and living standard

(0.708), but it has lower index value in health (0.567). Taluk-wise comparison of HDIs has brought out wide inter-taluk variations in human development outcomes. Mangaluru taluk has the highest HDI of 0.830 and is very good category. It ranks first in the district. As against this, Belthangady ranks the lowest and has HDI of 0.399. The HDIs of other taluks were also below 0.500. All these taluks lag behind Mangaluru taluk in human development significantly. In all three dimensions, the inter-taluk differences are also very wide. Mangaluru ranks first in education and standard of living, while Belthangady ranks first in health but lowest in education and standard of living.

The district is in 'very good' status in gender equality. The GII for the district works out to 0.043. The district is in 'good' status in CDI (0.518), FSI (0.571) and DCDI (0.661). Taluk-wise comparison has shown the wide divergence in ranking pattern in various indices and also in dimension indices. In GII, Belthangady ranks first (0.026), followed by Mangaluru (0.034) and Sullia (0.046). Bantwal has the lowest index value (0.061) showing the highest gender inequality. In CDI, Bantwal ranks first (0.847), followed by Mangaluru (0.493) and Sullia (0.449). Belthangady has the lowest position in CDI. In FSI, Mangaluru ranks first (0.62), followed by Sullia (0.593). Puttur has the lowest FSI index (0.385). Similarly, the inter-taluk variations in various dimensions of these indices are found to be very wide. In UDI, Mangaluru CC has the highest index value of 0.690, followed by Sullia TP (0.636) and Puttur TMC (0.562). Other ULBs have indices below 0.500 showing wide urban development deficits.

The overall performance based on all the

six indices and their dimensions shows that the district is still not in very good status in human development. The district is in very good status only in GII. Most of the taluks are either in 'good' or 'average' status. In some dimensions of human development, they are in 'poor' category. Moreover, the inter-taluk disparities are significantly high. The gap between the highest ranked taluk and the lowest ranked taluk is very wide. The analysis of dimension indices also shows no close correlation between various dimensions. In the case of HDIs, the taluks which have higher education index values have lower health index values. Similarly, the taluks which have lower standard of living index values have higher education and health indices. This empirically proves that for human development in the district, all dimensions are equally important. The development of one dimension cannot automatically take care of development of other dimensions.

In the ultimate analysis, human development is the outcome of economic growth, social policies and right based poverty reduction interventions at taluk level. The five indices computed clearly shows that the taluks which perform better in these indices are also better in economic and social development outcomes. Mangaluru taluk is the top achiever in some human development related indices because it has more industries, higher scope for non-farm employment, higher urbanization and easy access to educational and health infrastructural facilities. As against this, Belthangady taluk is more agricultural based has the lowest rank in most of these indices. In the case of health and education, easy access to infrastructural facilities matters more than income. In the case of income, nearness to urban

centres and major industries, scope for non-agricultural employment and diversification of agriculture apparently played a significant role. Whatever the gaps observed in values of indices and their dimensions are mainly due to gaps in the key performance indicators selected to measure various human development dimensions. The policy or strategic intervention programmes for sustainable human development should take into consideration spatial, social and economic disparities observed in these key parameters

12.2.2 Education Component

In the field of education, the discussion and analysis mainly centered on access, enrolment, retention, teacher-student ratio, quality, equity, educational attainments and infrastructure at different level of education. The achievement of the district in most of these indicators, as shown in this study, is quite impressive. The district has also made remarkable progress in higher education during the last two decades. It is ranked as one of the best in education attainment in the state. It is almost on the way to universal literacy and also universal primary and secondary education. Even in the education attainment in terms of pass percentage in SSLC and PUC, the district is always one among top ranked districts in the state. The disparities between taluks, rural and urban and across social groups and gender do exist but are not very significant. The district also witnesses a gradual upward movement of the students in the ladder of education and particularly towards professional courses. The programmes such as Sarva Shiksha Abhiyana (SSA), the Mid-Day Meal programme and now

Rashtriya Madhyamik Shiksha Abhiyan (RMSA) have all contributed significantly to this achievement.

Despite considerable improvement in the field of education, there still exist many areas of concern particularly in the transition to higher level of education, quality of education at all levels and persistent social, rural-urban and gender inequalities in access to quality education. Most of the schools in rural areas are still short of the RTE norms of provision of requisite school infrastructure, all-weather school buildings, one teacher per class room and various other infrastructures such as an office-cum-store-cum head teacher room, separate toilets for boys and girls, drinking water, barrier-free access, library, playground and boundary wall. Since the district is already on the way to universal primary and secondary education, the challenge would be now not on expansion but improvement in quality, equity in educational attainment and equipping children with life-skills required to compete at the higher levels in all spheres.

There are also some emerging areas of concern, which require attention. They are briefly summarized below:

- The gender gap, social inequity and rural-urban disparity in literacy rates and enrolment at ph. The missing out on school attendance due to compulsion providing livelihood support is an issue among the SC and ST students, which adversely affects their performance.
- The rural-urban divide in primary and secondary education is widening in the district. While in urban areas, children have easy access to private nursery schools, in rural areas, children are deprived of pre-

schooling. Moreover, the urban children are benefiting from mushrooming tuition classes in secondary and PUC level. The rural students do not have easy access to tuition classes and also it is beyond their affordability.

- The district has favorable pupil-teacher ratio but in many rural lower primary schools due to lack of students, a mandatory number of two teachers have to manage classes I to V. With the declining population and enrolment in the district, the number of such schools in rural areas will increase in near future. This has serious implications on the quality of education in rural areas.
- The private English medium schools are increasingly becoming popular and thereby threatening the sustainability of Kannada medium government schools. It creates inequality in education; English medium for elites in urban areas and Kannada medium for poor and socially disadvantaged sections in rural areas. The affordability of English medium schools in terms of fee is also an area of concern particularly for economically weaker sections.
- School infrastructure matters in quality education. Most of the government school buildings in rural areas were constructed in 1950s and 1960s and require major repairs. A substantial number of schools have no playgrounds, ramps and compound walls.
- Computer assisted instruction through setting up computer aided laboratories in all primary and secondary schools is still a distant dream. Only few upper primary schools are brought under CALC but

without computer teachers. Leveraging computer technology in the education system has to be mainstreamed at the formative years of schooling.

12.2.3 Health component

Health is another important ingredient of human development. It is the basic factor shaping both the longevity and the quality of people's lives. Health factors impacts not only health outcomes but also learning outcomes, functioning capability and earning capacity of the people. Dakshina Kannada district is blessed with good health infrastructure and enviable public-private initiatives in provision of healthcare service. The district has 11 privately run medical and dental colleges and a number of para-medical and nursing colleges. All of them played a catalytic role in building up necessary health infrastructure and delivery of high quality health care services in the district. In rural areas, the government is the dominant player in rural health services. Public sector health care infrastructure through PHCs, CMCs and taluk and district level hospitals renders health care services mainly to the weaker section of the community throughout the district. Under the NRHM initiatives, the district has made remarkable progress in most of the RCH indicators like IMR, CMR and MMR and stands out as one of the districts to achieve the UN millennium development goals in time.

In health sector the district has problems; some of which are institutional in nature and others emanate from the changing environment like aging population and modern life style and food habits. Institutional problems are mainly due to more urban orientation of private health

infrastructure, scarcity of qualified doctors in government hospitals particularly in rural areas, scarcity of paramedical staff and absence of networking between PHCs/CMCs and tertiary hospitals at taluk and district levels. The private sector health facilities and the public tertiary health facilities mainly located in urban centres, while in rural areas, only available healthcare services are from PHCs. The PHCs and CMCs lack qualified doctors and nurses as well as timely supply of required medicines. They also do not provide health services to rural people round the clock. There is, thus, a growing rural-urban divide in the provision of healthcare services, which creates stumbling blocks towards achieving the dream of 'health for all' and universal comprehensive quality health coverage.

The district is now faced with unrelenting burden of the old and emerging threats of new diseases. Though good progress was achieved in RCH indicators, the maternal and child health care and nutrition are still continuing to be a problem among weaker and marginalized section of the population. The declining child sex ratio in the district, which has at present a favourable male-female ratio till now, has serious future demographic implications. The revival of malaria and filaria, rising incidence of Dengue Fever and HIV/AIDS, aging population, chronic non-communicable diseases such as diabetes, hypertension, heart ailments, growing mental diseases, alcoholism among the youth and increasing unnatural deaths such as road accidents and suicides are the emerging new health problems in the district. The district is also faced with the problem of endosulfan infected

illness in endosulfan sprayed areas. All these require specialists' treatment at affordable costs. The health service network in rural areas is at present not geared to cope up this requirement. The cost of non-communicable health services of private hospitals in urban areas is beyond the affordability of rural people. Though effective surveillance and preventive measures have succeeded to some extent in controlling communicable diseases, their recent revival is a major health threat. The problem is compounded by to some extent, ignorance, prejudice and discrimination.

The high morbidity and mortality rates among the marginalized SCs/STs, migrants and other vulnerable sections of the society in urban slum areas are also posing problem. They have a very poor health profile compared with the other communities. The current influx of massive number of floating migrant workers because of the rapidly growing urbanization and acute shortage of labour resulted in rising urban slums without basic amenities. These slums are characterized by temporary houses crowded together without access to safe drinking water and sanitation. As a result of the unhygienic conditions, these slums are increasingly becoming a breeding ground for communicable diseases.

12.2.4 Livelihood and Quality of Living Indicators

Living standard is directly linked to per capita income, employment status, ownership of assets and basic livelihood amenities. Dakshina Kannada district ranks second in per capita income and 3rd in total GDP among 30 districts in the state. However, during the last decade, the

district witnessed lower growth compare to the state's average. While considering the scope for increasing per capita income in the district, the major areas of concern are the deceleration in growth in agriculture as well as near stagnation in the secondary sector in recent years. The tertiary sectors, however witnessed remarkably higher growth. Employment oriented traditional industries like tiles and beedi rolling are almost in closing stage. Besides this, the economic growth in the district is mainly driven by mainly cities, particularly Mangaluru city. In rural areas, with the abandoning of agriculture, most of the families in the district depend on the remittances from outside district not only to ensure higher standard of living but also to invest in housing, health and education of children. Though poverty incidence in the district is considered as one of the lowest in the state, BPL families as per the eligibility criteria stipulated by the state, constitute nearly 50 percent of the families in the district. Most of them are in rural areas and concentrated among marginalized rural communities, such as marginal farmers, agricultural labourers, SCs and STs.

As regards employment is concerned, the major area of concern is the significant decline in the work participation rate among women and increase in women non-workers. Men dominate in the workforce and the gap between men and women in WPR is very wide. Though the structural shift in the occupation pattern towards secondary and tertiary sectors is a healthy sign, the area of concern is the decline of agricultural sector as source of employment when 52 percent of the district population still lives in rural areas. The slow demise of traditional gender-friendly industries like beedi

rolling and tiles factory adversely affected the employment and income of weaker section of the community particularly women in rural areas.

As regards living standard, Dakshina Kannada district has made significant progress in basic livelihood amenities such as housing, safe drinking water, electrification and sanitation. The quality of housing in terms of materials used for roofing and walls and quality in terms of availability of dwelling rooms, kitchen and bathroom in the district is comparatively better than most of the districts in the state. The district is in fact in the process of reaching the goal of houseless households in all sections of the community. Similarly, almost all inhabited villages in the district are electrified and nearly three-fourth of households uses electricity for lighting. The government's proactive and pro-poor housing policy significantly contributed in provision of quality houses fully electrified in the case of weaker section of the community.

In the case of safe drinking water, the district, historically, relied on open wells. More than half of rural households still depend on open wells for drinking water. Even in urban areas, one-third of the households use open wells for drinking water. The water quality of open wells is now considered unsafe for drinking. The tap water treated is available mainly in urban areas. The district is also faced with the problem of availability of adequate drinking water during summer. With the overexploitation of ground water for irrigation through bore wells, the ground water table is depleted and open wells dry up during summer months, which creates acute shortage of water for drinking during

summer. Thus, the problem of safe drinking water centred on not on access but on quality and adequate supply particularly during summer.

There exists rural and urban divide in the types of fuel used for cooking. In rural areas, nearly three-fourths of the households depend on traditional bio-fuels like fire-wood for cooking. As against this, in urban areas, more than two-thirds of the families use modern fuel type mainly LPG. Inaccessibility and unaffordability of modern fuel, absence of supply/services network in rural areas pose problem in this regard. Rural based bio-gas was expected to replace traditional fuel for cooking, but it has not taken off as expected.

In the area of sanitation, the district has made a remarkable progress in both rural and urban areas. The majority of households including weaker sections have flush latrine in their own premises. The Government's enabling and entitlement policy and programmes facilitated this achievement. Now the emerging problem is their effective use particularly in rural areas and among weaker section of the community. The menace of growing slums with the increasing number of floating migrant labour families in and around urban centres also poses serious threat to the sanitation in the district particularly in urban areas.

12.2.5 Marginalized Sections

The marginalized section refers to hitherto vulnerable and deprived groups like women, SCs and STs. The inclusive human development is not possible unless the marginalized sections are brought into mainstream on equal basis economically,

socially and politically. The district is hailed as one of the most progressive districts in the state with regard to women and their empowerment. As a result of various gender-friendly enabling factors such as matriarchal system, favourable sex ratio, high literacy amongst men and women etc have contributed significantly to the gender development in the district. The various government schemes such as Bhagya Laxmi Programme to provide insurance cover for new born girl's education and marriage of poor families, free education for girls in government schools up to the secondary level, provision of bicycles to secondary school girls, Stree Shakthi SHG model for empowering women and reservations in political representation local governing bodies have contributed significantly in gender development and improving gender equality in the district.

Notwithstanding these achievements, the women in the district are still suffer from some traditionally rooted gender biases such as social norms and customs on women's roles, codes of modesty, code of honour and dowry system as well as women's ability to do some jobs. The parents' preference for boys rather than girls in professional education still persists. Declining sex ratio, declining female work participation, feminization of employment and casualization and marginalization of women's employment in informal sectors without any social security are some of the emerging gender issues in the district. The disintegration of undivided joint family, increasing divorce and out-migration of husbands, the life of widows and single women living also lead to the problem of insecurity and vulnerability. Adding to this is the increasing alcoholism among young

generation which result in family quarrels and spouse abuse.

The SCs and STs are historically, socially and economically deprived communities. Since independence, both the Central and the State Governments have implemented several multi-faceted and multi-pronged programmes for social and economic welfare of the SCs and the STs and thereby bring them into the mainstream development. The analysis of the data in Chapter 9 has clearly shown that most of the government social programmes implemented have been successful in provision of the basic livelihood amenities to the SCs and the STs in the district. They are not lagging very much behind other communities as regards housing, drinking water supply, electricity and sanitation. The historically existing wide gaps between them and the rest of the population in regard to housing and basic amenities no more exist.

The SCs and STs, however, still lag behind the rest of the population in regard to higher and professional education, access to healthcare facilities, organized job market, access to productive assets and credit, entrepreneurship and business world and standard of living. Most of them remained as resource poor and in low-end labourers. There are many government programmes to improve the education and economic status of these communities, but the effect is only marginal. The district has still relatively a larger percentage of the SCs and the STs below poverty level. They have higher dropouts in secondary and PUC education. Their representation in higher-end professional employment is insignificant. The setting up separate colonies for SCs and STs also

adversely affects their integration into mainstream society.

Another important emerging issue is the existence of wide gaps among the sub-castes of the SCs and the STs. All sub-castes among SCs and STs have not benefitted from government programmes equally. Among the STs, Koragas are still far behind economically and socially compared to other ST groups. There is also at present, absence of statistics on livelihood, education and health status, occupation pattern, poverty and other socio-economic indicators of various sub-castes in SCs and STs. These data are essential for focused demand driven government interventions for the economic and social uplift of this community. The challenge is to recognize such downtrodden sub-castes and prepare a holistic action plan to bring them to the level of the rest of the community.

12.2.6 Governance Issues

Good governance means efficient and timely delivery of public services, simplicity and easy accessibility of systems and procedures, accountability, transparency and sound financial management, active people's participation, autonomy in decision making process and strict enforcement of right to information. The 73rd and 74th Constitution Amendment provided decentralization framework through the PRI system as an appropriate institutional framework to ensure grassroots participation of the people and effective delivery of public services. Dakshina Kannada district, by all standards, has done relatively better in governance than most of other districts in the state. However, there are many grey areas, which

are mainly systemic and require civil reforms.

The ZP, TPs GPs and ULBs are charged with a number of devolved developmental functions and responsibilities, which calls for empowerment, professional competence, accountability and effective monitoring. The devolution of functions and finance has not taken place as expected and as result, they do not have adequate revenue raising powers. Though the Act provided framework for decentralized planning, the top-down approach still in vogue for planning and resource allocation. The programmes are imposed from the above without considering the area specific needs and feasibility and the ability of the local administration to implement the programmes effectively.

GPs are the bottom of the pyramid administrative units for delivery of developmental services for the well-being of people. The GPs in the district are plagued with numerous problems, which include *inter alia* inadequate allocation of resources, political interference, absence of community participation, lack of knowledge and capability of representatives, corruption, lack of accountability and transparency etc. The GPs have at present no financial and functional autonomy. The decentralization entails devolution of political, fiscal and administrative powers to grassroots governing institutions. This has not yet taken place. The Grama Sabhas and Ward Sabhas are at present not active. They are not empowered to participate effectively and act as watch-dogs at the GP level.

As against this, the ULBs in the district have better record of performance. They have achieved significant improvement in the

development of urban infrastructure and in the provision of basic civic services during last decade. With outsourcing water bill collection, road sweeping and cleaning and solid waste collection and disposal, there was a significant improvement in these areas. However, there are still issues in provision of these basic civic services. They are mainly centered around supply of portable tap water in required quantity throughout the year to all households, segregation of solid waste collection at primary stage, UGD coverage for all households etc. Besides these issues, there is also problem of the basic needs of migrant population who suffer from multiple deprivations that include lack of access to basic amenities such a water supply, sanitation, decent housing and electricity.

12.3 The Way Forward Strategies

The ranking of taluks and divergences between rankings based on various human development related indices and in their components have serious implications for the way forward policies and strategies for inclusive, equitable and sustainable human development in the district. They bring out the major thrust areas for the future policies and strategies. The future policies and strategies should not be restricted to merely on eliminating disparities across gender, social class and regions in respect of various dimensions of human development, but they should aim at enhancing all round wellbeing of all people in the district. The recommendations to address the key areas of concerns identified in different dimensions of human development have been already suggested in detail in the relevant chapters. In this section, an attempt is made to

recapitulate the key recommendations to chart the way forward agenda from human development perspective.

At the outset, it is important to note that the five human development indices computed provide comprehensive view of human development and hence, they should be considered in totality and not in isolation. The human development deficits observed in various indices within the district and spatial disparities existing among the taluks provide thrust areas for action in various dimensions of human development. It is also important to consider all dimensions equally important for enhancing well-being of people. To focus on mere one dimension cannot take care of development of other dimensions. There is thus a need to have holistic approach to achieve sustainable and more inclusive human development in the district.

12.3.1 Future HD Strategy for Education Sector

The primary objective of education policy should be to ensure that all children across gender, social class, rural-urban or differently-abled have equal access to educational institutions and quality education. This requires a holistic approach and concerted efforts to strengthen the system at all levels of education: elementary, secondary and higher education. Since the district is already on the way to universal elementary and secondary education, the challenge would be now not on institutional expansion but improvement in quality, curriculum, social equity in educational attainment and equipment of students with life-skills required to compete at the higher levels in

all spheres.

The primary and secondary education is the foundation for integrated and holistic development of the school-going children. It should facilitate realization of all innate potentials of children. The curriculum pedagogy should not be limited to learning text book subjects only. It should be extended to non-scholastic areas through innovative student-friendly extra curriculum activities. The emphasis in the education process should be accorded more towards innovative exploration, project work, experimentation; fields based experiential learning and interactive /communicative learning rather than mere class room text book teaching. This would enable a child to continuously pursue excellence in his/her respective sphere of life.

The Government is the main primary and secondary education provider in rural areas. With the declining population growth and declining number of students in the rural areas, there is no justification for continuing lower primary schools with one or two teachers and depriving the children quality education at the foundation level. Instead of spreading thinly the scarce resources to number of schools, it would be ideal to consider one model higher primary school to one GP of population below 5000 to provide required quality education. Since the district is on the way to universal elementary education, the emphasis should be now accorded to universalization of secondary education and PUC education. To improve employability and skills of those who cannot pursue higher education, there is a need for incorporating vocational education at secondary and pre-university courses.

Based on the analysis of the present education status in the district, the following are also considered the critical elements of way forward strategies in the education sector:

- Operationalising the requirement of RTE to establish good quality elementary education in rural areas,
- Achieving universalisation of secondary and PUC education,
- Focus on increasing transition rate from secondary to PUC and PUC to higher education particularly students of SCs and STs and other weaker sections
- Achieving zero drop-out and out-of-school till PUC education,
- Create IT-based teacher support tool to provide both content and pedagogical support. To ensure effective use of IT tools, provide free broadband internet to schools.
- Periodical training of teachers to update their knowledge and professional skill is critical for quality education.
- Incentivize teachers for creativity, research and extra-curricular activities.
- Providing pre-schooling opportunities for children in rural areas by integrating pre-school education into primary schooling in all government schools
- Developing skill and employability of students by offering pre-vocational courses at secondary and PUC level either as an add-on or alternative subject to facilitate mobility options for vocational courses to students who do not go for higher education.
- Involving community partnership without political interference not only to provide

financial support but also to ensure good school governance and act as watch-dog.

12.3.2 Future HD Strategy for Health Sector

The health care system in the district has to be comprehensive, easily accessible and inclusive. The accessibility, availability and affordability are critical in health care system. The Twelfth Five Year Plan envisages achievement of Universal Health Coverage (UHC) over next decade. The ultimate goal of UHC is to guarantee affordable easy access to a package of quality health services to all citizens. Based on the analysis of health status carried out in chapter 5, the following are considered important for future strategy in the district's health sector:

- Considering the prevailing public-private mixed institutional health system in the district, there is a need for public and private health sectors to work in tandem to provide appropriate, equitable and affordable health care services at all levels. As the district has 11 medical colleges, a close collaboration of private medical colleges with Taluk and District Hospitals is needed to ensure access to quality and super specialty health services in public sector system.
- The primary health care in rural areas should be strengthened to provide comprehensively preventive, curative and rehabilitative health care services. This requires upgradation of PHCs and CMCs as per IPHS standards. Every PHC should have one qualified doctor, a staff nurse, a pharmacist, a health inspector and other supporting staff. The PHC should have a vehicle to provide mobility support to the

doctor to do the field work. Every PHC sub-center should have its own building and one staff nurse. PHCs should be made round the clock medical services to rural people.

- It is worth considering the Tamil Nadu Model of mapping geographically and setting one Junction Hospital for a group of PHCs instead of CMC. The Junction Hospital should have specialist doctors and adequate number of nurses and their services should be made available to the rural people round the clock. Such junction hospitals could be linked to Taluk Hospitals through 108-*Arogya Kawacha*.
- In order to ensure rural people easy and affordable health services at tertiary level, there is a need for network linking through IT in all Government health services viz. PHCs, Junction hospitals and Taluk and District Hospitals in order to ensure prompt referral system, close interface, robust surveillance and timely treatment
- With the mushrooming of private hospitals, there is a need to regulate affordability of private medical services and ensure quality medical services to even weaker section in urban areas.
- To enable weaker section to access health care facilities from both private and public, there is a need to provide health insurance cover. Most of the rural poor are not aware of medical insurance coverage of *Vajpayee Arogyashree Scheme, Yashaswini Health Insurance Scheme, Sampoorna Suraksha Scheme, Rastriya Swasthya Bhima Yojane* etc. Yashawini Health Insurance Scheme can be extended to include marginalized SCs, STs, people below poverty line,

disabled, and abandoned elderly people in rural areas. There is a need for periodical awareness campaign to ensure rural poor get the benefit of them.

- Special Health services through well equipped Mobile Units to remote tribal areas, forest areas, Naxalite affected areas should be considered to ensure easy access and effective reach to the needy vulnerable section of the society.
- The revival of communicable diseases like Malaria, TB and Dengue Fever is becoming a serious health concern in urban areas. There is also endosulfan infected disease problem. All these warrants strengthening of monitoring and surveillance as well as preventive measures. Similarly the prevalence of HIV/AIDS requires both preventive and curative measures.
- Awareness campaigns and Medicare camps should be organized periodically for chronic diseases like diabetes, hypertension, blood pressure etc. in rural areas to educate rural people about these diseases and also provide on the spot medical check-up and treatment
- Urban health care comes under ULBs and most of them do not have, at present, Health Departments. With growing urbanization, there is an urgent need to set up Health Department in each ULB for taking care of urban health care needs.
- Health profile of Koraga community is relatively very poor and therefore requires special attention. A comprehensive health package should include health consciousness campaign, monitorable health indicators for the community, medical insurance coverage etc.

12.3.3 Future HD Strategy for Livelihood Sector

The human development closely related to economic growth. Income, asset ownership and basic amenities not only determine the living standard but also functionally linked to education, health and other dimension of human development. There is, thus, a need to strengthen the virtuous cycle of linking human development with economic growth. Considering the geographical potential, the long coastal belt and the availability of qualified and talented human resources, the district provides a challenging scope for higher economic growth. It has potential for diversification of agriculture into high value addition, setting up agro-processing industries, re-energization of small scale and tiny industries, and tertiary activities such as tourism, soft-ware and bio-technological park, infrastructure development, communication services, transport, construction etc. Mangaluru city is the cradle of banking and hub of education institutions. With the Konkan railway, opening up of Mangalore international airport, upgrading of port facilities and commencement of Economic Zones, the district has challenging potential for rapid economic growth and increase in employment in the future.

The recent spread of communication technology to rural areas has also opened up opportunities to foster a variety of secondary and tertiary activities in rural areas. Several rural centres have, in recent years, emerged as rural towns. This process of semi urbanization and associated improvements in infrastructure also provide good scope for non-farm employment opportunities both in the secondary and in the

tertiary sectors in the surrounding rural areas. The formation of self-help groups of women and promotion of micro finance in rural areas can also play a crucial role in encouraging women's participation in household industries. The way forward strategy for human development in livelihood sector should, therefore, focus on virtually linking human development with achieving higher, sustainable and more inclusive economic growth in the district. This seems to be the only way to arrest out migration and improve women work participation in rural areas in the district.

12.3.4 Strategy for Dalits and Tribals

Human development has to be inclusive. For inclusive human development, all sections of the society should receive adequate education, health, food and nutrition, housing, social participation, equal treatment, and freedom from discrimination and violence. In the district, SCs and STs are historically deprived and marginalized section of the society. To achieve inclusiveness of the SCs and STs in all human development dimensions without deprivation or discrimination require multiple right based interventions. The various Government schemes like, Anthyodaya for food security for the poorest of poor, free education up to secondary level for SC and ST students, RCH initiatives for welfare of SC and ST women and children, reservations in political participation, promotion of Stree Shakthi SHG model for empowering SC and ST women etc have contributed significantly for social empowerment of these marginalized and deprived section of the community in the district. As already shown, the discrimination

and deprivation of these communities in some of areas still persist. They are also still lagging significantly on economic front, All these result in their under performance in almost all human development indicators and therefore require immediate remedial interventions.

The well-being of these communities is not possible only through social empowerment. In all government interventions, so far the emphasis was given on social welfare focus - education, health, shelter, basic amenities such as electricity and sanitation. No doubt these initiatives are essential and need to be strengthened. What is now required is the economic empowerment as they are still in lowest rung of socio-economic ladder. They require capability building to actively participate in productive sectors and other economic activities. They should graduate from their low-end traditional occupations to high-end professional occupations on par with other communities.

The following strategies are therefore recommended for improving the well-being of the SCs and STs in order to bring them closer to other community:

- There is a need for stock-taking and diagnostic exercise on livelihood, education and health status, occupation pattern, poverty and other socio-economic indicators of all sub-castes of SCs and STs. These data are required for planning sub-cast focused demand driven government interventions with monitorable indicators for their economic and social uplift.
- Entry of SC and ST students to higher

and professional education should be now given highest priority. Unless they enter higher and professional education on par with other communities, they remain in low-end jobs and cannot be closer to other communities economically.

- Those who completed secondary or PUC education and do not want to pursue higher education should be motivated and incentivised to go for vocational training for skill development and employability to enable them to undertake various income generating micro enterprises as well as to enable them to enter organized job market..
- SCs and STs should be encouraged to enter productive ventures like agriculture, livestock enterprises, small and medium industries and business world. This requires empowering their youth and development of entrepreneurship among them and providing them soft loans.

12.3.5 Future HD Strategy for the Gender Development

The emancipation of women from persisting gender bias and gender inequality can be achieved only through empowerment of women in all human development dimensions. The process of empowerment involves not only equity in access to and control over resources but also development of functional capabilities to access one's rights and entitlements on equal basis. The empowerment of women has to therefore go beyond mere capacity building to

get control over the circumstances of their lives, but also address the problems of women's agency, their rights and freedom and their well-being and self-esteem. Poverty reduction, access to livelihood resources, capability building, security against vulnerability and equality of gender relations in all spheres of activities have to be considered integral part of the gender planning. The interventions and programs should be therefore context-specific based on ground realities and by taking into consideration gender differential needs and related emerging issues.

With this perspective, the following strategies for gender empowerment in the district are recommended:

- Social empowerment of women: The thrust areas as hitherto should continue to be laid on improving health and nutrition, education, relief and rehabilitation of women in distress, women concerns in employment, access and control over resources and enhancing women's capacity to participate effectively in community and political decision making process.
- Empowering women in agriculture: A multi-pronged strategy through independent land rights for women, strengthening women's agricultural capacities, improving women's access to credit, extension and marketing facilities, designing women-friendly technologies and promoting gender-friendly diversification of agriculture is required to empower women in agriculture in the district.

- Fostering women self-employment ventures: Specific women focused strategies are required for organization of women SHGs, capacity building, business skill development, credit linkage, provision of industry specific inputs and organization of marketing networks to enable women in rural areas to take up income generating micro enterprises.
- Developing women as entrepreneurs: Through enhancing skill and management training, capacity building, access to credit, industry-specific technology support, marketing- help, and providing incentive such as seed capital, women could be enabled to take up entrepreneurial activities in new and emerging business fields.
- Improving amenities for poor urban women: With the increasing urbanization, more and more women from rural areas move to urban areas for low ladder jobs mostly in construction and informal sectors. There are also growing single women employees in the organized sector. It is important to focus on providing enabling living conditions to these women through proper hostel facilities.

12.3.6 Future HD Strategy for Local Governance

The good governance at local institutions matters for inclusive and sustainable human development. The main ingredients of good governance at grassroots level are: (i)

efficient and effective delivery system for public services, (ii) simple, easily accessible and people-friendly rules and procedures, (iii) transparency, accountability and sound financial management, (iv) responsive to local needs and aspirations and (v) stringent anti-corruption measures and absence of rent seeking behaviour. Good governance should therefore enable a people-friendly, people-caring, people-participatory and responsive administration.

The Constitution Amendment Act and The Karnataka Panchayat Act have already laid down the required framework for decentralized governance. What is required is the agenda for improving governance at local administration level. It requires capacity and capability building, leveraging IT technology in governance, devolution of functions and finance, active people participation, involvement of civil society especially voluntary agencies in implementation of programmes and the crucial right to information. The agenda also includes civil service reforms aimed at improving transparency, accountability, efficiency and procedural reform to make them user-friendly. Special attention need to given to the capacity building at GP level for need assessment, priority setting, formulation of projects/programmes, and their effective implementation, sound financial management, transparency and accountability as well as right to information.

The Grama Sabhas and Ward Sabhas are at present not active. They should be empowered to participate effectively and act as watch-dogs at the GP level. In ultimate analysis, for the inclusive and sustainable human development, what matters are the local governing institutions? They should be made

professionally capable, responsible, people-friendly and responsive.

Urbanization is a dynamic process and expected to grow at rapid rate in terms of population living in cities. Hence, it is important to strengthen urban governance from human development perspective. In order to ensure good governance in ULBs, there is a need for unified and effective administrative set up with clear accountability to citizens. This requires empowering the ULBs in planning, management and monitoring. It is also important to give adequate emphasis on long term strategic urban planning to ensure that the present agenda is not limited to its present jurisdiction. It must anticipate and plan for outgrowth and expansion. The governance focus should be shifted towards an outcome-based approach that is based on effective and efficient civic service delivery rather than an approach aimed at management of investment and asset creation.

Notwithstanding the progress already achieved in development of urban infrastructure, there are many areas where the scaling-up delivery of civic amenities and provision of utilities with emphasis on universal access to the urban poor is needed. The following are the priority areas in urban governance from human development perspective:

- **Safe Drinking Water:** At present, more than 40 percent of the households depend on open well for drinking water in all ULB areas in the district. There is a need to ensure that all households in the municipal areas have access to portable treated water supply and requisite quantity throughout the year.
- **Underground drainage system:** UGD

does not at present cover majority of the municipal area. The need to cover all households by UGD cannot be overemphasized from health point of view.

- **Solid Waste Management:** Though with outsourcing, the primary collection of solid waste is 100 percent in most of the ULBs, the segregation of the solid waste at source is negligible in all ULBs. In order to ensure scientific solid waste management and facilitate proper treatment of solid waste, there is need to ensure scaling up segregation of solid waste at primary source.
- **Slums:** The migrant populations are growing and most of them live in slums. They suffer from multiple deprivations that include lack of access to basic amenities such as water supply, sanitation and decent housing. There is an urgent need to address their basic civic service needs.

12.4 Concluding Remarks

Dakshina Kannada district has achieved relatively good progress in most of the human development indicators. However, comparing to developed countries and neighboring Kerala State, it is still a long way to catch up with what they achieved in various dimensions of human development. The district's vision should be to catch up and reach the top level inclusive, equitable and sustainable human development. The society in the district is diverse comprising different social and religious groups and in different level of development in various

dimensions of human development. The study has attempted to identify development gaps in various dimensions of human development and grey areas in achieving high level of well being. There also issue of persisting disparities in achievements across social groups and taluks. Thus the district has still many challenges to overcome in human development endeavor.

An essential part of human development is equity. Every person has the right to live according to his or her own values and aspirations. No one should be doomed to miserable life because of his belonging to particular caste, gender, religion or region. The fundamental human development ingredients like higher education, high quality health care provisions and economic growth are at present skewed towards the better-off and those who badly need – the weaker sections of the community are excluded. The human development in the district should therefore envision enhancing human capabilities and enlarging choices and opportunities to all people irrespective of caste, religion or gender to lead the life they value most. Since such a comprehensive sustainable and equitable human development is a long term process, the way forward strategies require both short term and long term.

The district provides challenging opportunities for all round progress in human development. The findings and recommendations of the DHDR provide a framework to evolve a strategic vision and to plan both short term and long term action plans by taking into consideration the district's potential. It is important that the strategic plans of action should be bottom-up process and take

into consideration inter-taluk disparities and needs and aspirations of local people. Each taluk should build on its strengths and opportunities. In ultimate analysis, the human development in the district can be driven mainly by education, health and economic growth. Though the district is in the forefront in education and health, it has to go a long way to catch up in economic growth. Hitherto, the district depended on 'money order economy'. It may dry up in future considering the declining population growth and out-migration. The acceleration in human development in future mainly depends on increase in employment opportunities and per capita income in the district itself.

In conclusion, human development concerns are numerous and challenging. An agenda for sustainable and equitable human development is broader, multi-faceted and

multi-dimensional. The agenda should address both social and spatial human development deficits and inequalities in various dimensions of human development, institutional failures, social, religious and cultural barriers, vulnerabilities and emerging concerns affecting the well-being of people. To formulate and implement such an agenda, each taluk should prioritize human development goals, identify its strengths and weaknesses and prepare strategic interventions required. The agenda for human development should be made an integral part of the Comprehensive District Development Plan backed by adequate funds and monitoring mechanism with monitorable human development signposts. Only with proper planning, involvement of local authorities and community participation, inclusive, equitable and sustainable human development is possible and can be achieved in the district.



The Lion Cub at Pilikula – *Looking Forward*

ANNEXURE

TECHNICAL NOTES



IT Revolution in Dakshina Kannada



1. Methodology for Construction of Indices

UNDP Framework:

An index is a summary measure of selected indicators of a particular theme. The human development indices are thus summary measures of human development indicators reflecting various human development dimensions. For computation of human development index (HDI), UNDP adopted three dimensional framework of Health, education and standard of living. HDI is the average of achievement in these three dimensions. Human development being multi-dimensional, measuring involves choosing multiple indicators of three dimensions and capturing them in an aggregate index. For each dimension, separate indices are constructed. Minimum and maximum goalposts are set in order to transform the different indicators chosen into index values lying between 0 and 1; 0 indicating the lowest index value and 1 indicating the highest index value. Geometric mean is used to average the dimension values to derive the composite human development index.

The computation methodologies followed for calculation of six human development related indices in Dakshina Kannada HDR are briefly adumbrated below:

Human Development Index (HDI):

Three dimensional framework of UNDP was adopted to derive HDI. Seven indicators for standard of living, two indicators for health and two indicators for education as stated in the text are adopted for computation of composite HDI.

Minimum and Maximum values have been set for each indicators based on observed taluk-level minimum and maximum indicators to transform them into indices. The indicators chosen are intrinsically either positive or negative in contribution to human development. In the case of positive indicators, the minimum value is considered as 10 percent less than observed minimum value in taluk level. In the case of negative impact indicators, the maximum value is adjusted by 10 percent more than the observed maximum value. The formulas used were:

For positive indicators:

Dimension Index Value= (Actual value – Min, value)/(Max. value–Actual value)

For Negative Indicators:

Dimension Index Value = (Maximum value – Actual Value) / (Maximum Value – Minimum Value)

For per capita income, the minimum and maximum values were converted into natural log values prior to converting into the index. For computing dimension indices, geometric means of the indicator indices were calculated. HDI was computed as geometric mean of three dimension indices.

Gender Inequality Index (GII):

GII measures women's disadvantage in three dimensions: Reproductive Health, Empowerment, and Labour Market. Three female related health indicators for

Reproductive Health, six indicators for Women Empowerment and six indicators for Labour Market participation were considered to compute dimension indices. Likewise HDI, maximum and minimum values observed at taluk level for indicators were adjusted for positive and negative indicators. In computing GII, four steps were involved: first, computing arithmetic mean index for each indicator; second, aggregating across dimensions for female and male group using geometric mean of indicator indices, third aggregating across gender group using harmonic mean and fourth, computing GII by comparing the equally distributed dimension indices of each gender group to the reference standard. The GII value ranges from zero (no gender inequality across dimensions) to one (total inequality across dimensions)

Child Development Index (CDI):

Three dimensions of child development are: Health, Nutrition and Education. One health indicator, two nutrition indicators and one education indicator were used for computing dimension indices. The formula for computing dimension indices was the same as HDI except instead of geometric mean Arithmetic mean was used. CDI is the average of three dimension indices.

Food Security Index (FSI):

Three basic parameters considered were: Availability, Accessibility and Absorption. Seven indicators for availability, six indicators for accessibility, and six indicators for absorption were considered for computing

dimension indices. The dimension indices were computed as average of respective indicator indices after identifying their positive and negative values. The FSI is the arithmetic average of all three dimension indices.

Composite Taluk Development Index (CTDI):

68 indicators were considered for three dimensions: Livelihood Standard, Health and Education. In the case of standard of living, five sub-section indices: Demography, Livelihood and Employment, Housing and Assets and Participation and for Health three sub-section indices: Health, Sanitation and Drinking Water were considered for computing sub-section indices. Indicator indices are calculated following the same formulas as used for HDI for both positive and negative values. The dimension/sub-section indices are arithmetic mean of respective indicator indices. The CTDI is the average of three dimension indices. The methodology for DCDI is same as CTDI.

Urban Development Index (UDI):

Eleven urban infrastructure development and civil service indicators were chosen for computation of UDI. In this case, three dimensional framework is not applicable. Each indicator index reflects dimensional index. Indicator indices are computed following formulas used for HDI for both positive and negative indicator values. This is done to ensure the index values unidirectional. The composite UDI is the average of the indicator indices.

2. Data Availability, Quality and Limitation

Data for taluk and district indicators has been compiled from different secondary sources. For demographic indicators, livelihood and employment and housing and asset indicators, Census 2011 data were used. Wherever 2011 Census data were not yet available, 2001 Census data were used. The data on health indicators were compiled from the District Health and Family Welfare Department. For IMR, CMR and MMR, SRS, 2011 has provided the required data. For sanitation and drinking water, 2011 Census data were used. The District Education Department provided the requisite data on education. Since the DHDR involved in-depth analysis of all dimensions of human development, the data required for various dimensions were collected from line departments of ZP and other Government Departments. The data on urban developments were collected from Urban Cell of DC office and concerned ULBs. For small area and micro studies and partly for Composite Dalit Development Index (CDDI), primary data compiled through rapid appraisal survey were considered..

Since the data collection involved several agencies and various sources, a thorough

cross checking of data was undertaken to validate the base period for which they have been collected and to ensure their reasonableness and quality. The Data compiled were discussed with the concerned Departments as well as in the Core Committee Meetings as to their correctness and validation. A thorough checking of the data quality was also done by HDD, PD. In the case of primary data collection for CDDI, and small area/micro study, the interview and participant observation methods through structured schedules were used to collect both quantitative and qualitative data.

It should be noted that the data on demography, housing, drinking water, electricity, cooking fuel, sanitation etc were compiled from 2011 Census. In the case of official data for various sectors/sub-sectors, in spite of their validation, overestimation and underestimation bias are obvious. Similarly, in micro study are based on rapid appraisal method and perceptions. The primary data collected have thus their own limitations. However, these limitations in computation of indices have limited impact and no way vitiate conclusions drawn.

3. Note on IMR, CMR and MMR

(Source: SRS, 2011):

The service statistics on mortality indicators are grossly underestimates particularly at younger ages. This is also true of maternal mortality rate. There are two types of service statistics on mortality are available with the Department of Health, Karnataka (DHO). First, the data provided by the respective health institutions and entered into the Health Management Information System (HMIS) portal. However, as this is a facility based reporting, the mortality indicators are higher in those districts and sub-districts with more facilities and does not represent the performance of a particular area. Moreover, the facilities not reporting the deaths as well as the deaths taking place at home will not become part of the HMIS in most cases. Second, the mortality information is also kept for respective geographical area based on the ANM reporting. This is found to be grossly underestimates. For instance, as per this information, Infant Mortality Rate for Karnataka is only 12 for the year 2012 as against the Sample Registration System (SRS) estimates of 35. Thirdly, the Civil Registration System (CRS) also provide data on mortality. The analysis of this data also showed gross underestimate particularly the infant mortality rate (IMR), child mortality rate (CMR) and maternal mortality ratio (MMR). The IMR estimated from CRS for the year 2011 is 6.0. Thus it is essential to rework the estimates by adjusting for underestimation to find out the real IMR and MMR in different regions of Karnataka.

SRS estimates on mortality indicators are widely accepted but they are available only at State levels. Reliable estimate of IMR at the district level are available only from 2001 census. As the District level Human Development Reports (DHDR) requires district and sub-district level estimates of these indicators, a method is developed to provide reasonable quality estimates of IMR, CMR and MMR at the district and sub-district level.

Methodology

Indirect estimates of infant and child mortality is feasible using the information on children ever born and children surviving by age of the mother from surveys and census. The census estimates of IMR and CMR are based on this information. District Level Household Surveys (DLHS) conducted in 2007-08 have collected this information. Ram et al (2013) have already estimated neonatal mortality rate and CMR using this information and adjusted the estimate for the year 2012 using a ratio method of distributing the total deaths computed for India to states and districts. But the estimates they used are from the UN estimate of neonatal and child mortality for India for the year 2012. The neonatal and child mortality rate are estimated by Ram et al (2013).

Ratio method is adopted here for estimating district and sub-district IMR, CMR and MMR for Karnataka. We have used the SRS estimate of IMR, CMR and MMR for Karnataka and distributed the corresponding deaths across

district and sub-districts. First, the IMR, CMR and MMR for Karnataka are obtained from SRS for the period 2011 which has been 35, 40 and 144 respectively.

Second, we have distributed the same number of deaths across districts using ratio method. The ratio is obtained considering the neonatal and CMR estimated by Ram et al (2013) across districts of Karnataka. For distributing IMR and CMR, data from Ram et al (2013) on CMR is used while for MMR the neonatal mortality rate from the same source is used. Thus we have computed the IMR, CMR and MMR across districts of Karnataka

considering that the state level is same as the SRS figures for 2011.

Third, the corresponding district IMR, CMR and MMR are distributed across sub-districts using ratio method. The ratio is obtained from the data gathered from the DHO on these three indicators across sub-districts. Thus the IMR, CMR and MMR obtained from DHO have been adjusted upward to match with the district IMR, CMR and MMR computed for the district based on the similar methodology. IMR, CMR and MMR estimated for districts in the state are presented in Appendix Table 16.

4. Process of DHDR Preparation

Background

Karnataka was the second state to prepare HDRs in 1999 and 2005. Recognizing the critical importance of preparing HDR at micro level, the state government initiated four pilot projects in the first phase in Vijayapur, Kalaburagi, Mysuru and Udupi for preparing district human development reports (DHRDs). The objectives this pilot projects were to:

- a. Capture variations in the state of human development at the district level,
- b. Enable Government to take a holistic view of the state's development outside the normal governmental functioning and
- c. Assess the strengths and weaknesses of existing department policies

The pilot projects were published in 2010. Encouraged by the experience gained, the Government of Karnataka has decided in the second phase to undertake DHDRs for all 30 districts focusing taluks in the state.

Rationale for DHDRs

Since the state level HDRs has only revealed regional imbalances, they did not reflect spatial and social disparities in human development within the districts. The following were also considered justification for preparing DHDRs:

- 73rd and 74th Constitution amendment mandated decentralized micro-level planning.
- Districts and taluks are the focal points in

PRI system and for bottom-up planning process

- Within state level and district level aggregate/average do not capture grassroots level and spatial disparities/deprivations in human development concerns.
- Classifying taluks and ranking based on performance in different dimensions of human development are of great relevance for policy and decentralized planning.

The CEOs of ZPs were made responsible to coordinate the preparation of DHDRs. The preparation of DHDRs has been entrusted to Lead Agencies indentified in Each District. The Lead Agencies were mainly represented by the senior faculty members, consultants and professionals from locally based universities, Institutes of Social Science Research and NGOs. The Lead Agencies were identified by the CEOs of ZPs. The preparation of the DHDRs being a huge responsibility, care was taken that no Lead Agency was assigned more than two districts.

To coordinate the preparation of DHRs in 30 districts in the state, a State Level Coordination Committee (SLCC) was set up under the Chairperson of Principal Secretary, Planning Department, Government of Karnataka, comprising of the Chief Coordinator of the Project as Secretary, and Members of Quality Management Groups on DHDRs. At the district level, for proper supervision, guidance and monitoring of preparation of DHDRs, a District Core Committee (DCC) was constituted under

the Chairperson of the CEO of the District ZP and the Chief Planning Officer (CPO) of the District ZP as Member Secretary. The DCC included the representative of the Lead Agency, Heads of the Departments of ZP and subject experts locally available. The DCC also set up Subject-matter Specialists' Sub-committee for technical guidance. The DCC met every month to review the work. The SLCC met periodically to review the overall progress.

With a view to ensure common understanding of the concepts, methodology, issues and tasks between all Lead Agencies and Government Officials involved in preparation of DHDRs, a 4-day Basic Training Programme for capacity building on the preparation of DHDR was organized to representatives of Lead

Agencies, CEOs of ZPs, Heads of the Departments of ZPs and representatives of ULBs in 16 batches. These trainings were planned to sensitize participants on the concepts of human development, collection of data for various indicators and the rationale for preparation of DHDRs. Subsequently, a 3-day Technical Training Programme was exclusively planned to the representatives of Lead Agencies, CPOs of ZPs, and District Statistical Officers in four batches on collection and validation of data, measurement of indicators to be used, methodology and computation of various indices and their analysis and chapter plan for DHDR. A detailed Guideline Document on preparation of DHDR was provided by HDD, PD for all Lead Agencies and ZPs.

5. District Human Development Report Core Committee Details / List of Meeting and Workshop Conducted

a. District Human Development Report Core Committee Details

President : Chief Executive Officers
Dakshina Kannada Zilla Panchayat, Mangalore

Member
Secretary : Chief Planning Officer

Members:

- 1) Deputy Secretary, Dakshina Kannada Zilla Panchayat, Mangalore
- 2) District Statistical officer, Dakshina Kannada , Mangalore
- 3) Deputy Director, Public Instructions, Education Department, Dakshina Kannada, Mangalore
- 4) District Health and Family Welfare Officer, Dakshina Kannada, Mangalore
- 5) District Social Welfare Officer, Dakshina Kannada, Mangalore
- 6) Deputy Director, Women and Child Development Department, Dakshina Kannada, Mangalore
- 7) Joint Director, Agriculture, Dakshina Kannada, Mangalore
- 8) Deputy Director, Food and Civil Supplies Department, Dakshina Kannada, Mangalore
- 9) Project Director, Urban Development Cell, District Collector's Office, Dakshina Kannada, Mangalore
- 10) Assistant Director, Social Securities Scheme, District Collector's Office, Dakshina Kannada, Mangalore
- 11) District Officer, Integrated Tribal Development Program
- 12) Executive Officers, Taluk Panchayat, Mangalore / Bantwal/ Puttur, Sullia, Belthangady
- 13) Deputy Project Co-ordinator, SSA, Dakshina Kannada, Mangalore
- 14) District Programme Officer, Women & Child Development Dept., Dakshina Kannada, Mangalore
- 15) Dr N S Shetty, Principal Consultant, Professor Emiratus, Justice K S Hegde Institute of Management
- 16) Mr Vinod Dixit, Consultant

b. HDR Workshop Details

Date	Particulars of Meeting /Workshop	Place
22/10/2014 11.00 A.M.	District level workshop (D.K.Z.P.members, Mangalore & Bantwal Taluk)	'Nethravathi 'Hall, D.K.Z.P.Mangalore
24/10/2014 11A.M.	Taluk level workshop	Taluk Panchayath Hall Puttur
24/10/2014 3.00 P.M.	Taluk level workshop	Taluk Panchayath Hall Sullia
08/11/2013	Taluk level workshop	Taluk Panchayath Hall Belthangady

APPENDIX

STATISTICAL TABLES



Kambla – The Buffalo Race



Table 1
Dakshina Kannada District Profile: Basic Statistics (2011-12)

Particulars	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
A. Land Utilization						
Geographical Area (ha)	71758	137510	85385	99697	83031	477381
Forest Area (ha)	5069	49837	2902	27386	43282	128476
Land not available for cultivation (ha)	24469	30141	33615	31317	6604	125146
Fallow Land (ha)	1074	1505	8012	2163	301	13055
Uncultivated Land (ha)	14610	18166	20141	16869	10950	80736
Net Area Sown (ha)	27536	37861	20715	21962	21894	129968
Gross Cropped Area (ha)	34522	45923	29119	24843	22538	156945
Cropping Intensity (Percent)	125	120	141	113	102	120
Net Irrigated Area (Ha)	16366	20612	12214	12025	11390	72607
B. Demography						
Total Male Population (No)	196708	131967	490797	143116	72126	1034714
Total Female Population (No)	198672	134622	503805	144735	73101	1054935
Total Population (No.)	395380	266589	994602	287851	145227	2089649
Density of population (per Sq.km)	538	194	1078	288	176	430
Sex Ratio (per 1000 males)	1010	1020	1027	1011	1014	1020
Total Child Population (0 – 6)	41635	28152	94301	29817	14392	208297
Male Child Population (0 – 6)	21411	14350	48576	15330	7318	106985
Female Child Population (0 – 6)	20224	13802	45725	14487	7074	101312
Child Sex Ratio (945	962	941	945	967	947
Rural Male	138959	124672	102613			541484

Population (No)				112812	62428	
Rural Female Pop (No)	140523	127130	107420	114165	62841	552079
Rural Total Population (No.)	279482	251802	210033	226977	125269	1093563
Urban Male Population (No.)	57749	7295	388184	30304	9698	493230
Urban Female Population (No.)	58149	7492	396385	30570	10260	502856
Urban Total Population (No.)	115898	14787	784569	60874	19958	996086
Total SC Male Population (No)	9585	12426	24262	17102	9949	73324
Total SC Female Population	9675	12890	25013	16938	10338	74854
Total SC Population	19260	25316	49275	34040	20287	148178
Total ST Male Population	10486	7733	8137	8773	5832	40961
Total ST Female Population	10426	7909	8109	8854	6009	41307
Total ST Population	20912	15642	16246	17627	11841	82268
Total Households (No)	76405	55385	216300	59569	32074	439733
Total Rural Households (No)	54562	52151	44003	46647	27880	225243
Total Urban Households (No)	21843	3234	172297	12292	4194	214490
Total workers (No)	205303	138066	438285	147029	69038	997721
Total Male Workers (No)	119378	81262	286488	88803	44972	620903
Total Female Workers (No)	85925	56804	151797	58226	24066	376818
C. Education						
Male Literacy Rate (Percent)	92.6	89.99	95.31	90.71	91.34	93.13
Female literacy Rate (Percent)	81.02	77.99	88.15	80.15	81.44	84.13
Total literacy Rate (Percent)	86.76	83.92	91.67	85.92	86.35	88.57
Literacy Rate – Rural (Percent)	86.32	83.74	86.11	84.41	85.48	85.33
Literacy Rate – Urban (Percent)	90.74	89.61	95.49	92.24	91.80	92.12
Lower Primary Schools (no)	68	75	93	46	72	354
Higher Primary Schools (no)	232	154	428	189	95	1098

High Schools (no)	82	53	245	73	39	492	
Pre-University Colleges (no)	25	20	85	26	13	169	
General Degree Colleges (no)	8	10	103	16	6	143	
D. Health							
Crude Birth Rate (per 1000)	14.06	13.81	10.14	14.02	13.40	12.10	
Crude Death Rate(per 1000)	3.59	3.27	2.45	4.09	4.98	3.23	
Infant Mortality Rate (IMR per 1000 live birth)	19	20	20	22	11	19	
Child Mortality Rate (CMR per 1000 live birth)	24	27	28	33	14	22	
Maternal Mortality Rate (MMR/100000 birth)	122	47	44	89	103	89	
Primary Health Centres (No)	17	11	21	9	6	64	
Community Health Units	2	1	2	2	-	7	
Hospitals Govt+Private (No)	33	22	87	28	14	184	
Private Nursing Home/Hospitals (No)	20	13	25	12	7	77	
Private Clinics (no)	173	103	1042	180	83	1581	
Family Welfare Centres (No)	20	13	31	12	7	83	
Family Welfare Sub-centres (No)	93	75	129	75	58	430	
E. Agriculture							
Marginal Farmers below 1 ha	No	41029	30664	29216	34684	17562	153155
	Area (ha)	14328	12519	10389	13530	7591	58357
Small Farmers 1 – 2 ha	No	8574	8628	6171	8679	5408	37460
	Area (ha)	11562	11586	8451	11860	7339	50800
Semi-Medium 2 – 4 ha	No	3180	3089	3057	2417	1878	13621
	Area (ha)	8466	8047	8187	6287	4972	35959
Medium 4 – 10 ha	No	1109	857	1069	550	755	4340
	Area (ha)	6263	4779	5963	3019	4196	24220
Large Farmers above 10 ha	No	116	137	132	54	82	521
	Area (ha)	1576	3598	1926	710	1269	9080
Total Farmers	No	54008	43375	39645	46384	25685	209097
	Area (ha)	42195	40530	34917	35405	25368	178415
Total SC Farmers	No	1657	2597	1083	3390	1812	10539
	Area (ha)	802	1543	458	1715	891	5409
Total ST Farmers	No	2696	1918	396	2758	1850	9618
	Area (ha)	1702	1626	264	1802	1192	6585
	Paddy	15950	14770	18295	5285	866	55166

Cropping Pattern (ha)	Pulses	170	1147	1337	320	303	3277
	Oilseeds	12	424	76	34	15	561
	Total Commercial Crops	3806	10063	3621	4266	7479	29235
F. Livestock							
Cattle (No)	Indigenous	41075	55560	53675	43183	36344	229838
	Cross breed	35783	24617	47713	40545	18113	166771
	Total	76858	80177	101389	83728	54457	396609
Buffaloe		3347	3738	6322	1088	624	15119
Goats (No)		3353	2274	14283	4781	1058	25749
Pigs (No)		812	268	2142	1292	814	5332
Poultry Birds (No)		249848	182825	305759	433591	150857	1322880
G. Fisheries							
Fish Catch (tonnes)	18.15	14.00	138435.40	22.24	16.08		138505.84
Fish Market Centers (No)	16	18	25	11	10		80
Families engaged full time in fisheries (No)	32	-	2442	-	-		2474
Families engaged part time in fisheries (No)	126	82	1062	78	94		1442
H. Industries							
Factories (No)	49	19	328	35	14		445
Employees – Male	1184	468	20789	1363	543		24347
Employees – Female	1292	273	6968	777	499		9809
Small Scale Industry units (No)	1975	9609	3475	3675	1918		20652
	6977	93995	15223	13957	4522		134674
Workers (No)							

Source: Census of India 2011 and Dakshina Kannada District at Glance 2011-12.

Table 2
District wise Area & Population

Sl No	District	Area (in Sq.Km)	2011 Population			Decadal Change (Percent) 2001 -2011		
			Total	Male	Female	Total	Male	Female
1	Bagalkot	6594	1889752	950111	939641	14.40	13.89	14.92
2	Bengaluru (R)	5815	990923	509172	481751	16.45	16.39	16.51
3	Bengaluru (U)	2190	9621551	5022661	4598890	47.18	46.58	47.85
4	Belagavi	13415	4779661	2423063	2356598	13.41	12.70	14.15
5	Ballari	8419	2452595	1236954	1215641	20.99	20.13	21.88
6	Bidar	5448	1703300	870665	832635	13.37	12.92	13.85
7	Vijayapura	10475	2177331	1111022	1066309	20.50	19.93	21.10
8	Chamarajnagar	5685	1020791	512231	508560	5.73	4.55	6.95
9	Chikaballapur		1255104	636437	618667	9.23	8.88	9.60
10	Chikkamagaluru	7201	1137961	566622	571339	-0.26	-1.44	0.94
11	Chitradurga	8388	1659456	840843	818613	9.33	8.33	10.37
12	D. Kannada	4843	2089649	1034714	1054935	10.11	10.26	9.97
13	Davangere	6018	1945497	986400	959097	8.63	7.49	9.83
14	Dharwad	4230	1847023	937206	909817	15.13	13.85	16.49
15	Gadag	4657	1064570	537147	527423	9.54	8.84	10.27
16	Kalaburagi	16224	2566326	1301755	1264571	18.01	17.23	18.82
17	Hassan	6814	1776421	883667	892754	3.18	2.86	3.50
18	Haveri	4851	1597668	819128	778540	11.02	10.62	11.44
19	Kodagu	4102	554519	274608	279911	1.09	-0.08	2.26
20	Kolar	8223	1536401	776396	760005	10.77	10.65	10.89
21	Koppal	8458	1389920	699926	689994	16.21	16.01	16.40
22	Mandya	4961	1805769	905085	900684	2.38	1.92	2.86
23	Mysuru	6269	3001127	1511600	1489527	13.63	12.41	14.90
24	Raichur	5559	1928812	964511	964301	15.51	14.57	16.47
25	Ramanagar		1082636	548008	534628	5.05	4.44	5.69
26	Shivamogga	8465	1752753	877415	875338	6.71	5.64	7.80
27	Tumkur	10598	2678980	1350594	1328386	3.65	2.80	4.52
28	Udupi	3598	1177361	562131	615230	5.85	7.64	4.27
29	Uttara Kannada	10291	1437169	726256	710913	6.17	5.73	6.62
30	Yadgir		1174271	590329	583942	22.81	22.39	23.24
Karnataka		191791	6109529	3096665	3012864	15.60	15.12	16.10
			7	7	0			

Source: Census of India 2011

Table-3
District wise Rural and Urban Population

Sl No	District	2011 Population			Decadal Change (Percent) 2001 -2011		
		Total	Rural	Urban	Total	Rural	Urban
1	Bagalkot	1889752	1291906	597846	14.40	10.10	24.94
2	Bengaluru (R)	990923	722179	268744	16.45	9.65	39.73
3	Bengaluru (U)	9621551	871607	8749944	47.18	12.16	51.91
4	Belagavi	4779661	3568466	1211195	13.41	11.45	19.60
5	Ballari	2452595	1532356	920239	20.99	16.06	30.19
6	Bidar	1703300	1277348	425952	13.37	10.35	23.51
7	Vijayapura	2177331	1675353	501978	20.50	18.75	26.73
8	Chamarajnagar	1020791	845817	174974	5.73	3.48	18.15
9	Chikaballapur	1255104	973985	281119	9.23	4.96	27.19
10	Chikmagalur	1137961	898453	239508	-0.26	-2.15	7.54
11	Chitradurga	1659456	1329923	329533	9.33	6.94	20.16
12	D. Kannada	2089649	1093563	996086	10.11	-6.41	36.58
13	Davangere	1945497	1316487	629010	8.63	5.49	15.84
14	Dharwad	1847023	797484	1049539	15.13	10.40	19.01
15	Gadag	1064570	685261	379309	9.54	8.83	10.85
16	Kalaburagi	2566326	1730775	835551	18.01	16.54	21.17
17	Hassan	1776421	1399658	376763	3.18	-1.22	23.66
18	Haveri	1597668	1242167	355501	11.02	8.95	18.89
19	Kodagu	554519	473531	80988	1.09	0.07	7.44
20	Kolar	1536401	1056328	480073	10.77	7.51	18.68
21	Koppal	1389920	1156216	233704	16.21	15.88	17.86
22	Mandya	1805769	1497407	308362	2.38	1.11	9.07
23	Mysuru	3001127	1755714	1245413	13.63	5.84	26.81
24	Raichur	1928812	1438464	490348	15.51	15.18	16.52
25	Ramanagar	1082636	814877	267759	5.05	-0.07	24.50
26	Shivamogga	1752753	1129026	623727	6.71	5.37	9.23
27	Tumakuru	2678980	2079902	599078	3.65	0.12	18.11
28	Udupi	1177361	843300	334061	5.85	-6.91	61.89
29	Uttara Kannada	1437169	1018188	418981	6.17	5.43	8.01
30	Yadgir	1174271	953594	220677	22.81	20.23	35.34
	Karnataka	61095297	37469335	23625962	15.60	7.40	31.54

Source: Census of India 2011

Table 4
Human Development: Comparison of Dakshina Kannada with Other Districts
In Karnataka State

Districts	HDI-1991		HDI-2001	
	Value	Rank	Value	Rank
Bagalkot	0.505	20	0.591	22
Bengaluru Rural	0.539	11	0.653	6
Bengaluru Urban	0.623	4	0.753	1
Belagavi	0.545	9	0.648	8
Ballari	0.512	18	0.617	18
Bidar	0.496	23	0.599	21
Vijayapura	0.504	21	0.589	23
Chamrajnagar	0.488	24	0.576	25
Chikamagalur	0.599	7	0.647	9
Chitradurga	0.535	13	0.627	16
Dakshina Kannada	0.661	1	0.722	2
Davangere	0.548	8	0.635	12
Dharwad	0.539	10	0.642	10
Gadag	0.516	17	0.634	13
Kalaburagi	0.453	25	0.564	26
Hassan	0.519	16	0.639	11
Haveri	0.496	22	0.603	20
Kodagu	0.623	3	0.697	4
Kolar	0.522	15	0.625	17
Koppal	0.446	26	0.582	24
Mandya	0.511	19	0.609	19
Mysuru	0.524	14	0.631	14
Raichur	0.443	27	0.547	27
Shivamogga	0.584	5	0.673	5
Tumakuru	0.539	12	0.630	15
Udupi	0.659	2	0.714	3
Uttara Kannada	0.567	6	0.653	7
Karnataka	0.541		0.650	

Source: KHDR-2005

Table 5
Taluk and District Level Key Human Development Indicators for HDI
(2011-12)

Sr. No.	Indicators	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
Standard of Living							
1	Percentage of HHs having access to Cooking fuel	24.86	18.38	63.73	23.58	15.14	42.02
2	Percentage of HHs having access to Toilet	92.58	90.65	96.33	88.02	80.81	92.66
3	Percentage of HHs having access to Water	47.87	27.46	64.83	45.33	29.18	51.77
4	Percentage of HHs having access to Electricity	93.46	77.31	96.73	84.94	80.10	90.83
5	Percentage of HHs having access to Pucca house	54.54	34.55	73.30	48.28	44.57	59.52
6	Percentage of Non agricultural workers (main + marginal)	91.22	85.58	95.36	97.46	98.46	93.68
7	Per-capita Income (Rupees)	54572	50267	94716	53245	81882	74528
Health							
8	Child Mortality Rate (No)	24	27	28	33	14	22
9	Maternal Mortality Rate (No)	122	47	44	89	103	89
Education							
10	Literacy Rate (Percent)	86.71	84.06	91.50	86.02	86.69	88.57
11	Gross Enrolment Rate (Percent) (Primary+secondary)	86.70	85.76	90.94	92.18	85.91	89.22

Table 6
Key Indicators for Gender Inequality Index (GII) (2011-12)

Sr. No.	Indicators	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
Reproductive Health							
1	Maternal Mortality Rate (MMR)	122	47	44	89	103	89
2	Share of Institutional deliveries (ID)	99.91	99.93	99.90	99.90	99.93	99.92
3	Share of pregnant women with severe Anemia (ANE)	42.36	26.80	37.87	41.52	21.29	33.96
Empowerment							
4	Share of female elected representatives in PRIs and ULBs (PR _F)	45.55	46.28	43.43	44.98	49.15	45.29
5	Share of male elected representatives in PRIs and ULBs (PR _M)	54.45	53.72	56.57	55.02	50.85	54.71
6	Share of female children in the age group 0-6 years (CHLD _F)	48.57	49.03	48.49	48.59	49.16	48.64
7	Share of male children in the age group 0-6 years (CHLD _M)	51.43	50.97	51.51	51.41	50.85	51.36
8	Share of female literacy (LIT _F)	81.05	78.34	88.13	80.79	81.90	84.13
9	Share of male literacy (LIT _M)	92.48	89.93	94.99	91.34	91.57	93.13
Labour Market Participation							
10	Share of female Work Participation Rate (WPR _F)	48.15	47.02	33.14	44.70	36.45	39.51
11	Share of male Work Participation Rate (WPR _M)	68.10	69.09	64.78	69.49	66.39	66.93
12	Share of female workers in the non agricultural sector (NAG _F)	95.36	91.69	96.02	97.90	98.22	95.65
13	Share of male workers in the non agricultural sector (NAG _M)	88.24	81.30	95.01	97.17	98.58	92.48
14	Female Agricultural wage rate(WAGE _F)	300	290	290	300	295	295
15	Male Agricultural wage rate(WAGE _M)	350	340	340	340	340	345

Table 7
Key Indicators for Child Development Index (CDI) (2011-12)

	Indicators	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
Health:	Child Mortality Rate	24	27	28	33	14	22
Nutrition:	1.Percentage of Malnourished Children	19.06	25.59	17.89	22.89	31.54	21.23
	2.Percentage of children born underweight	5.90	9.24	20.73	10.41	15.04	12.26
Education:	Percentage of drop-out children at Primary and Secondary School mainsreamed	89.50	84.30	87.98	86.14	86.45	86.87

Table 8
Key Indicators for Food Security Index (FSI) (2011-12)

Sr. No.	Indicators	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
Availability							
1	Cropping Intensity	125	120	141	113	102	120
2	Percentage Change in NSA(Net Sown Area)	3.79	0.62	-20.52	-0.64	7.06	-2.19
3	Per capita food grain production (Kg)	89.86	130.94	40.60	39.70	14.24	62.94
4	Per Capita forest cover (Ha)	0.013	0.188	0.003	0.009	0.298	0.061
5	Irrigation Intensity	101.76	101.42	106.29	100.44	100.48	101.97
6	Percentage of area degraded to TGA	13.60	3.62	11.35	3.02	3.79	6.40
7	Percentage of leguminous crops in the GCA	0.49	2.49	4.50	1.28	1.35	2.02
Accessibility							
8	Percentage of BPL families in the Taluk	55.35	52.24	42.26	46.42	49.25	47.38
9	Per capita income	54572	50267	94716	53245	81882	74528
10	Percentage of Non-agricultural workers to total workers	91.22	85.88	95.36	97.46	98.46	93.68
11	Average size of holdings (Ha)	0.95	0.96	0.83	0.80	1.04	0.90

12	Percentage of Agriculture labourers to total workers	4.25	7.07	2.08	0.94	0.42	2.93
13	Percentage of villages having PDS outlets within the village	100	100	100	100	100	100
Absorption							
14	Child Mortality Rate	24	27	28	33	14	22
15	Percentage of households with access to drinking water	47.87	27.46	64.83	45.33	29.18	51.77
16	Percentage of pregnant women with Anemia	42.36	26.80	37.87	41.52	21.29	33.96
17	Percentage of Malnourished Children	19.06	25.59	17.89	22.89	31.54	21.23
18	Percentage of children born underweight	5.9	9.24	20.73	10.41	15.04	12.26
19	Female Literacy Rate	81.05	78.34	88.13	80.79	81.89	84.13

Table 9
Key Indicators for Urban Development Index (UDI)(2011-12)

Sr. No.	Indicators	Mangaluru CC	Bantwal TMC	Puttur TMC	Ullal TMC	Moodabidri TMC	Belthangady TP	Mulky TP	Sullia TP
1	Percentage of urban population to total population	50.21	10.15	18.44	2.62	1.35	2.90	0.86	13.74
2	Percentage of HHs without Own Houses	1.22	6.68	9.40	0.00	0.01	9.01	0.01	7.06
3	Percentage of Slum Population to total population	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Percentage of HHs with tap water connection	61.53	13.66	50.78	25.44	49.64	44.68	45.46	50.40
5	Sewerage/ Drainage	63.83	53.81	65.76	29.67	15.59	40.37	86.87	62.45
6	No. of Hospital Beds per 1000 population in urban area	26.00	2.80	15.00	4.00	10.00	7.40	0.00	33.00
7	Growth Rate of Own Resources Mobilisation	90.84	38.95	81.02	55.95	41.82	23.40	19.82	25.59
8	Per capita expenditure on Development Works	1667	290	220	281	265	167	177	225
9	Road Kms per sq. Km	9.58	3.18	5.62	7.78	3.57	4.51	4.22	20.57
10	Crime Rate per 10000 Population	52.20	51.94	23.81	51.85	56.74	20.29	57.26	22.58
11	Road accidents per 10000 population	19.05	15.29	8.04	11.89	61.83	8.74	35.86	4.97

Table 10
Key Indicators for Composite Taluk Development Index (CTDI)(2011-12)

Sr. No.	Indicators	Bantwal	Belthangady	Mangaluru	Puttur	Sullia	District
Standard of Living/Livelihood Indicators							
Demographic Indicators							
1	Decadal population growth rate	9.36	8.15	12.66	8.19	3.18	10.11
2	Population Density	538	194	1078	288	176	430
3	Sex ratio	1010	1020	1027	1011	1014	1020
4	Percentage of Slum Population	0	0	0.24	0	0	0.11
5	Percentage of Population in age group of 0-6	10.53	10.56	9.48	10.36	9.91	9.97
6	Child sex ratio	945	962	941	945	967	947
7	Infant mortality rate(IMR)	19	20	20	22	11	19
8	Child Mortality Rate	24	27	28	33	14	22
9	Maternal Mortality Rate (MMR)	122	47	44	89	103	89
10	Percentage of women headed households	23.90	22.23	21.24	22.32	20.92	21.95
Livelihood and Employment Indicators							
11	Percentage of BPL HHs provided with BPL ration cards	55.35	52.24	42.26	46.42	49.25	47.38
12	Cropping Intensity	125	120	141	113	102	120
13	Irrigation Intensity	101.76	101.42	106.29	100.44	100.48	101.97
14	Percentage of Households provided employment to total number of households registered under MGNREGS	21.77	15.71	23.85	23.62	18.02	20.08
15	Ratio of average agricultural wage to Minimum wages prescribed by the State	1.66	2.35	2.35	2.41	2.36	2.38
16	Work participation rate	58.04	57.90	48.68	56.98	52.77	53.03
17	Decadal Growth rate of Employment	2.94	7.91	10.87	-2.27	-5.79	5.42
18	Percentage of Cultivators to Total workers	4.53	7.36	2.56	1.60	1.12	3.39
19	Percentage of main workers to total workers	92.17	90.34	92.34	88.41	95.35	91.66
20	Percentage of workers in Household Industries	28.64	25.77	13.52	20.37	6.70	18.86
21	Percentage of Agriculture labourers	4.25	7.07	2.08	0.94	0.42	2.93
Housing and Assets Indicators							
22	Percentage of Households with Pucca houses	54.54	34.55	73.30	48.28	44.57	59.52
23	Percentage of Site less Households	33.31	25.89	41.35	16.46	18.29	30.76
24	Percentage of Households provided with house sites	10.14	27.53	2.60	11.82	11.76	11.74
25	Percentage of Houses constructed for houseless poor families	52.18	57.25	24.74	36.66	68.28	47.80

26	Percentage of households with cycles	16.60	23.32	13.29	20.39	17.61	16.40
27	Percentage of households with two-wheelers	14.53	18.88	27.09	23.04	22.61	22.95
28	Percentage of households with other assets such as Telephone, Computer, TV, 2 Wheelers and 4 Wheelers	27.90	24.84	40.46	29.36	27.04	33.75
29	Percentage of Households with no assets	6.08	7.24	4.13	7.05	8.88	5.62
29	Percentage of Households with electricity	93.46	77.31	96.73	84.94	80.10	90.83
30	Percentage of Households dependent on modern fuel type	24.86	18.38	63.73	23.58	15.14	42.02
Participation Indicators							
31	Percentage of women elected representatives in rural local bodies	45.60	46.14	43.86	45.18	49.40	45.50
32	Percentage of elected SC/ST representatives in rural local bodies	14.86	17.59	12.18	20.30	27.08	16.74
33	Percentage of women elected representatives in urban local bodies	43.48	54.55	40.16	40.74	44.44	41.75
34	Percentage of elected SC/ST representatives in urban local bodies	8.70	18.18	9.45	11.11	16.67	10.68
35	Percentage of active SHGs	100	100	100	100	100	100
Health Indicators							
36	Percentage of pregnant women receiving full ANC	88.82	74.06	89.17	80.14	85.05	85.11
37	Percentage of pregnant women with Anemia	42.36	26.80	37.87	41.52	21.29	33.96
38	Percentage of Institutional deliveries	99.91	99.93	99.90	99.90	99.93	99.92
39	Percentage of children fully Immunized	88.76	87.41	66.12	88.26	89.74	78.02
40	Percentage of Children born underweight	5.90	9.24	20.73	10.41	15.04	12.26
41	Percentage of Malnourished Children	19.06	25.59	17.89	22.89	31.54	21.23
42	Percentage of people affected by major communicable diseases	2.20	0.96	1.55	1.16	1.46	1.56
43	Average Population served by sub-centres	4316	3688	4631	3925	2426	4670
44	Average Population served by Primary Health Centres (PHCs)	25089	23048	36261	26764	23462	29058
45	Availability of Doctors per	0.52	0.47	1.23	0.81		

	1,000 population					0.59	0.89
46	Availability of nurses per 1000 population	0.23	0.59	0.73	0.82	0.26	0.60
47	Average population served by Anganwadi centres	54	59	67	55	60	59
48	Percentage of villages having Anganwadis within a km. Distance	78.5	78.5	92.0	79.4	75.6	80.8
49	Percentage of couples protected by any contraceptive method	68.90	66.50	62.50	71.09	66.20	66.18
50	Average Health Expenditure (Rs)	190.20	259.64	118.30	244.82	445.22	190.10
Sanitation Indicators							
51	Percentage of Gram Panchayats Selected for Nirmal Gram Puraskar Awards	100	100	100	100	100	100
52	Percentage of Households with toilets	92.58	90.65	96.33	88.02	80.01	92.66
53	Percentage of villages with drainage facility	55.35	53.76	53.56	31.57	24.99	48.77
Drinking Water Indicators							
54	Percentage of Households having access to safe drinking water	47.87	27.46	64.83	45.33	29.18	51.77
Education Indicators							
55	Percentage of Literacy	86.71	84.06	91.50	86.02	86.69	88.57
56	Gross Enrolment rate – Elementary School	96.23	95.34	116.21	103.13	96.09	100.56
57	Net Enrolment rate	90.93	90.53	100.00	97.98	91.88	95.49
58	Dropout rate in Elementary education	1.18	2.47	0.13	0.13	2.82	0.14
59	Percentage of Out-of-School Children mainstreamed	89.50	84.30	87.98	86.14	86.45	86.87
60	Student – Teacher ratio for elementary education	23	23	21	22	19	21
61	Secondary school Gross Enrolment Rate (15-16 years)	87.04	90.34	129.70	106.90	89.46	98.52
62	Drop-out rate in secondary education	12.73	13.05	9.14	9.45	12.51	9.96
63	SSLC pass percentage	88.00	91.00	94.00	87.00	88.00	89.55
64	Student - Teacher ratio for secondary education	21.39	25.57	17.89	23.39	22.07	20.81
65	PUC pass percentage	81.87	89.17	86.95	83.84	80.76	85.70
66	School Infrastructure Index	0.88	0.88	0.81	0.88	0.92	0.87
67	Average Education Expenditure	510	282	426	163	249	326
68	Percentage of villages having a Primary School within 1 km. Distance	100	100	100	100	100	100

Table-11
District wise Change in Sex Ratio 2001 – 2011(Per 100 males)

SI No	District	Sex Ratio		Child Sex Ratio (0 -6 years)	
		2001	2011	2001	2011
1	Bagalkot	980	989	921	934
2	Bengaluru (R)	945	946	939	950
3	Bengaluru (U)	908	916	943	944
4	Belagavi	960	973	921	934
5	Ballari	969	983	947	960
6	Bidar	949	956	941	942
7	Vijayapura	950	960	928	931
8	Chamarajnaragar	971	993	964	953
9	Chikaballapur	966	972	952	953
10	Chikmagalur	984	1008	959	969
11	Chitradurga	955	974	946	947
12	D. Kannada	1022	1020	952	947
13	Davangere	952	972	946	948
14	Dharwad	949	971	943	944
15	Gadag	969	982	952	947
16	Kalaburagi	958	971	931	943
17	Hassan	1004	1010	958	973
18	Haveri	944	950	957	946
19	Kodagu	996	1019	977	978
20	Kolar	977	979	965	962
21	Koppal	983	986	953	958
22	Mandya	986	995	934	939
23	Mysuru	964	985	962	961
24	Raichur	983	1000	964	950
25	Ramanagar	964	969	945	962
26	Shivamogga	978	998	956	960
27	Tumakuru	967	984	949	959
28	Udupi	1130	1094	958	958
29	Uttara Kannada	971	979	946	955
30	Yadgir	982	989	952	951
Karnataka		965	973	946	948

Source: Census of India 2011

Table-12
District wise Change in Literacy Rate by Sex: 2001 – 2011 (Percentage)

Sl No	District	2001			2011		
		Total	Male	Female	Total	Male	Female
1	Bagalkot	57.30	70.88	43.56	68.82	79.23	58.40
2	Bengaluru (R)	69.59	78.99	59.67	77.93	84.82	70.63
3	Bengaluru (U)	82.96	87.92	77.48	87.67	91.01	84.01
4	Belagavi	64.21	75.70	52.32	73.48	82.20	64.58
5	Ballari	57.40	69.20	45.28	67.43	76.64	58.09
6	Bidar	60.94	72.46	48.81	70.51	79.09	61.55
7	Bijapur	57.01	69.94	43.47	67.15	77.21	56.72
8	Chamarajnar	50.87	59.03	42.48	61.43	67.93	54.92
9	Chikaballapur	59.24	69.80	48.33	69.76	77.75	61.55
10	Chikkamgaluru	72.20	80.29	64.01	79.25	85.41	73.16
11	Chitradurga	64.45	74.66	53.78	73.71	81.37	65.88
12	D. Kannada	83.35	89.70	77.21	88.57	93.13	84.13
13	Davangere	67.43	76.37	58.04	75.74	82.40	68.91
14	Dharwad	71.61	80.82	61.92	80.00	86.37	73.46
15	Gadag	66.11	79.32	52.52	75.12	84.66	65.44
16	Kalaburagi	54.34	66.18	42.06	64.85	74.38	55.09
17	Hassan	68.63	78.37	59.00	76.07	83.64	68.60
18	Haveri	67.79	77.61	57.37	77.40	84.00	70.46
19	Kodagu	7.99	83.70	72.26	82.61	87.19	78.14
20	Kolar	65.84	75.99	55.46	74.39	81.81	66.84
21	Koppal	54.10	68.42	39.61	68.09	78.54	57.55
22	Mandya	61.05	70.50	51.53	70.40	78.27	62.54
23	Mysuru	63.48	70.88	55.81	72.79	78.46	67.06
24	Raichur	48.81	61.52	35.93	59.56	70.47	48.73
25	Ramanagar	60.71	69.88	51.22	69.22	76.76	61.50
26	Shivamogga	74.52	82.01	66.68	80.45	86.07	74.84
27	Tumakuru	67.01	76.78	56.94	75.14	82.81	67.38
28	Udupi	81.25	88.23	75.19	86.24	91.41	81.58
29	Uttara Kannada	76.60	84.53	68.47	84.06	89.63	78.39
30	Yadgir	39.90	51.35	28.32	51.83	62.25	41.38
Karnataka		66.64	76.10	56.87	75.36	82.47	68.08

Source: Census of India 2011

Table-13
District wise Rural-Urban Literacy Rates by Sex : 2011 (Percentage)

Sl No	District	Rural			Urban		
		Total	Male	Female	Total	Male	Female
1	Bagalkot	64.20	75.77	52.58	78.58	86.55	70.65
2	Bengaluru (R)	75.16	83.06	66.80	85.37	89.57	80.95
3	Bengaluru (U)	78.21	84.54	70.92	88.61	91.66	85.27
4	Belagavi	69.28	79.12	59.20	85.56	91.10	79.95
5	Ballari	61.81	72.42	51.02	76.63	83.58	69.62
6	Bidar	66.73	76.28	56.82	81.81	87.42	75.88
7	Vijayapura	62.81	74.03	51.10	81.33	87.80	74.79
8	Chamarajnar	57.95	64.80	51.06	78.39	83.29	73.54
9	Chikaballapur	66.39	75.41	57.10	81.57	86.01	77.06
10	Chikkamagaluru	76.95	83.82	70.15	87.93	91.40	84.51
11	Chitradurga	70.68	79.19	61.91	85.89	90.22	81.55
12	D. Kannada	85.33	90.97	79.83	92.12	95.50	88.83
13	Davangere	71.77	79.63	63.69	84.02	88.19	79.77
14	Dharwad	72.09	80.98	62.72	85.92	90.49	81.31
15	Gadag	71.86	82.83	60.62	80.94	88.01	73.92
16	Kalaburagi	58.09	69.08	46.86	78.61	85.12	71.91
17	Hassan	72.79	81.41	64.29	88.36	91.94	84.81
18	Haveri	75.69	83.05	67.89	83.39	87.39	79.29
19	Kodagu	81.09	85.94	76.37	91.48	94.41	88.58
20	Kolar	69.08	78.11	59.82	86.13	90.05	82.18
21	Koppal	66.05	77.12	54.85	78.03	85.48	70.59
22	Mandya	67.78	76.34	59.21	83.24	87.78	78.75
23	Mysuru	63.29	70.64	55.78	86.09	89.50	82.67
24	Raichur	54.11	66.01	42.37	75.12	83.10	67.10
25	Ramanagar	65.26	73.96	56.36	81.54	85.47	77.51
26	Shivamogga	76.37	83.14	69.60	87.79	91.35	84.24
27	Tumakuru	71.66	80.48	62.71	87.32	90.93	83.67
28	Udupi	83.91	89.85	78.65	92.13	95.22	89.21
29	Uttara Kannada	81.31	87.63	74.87	90.73	94.49	86.91
30	Yadgir	47.05	58.02	36.05	72.01	80.03	63.92
	Karnataka	68.73	77.61	59.71	85.78	90.04	81.36

Source: Census of India 2011

Table-14
District wise IMR, CMR and MMR: 2011 – 2012

SI No	District	IMR	CMR	MMR
1	Bagalkot	43	49	163
2	Bengaluru (R)	27	31	119
3	Bengaluru (U)	15	17	73
4	Belagavi	37	42	155
5	Ballari	55	63	227
6	Bidar	31	35	134
7	Vijayapura	34	39	135
8	Chamarajnar	34	39	142
9	Chikaballapur	34	39	137
10	Chikkamagaluru	22	25	94
11	Chitradurga	42	49	170
12	D. Kannada	19	22	89
13	Davangere	38	44	163
14	Dharwad	35	40	157
15	Gadag	50	57	215
16	Kalaburagi	49	56	182
17	Hassan	20	23	98
18	Haveri	35	41	163
19	Kodagu	29	33	101
20	Kolar	34	39	140
21	Koppal	58	66	236
22	Mandya	26	30	111
23	Mysuru	39	44	155
24	Raichur	67	77	244
25	Ramanagar	27	31	114
26	Shivamogga	24	27	106
27	Tumakuru	34	39	124
28	Udupi	11	13	50
29	Uttara Kannada	25	29	99
30	Yadgir	49	56	186
Karnataka		35	40	144

Source: SRS, 2011, Note: IMR and CMR per 1000 live births and MMR per 100000 live births.

Table-15
District wise Sectoral Composition of Gross District Domestic Product (GDDP)
At Current Prices: 2010-11 (Rs. Lakhs)

Sl No	District	Primary Sector	Secondary Sector	Tertiary Sector	GDDP	Per Capita GDDP (in Rs.)
1	Bagalkot	299830	184669	362080	846579	45776
2	Bengaluru (R)	163583	378498	464883	1006965	105685
3	Bengaluru (U)	165802	4310273	8340770	12816846	175122
4	Belagavi	691427	623438	1005994	2320859	49187
5	Ballari	782947	419146	759995	1962087	86455
6	Bidar	170797	141961	306345	619102	36808
7	Vijayapura	347552	189795	361714	899061	44442
8	Chamarajnar	145125	70328	165984	381437	35289
9	Chikaballapur	155667	95786	221463	472916	36763
10	Chikkamagaluru	311130	103779	336572	751482	58834
11	Chitradurga	331499	134131	380996	846626	49819
12	D. Kannada	239365	498360	1230292	1968018	92630
13	Davangere	319957	182045	456888	958890	47820
14	Dharwad	163684	360861	870975	1395520	77697
15	Gadag	129853	102185	245459	477496	43887
16	Kalaburgi	252190	241590	529761	1023541	42040
17	Hassan	359563	177030	454977	991570	51441
18	Haveri	201030	120575	281934	603538	37459
19	Kodagu	263678	65164	243774	572616	93230
20	Kolar	211091	241124	386869	839085	54030
21	Koppal	189744	162076	245020	596839	44570
22	Mandya	296705	179605	309419	785729	39792
23	Mysuru	323662	547296	1046830	1917788	64860
24	Raichur	231506	167954	336456	735916	39364
25	Ramanagar	160979	151564	476579	789122	68399
26	Shivamogga	297313	243953	467332	1008597	54848
27	Tumakuru	439975	371639	574504	1386119	47900
28	Udupi	189018	278355	472895	940268	75511
29	Uttara Kannada	204397	195241	406679	806317	53205
30	Yadgir	98794	68957	181638	349389	32641
Karnataka		8137863	11007378	21925075	41070316	69411

Source: Directorate of Economics and Statistics, GOK.

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