GOVERNMENT OF KERALA

PERSPECTIVE PLAN 2030 - KERALA

Volume IV

Social Sustainability

Kerala State Planning Board
National Council of Applied Economic Research

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Foreword

Sri. Oommen Chandy
Chief Minister of Kerala

Kerala Perspective Plan 2030 is a perception of the future, which reveals and points to something new, beyond what is already available and accessible. The goal of the Perspective Plan is to improve the quality of life of the people of Kerala to the level of Nordic countries (Sweden, Denmark, Norway and Finland), by 2030. These countries have achieved high material, human, social and ecological development and a highly regarded balance of all aspects of development. In order to get there, we need a framework that defines clearly where we are today, what challenges we face, where we want to be by 2030 and how to get there. Perspective Plan for a State/region means creating a set of alternative long term development strategies and integrated implementation approaches, for reaching the goal of future development.

Our future is about the people. This plan has been prepared after considerable consultations with various expert groups and citizens. The expected change would be to transform Kerala into a healthy and knowledge based economy, in which people enjoy high standards of living, a good quality of life and have access to quality education, health and other vital services.

The Vision of Perspective Plan 2030 is the creation of a diversified, knowledge economy with a resource-based industrial sector, competitiveness and productivity in agriculture, placing great emphasis on skills development. In addition, the Plan will promote competitiveness in all sectors, in terms of product quality and differentiation.

As required by this perspective, the State will operate a totally integrated, amalgamated, flexible and high quality education and training system, which prepares Kerala's learners to take advantage of a rapidly changing global environment, including developments in science and technology. This, in turn, would contribute to the economic and social development of the people of Kerala. Arising from the overall capacity building investments, Kerala will be transformed into a knowledge-based society, and changes in production and information technology will revolutionalize all aspects of the manufacturing process.

Perspective Plan 2030 is expected to reduce disparities and move the State significantly up the scale of human development, to be ranked on par with the developed countries in the world. There will thus be a pervasive atmosphere of tolerance in matters relating to culture, religious practices, political preference and differences in social background. The plan will facilitate equity in access to social services and facilities, as well as access to productive resources such as land, labour and capital. Kerala will be a just, moral, tolerant and safe society

with legislative, economic and social structures in place to eliminate marginalisation and ensure equity between women and men, the diverse and ethnic groups, and people of different ages, interests and abilities and harmony and peace in society.

The major challenge of this Perspective Plan is for all of us (Government, private sector, civil society, as well as individuals) to make a determined effort to concentrate on resolving, not just addressing, very important State level problems. This document: Perspective Plan 2030, presents a clear view of the major problems faced by the State and how these problems can be effectively resolved by deploying-to the fullest extent-our human and natural resources.

Kerala's future will also depend largely on the people themselves; much will depend on our ability and willingness to respond with innovation and commitment to new challenges. The immediate challenge we face as a State, now that we have a Perspective Plan document that defines our state's future development possibilities, is to ensure that the Perspective Plan is translated into reality. As a step in that direction, implementation strategies will be developed and human and financial resources will be mobilized. The programmes of Perspective Plan 2030 have specific targets and periodically, through the State Development Plans, we will evaluate the programme's performance. The success of the Perspective Plan depends on commitment not only of successive governments at the State level and local body level but also on the support we receive from the Union Government in achieving the goals. By the year 2030, with all of us working together, we should be the most developed state in India enjoying prosperity, interpersonal harmony and peace.

(Oommen Chandy)

Preface

Sri. K.M. Chandrasekhar
Vice Chairman, State Planning Board

Perspective Plan is a plan for a fairly long period, say 15 or 20 years, less detailed and less concrete than plans actually implemented scheme wise. The purpose of a perspective plan is to set a 'perspective' for the short term plans. The short term plans, so worked out, would be such as to lead to certain long term results. Thus it is neither a fully worked out plan nor just a theoretical exercise, but a framework within which concrete short term plans can be fitted.

Kerala Perspective Plan 2030 presents a clear view of where we are, where we want to go from here, and over what time frame. It is a vision that will take Kerala from the present into the future; a vision that will guide us to make deliberate efforts to improve the quality of life of our people. Creation of a knowledge-based economy is central to this Perspective Plan. It is designed as a broad, unifying vision which would serve to guide the State's five-year development plans and, at the same time, provide direction to government departments, the private sector, NGOs, civil societal and local Government authorities. Therefore, Kerala Perspective Plan 2030 will create policy synergies, which will effectively link long-term perspectives to short-term planning. The plan will be implemented through the next four Five Year Plans.

Unless and until there is commensurate increase in productive capacity, maintaining growth rates above 8 per cent may prove to be difficult to sustain in the long run. There is relatively high personal and regional inequality in Kerala. The State faces several problems: an aging population, rapidly increasing urbanisation and increasing pressures on natural resources, especially land and water. In a highly competitive business scenario, there is need to improve the quality of growth in terms of productive capacity, structural transformation and the quality of human development. Strategic planning is an essential first step to place a region on an upward trajectory.

One of the major principles upon which our Perspective Plan 2030 is based is 'partnership'. Partnership is recognised as a major prerequisite for the achievement of dynamic, efficient and sustainable development in the State. This involves partnership between government, communities and civil society; partnership between different branches of government, with the private sector (the business community), banks and financial institutions, nongovernmental organisations, community-based organisations and the international community; partnership between urban and rural societies and, ultimately, between all members of Kerala society. While the principle of sustainable development is the cornerstone on which the strategies for realizing the objectives of perspective Plan 2030, the driving force among the complex agents of our development comprises the sectors Tourism, Information Technology,

Education, Science and Technology, Health, Sustainable Agriculture, Energy, Social Justice, Gender Equality.

In support of the objectives of Perspective Plan 2030, capacity building will be pursued with the utmost vigour by both the private and public sectors to facilitate the implementation of the Plan. The capacity building process (including institution restructuring and building, and human resource development) will continue to be promoted by the existence of a suitable, economic resources and opportunities, and social norms which are conducive to sustained development. In order to realise the objectives of capacity building in Perspective Plan 2030, human resource information management systems will be strengthened; the ultimate objective is to balance supply and demand in the labour market and in this way achieve full employment in the economy. With determined effort to address macro economic imbalances, and to achieve effective implementation of the strategies and action plans suggested in this four volume document, there are strong possibilities of bringing our State on par with the status of developed countries by the year 2030.

Acknowledgements are necessary in full measure of those who helped us in the task of preparation of Perspective Plan 2030 in the State to suggest suitable framework for both long term and short term plans. We are thankful to the National Council of Applied Economic Research (NCAER), New Delhi and its officials, particularly, Dr. Shekhar Shah, (Director General), Dr. Aradhna Aggarwal (Coordinator of the team) and Dr. Bornali Bhandari (Fellow) for carrying out this task in consultation with various stakeholders and submitting the report in time. We are most grateful to the Chief Minister, Ministers and MLAs for their valuable guidance. We are obliged to the Government Secretaries, Heads of Departments, officials of line departments and experts involved in preparation of this document. Our sincere thanks to the general public and students who have offered valuable suggestions and comments on the draft report.

I would like to place on record the valuable inputs and contributions provided in shaping the document by the Members and Member Secretary of State Planning Board, Dr. D. Narayana, (Consultant, State Planning Board), Division Chiefs of State Planning Board and officials of Perspective Planning Division who have coordinated this initiative.

I am sure that Kerala Perspective Plan 2030 would serve as a blue print for the development of Kerala through shorter term Annual and Five Year Plans. We look forward to support and assistance from the Government of India to convert this Perspective Plan into reality.

(K.M. Chandrasekhar)

Contents

List of figures

List of tables

List of boxes

Acronyms

ADIC	India Alcohol and Drug Information Centre-India
AIMS	All India Medical Sciences
ANC	Ante-Natal Check-up
AVSR	Annual Vital Statistics Reports
BMI	Body Mass Index
BPL	Below Poverty Line
CH	Community Health Centres
C2G	Citizen to Government
CAG	Comptroller and Auditor General of India
CBHI	Central Bureau of Health Intelligence
CHIAK	Comprehensive Health Insurance Agency, Kerala
CHIS	Comprehensive Health Insurance Scheme
DH	District Hospitals
DHS	Directorate of Health Service
FAO	Food and Agriculture Organisation
G2B	Government to Business
G2C	Government to Citizen
G2G	Government to Government
G2P	Government to Public
GM	Gender Mainstreaming
GPI	Gender Parity Index
HDI	Human Development Index
ICAN	Indigenous Consumer Awareness Network
ICPD	International Conference on Population and Development
ICT	Information, Communication and Technology
IIPS	International Institute of Population Sciences
ILO	International Labour Organisation
IMFL	Indian Made Foreign Liquor
IMR	Infant Mortality Rate
KDF	Karunya Benevolent Fund

KLGSDP	Kerala Local Government Service Delivery Project
MC	Medical colleges
MDG	Millennium Development Goals
MHRD	Ministry of Human Resources Development
MMP	Mission Mode Projects
MMR	Maternal mortality rate
NeGP	National E-Governance
NFHS	National Family Health Survey
NFHS	National Family Health Survey
NGO	Non-Governmental Organisations
NRHM	National Rural Health Mission
P PI	Public-Private Initiatives
PH	Primary Health Centres
PAP	proportion of ailing persons
PHC	Primary Health Care Centres
RSBY	Rashtriya Swasthya BimaYojana
SC	Scheduled Caste
SCP	Special Component Plan
SSLC	Senior Secondary Level Completion that
ST	Scheduled Tribe
TH	Taluk Hospitals
TI	Transparency International
TSP	Tribal Sub-Plan
U5MR	Under-Five Mortality Rate
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Program
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNFPA	United Nations Population Fund
VAW	Violence against Women
VSS	Vana Samrakshana Samithi
WSSD	World Summit on Social Development

Appendix

Towards a Globally Competitive Kerala

An Innovator Lagging Behind?

Historically, Kerala was an innovator. It chartered a path somewhat different from that followed by other Indian states and many countries. Kerala's approach put human development at its centre — it emphasised education and health; upheld gender parity; and channelled public funds to schools, hospitals and infrastructure. Individual resources too were directed into areas such as private expenditure on health and education as well as to build health and educational institutions. The results of these policies and investments are there for everyone to see. Global recognition came, with Kerala celebrated as one of the few cases of 'good health at low cost' and, more generally, 'high human development at low per capita income'. The State stood alongside Cuba, Costa Rica and Sri Lanka on these parameters.

The high human development, however, had two dark spots: the 'outliers' who missed the larger gains in human development and the regional inequalities, which were not entirely independent of the 'outliers'. It also could not take growth to a new level. Hence, a new development model more responsive to local needs, which also responded to the voices of the poor and marginalised on the one hand and faced the challenges of growth on the other, had to be invented. An opportunity came Kerala's way in 1992 with the 73rd and 74th amendments to the Constitution of India and the consequent instituting of the third tier of government. Kerala took the lead in devolving the three Fs — funds, functions and functionaries — to the local governments. No other Indian state has thought it necessary to devolve over one-third of plan funds to local bodies and give them the freedom to experiment with local planning.

The enactment of the 73rd and 74th constitutional amendments ushered in a new era of decentralised democratic governance in Kerala. By giving a legal status to the rural (panchayats) and urban (municipalities) local bodies it intended to enable them to function as effective democratic self-government institutions. This ensured people's participation in local level planning and enabled them to be part of the development process. The effective functioning of local governments was, however, subject to the devolution of larger funds to them. Kerala has done this since 1996, the results of which are being taken note of.

Kerala has also made creditable progress in the reduction of poverty and the provision of public services through decentralisation. The Multi–Dimensional Poverty Index (MPI) constructed in terms of lack of access to education, health and other basic services has shown a remarkable reduction in the recent past in the State. For instance, the Adjusted Headcount Ratio for Kerala, which shows the percentage deprivation in terms of the MPI indicators, was 0.136 in 1999, the third lowest in India, and fell to the lowest at 0.038 by 2006 (Alkire and Seth, 2013[1]). The Multi–Dimensional Headcount Ratio too has performed very well. This is especially noteworthy for a state like Kerala, where deprivation levels were comparatively low by the 1990s, as it is generally difficult to bring it down further. The Population Census 2011 confirms the findings of Alkire and Seth as Kerala is reported to have the largest proportion of households with latrines and *pucca* houses. Access to basic services, the levels of which took over 40 years to reach, could be reached in less than half the time. These achievements are largely attributable to the experience of the past two decades of decentralisation ensuring local planning and people's participation.

* ***General Introduction is common to all volumes***

Kerala has continued with its human development achievements. Its local governments have strived to provide access to basic services to all and the State has reached income levels above the national average. While the quality of infrastructure and the quality of nutrition supplements in anganwadis and schools have shown an improvement, it is doubtful whether the quality of education has got much better. The infrastructure in primary healthcare centres and hospitals has improved, but a worrying public health situation persists. Kerala's growth rate has continued to move above the national average, but it is nowhere near the top; there are many states doing just as well if not better. Agriculture, where local governments have made many interventions, has slipped into negative growth in recent years. Even sectors where Kerala had the lead seem to have lost out: One of the first techno-parks was established in Kerala, but neither the State's exports nor its companies are visible at the very top. Companies based in some other states in India have gained a global reputation through high value addition, with marketing and effective branding. Unfortunately Kerala-based companies have yet to be recognised as major players in any field.

Kerala is part of a globalised world in which rapid change is a constant. In such a setting, the State's growth hinges on ensuring that it is competitive, accessible, liveable and safe. In order to achieve this, Kerala needs to foster an economic environment that helps businesses succeed, simultaneously holding on to the gains in human development and decentralised democratic governance. As the experiences of some of the world's leading nations show, a free, open and innovation-embracing economy can lay the foundation for thriving businesses, markets and investors, which, in turn, will create an impetus for development.

The US is still on top because it embraces innovation, helping promising businesses flourish irrespective of their size. Similarly, Germany is an industrial powerhouse because of its higher education and training sectors and infrastructure; its training and career track programmes are the envy of the world. Likewise, Finland's competitiveness stems from its top ranking position on parameters such as innovation, higher education and training institutions, health and primary education. Singapore is among the best in the world as it ranks high on infrastructure, financial market development, health, primary education and institutions. All these countries are great places for doing business, and that spurs growth.

The imperative for Kerala, therefore, is to create an international business climate, clearly prioritise investments and link spatial development and infrastructure. The State needs to work towards this goal alongside the central government and local governments, spelling out clearly defined responsibilities, simple rules and selective government involvement and by creating freedom of choice for individuals and companies. This new approach will require an overhaul of the State's policies and programmes. Kerala Perspective Plan 2030 (KPP 2030) seeks to set out the contours of such an approach.

Need for a Policy Change

A thriving private sector with new firms entering the market contributes to a growing economy. Governments play an important role by setting clear rules that create and support a dynamic ecosystem for firms. Without good rules, entrepreneurs have a hard time starting and building small and medium-size firms that are the engines of growth.

The World Bank's 'Ease of Doing Business' reports provide a snapshot of business environments across the world, including the bureaucratic and legal hurdles that entrepreneurs need to overcome to start a business. So where does India (and Kerala within the country) stand on creating an enabling environment for firms to start business?

The 11th edition of the report, released in 2014, ranks India at 134 of 189 countries in ease of doing business. In areas such as starting a business, dealing with construction permits, getting electricity, paying taxes, trading across borders, enforcing contracts and receiving insolvency, India is ranked

between 111 and 179. On the ease of registering property, India is somewhere near the halfway mark. It is only on parameters such as getting bank credit and protecting investors (both more of a central government domain) that India is ranked high, at 28 and 34 respectively.

While all the states and cities in India have similar legal and institutional frameworks, local regulations and the implementation of national laws vary. And these variations are not small. The report found that, "… it is easiest to start and operate businesses in Ludhiana, Hyderabad and Bhubaneswar. Starting a business is fastest in Mumbai and Noida, at 30 days, while it takes 41 days in Kochi." The report found that among the 17 Indian cities considered, Kochi ranks 16th overall. Kochi's does poorly on starting a business (16), dealing with construction permits (15), paying taxes (14) and receiving insolvency (10). Therefore, it seems the economic environment for doing business is not very conducive in Kerala.[2]

Over the past few years, The Institute for Competitiveness, India has regularly published 'State Competitiveness reports', a 'Manufacturing Competitiveness Index' and a 'City Liveability Index'. The Manufacturing Competitiveness Index is constructed based on four inter-related factors — company operations and strategy, state business environment, social infrastructure and political institutions and macroeconomic indicators. In the index for 2014 Kerala is ranked 'medium' along with Chhattisgarh, Madhya Pradesh, Uttar Pradesh and others, way below the 'medium and strong' category (Uttarakhand, Karnataka and Andhra Pradesh) and 'strong' category (Punjab, Haryana, Tamil Nadu, Gujarat and Maharashtra). Kerala's score at 58.30 is only about six or seven points above the lowest scoring Meghalaya (51.47) and Bihar (52.35), while Maharashtra scores highest at 67.07.[3]

Similarly, the Liveability Index 2013 computed for 50 Indian cities puts Thiruvananthapuram at 19, Kozhikode at 21 and Kochi at 24. The cities are ranked on the basis of demographics, education, health and medical standards, safety, housing conditions, socio-cultural and political environment and economic environment, and 20 constituent sub-pillars. Surprisingly, all three cities of Kerala are not only ranked low, but have also slipped in their rankings from 2010: Thiruvananthapuram from 16, Kochi from 12 and Kozhikode from 15. This suggests that over the past three years, other cities have been improving their liveability standards relative to these three cities in Kerala.[4]

The 'India Public Policy Report 2014' goes beyond the ease of doing business and competitiveness and liveability indices and assesses public policy effectiveness in the broad area of well being. The policy effectiveness index presented in the report is a composite of four component indices — livelihood opportunity index, social opportunity index, rule of law index and physical infrastructure development index. The component indices reflect livelihood opportunities, socially meaningful life, security of life and rule of law and amenities for a sustained improvement in living standards. The indices have been estimated for four points of time, 1981, 1991, 2001 and 2011. The analysis at the state level shows that Kerala's rank, which was 18 in 1981, after showing a slight improvement by 1991 (rank 16) has dropped to 20 in 2001 and 21 in 2011. Kerala seems to be doing well on gender equality, reducing infant mortality rate and raising school education. But in terms of crime, inequality in consumption, proportion of underweight children and access to electricity, water and sanitation, the State's performance is poor.

Similarly, Kerala does rather poorly on factors such as the time taken to obtain construction permits, get electricity connections, pay taxes and other similar services required to run a competitive businesses; the delays involved are among the longest in India. The State's manufacturing competitiveness is poor because of a weak business environment, unhelpful social infrastructure and political institutions; it does not appear to provide sufficient livelihood and social opportunities. Overall, it seems that Kerala does not provide a conducive environment for starting a business. This possibly explains why few businesses are started, and grow, in Kerala.

What Trajectory to Take?

Encouraging, sustaining and enhancing growth will require decisive action by the State's leaders in order to boost its competitiveness and improve its future economic outlook. Reforms and the right set of investments to enhance competitiveness are crucial for the economic transformations that can lead to sustained higher growth and development over the long term. It is, therefore, imperative that competitiveness — the set of institutions, policies and factors that determine a country's level of productivity — features high on the economic reform agenda.

A competitive economic environment is built on eight pillars, of which the first is the institutional environment determined by the legal and administrative framework within which individuals, firms and governments interact to generate wealth. The quality of institutions has a strong bearing on competitiveness and growth. The role of institutions goes beyond the legal framework. Government attitudes toward markets and freedoms and the efficiency of its operations are also very important. Excessive bureaucracy and red tape, overregulation, corruption, lack of transparency and trustworthiness and the inability to provide appropriate services can considerably slow the process of economic development.

An equally important factor in the institutional environment that determines investor interest is the credibility of the government. A government that promises, but fails to deliver will not attract as much interest as a government that offers an answer after careful examination of a proposal and sticks to its decision with firmness, regardless of opposition from pressure groups. A recurring and persisting gap between promises and delivery will quickly lead to the loss of all credibility of the government among entrepreneurs, adversely affecting the business environment.

The second pillar is infrastructure. It is critical for ensuring the effective functioning of the economy as it is an important factor in determining the location of economic activity and the kinds of activities or sectors that can develop within a region. Well-developed infrastructure reduces the effect of distances, lowers costs and reduces inequalities in a variety of ways. Effective modes of transport — quality roads, railway, ports and air transport — enable entrepreneurs to get their goods and services to market in a secure and timely manner and facilitates the movement of workers to the most suitable jobs. The quality of electricity and telecommunications too play an important role.

The third pillar of a competitive economic environment is health and primary education. A healthy workforce is vital to a region's competitiveness and productivity, not to mention the State's well being. Workers who are ill cannot function to their potential and will be less productive. Poor health leads to significant costs for businesses, as sick workers are often absent or operate at lower levels of efficiency. Catastrophic health expenditure could also greatly reduce savings and investment. This pillar takes into account the quantity and quality of the basic education received by the population, as basic education increases the efficiency of each individual worker. Often, workers who have received little formal education can carry out only simple manual tasks and find it much more difficult to adapt to more advanced production processes and techniques, thereby constraining productivity growth.

The fourth pillar is quality higher education and training, which is crucial for economies that want to move up the value chain, beyond simple production processes and products. Today's globalising economy requires countries to nurture pools of well educated workers, who are able to perform complex tasks and adapt rapidly to their changing environment and the evolving needs of the production system. Higher education is also crucial for sustaining a knowledge economy by providing a continuous supply of personnel for centres of higher learning.

The fifth pillar is labour market efficiency. The efficiency and flexibility of the labour market is critical to ensure that workers are allocated to their most effective use in the economy and provided with

incentives to give their best effort in their jobs. Labour markets must, therefore, have the flexibility to shift workers from one economic activity to another rapidly and at low cost, and to allow for wage fluctuations without much social disruption. Efficient labour markets must also ensure clear, strong incentives for employees along with efforts to promote meritocracy in the workplace, and must create gender equity in the business environment.

Development of the financial sector is the sixth pillar of a competitive economic environment as it allocates the resources saved by citizens, as well as those entering the economy from abroad, to their most productive uses. It channels resources to entrepreneurial or investment projects with the highest expected rates of return rather than to the politically connected. A thorough and proper assessment of risk is, therefore, a key ingredient of a sound financial market. Therefore, economies require sophisticated financial markets that can make capital available for private sector investment from such sources.

The seventh pillar is technological readiness, which is the agility with which an economy adopts existing technology to enhance the productivity of its industries. It also includes a specific emphasis on its capacity to fully leverage information and communication technology (ICT) in daily activities and production processes to increase efficiency and enable innovation for competitiveness. ICT has evolved into the 'general purpose technology' of the era, given its critical spillovers to other economic sectors and its role as industry-wide enabling infrastructure. Therefore, ICT access and usage are key enablers of a region's overall technological readiness.

The eighth pillar, innovation, can emerge from new technological and non-technological knowledge. Non-technological innovation is closely related to the know-how, skills and working conditions that are embedded in organisations. In the long run, sustained gains in productivity depend on innovation, which is a strong source of market power that entrepreneurs compete with existing firms to build. The introduction of innovation is responsible for both the progress and instabilities of the capitalist economic system. Entrepreneurs positioned at the top of the knowledge economy excel at ideating and taking these ideas to the market. Ideation requires powerful higher education initiatives provided by dynamic centres of learning and university-industry linkages. The creative arts and broader humanities too can drive, produce, apply and diffuse innovation in different, but equally useful ways compared to the science and technology sector. Therefore, a broad platform that embraces both science and technology and the arts and humanities needs to be built: That is the fount of knowledge creation. Innovation is also not just about coming up with new products — it is also about doing things differently. For this to happen, the entire innovation ecosystem, which consists of a set of closely intertwined and reinforcing factors, is critical.

Local governance (increasingly urban governance, as the State is urbanising rapidly) too has an important role to play in sustainable competitiveness. Globalisation and state devolution establish the contemporary context of urban governance. Economic globalisation has made cities more vulnerable to the ebbs and flows of the international economy, compelling them to compete for business investment. Cities have to become competitive to be successful. Cities such as New York, London and Paris, which have adjusted to the 'new economy' that emphasises corporate and financial services, high technology, higher education and tourism and entertainment services, are advantageously placed to attract mobile capital and skilled workers. If cities have to work towards such a goal, then more administrative authority and functional responsibility should be transferred from the higher to the lower levels of government.

Economic globalisation involving mobile capital investments, the emergence of world wide economic sectors and large movements of domestic labour has changed the context of urban governance. In an increasingly competitive world, urban governance has been forced to transform from welfarist models into economic development models where city governments, both elected members and officials,

have to become more entrepreneurial. Globalisation demands that pro-growth and environmental sustainability concerns be balanced. The mode and manner of governing has to change from hierarchism and bureaucracy to self-organising networks. The general consensus is that positive benefits are to be had from cities taking an entrepreneurial stance towards economic development. Urban entrepreneurialism could take advantage of the resource base, location or physical and social infrastructure created through public and private investments. Direct interventions to stimulate the application of new technology, the creation of new products or the provision of venture capital to new enterprises may also be significant. International competitiveness also depends on the qualities, quantities and costs of local labour supply. Labour of the right quality, even though expensive, can be a powerful magnet for new economic development.

Sustainable competitiveness is the keystone of rapid economic growth in a globalising era. Throughout the second half of the 20th century, increasing productivity and economic growth went hand in hand with better and improving living conditions. But it does not seem to hold true any longer. The relationship between economic competitiveness and social and environmental sustainability has become tenuous. The need to consider sustainability along with competitiveness has become all the more relevant. The World Economic Forum puts it as competitiveness adjusted by two additional pillars: The **social sustainability pillar,** *"the set of institutions, policies and factors that enable all members of society to experience the best possible health, participation and security; and to maximise their potential to contribute to and benefit from the economic prosperity of the country in which they live"* and the **environmental sustainability pillar** which measures *"the institutions, policies and factors that ensure an efficient management of resources to enable prosperity for present and future generations."* [5]

In 1987 the Brundtland Commission defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This initial concept, which mainly focused on the environmental aspects of development, has evolved significantly over time and today it is widely accepted that sustainability also includes economic and social dimensions. But the complex relationship between competitiveness and sustainability is poorly understood. Although environmental limitations to growth are important, recent studies have shown that the state of the environment tends to worsen during the initial stages of industrialisation, but then improves as income increases — a concept known as the Environmental Kuznets Curve. But it cannot be assumed that environmental sustainability will be automatically achieved at a certain income level. In order to preserve future generations' ability to benefit from nature's resources and services and increase standards of living, policies and measures that ensure an efficient use of natural resources as well as the adoption of clean industrial processes need to be in place. The efficient use of natural resources includes both managing exhaustible raw materials and using renewable resources within their regenerative capacity in order to minimise production costs, ensure the legacy of future generations and reduce pollution.

Environmental degradation can impact the way ecosystems work and reduce biodiversity. Biodiversity losses caused by deforestation or significant land use changes increase the vulnerability of terrestrial and aquatic ecosystems. Biodiversity is also the key driver of economic growth because it provides the basis for many innovations in pharmaceuticals and cosmetic products. Also, investing in the greening of tourism can reduce the cost of energy, water and waste and enhance the value of biodiversity. And overall, opinions are moving towards the belief that 'green' growth leads to higher energy and resource efficiency.

The concept of social sustainability is not widely accepted, but human rights, equity and social justice are its recurring themes. While the relationship between social sustainability and development is hazy, the sense is that an unbalanced social model can undermine the stability of the growth process for both current and future generations. If economic benefits are perceived to be unequally distributed

within a society, discontent could erupt, undermining the growth process. Thus, the growth process needs to be inclusive, which is a prerequisite for social cohesion. Social exclusion, apart from being non-democratic, could have a negative impact on competitiveness. Lack of access to basic necessities, gender discrimination, polarisation and lack of social security could be serious problems.

Social sustainability and environmental sustainability are interrelated. Institutions that set clear rules on managing the environment increase the quality of life and provide better opportunities to the whole community. Well managed environmental systems may also translate into equitable income flows. Environmental degradation, on the other hand, could seriously affect the health of the population, especially the underprivileged segments, while pressures on water and land could aggravate social instability. That demography, poverty and environmental sustainability are intricately related is well known.

Combining the ideas of competitiveness and sustainability, sustainable competitiveness may be defined as "the set of institutions, policies and factors that make a nation remain productive over the longer term while ensuring social and environmental sustainability," (Schwab, 2013: 61[6]). **It is a combination of competitiveness or high quality growth, an equitable society and sustainable environment that creates the ideal conditions for life.**

Kerala wishes to be one such society by 2030, and that requires developing policies that balance economic prosperity with social inclusion and environmental stewardship. KPP 2030 explores the current status of Kerala on these dimensions and offers strategies to take the State towards sustainable competitiveness.

Vision in terms of Measurable Indicators

In order to assess progress and facilitate meaningful discussions on a vision for Kerala 2030, a series of indicators have been identified. These include economic prosperity, quality of life, equitable society and environmental sustainability.

Economic prosperity

- To achieve a compound annual growth rate of 7.5 per cent in GSDP per capita for the next 20 years.
- Increase per capita income from the current US$4,763 (in terms of purchasing power parity of 2005[7]) to US$19,000 by 2030, and then to US$36,000 by 2040.
- Achieve sectoral growth rates of:
    - √ 2 per cent minimum growth in agriculture
    - √ 9 per cent in manufacturing
    - √ 9 per cent in construction
    - √ 7.5 per cent in communication
    - √ 10 per cent in the education and health sectors

Quality of life

- Increase the share of the education and health sectors in GSDP to 15 per cent from the current 11 per cent by 2030.
- Increase the enrolment ratio in higher education to 48 per cent by 2030.
- Create health security for all.
- Move Kerala to the highest category of the UNDP human development index.

- Achieve high standards of living with a focus on:
  - √ The growth of smart urban and rural areas.
  - √ Transforming Kochi into a global city to take it onto A.T. Kearney's Global Cities Index.

Equitable society

- Reduction in:
  - √ Unemployment rate from 9.9 per cent in 2011−12 to 2 per cent in 2031 (reduce the female unemployment rate from 26.2 per cent to 5 per cent).
  - √ Gini coefficient of economic inequality from around 45 per cent in 2009−10 to 23 per cent in 2031.
  - √ Poverty rate from 7.1 per cent in 2011−12 to 1 per cent in 2031.
- Maintaining a culturally diverse, safe and just society

Environmental sustainability

- Upgrade ecosystems, biodiversity and resources through sustainable production systems and consumption.
- Protect wetlands.
- Conserve the World Heritage biodiversity of the Western Ghats.
- Increase energy efficiency to save 10 per cent of Kerala's energy and water consumption by 2030.
- Recycle between 60 and 75 per cent of waste generated depending on the type of waste.
- Identify and maximise the use of sustainable resources.

Organisation of the Perspective Plan

The framework for the development of the Kerala Perspective Plan 2030 has been conceived in terms of innovation-embracing entrepreneurs at the centre of the economy, with eight pillars of institutional elements, infrastructure, health and primary education built on the foundational elements of environmental sustainability and social sustainability (See Figure 1). The driving force of the economy is envisioned as the stream of entrepreneurs in all sectors of the economy, embracing innovation, pushing for new technology and raising productivity to be at the forefront of the global economy. An economy can only be as dynamic as the entrepreneurs and enterprises of the state, as emphatically put by Lazonick (2011[8]) comparing the development experience of industrial Great Britain and post-war Japan with the technology boom in Silicon Valley. As argued by him, the creation and growth of indigenous enterprises was the necessary ingredient for lasting development. While investment in education and foreign direct investment may make important contributions to growth, these are insufficient without entrepreneurial activity within the domestic economy (See Chapter 12 in Volume II for an elaboration of the theme).

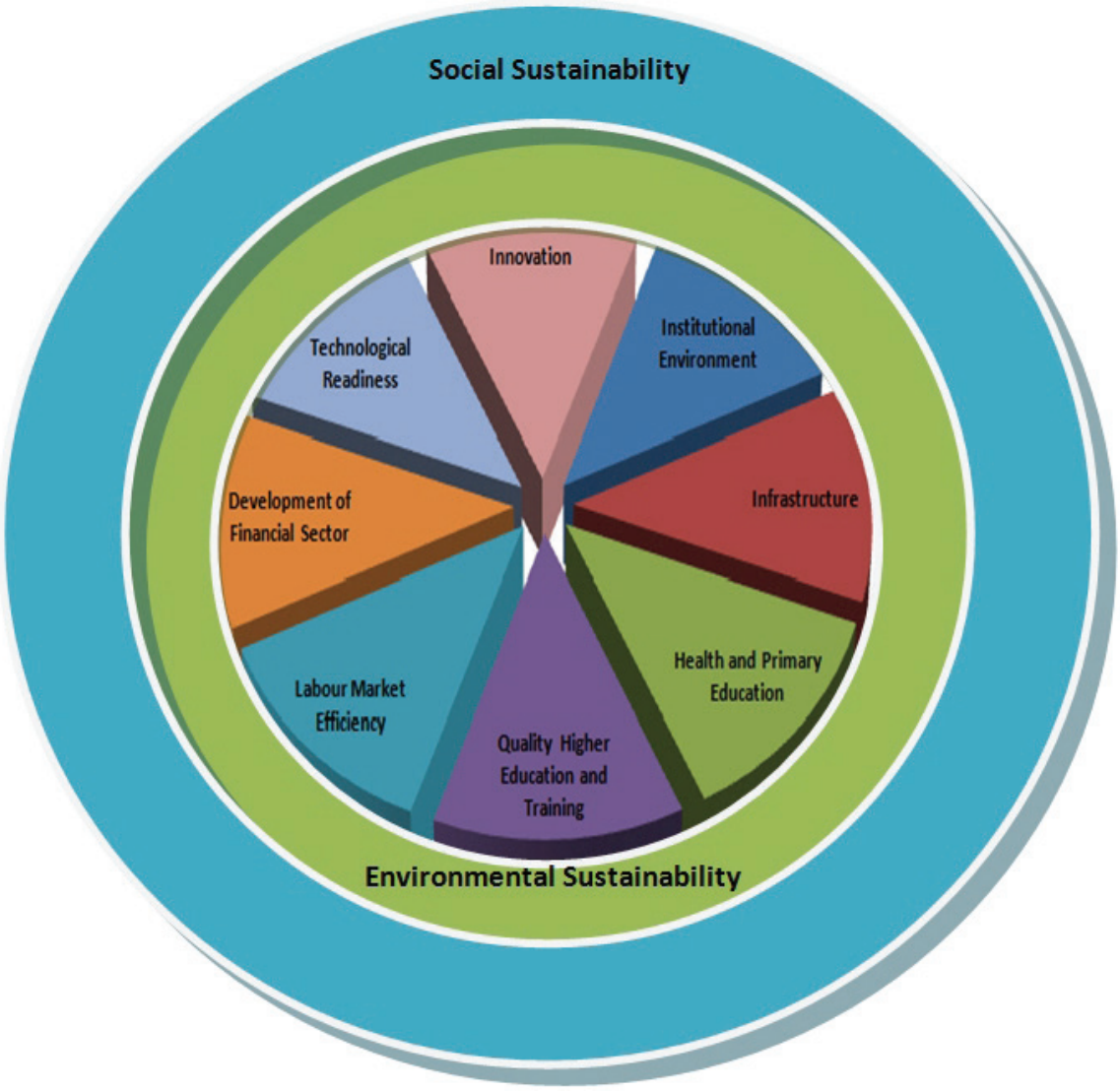


Figure 1. Framework of Kerala Perspective Plan 2030

The approach of KPP 2030 is to build on Kerala's achievements, discuss the challenges faced by the State in a globalising economy and think up strategies to achieve the goals. That is why KPP is organised in four volumes, which elaborate on four interconnected themes that together constitute its central tenet of balancing economic prosperity, social inclusion and environmental stewardship (See Figure 2 for the diagrammatic representation). Volume I begins with an analysis of the growth of the economy, identifies growth drivers and dynamism of enterprises in different sectors and then goes on to discuss strategies needed to spur entrepreneurial initiative. Seven material production sectors are taken up for detailed analysis to ascertain the nature of entrepreneurial activity, the evolution of the policy environment and the challenges faced by them in each of the sectors. Volume II takes up the eight pillars of entrepreneurial activity, except some, such as health, that are more foundational and are taken up in the social sustainability volume (Volume IV) and some such as infrastructure that go into the environmental sustainability volume (Volume III). Thus, each volume has its own merit and adds to overall value.

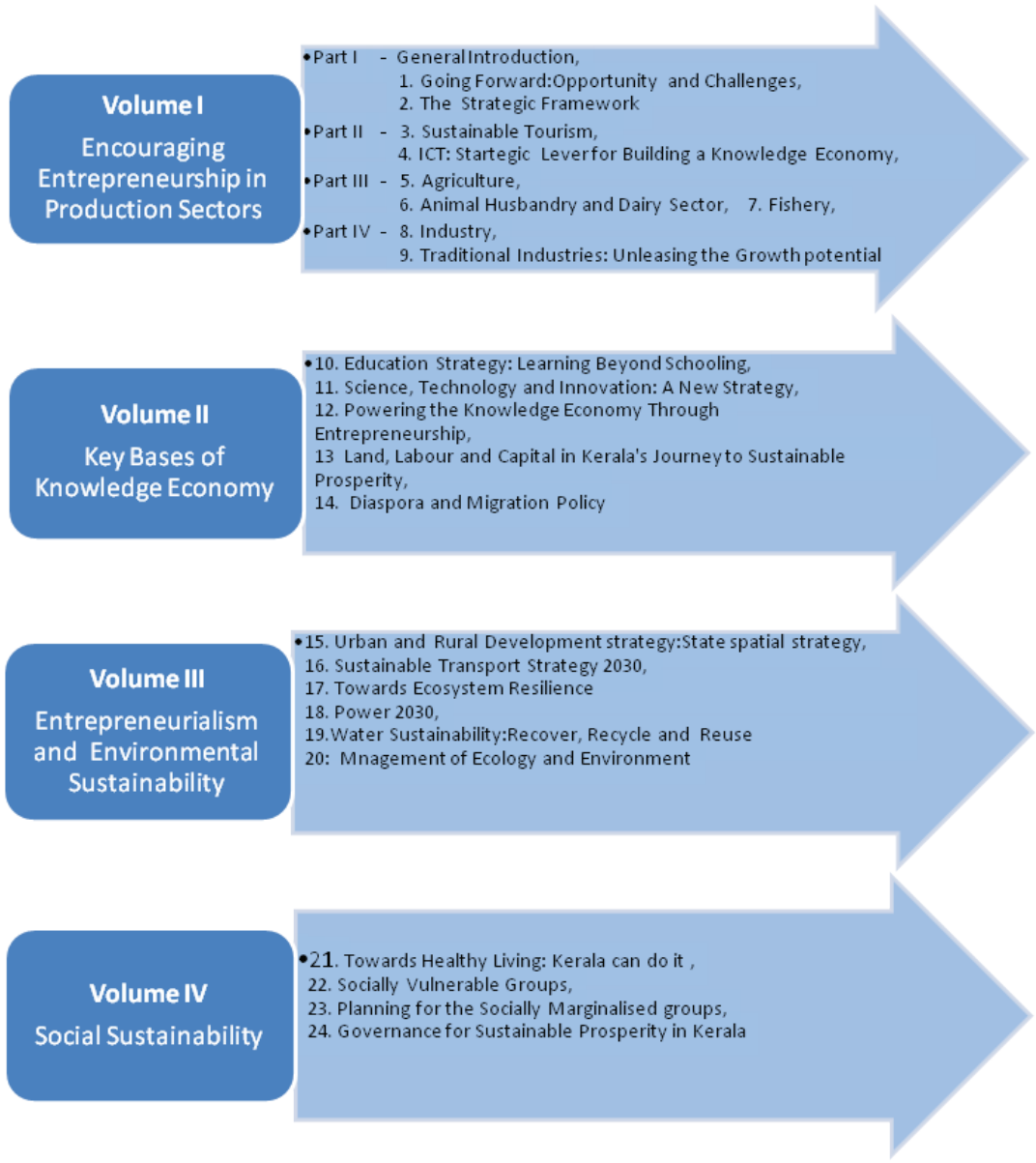


Figure 2. Organisation of Kerala Perspective Plan 2030

Volume I begins with a short introduction and continues in four parts. Part 1 contains Chapters 1 and 2, that discuss the opportunities and challenges, and the strategic framework required for the economy to move forward. Part 2 contains two chapters, one on tourism and the other on ICT, the two sectors that offer great opportunities in a globalising economy. Unconstrained by the market and receiving lots of government support, the two sectors, however, show contrasting performances in Kerala. Tourism zoomed ahead, establishing the Kerala brand across the world and setting benchmarks for other Indian states. ICT on the other hand, despite early advantages, lagged behind and is finding it challenging to make its presence felt in a very competitive market. Part 3 on agriculture, livestock and fisheries analyses these ailing sectors with some sparks of success. Part 4 on industry, including traditional industry, draws attention to the constraints and the major steps needed to take the sector out of decline. Comparing and contrasting the growth experience of the different sectors lays bare the fact that innovation and entrepreneurship go side by side in dynamic sectors such as

tourism and subsectors such as cardamom or natural rubber cultivation. Other sectors lack the two and languish. The centrality of innovative entrepreneurs for growth dynamism of the economy is well brought out.

Volume II is on the Key Bases of the Knowledge Economy. Education, innovation and entrepreneurship are among the factors that foster competitiveness. By responding to the needs of labour markets, educational systems help economies avoid skills gaps and ensure that adequately trained human capital is available. Kerala's education sector, a key base of the knowledge economy, has to be transformed to raise the skill levels of those who pass through it and enter the labour force, as well as of those who enter institutions of higher learning. In short, it needs to become a knowledge-creator of excellence.

Education in the form of dynamic centres of higher learning also supports the growth of entrepreneurship and a culture of ideas and innovation. Entrepreneurs are at the pinnacle of the knowledge economy, creating new products, services, technology or production methods.

Similarly, the creative arts, and the broader humanities stream, can drive, produce, apply and diffuse innovation in different, but equally useful ways compared to the science and technology sector. Consequently, a much broader platform that embraces both science and technology and the arts and humanities needs to be conceived. The ever expanding cycle of innovation is transformed into economic progress when capital and labour shift from failing technologies to those at the cutting edge. These movements of factors of production are greatly affected by factor rigidities, so the move from the sphere of ideas to the market can be greatly eased by loosening the factor rigidities. Institutions, therefore, have to be designed to ease the rigidities of the land, labour and capital markets.

The diaspora too can play an active role in the growth of the knowledge economy by making use of its global exposure to ideas, markets and institutions. This exposure can be then brought home to Kerala in various ways. Transitioning to a knowledge economy, thus, calls for an inclusive strategy that brings together education, science and technology, higher learning, entrepreneurship, land and labour rigidities and the diaspora.

Volume III is on Environmental Sustainability. The fact that economic growth requires extra inputs of natural resources can be attributed to increased urbanisation and changing consumption patterns. Urbanisation leads to substantial use of raw materials for building urban infrastructure such as water supply and sewage systems, roads, buildings and so on. Similarly, rising incomes change consumption patterns, raising the demand for a number of goods, the production of which requires many natural resources. For Kerala, these are issues to consider, as the depletion of natural resources will affect the Western Ghats, wetlands and coastal regions.

The State also faces new challenges in the context of the Kasturirangan Report and related notifications. Many parts of Kerala come under its purview, thus introducing limitations on economic activity in several regions of the State. At the same time, the notifications are also an opportunity for the State to channelise reverse migration from the hills to its urban centres more systematically, while using areas falling within the Western Ghats for forest regeneration and preservation.

Likewise, the environmental sustainability of Kerala's urban areas has to be in sync with the distinctive patterns of urbanisation in the State. For instance, overall population growth in the State is low and is concentrated in a few urban agglomerations. These urban centres need to have sustainable power, water, sanitation and transportation systems of international standards. Likewise, they need proper green spaces, while the Ramsar sites located around them have to be preserved and the coastal zones have to be conserved.

Volume IV is on Social Sustainability. Social sustainability is achieved when the economy has a fair and equitable health and social security system. It has two parts: one, preserve and protect the health of the population, and two, protect and support the vulnerable — the aged, disabled, disadvantaged and marginalised. The first requires investments in health, which has forward links to economic growth and productivity. Financing, architecture and governance of health of the population to reduce the IMR, CMR, MMR and infectious and lifestyle disease burden is its goal. The burden of lifestyle diseases is aggravated by smoking, consumption of high calorie processed food and consumption of alcohol. Injuries from traffic accidents form an additional burden. Financial protection against catastrophic health expenditure is also part of the healthcare system. The social sustainability pillar of KPP 2030 intends to reduce the difference between Kerala and the developed countries on parameters such as infectious, maternal and child mortality outcomes and lifestyle diseases.

The principle underlying the social security system is solidarity. This is solidarity between various social groups, especially between the employed and unemployed, the young and the old, the healthy and the ill and so on. Social solidarity evolved from simple insurance against social risks to a guarantee of subsistence security. The charter of the socially insured is basically to protect the population through a set of rules to be respected by all social security institutions; the automatic adaptation of social benefits to the evolution of the consumer price index; and electronic governance of social security institutions by reducing the number of forms, reducing the number of times information is asked for and reduction in the time needed for filling forms through the increased use of ICT. By 2030, Kerala's social security system will be comparable to that in any of the Nordic countries.

Governance systems too form the base of social sustainability. It is often said, "A common problem for many governments is that they use yesterday's institutions to meet tomorrow's problems." These are blunt instruments, which have to be replaced. Kerala has already made some progress with decentralisation initiatives following the 73rd and 74th amendments to the Constitution. Local governments are participatory, with their gram/ward sabhas. The aim is to go further with participatory budgeting and transparent project formulation and implementation so that the efficiency of public spending can be enhanced. But other government institutions are archaic and call out for a complete overhaul.

The local government system in Kerala may be characterised as welfarist. The bulk of the funds that flow from the central and state governments go towards meeting social security and welfare activities. This will have to change because urbanisation is taking place at a rapid pace and in an increasingly competitive world, urban governments have to become more entrepreneurial.

Kerala will have to balance the welfarist and pro-growth or urban entrepreneurialism models of governance. Sustainable competitiveness calls for a system of urban governance that creates conditions for higher local economic growth. As the source of such growth is knowledge-intensive business, urban governance should be building a favourable image of the city to attract investment. Urban entrepreneurialism needs to take advantage of the local resource base, location or physical and social infrastructure to push for sustainable competitiveness. Urban governments will, therefore, need to explore all the options before them, with some leveraging their status as tourism or entertainment centres and others growing as centres of higher education or finance. This requires the institutional structure of local government-state government interaction to move in the direction of promoting urban entrepreneurialism, with the state government creating appropriate incentives to facilitate the process.

Some Limitations

Perspective plans such as KPP 2030 detail a vision of where a community wishes to be in 20 or so years. Any vision is a projection, a visualisation of something that does not exist today; it combines

what exists with what is possible. The possibilities generated by the imagination are born out of what exists, which in turn is the result of the past that is our history and the evolution of the economy and society to the present. While imagination remains in the realm of the mind, creativity is its result and tangible creation.

This requires a depth of understanding that is multi-layered, with the past and present serving as a continuum as well as a spur to further evolution. Such deep understanding is the result of observation, analysis and introspection. In other words it stems from a critical analysis of the reality around, an analysis that draws from research studies and experience. This is essential if visualisation is to be kept within realistic limits.

This is broadly the perspective with which this document needs to be viewed. Therefore, KPP 2030 can only be as rich as the critical analysis of different sectors that were available during its preparation. Kerala is fortunate to have detailed studies on a number of sectors such as health, education, social vulnerability, governance and marginalisation and so on. Equally, there are few comprehensive studies on a number of sectors such as urbanisation, transportation, the environment and so on. The integral link between the idea of future and the present may be perceived as strong for some sectors and weak for others in the document, depending on availability of data and baseline scenarios. While an effort has been made through various rounds of stakeholder consultations and insightful study of relevant documents and best practices around the world, gaps do remain.

It is possible that some of these issues have been pointed out by experts during the workshops held to review the draft document. But the absence of adequate studies could be a serious challenge to bridging the gap between the reality that is Kerala's society and economy today and a vision of the future. This, therefore, needs to be viewed as a stimulus for further studies rather than a rigid document.

Reference

[1] *Alkire, S. and S. Seth (2013), Multidimensional Poverty Reduction in India between 1999 and 2006: Where and How?, OPHI WP 60, 2013.*

[2] *www.doingbusiness.org/India and www.doingbusiness.org*

[3] *businesswireindia.com/news/news-details/states-india-assessed-ranked-according-different-stages-development-ma/38139*

[4] *Liveability Index 2010: The Best Cities in India, A CII–Institute for Competitiveness Report*

[5] *http://www.weforum.org/content/pages/sustainable-competitiveness/ accessed 27 March 2014*

[6] *Klaus Schwab;The Global Competitiveness Report 2012–2013,World economic forum.*

[7] *Purchasing power parities (PPPs) are indicators of price level differences across countries. They indicate how many currency units a particular quantity of goods and services costs in different countries (http://epp.eurostat.ec.europa.eu/portal/page/portal/purchasing_power_parities/introduction).*

[8] *Lazonick,M.(2011) Entrepreneurship and the Developmental State, In W. Naudé (ed), Entrepreneurship and Economic Development (254−270). Palgrave Macmillan*

Social Sustainability

Sustainable competitiveness calls for social sustainability to contribute to and benefit from economic prosperity. All members of society should be able to experience the best possible health, participation and security to achieve social sustainability. That a healthy population is an engine of growth is now widely accepted and improvements in health and nutrition have been associated with GDP growth. Such improvements will only be possible through a strong health system. The major functions of a health system such as service delivery, health workers, drugs, information systems, governance and financing require substantial investment commitments. The ability to offer a continuum of care — from primary to advanced surgical care — is one of the main characteristics of a well-developed health system. Such a system requires investments to coalesce into a multi-functional health service delivery platform to provide life-long care to people. To create a healthy population, systems that are outside the health system play an important role. The key risk factors associated with infectious diseases, lifestyle diseases, injuries, tobacco use and unsafe roads need to be tackled by laws and regulation, information and communication and improvements in built environment. Local governments too have an important role to play here.

Social security is one of the foundations of social sustainability. Social security should be designed to ensure that everyone enjoys at least basic income security that is sufficient to live, guaranteed through transfers in cash or kind, such as pensions for the elderly and persons with disabilities, child benefits, income support benefits and/or employment guarantees and services for the unemployed and working poor. In the context of the global campaign 'Social Security for All', the aim is to achieve universal coverage of the population with at least minimum levels of protection, and progressively ensure higher levels of protection. Social protection measures have to be in place to act as a cushion against the instabilities caused by 'creative destruction' and to serve as a macroeconomic stabiliser in any society in the 21st century.

Effective governance institutions and systems that are responsive to public needs deliver essential services and promote inclusive growth. Good governance promotes freedom from violence, fear and crime, and peaceful and secure societies that create the stability needed to sustain development investments. Effective and acceptable governance is also an end in itself. For development to be sustainable —economically, socially and environmentally — a new approach that addresses the political and technical aspects of development solutions is needed. The quality of governance, thus, plays a defining role in supporting inclusive social development, sustainable competitiveness, environmental sustainability and security.

Governance includes relations between the state and the people. Mechanisms of good governance include transparent democratic institutions as well as efficient and effective public services. Participation is necessary to ensure broad consensus in society on economic priorities and that the voice of the poor and the most vulnerable is heard. Openness and transparency in governance have both intrinsic and instrumental value and are essential to send strong signals to citizens and investors to attract more investment. Citizens have a right to know how revenue and resources are being used. It is recognised that hierarchical, government-driven approaches to development are unsuitable for the complex and multi-sectoral challenges of sustainable development. The use of ICT is also opening up new forms of engagement between citizens, the state and the private sector. Thus, there is a high premium on the capacity of the public sector to innovate and collaborate with people and business.

This volume on Social Sustainability is organised in four chapters — on Healthy Living, the Socially Vulnerable, the Socially Marginalised and Governance.

The chapter titled **Towards Healthy Living** traces Kerala's health achievements and discusses the challenges faced by the health system of the State. Kerala has already built a strong health system and has achieved for its people a level of healthcare, which is comparable with advanced countries in many respects. Despite this, there are major challenges. Shifting family structures, an aging population and increasing social inequities are all exacerbating health problems. Communicable and lifestyle diseases are adding to the burden. For Kerala, the health sector is the backbone of economic and social prosperity. While Kerala has a well distributed primary care system, efforts are being made to improve the higher levels of care. Several packages of services can be delivered in the primary care environment, but they alone are insufficient to handle treatment of injuries, complications from cardiovascular and other diseases. Consequently, the need to upgrade higher-level facilities has been recognised. Further, the importance of universal health coverage in terms of the proportion of the population covered, the percentage of costs covered and the percentage of interventions covered by prepaid schemes is being recognised. Systems have been put in place to cover close to 50 per cent of the population, which will have to be increased to cover the entire population.

The gains made by the socially vulnerable sections of Kerala's population are well known. In terms of literacy, life expectancy and mean age at marriage, women in Kerala score higher than those in any other state in the country. Still, incidence of crimes against women, rape and sexual harassment is high in Kerala; female health issues have assumed alarming dimensions; and the autonomy of women in household matters and their participation in economic activity is low. Kerala is in the midst of a unique and irreversible process of demographic transition that has resulted in an expanded elderly population. According to figures based on the 2001 Census, 2.7 per cent of the State's population is disabled. While strategies have been evolved to protect the vulnerable, the social infrastructure that is necessary for enhancing the quality of their life has to be considerably improved. Mainstreaming the concerns of socially vulnerable groups is needed to alleviate their problems. The chapter, **The Socially Vulnerable: Far to Go** addresses these issues.

The chapter titled **Planning for The Socially Marginalised Groups** deals with the special problems of Scheduled Castes and Scheduled Tribes in Kerala. Although the growth process in Kerala has been more inclusive than in other states of India, there are historical inequalities that have persisted over time and remain a potential source of conflict within the State. Kerala's strategy for its socially marginalised groups proposes different strategies for SCs and STs. While SCs are to be brought into the mainstream, STs' culture needs to be celebrated. However, both SCs and STs need targeted interventions in education and health to lessen historic inequities.

Good governance is one of the enablers in KPP 2030. The chapter on **Governance for Sustainable Prosperity in Kerala** discusses the current problems of governance and the reforms needed to take it to a higher level. It is said, "A common problem for many governments is that they use yesterday's institutions to meet tomorrow's problems." Therefore, it will require institutional, organisational and cultural changes in governance to improve its quality and fulfil the vastly increased duties of the government envisaged in the report. There is a need to build institutional capacity to address the problems of governance in the 21st century. The explosion of ICT has to be reflected in governance systems so that they become efficient, bringing down transaction costs. Fiscal sustainability too is an issue and the mode of resource mobilisation and expenditure has to undergo major changes. The administrative system has to be reformed to become citizen friendly and the recruitment and training of personnel has to support such reforms. The architecture of local governments has to be thought of, to deal with the form of urbanisation in the State. Overall, a considerable number of functions have to be decentralised and the system of governance has to go beyond replicating state level systems in local governments.

In the 'big bang' reform of the 1990s, local governments, led by the state government, were instrumental in taking the State forward in the equitable provision of a number of basic services and in bringing down multi-dimensional poverty in Kerala. Sustainable environment has begun attracting the attention of a number of them, but has not yet reached the critical threshold to make a perceptible impact, perhaps partly due to the lack of concerted support from the state government. But sustainable competitiveness is yet to attract the attention of local governments. The 'growth push' has to become a *mantra* of hundreds of local governments if the State is to move towards becoming globally competitive.

Chapter 21

TOWARDS HEALTHY LIVING: KERALA CAN DO IT

Chapter 21

TOWARDS HEALTHY LIVING: KERALA CAN DO IT

21.1 The Kerala Model

21.1.1 For over 40 years now, Kerala has been talked about as a model of 'good health at low cost'. But the health scenario of the last few years shows a reality at odds with this perception. Emerging diseases like chikungunya have almost assumed epidemic proportions in the last decade. Dengue is another disease that is spreading across the State. Traffic accidents are growing rapidly and lifestyle diseases have begun taking a heavier toll. Child mortality rates have not come down substantially over the past two decades. Overall, the picture of Kerala with all the trappings of a developed country seems to be fraying at the edges, especially with respect to lifestyle and environment-related diseases. These are huge public health challenges that call for systemic responses. Public health or an organised response by society to protect and promote health and prevent illness, injury and disability, needs to play a more active role.

21.1.2 Kerala can regain its eminence in healthcare only by building a health system on the following seven pillars. First, the well spread-out health institutions in the government system have to raise their standards and strive to obtain national accreditation. Second, the private healthcare sector has to be brought under a stringent regulatory framework to ensure that it is trusted for its quality and affordability. Third, tax-funded financial protection systems that cover almost the entire population have to be a goal. Fourth, local governments should be fully equipped to analyse civil registration and other data for local health planning. Fifth, the health challenges of vulnerable groups including the rapidly ageing population have to be addressed. Sixth, the institutional structure of healthcare has to undergo a major transformation to manage the health of the population in a rapidly urbanising state. Finally, public health prioritisation at the social level with local governments at the centre has to be achieved so that preventable diseases and injuries are avoided. A health system built on these pillars can assure a long, healthy life for every resident of Kerala.

21.2 Health Achievements

21.2.1 Kerala is well known for its high achievements in Human Development Indices. The Human Development Index (HDI[1]) for Kerala in 2005 at 0.773 was much above the all India HDI of 0.619 (UNDP 2007-08). Kerala's achievements on the health front are often highlighted through the improvements in health indicators such as life expectancy and infant mortality. In 2001, Kerala had a life expectancy at birth of 73.33 years and an infant mortality rate (IMR) of 11.[2] Paradoxically, these levels of human development were achieved during the early years of the State's existence, despite slow economic progress and low per capita income. This paradox in development is often referred to as the 'Kerala model of development' or 'Kerala development experience' in development literature. It makes the development experience of Kerala in general, and that of the State's health sector in particular, unique. Thus, Kerala stands along with Sri Lanka and Costa Rica with respect to human development experience.

21.2.2 A comparison of the reduction in infant mortality rates (IMR) across a few of the Indian states shows that Kerala's achievements are indeed creditable. No other Indian state (except Goa) has come anywhere near Kerala (Table 21.1). Among the other Indian states, those closest to Kerala report levels that the State reached about 30 years ago. This is why Kerala has acquired the tag of a model of 'good health at low cost'.

Table 21.1.
Infant Mortality Rate (2008) in some Indian States by Residence and Sex

State	Total	Rural	Urban	Male	Female
India	53	58	36	52	55
Kerala	12	12	10	10	13
Goa	10	10	11	10	11
Tamil Nadu	31	34	28	30	33
Orissa	69	71	49	68	70
Uttar Pradesh	67	70	49	64	70
Haryana	54	58	43	51	57

Source : SRS Bulletin October 2009

21.2.3 The significantly lower IMRs in Kerala have a lot to do with the 'support led' strategy of governments in the state over a long period of time. The resultant higher educational and health status of women in the State is an important factor in the IMR story. While close to 50 per cent of women are married by the age of 18 in India, in Kerala the proportion is around 15 per cent. Their higher nutritional status is reflected in a lower proportion of women of reproductive age reporting body mass index (BMI) below normal (Table 21.2). The proportion of married and pregnant women who are anaemic is also significantly lower in Kerala compared to the Indian average, showing that the health gains are large. While child malnutrition in India among the highest in the world, Kerala has done much better in raising the nutritional levels of children and the proportion of malnourished in the State is over 20 percentage points lower than the Indian average (Table 21.3). The differences between the Indian average and the proportion for Kerala are large in every aspect of malnourishment, whether stunting, underweight or anaemia.

Table 21.2.
Nutrition Status of Women in Kerala and India: 1992-93 to 2005-06

Nutrition Status	State	1992-93	1998-99	2005-06
Women age 20-24 married by age 18 years (%)	India	54.2	50.0	47.4
	Kerala	19.3	17.0	15.4
Women (15-49) whose BMI below normal (%)	India	Na	36.2	33.0
	Kerala	Na	18.7	12.5
Women (15-49) who are overweight (%)	India	Na	10.6	14.8
	Kerala	Na	20.6	34.0
Ever married Women (15-49) anaemic (%)	India	Na	51.8	56.2
	Kerala	Na	22.7	32.7
Pregnant women (15-49) anaemic (%)	India	Na	49.7	57.9
	Kerala	Na	20.3	33.8

Source : National Family Health Survey (various rounds).

Note: Na- not available.

Table 21.3.
Nutritional Status of Children under 3 Years: 1992-93 to 2005-06

Nutrition Status	State	1992-93	1998-99	2005-06
Children under 3 years stunted (%)	India	Na	51.0	44.9
	Kerala	32.8	28.0	26.5
Children under 3 years wasted (%)	India	Na	19.7	22.9
	Kerala	13.7	13.0	15.6
Children under 3 years underweight (%)	India	51.5	42.7	40.4
	Kerala	22.1	21.7	21.2
Children (6-35 months) anaemic (%)	India	Na	74.2	78.9
	Kerala	Na	43.9	56.1

Source : National Family Health Survey (various rounds).

Note: Na- not available.

21.2.4 The improvement in health status was accomplished with an emphasis on education and basic healthcare services and in a context of less socioeconomic inequality (Panikkar and Soman 1984; Dreze and Sen 2002[3]). Better housing, water supply and sanitation, education and health consciousness and the availability of healthcare facilities contributed to the improvements in health status. Caldwell (1984[4]) attributed socio-economic indicators such as women's education to the reduction in infant and maternal mortality. Studies also attribute improvements in health status to policies on land relations, public distribution of food grains, education and housing. The programmes in these areas have contributed to reducing socio-economic inequities in facilitating better utilisation of health facilities. The achievements of Kerala in health is the effect of an all round policy of public intervention not limited to the healthcare sector.[5]

21.3 Access to Government Institutions

21.3.1 The characteristics of Kerala's health system may be summarised as follows. Health is primarily a state responsibility, though the central government is responsible for developing and monitoring national standards and regulations and sponsoring various schemes for implementation by state governments. Both the centre and the states have a joint responsibility for programmes listed under the concurrent list of the Indian Constitution. Kerala has, broadly, a publicly financed government health system and a fee levying private health sector. Charity/missionary hospitals and cooperative-run facilities are also present. But their share in the overall healthcare sector is quite small. By definition, the charity hospitals (missionary hospitals) and cooperative hospitals are not-for-profit institutions. However, in order to cover their costs, the fees they charge for services are almost on par with those in private facilities. Thus, for ease of classification, they are considered private healthcare facilities. Therefore, in general, the provision of healthcare services may be classified under the public sector and private sector. Figure 21.1 portrays the different institutional forms under different medical systems.

21.3.2 There are different layers of institutions under each of these classifications, with more in the public sector. The presence of a hierarchy of institutions is seen across all systems of medicine, though it is more pronounced and clear-cut in the allopathic system within the public sector.

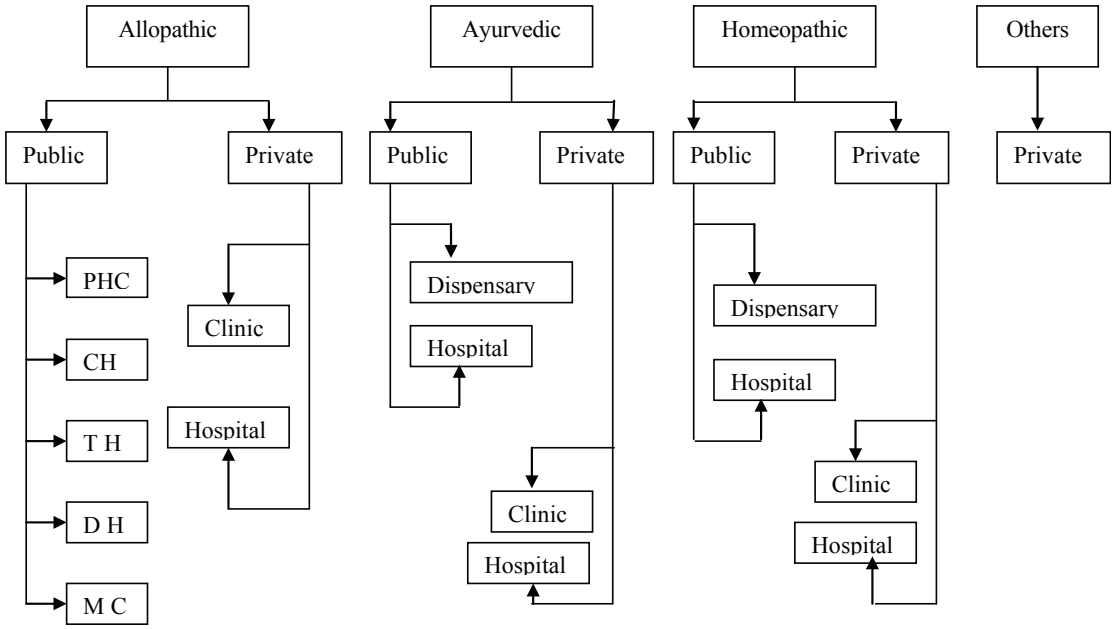
21.3.1 Physical Availability

21.3.1.1 The data that is available does not permit a uniform comparison of public and private facilities across different systems of medicine. Data on public sector allopathic facilities is available from

the Central Bureau of Health Intelligence (CBHI).[6] This allows comparisons between the physical infrastructure in public sector allopathic institutions in Kerala and those in other states. Data on private healthcare institutions in Kerala is available across systems of medicine for the years 1986, 1995 and 2004, from the surveys of private medical institutions in Kerala conducted by the Department of Economics and Statistics, Government of Kerala. But system-wise data on the spread of facilities in terms of the number of institutions and number of beds is not available from the CBHI.

21.3.1.2 The Economic Review published by the Kerala State Planning Board provides information on the spread of different systems of medicine in the public sector. The prominent systems of medicine for which data is available are allopathy, ayurveda and homeopathy. In the government sector alone, there were 1,253 allopathic medical institutions (including grant in aid institutions) with 36,787 hospital beds in the State during 2009. Besides, there were 2,329 beds in 108 ayurveda hospitals and 950 beds in 31 Homeo hospitals (Government of Kerala 2009). The combined bed population ratio of all the three systems of medicine in the government sector taken together would be 148 beds per lakh of population. In the private sector, as per the survey of private medical institutions in Kerala conducted by the Department of Economics and Statistics, there were 12,918 medical institutions across all systems of medicine in 2004.

Fig 21.1
Schematic Representation of the Health System of Kerala.



Note: M.C - Medical colleges D.H - District hospitals T.H - Taluk hospitals C.H - Community health centres P.H - Primary health centres

21.3.2 Spread of Institutions and Beds Across States in the Public Sector

21.3.2.1 One of the major factors that contributed to the present level of healthcare development in Kerala is the growth of both public and private healthcare infrastructure, which facilitates greater access to institutional care. Compared to other states in India, Kerala has a better infrastructure base in terms of the number of medical care institutions and number of hospital beds in both the private and public sectors. In the public sector, this is visible at all layers of facilities such as hospitals, dispensaries and primary health centres. The spread and coverage of the public facilities is presented in Tables 21.4 and 21 .5.[7]

Table 21.4.
Number of Hospitals, All India and Major States (Per Lakh Population)

Year	1961			1971	1981			1991			2001		
States	Rural	Urban	Total	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	.52	2.34	.84	.99	.41	3.52	1.14	.66	4.71	1.75	1.92	10.10	4.14
Assam	*	*	.46	.55	.20	3.57	.54	.76	4.74	1.20	0.6	3.5	1.01
Bihar	*	*	*	.13	.03	2.37	.32	.10	1.95	.35	0.13	2.62	0.40
Gujarat	*	*	*	.51	.13	7.53	2.43	.70	11.26	4.34	0.57	12.35	5.00
Haryana	*	*	*	.73	.06	2.79	.66	.07	1.73	.48	0.05	1.16	0.37A
Jammu& Kashmir	*	*	*	.69	.04	2.62	.58	.26	2.72	.84	0.04	1.59	0.42
Karnataka	**.56**	**1.67**	**.81**	**.65**	**.18**	**1.73**	**.63**	**.08**	**1.90**	**.64**	**0.07**	**1.49**	**0.56**
Kerala	**.30**	**1.53**	**.49**	**.55**	**2.88**	**3.42**	**2.98**	**5.34**	**7.80**	**7.02**	*	*	**6.59B**
Madhya Pradesh	.24	2.23	.53	.40	.17	1.95	.53	.65	.48	.61	*	0.59	0.16C
Maharashtra	.09	3.18	.96	.78	.25	4.10	1.60	.71	5.78	2.67	0.63	7.54	3.6
Orissa	.63	5.50	.94	.98	.62	5.11	1.15	.44	3.92	.91	0.32	3.14	0.7
Punjab	.20	5.96	1.53	.90	.91	3.10	1.51	.63	2.33	1.14	0.47	1.76	0.91
Rajasthan	.58	6.52	1.55	.71	.09	2.86	.67	.04	1.98	.49	0.0	0.8	0.2
Tamil Nadu	.70	1.60	.94	.79	.30	1.75	.78	.24	1.68	.73	0.3	1.2	0.7
Uttar Pradesh	.14	4.35	.66	.92	.10	3.22	.66	.07	2.38	.53	0.1	1.9	0.4
West Bengal	.35	2.12	.78	.67	.38	1.77	.75	.27	1.51	.61	0.2	1.4	0.5
All India	**.28**	**2.50**	**.70**	**.70**	**.35**	**3.12**	**.99**	**.57**	**3.51**	**1.32**	**0.36**	**3.60**	**1.52D**

Source : SRS Bulletin October 2009

Notes: Not Available*
A: Reduction (from 2000) is due to under reporting of private hospitals.
B: Rural/urban breakup is not reported; also reduction in total number of hospitals from the year 2000 is due to conversion to CHCs.
C: Reduction in figures from the year 1992 is due to non-reporting of rural hospitals and exclusion of Chhattisgarh.
D: Total number of hospitals reduced from the year 2000 due to heavy decrease in the figures of Madhya Pradesh.
Sources: Health Information of India (Respective years), CBHI, GOI, and Census of India 2001.

21.3.2.2 The number of hospitals per lakh of the population for Kerala as shown in Table 21.4 is the highest among the Indian states. This is true for both urban and rural areas. In fact, for rural areas it is 10 times higher than that for the whole of India in 1991. For urban, it is double, and for rural and urban together (total) the number of hospitals per lakh of the population for Kerala is nearly six times higher compared to the corresponding all India figure. Rural-urban breakup of the number of institutions is not available for Kerala in 2001. The number of hospitals per lakh of the population for Kerala is 12 times higher than that of Karnataka in 1991 and 2001. Till 1991, there is a steady increase in the number of hospitals per lakh of the population. The number of hospitals per lakh population has increased from 0.49 in 1961 to 7.02 in 1991 compared to the all India average of 0.70 in 1961 and 1.32 in 1991. During this period, Kerala made substantial progress in setting up new hospitals compared to other states. The explanation for the improvements in the health status by Kerala could, among others, be attributed to this. However, after the 1990s, growth in the number of institutions

has stagnated and by 2001 when standardised with population it, in fact, shows a decline. In 1991, there was one allopathic healthcare institution in the public sector for every 14,235 persons, which has moved to one for every 15,175 persons by 2001. But the population served per institution (public and private, across all systems of medicine) continues to be one of the lowest in the world.

Table 21.5.
Number of Beds in Hospitals, All India and Major States (per lakh population)

Year	1961	1971	1981			1991			2001		
States	Total	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	55.78	71.82	9.43	242.06	63.68	12.55	206.66	64.55	25.70	270.88	92.14
Assam	31.43	52.92	12.13	382.09	50.19	20.10	352.83	56.98	17.0	257.5	47.53
Bihar	22.333	26.62	8.86	253.25	39.33	3.07	228.12	32.70	4.07	299.60	35.10
Gujarat	38.78	59.93	10.48	290.92	97.71	31.34	363.95	145.76	18.36	302.87	125.34
Haryana	*	61.28	10.05	248.71	62.27	4.57	169.19	45.38	3.64	100.66	31.77
Jammu & Kashmir	86.61	86.73	5.10	383.9	68.94	8.18	421.39	106.65	1.05	79.31	20.47
Karnataka	**65.27**	**84.61**	**13.99**	**264.10**	**86.25**	**9.31**	**232.25**	**78.26**	**8.66**	**197.80**	**72.97**
Kerala	**71.42**	**101.98**	**112.58**	**450.45**	**175.92**	**202.94**	**431.33**	**263.20**	*	*	**307.64**
Madhya Pradesh	30.75	36.70	3.21	146.28	32.24	43.38	21.37	38.27	*	67.10	17.92
Maharashtra	69.94	74.24	13.52	306.69	116.22	26.05	332.51	144.64	10.70	226.95	102.39
Orissa	31.32	49.51	10.16	293.57	43.59	11.05	261.15	44.64	4.80	190.37	32.64
Punjab	119.17	72.87	68.51	250.72	118.95	54.66	213.19	101.77	14.54	152.92	61.45
Rajasthan	52.27	67.38	5.93	225.63	52.16	3.11	182.30	44.11	2.13	124.78	30.83
Tamil Nadu	71.43	67.07	12.46	233.29	85.23	11.94	234.85	88.17	12.22	164.26	78.97
Uttar Pradesh	35.76	43.87	7.83	219.01	45.74	6.93	165.38	38.20	1.97	129.40	28.47
West Bengal	83.22	91.28	23.69	270.05	88.89	15.42	251.70	80.14	8.33	223.76	68.65
All India	**52.28**	**63.60**	**16.51**	**261.56**	**73.64**	**22.26**	**241.96**	**78.70**	**7.75**	**174.23**	**66.49**

*Note: * Not Available*
Sources: Health Information of India (Respective years), CBHI, GOI, and Census of India 2001.

21.3.2.3 With regard to the number of beds per lakh of the population, Kerala's position is much ahead of the other states in India (see Table 21.5). In 1991, the number of beds in rural Kerala was nine times more than the all India average. For urban areas, it was two times higher and for urban and rural together (total) it was nearly four times higher than the all India figure. Even though the number of hospitals in Kerala declined after 2000, the number of beds per lakh population has risen to 307.64 in 2001 from 263.20 in 1991. During the same period, the number of beds per lakh of the population for all India declined from 78.70 to 66.49. As in the case of institutions, the number of beds in Karnataka is also significantly less than that of Kerala. What is unique about the spread of hospitals in Kerala is the density of hospitals in rural areas. The improvements in healthcare accessibility in Kerala are largely determined by this aspect.

21.3.2.4 In Kerala, growth of healthcare infrastructure is not confined to urban centres alone. Accessibility to rural healthcare facilities is much higher in Kerala compared to other Indian states. In terms of the bed-population ratio, the urban-rural gap in 1991 is the least in Kerala (twice). The urban-rural gap is very high in many other states. The largest gap is in Bihar (76 times), Jammu and Kashmir (73 times), Haryana (40 times), Rajasthan (37 times), Himachal Pradesh (55 times) and Meghalaya

(115 times). The urban-rural disparity in availability of doctors (for the year 1990) is also the least in Kerala (3 times) along with Punjab (Duggal et al. 1995). The comparable available figures for other states are Tamil Nadu (11 times), West Bengal (6 times), Maharashtra (5 times), Gujarat (6 times), Andhra Pradesh (11 times) and Madhya Pradesh (18 times).

21.3.3 Access to private institutions

21.3.3.1 The spread of different systems of medicine in the private sector is available from the surveys of private medical institutions in Kerala. The Department of Economics and Statistics has conducted three surveys of private medical institutions in Kerala, in 1986, 1995 and 2004. As per the survey conducted in 1986, there were 3,565 private allopathic medical institutions with 49,030 beds. The 1995 survey revealed that the number of private allopathic institutions had gone up to 4,288 with 67,517 beds. This shows a growth rate of 20.3 per cent in the number of institutions and a growth rate of 37.7 per cent in the number of beds during this period. As expected, the number of beds increased at a greater pace than the number of institutions. This is due to the fact that existing institutions generally go for expansion of their activities by setting up additional specialty departments or else enhance the number of beds in existing departments. The total number of medical institutions across all systems of medicine increased from 9,663 in 1986 to 12,618 by 1995. However, there was a decline in the number of beds reported in 2004. The number of institutions covered under the allopathic system in 2004 marginally increased, whereas the number of beds declined to 57,071 in 2004 from 67,517. This has more to do with the design of the data collection system followed in the 2004 survey, which excluded erstwhile clinics in the allopathic system from the survey.

Table 21.6.
System-Wise Distribution of Number of Hospitals and Beds in Private Medical Institutions in Kerala

System of Medicine	1986		1995		2004	
	Institutions	Beds	Institutions	Beds	Institutions	Beds
Allopathic	3565 (36.89)	49030 (96.58)	4288 (33.98)	67517 (95.20)	4825 (37.35)	57071 (88.49)
Ayurvedic	3925 (40.62)	1301 (2.56)	4922 (39.01)	2595 (3.66)	4332 (33.53	5502 (8.53)
Homoeopathy	2078 (21.50)	296 (0.58)	3118 (24.71)	394 (0.56)	3226 (24.97)	813 (1.26)
Others	95 (0.98)	139 (0.27)	290 (2.30)	418 (0.59)	535 (4.14)	1105 (1.71)
Total	9663 (100.00)	50766 (100.00)	12618 (100.00)	70924 (100.00)	12918 (100.00)	64491 (100.00)

Note: Figures in parentheses are percentages to total.

Source: GoK: Report on the survey of private medical institutions in Kerala for the years 1986, 1995, 2004, Department of Economics and Statistics, Thiruvananthapuram.

21.3.3.2 The number of institutions across systems of care is an indicator of the medical pluralism in Kerala. It certainly throws light on the geographical accessibility of care. Table 21.6 shows that the composition of the sector, in terms of the number of institutions across different systems of medicine in the private sector, does not vary much over the period. The share of institutions in the allopathic system has remained more or less the same, with a share of 37.35 per cent in 2004. But the share of ayurvedic institutions declined from 40.62 per cent in 1986 and 39.01 per cent in 1995 to 33.53 per

cent in 2004. In 1986, ayurvedic institutions were more in number compared to the other systems of medicine. The share of homeopathic institutions remained the same over the years, accounting for 24.97 per cent of the total number of institutions in 2004. The relatively large spread of institutions in the ayurvedic system does not prevail in the case of other indicators of the healthcare system. The number of beds, inpatient and outpatient admissions, number of employees and so on are substantially higher in the allopathic system. The share of beds of the allopathic system, though it declined from 95.20 per cent in 1995 to 88.49 per cent in 2004, is substantially high, but the share of ayurveda hospitals showed a substantial increase from 2.56 per cent in 1986 to 8.53 per cent in 2004.

Table 21.7.
Population per Institution and per Bed in the Private Sector in Kerala

System of Medicine	1986			2004		
	1986	1995	2004	1986	1995	2004
Allopathic	7140	6786	6599	519	431	558
Ayurvedic	6485	5912	7349	19565	11213	5787
Homoeopathy	12249	9332	9869	85992	73854	39161
Others	267933	100340	59510	183120	69614	28813
Total	2634	2306	2465	501	410	494

Source: GoK: Report on the survey of private medical institutions in Kerala for the years 1986, 1995, 2004, Department of Economics and Statistics, Thiruvananthapuram.

21.3.3.3 An analysis of the coverage of private facilities in terms of the population served per institution and bed across systems of medicine is given in Table 21.7. On an average, there is one private medical care facility available for 2,465 people. An allopathic facility on an average caters to 6,599 people. More important, a private hospital bed in Kerala catered to just 494 people in 2004.

Table 21.8.
Population Covered per Bed in the Public and Private Sector in Kerala

	Number of beds			Population served per bed		
Year	Public	Private	Total	Public	Private	Total
1986	36258	50766	87024	702	501	292
1995	41164	70924	112088	707	410	260
2004	44193	64491	108684	720	494	293

Source: GoK: Report on the survey of private medical institutions in Kerala for the years 1986, 1995, 2004, Department of Economics and Statistics, Thiruvananthapuram. GoK, Administration Report of the Health Services Department

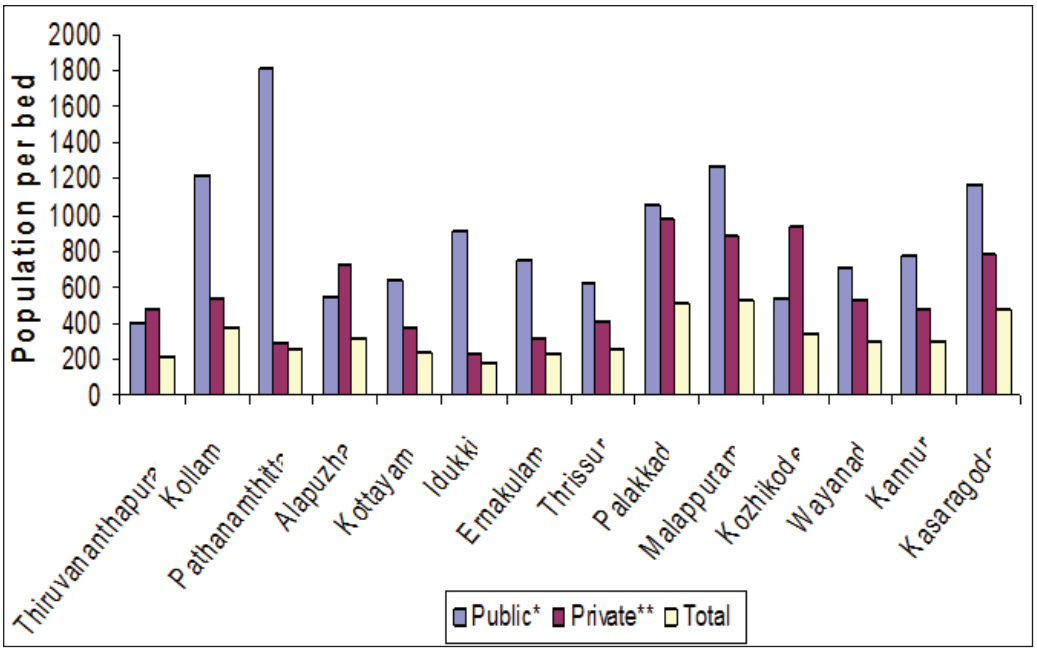
21.3.3.4 A comparison of the number of beds in private and public facilities is given in Table 21.8. The number of institutions in the private sector is three times that of the public sector. However, in terms of beds in these institutions the difference is only one-and-a-half times. The beds per lakh of the population calculated separately for the private and public sectors were 176 and 128 respectively in 1986 and 220 and 137 respectively in 1995. It is evident from Table 21.8 that between 1986 and 1995, health services in the private sector in Kerala have grown rapidly. As such, the population covered per bed in the private sector has come down to 410 before increasing to 494 in 2004 for reasons cited elsewhere. Consequently, with a share of nearly 60 per cent of hospital beds in the private sector, the average number of people covered by public and private taken together was 260

in 1995 and 293 in 2004. The population covered by a hospital bed in Kerala is the lowest among the Indian states. This implies that bed per lakh of the population of Kerala, which was 330 in 2001, is the highest in India.

21.4 Regional Distribution of Healthcare Facilities in Kerala

21.4.1 Though Kerala is on a better plane on most indicators of the health system, there is inequality in the regional distribution of healthcare infrastructure within Kerala as seen from Table 21.9. This is true of the spread of the number of hospitals, beds and healthcare personnel. The relative weight of public and private sector facilities across districts also shows variations. The presence of the private sector is relatively less in the northern districts of Palakkad, Kozhikode, Malappuram and Kasaragod. The presence of the private sector is more in Idukki, Pathanamthitta, Kottayam and Ernakulam.

Fig 21. 2
Distribution of Population per Bed in Private and Public Hospitals Across Kerala 2004.



Source: (1) Private beds from Survey of Private Medical Institutions in Kerala, Bureau of Economics and Statistics (2004) and (2) Public beds from Economic Review, State Planning Board, GoK (2004).

Table 21.9.
Distribution of Population per Bed in Private and Public Hospitals across Kerala.

Districts	1985-86			1995-96			2004-05		
	Public*	Private**	Total	Public*	Private**	Total	Public*	Private**	Total
Thiruvananthapuram	389	618	239	418	564	240	392	475	215
Kollam	1394	588	413	1027	320	244	1214	529	368
Pathanamthitta	-	-	-	289	264	138	1809	285	246
Alappuzha	2076	734	542	1673	520	397	550	720	312
Kottayam	538	266	178	510	232	159	635	370	234
Idukki	1570	275	234	1075	269	215	912	219	177
Ernakulam	**713**	**288**	**205**	**690**	**243**	**180**	**748**	**315**	**221**
Thrissur	**596**	**464**	**261**	**631**	**308**	**207**	**620**	**409**	**247**
Palakkad	1156	1860	713	1076	1068	536	1053	986	509
Malappuram	1544	1118	648	1315	784	491	1265	884	520
Kozhikode	517	899	328	575	646	304	530	934	338
Wayanad	886	348	250	720	372	245	710	517	299
Kannur	1149	1091	560	876	549	338	770	475	294
Kasaragod	-	-	-	1288	816	500	1168	777	466
Kerala	**702**	**501**	**292**	**707**	**410**	**260**	**720**	**494**	**293**

*Note: * Bed data for private hospitals available only for 1986, 1995, 2004*
*** Bed data for public hospitals available for 1986-87, 1995-96, 2004-05*
Source: (1) Private beds from Survey of Private Medical Institutions in Kerala, Bureau of Economics and Statistics and (2) Public beds from Economic Review, State Planning Board, GoK (respective years).

21.4.2 Table 21.9 details the distribution of population per bed in private and public hospitals across Kerala. The population covered per bed in the healthcare sector has remained more or less the same in the State as whole during 1985-86, 1995-96 and 2004-05. But there are inter district variations in the coverage of hospital beds during these periods. In 2004, Idukki district had the least number of people covered per hospital bed due to a relatively higher availability of private beds. An even spread of public and private beds helped Thiruvananthapuram come second on the list.[8]

21.5 High Morbidity and Use of Private Care Despite Lack of insurance

21.5.1 Morbidity in Kerala

21.5.1 Morbidity is an indicator of the prevalence of self reported illness. Morbidity rate indicates the percentage of people reporting illness during a certain reference period. NSSO 60th round adopted a reference period of 15 days to report the extent of morbidity.[9] The rate of morbidity in Kerala continues to be the highest in India. As per NSSO 60th round, the rate of morbidity in rural Kerala is 25.5 per cent and urban Kerala is 24 per cent against national level morbidity rates of 8.8 per cent and 9.9 per cent for rural and urban areas respectively (see Table 21.10). The overall rate of morbidity in India is 9.1 per cent as against 25.1 per cent for Kerala. Next to Kerala is Punjab with only 13.6 per cent and 10.7 per cent rates of morbidity for rural and urban population respectively. Women

report slightly higher rates of morbidity than men, both at the state and national levels irrespective of urban and rural areas. However, the rates of morbidity reported for males and females among social groups such as SCs and STs for Kerala as given in Table 21.10 has to be interpreted cautiously as the sample size for these categories (especially for urban STs) is too low to come up with a reliable and consistent estimate of morbidity. In general, the rates of morbidity for the SC and ST population in Kerala follow the pattern of the general population. The morbidity rate of the ST population at the national level is lower than that of the general population.

Table 21.10.
Rate of Morbidity Among Males and Females Within a Recall Period of 15 days: Kerala and India (%)

Categories	Kerala			Karnataka			India		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Male	24.2	23.5	24	6.3	5.3	6.0	8.3	9.1	8.5
Female	26.6	24.4	26.1	6.4	6.1	6.3	9.3	10.8	9.7
Persons (all)	25.5	24	25.1	6.4	5.7	6.2	8.8	9.9	9.1
ST(male)	22.1	0	19	5.0	8.7	5.6	5.2	6	5.3
ST (Female)	30.4	14.9	28.2	7.0	4.0	6.5	6.3	6.3	6.3
ST Total)	26.4	7.9	23.8	6.0	6.1	6.1	5.8	6.1	5.8
SC (male)	**24.5**	**22.7**	**24.2**	**6.5**	**3.2**	**6.1**	**8.3**	**8**	**8.3**
SC (female)	**29.9**	**26.4**	**29.2**	**5.4**	**4.5**	**5.3**	**9.3**	**9.1**	**9.3**
SC(total)	27.2	24.9	26.8	6.0	5.1	5.7	8.8	8.6	8.8

Source: Estimated from NSSO 60th round unit-record data.

21.5.2 The presence of higher levels of morbidity in Kerala has been reported by earlier studies also (Paniker and Soman 1984, Kannan et al. 1991, NSSO 52nd round, KSSP 2006[10]). Explanations regarding the existence of higher levels of morbidity in Kerala have been a subject of debate. However, the general consensus has been that it is due to the perception factor on account of better health awareness in Kerala. This explanation can be extended to explain the lower rate of morbidity among the ST population at national level.[11] However, the relatively higher prevalence of perceived morbidity for the richer quintiles as seen in Table 21.11 could be partly due to the increased incidence of lifestyle diseases reported in Kerala.

21.5.3 Private facilities are the preferred choice of inpatients of all income classes in terms of both the number of people and number of episodes of treatment as seen in Table 21.11. It is important to note that even in the poorest quintile (quintile I), more than half the people (53 per cent) and episodes of treatment (57 per cent) are taken care of by the private sector. As economic status improves there is a gradual increase in the percentage of people and episodes of treatment in the private sector. As regards the public sector, the pattern is just the reverse. Preference for the private sector is the maximum in quintile V (86 per cent). The gap of 29 percentage points (86 per cent-57 per cent) between V and I quintiles explains the percentage of episodes excluded from quintile I on account of higher cost in the private sector. Similarly, looking at it from the public sector, the gap of 29 percentage points (43 per cent-14 per cent) is the extent of cases included from quintile I by the public sector.

Table 21.11.
Share of Public and Private Facilities in Annual Inpatient Admissions by MPCE Quintiles

Quintiles	Persons						Cases					
	No's			(%)			No's			(%)		
	Public	Private	Total	Public	Private	Total	Public	Private	Total	Public	Private	Total
I	143	163	306	47	53	100	201	270	471	43	57	100
II	130	221	351	37	63	100	214	356	570	38	62	100
III	161	224	385	42	58	100	255	363	618	41	59	100
IV	135	237	372	36	64	100	195	353	548	36	64	100
V	69	351	420	16	84	100	91	554	645	14	86	100
All	638	1196	1834	35	65	100	956	1896	2852	34	66	100

Source: Estimated from NSSO 60th round unit-record data.

21.5.4 The social, cultural and demographic factors that determine the choice of outpatient care are presented in Table 21.12. The reliance on private sector providers for outpatient care is stronger, across all categories, than what it was for inpatient care. Even among SCs/STs reliance on the public sector, though relatively higher than other groups, has declined compared with inpatient care. The male-female difference seen in inpatient care get reversed for outpatient care with more women than men opting for private facilities. The rural-urban difference in the choice of facilities gets magnified for outpatient care with nearly 79 per cent of urban people seeking private outpatient care. The pattern in the differences across age groups remains the same as in inpatient care, with uniformly higher reliance on private providers.

Table 21.12.
Determinants on the Choice of Facility for Outpatient Treatment

Type of Facility	Sex		Place of residence		Social Group		Age group		
	Male	Female	Rural	Urban	SC/ST	Non-SC/ST	0-14	15-59	60+
Public	32.1	30.6	36.4	21.4	52.1	28.4	31.1	33.6	28.5
Private	67.9	69.4	63.6	78.6	47.9	71.6	68.9	66.4	71.5
Total	100	100	100	100	100	100	100	100	100

Source: Estimated from NSSO 60th round unit-record data.

Table 21.13.
Share of Public and Private Facilities in Outpatient Care by MPCE Quintiles

MPCE quintiles	Number of cases			Per cent	
	Public	Private	Total	Public %	Private%
I	218	257	475	46	54
II	202	320	522	39	61
III	169	360	529	32	68
IV	229	507	736	31	69
V	123	628	751	16	84
All quintiles	941	2072	3013	31	69

Source: Estimated from NSSO 60th round unit-record data.

21.5.5 The utilisation of outpatient and inpatient care across providers exhibits certain broad trends. There is a visible increased preference for private outpatient care, with 69 per cent of the population approaching private facilities against 65 per cent found in inpatient care.[12] The variations across quintiles are negligible. The proportions across quintiles for inpatients and outpatients almost coincide, with only a marginal deviation found in the middle quintile. The overall increase (4 per cent) in the preference for private sector outpatient care is explained by this increased preference for private sector outpatient care by the middle quintile. As in inpatient care, more than half the patients from the lowest quintile resort to private healthcare providers.

21.6 Health Challenges

21.6.1 Compared to the rest of India, Kerala's health achievements are, of course, commendable, but there seems to be some fraying at the edges that cannot be ignored. First, while child malnutrition is lower in Kerala, the levels are either persisting or increasing. Over one-fifth of the children below three years are underweight and close to half the total number are anaemic. These are still high. Second, the persistence of a small proportion of malnourished women along with an increasing proportion of obese women suggests increasing inequality in society. The persistence of high levels of malnourishment among women and children suggests that the marginalised in society are probably not benefiting from the numerous government schemes or the 'equitable provision of services'.

21.6.1 Re-emergence of Communicable Diseases/New Diseases

21.6.1.1 Turning to the disease environment in Kerala, the State had the distinction of eradicating or controlling a number of communicable diseases such as malaria and tuberculosis, which were widely prevalent before the 1960s. But recent years have seen the re-emergence of some of the diseases believed to have been eradicated. Many new diseases — dengue, chikungunya, leptospirosis and Japanese encephalitis to name a few — have appeared in Kerala. Consider just one of the new diseases: Dengue fever was unheard of in Kerala till 2003, but since then it is being reported each year in all districts of the State. Kerala and Delhi distinguish themselves by reporting a sizeable number of cases every year (Table 21.14). Not only are the number of cases of dengue reported in Kerala each year increasing, but the State's case fatality rate has also been higher than the all-India average. The higher density of hospitals and the significantly higher hospitalisation rate in Kerala have not helped bring down the case fatality rate in the State.

Table 21.14.
Share of Cases of Dengue of Some Indian States: 2004-10

State	2004	2005	2006	2007	2008	2010+ (till 31 Oct)
India	4153 (100)	11985 (100)	12317 (100)	5534 (100)	12440 (100)	19430 (100)
Kerala	16.52	8.58	7.96	10.89	5.89	12.34
Tamil Nadu	24.73	9.53	3.87	12.78	4.26	6.28
Maharashtra	20.61	2.91	5.98	11.10	5.58	5.59
Delhi	14.59	8.54	27.33	9.90	10.55	28.53
Karnataka	7.01	4.90	..	4.16	2.62	10.65
West Bengal	**0.77**	**53.19**	**9.99**	**1.72**	**8.34**	**2.09**

Source: Ministry of Health and Family Welfare, National Health Profile, 2008. + Directorate of National Vector Borne Disease Control Programme for 2010.

Table 21.15.
Share of Cases of Acute Diarrheal Diseases,
Enteric Fever and TB of Some Indian States: 2007 and 2008

State	% Cases of Diarrheal Diseases		% Cases of Enteric Fever		%TB Cases	
	2007	2008	2007	2008	2007	2008
India (000)	10994(100)	11231(100)	820(100)	916(100)	1479(100)	1518(100)
Kerala	4.09	3.24	0.52	0.65	1.65	1.64
Tamil Nadu	0.99	3.81	2.93	9.41	5.82	5.58
Maharashtra	7.51	8.82	8.25	8.86	9.63	9.20
Delhi	1.46	0.90	2.58	1.77	3.33	3.26
Karnataka	7.53	6.44	7.51	5.96	4.60	4.36
West Bengal	23.58	23.88	14.50	14.90	7.25	7.06

Source: Ministry of Health and Family Welfare, National Health Profile, 2008.

21.6.1.2 In addition to the new, emerging diseases, which are fast establishing their presence across Kerala, many of the diseases that were reflective of the living environment have not been rooted out. Diarrhoeal diseases, for instance, continue to afflict a vast population in Kerala. While the share of Kerala in India's population is less than 3 per cent, its share of the total cases of diarrheal diseases incidence was over 3 per cent in 2008. Kerala also continues to report a sizeable number of enteric fever cases and TB cases (Table 21.15).

21.6.1.3 "Communicable diseases such as dengue, HIV/AIDS, malaria, leptospirosis, hepatitis, chikungunya, H1N1 fever and so on are increasing every year. Thiruvananthapuram district is almost endemic to dengue and reporting about two thirds of cases in the State," says the Kerala Economic Review 2012.[13] The number of swine flu and chikungunya cases has come down over time (Table 21.16). Kerala had the highest number of lab-confirmed case of H1N1 fever or swine flu in 2011. The number of dengue and malaria cases has varied from year to year, but there is a positive trend between 2007 and 2011. Further, there is a significant outbreak of a few communicable diseases like leptospirosis, which is an emerging zoonotic disease, especially during monsoon. "During 2007, out of the 1,359 cases reported of leptospirosis, 17 per cent of cases resulted in death. The rate has come down to 7.4 per cent during 2011 and to 2.2 in 2012," says the Kerala Economic Review 2012.[14] Japanese encephalitis has become a serious problem in the State.
21.6.1.4 That the living environment in Kerala is conducive to the spread of communicable diseases is evident from the incidence of cases presented in Tables 21.14 to 21.16. Taking the emerging and re-emerging diseases together, the burden is high in Kerala. The civil registration data with all its limitations (see next section) shows that the number of deaths (medically certified) caused by cholera (64), typhoid (143), dysentery (49), tuberculosis (721) and malaria (19) for the year 2008 are high (Government of Kerala, 2010). Thus, Kerala seems to have not been very successful in building a healthy living environment for its population.

Table 21.16.
Morbidity: Communicable Diseases in Kerala, 2007 to 2011 (Number of Cases)

Disease	2007	2008	2009	2010	2011*
Chikungunya	909	492	711	209	58
Dengue	603	733	1,425	2,597	1,281
HINI Fever/Swine Flu	NA	NA	1,440†	1,483	210

HIV/AIDS	1,769	4,407	6,106	7,664	9,751
Leprosy	870	778	827	884	931
Malaria	1,927	1,804	2,046	2,299	1,339
Pneumonia	**15,659**	**14,446**	**18,568**	**19,694**	**21,390**
Tuberculosis (TB)	**24,339**	**24,935**	**27,019**	**26,255**	**26,126**

*Notes: * All 2011 numbers are provisional*

†Data are from May to December, 2009
Chikungunya: Number of confirmed cases
HINI: Lab Confirmed Cases
HIV/AIDS: Number of Patients who ever started on Anti-retroviral Therapy (ART)
Leprosy: Total new cases detected
TB: Number of TB Patients Declared and Registered for Treatment (DOTS)

Sources: Central Bureau of Health Intelligence (CBHI), Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India. 2011 and previous reports. National Health Profile 2011: January to December. New Delhi.

21.6.2 Non-communicable diseases

21.6.2.1 Kerala has matured over time and its health challenges are different from those of the rest of India. While it has achieved a good degree of success on basic health indicators, it is yet to achieve the benchmarks of the high-income countries in IMR, MMR, TFR, and LE. Simultaneously, Kerala is associated with various lifestyle diseases (HDR, 2005).

21.6.2.2 A considerable proportion of people suffer from various lifestyle diseases such as asthma, goitre, diabetes, obesity and so on. The intensity of asthma and goitreis significantly higher among women when compared to men in Kerala, as shown in Table 21.17. The number of people in Kerala suffering from heart disease and high blood pressure is also increasing.

Table 21.17.
Non-Communicable Diseases, Number of Cases: 2005−06

Disease	Gender	Kerala	India
Diabetes	Male	3,078	1,051
	Female	2,549	881
Asthma	Male	2,984	1,627
	Female	4,037	1,696
Goitre or any other thyroid related disease	Male	1,888	383
	Female	5,744	949

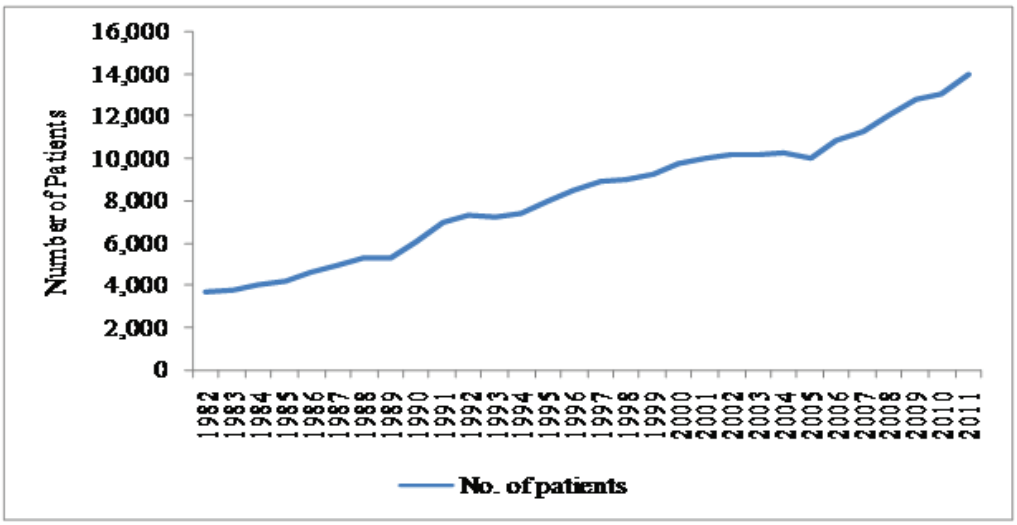
Note: Number of men and women age 15−49 per 1,00,000 who reported that they have above mentioned diseases

Source: International Institute of Population Sciences (IIPS) and Macro International. 2007. National Family Health Survey (NFHS−3), 2005−06: India Volume I. Mumbai: IIPS.

21.6.3 Cancer

21.6.3.1 An increasing number of cancer cases has become a matter of concern in Kerala, along with the rest of India. As mentioned in the 12th Five Year Plan document[15], the number of new cancer patients registered has increased from 11,173 in 2006−07 to 13,040 in 2009−10, while the existing number of cancer patients has increased from 129,974 to 167,628 during the same period. Figure 21.3 shows the rising number of patients at the Regional Cancer Centre (RCC) in Thiruvananthapuram. According to the RCC, among males in Kerala, 50 per cent of cancers that occur in the mouth, throat and lungs are caused by tobacco and alcohol habits.[16] Among women in Kerala, age adjusted incidence rates are highest for breast cancer in urban and rural Thiruvananthapuram and Karunagapally.[17] The latter is a town in Kollam district and is particularly known for incidence of cancer.

Fig 21.3
Number of Cancer Patients at the Regional Cancer Centre, Thiruvananthapuram 1982 to 2011



Source: Regional Cancer Centre. 2012. Hospital Based Cancer Registry Consolidated Report 1982−2011. http://www.rcctvm.org/AnnualRep.htm, Thiruvananthapuram, December.

21.6.4 Mental Health Scenario is Grim in Kerala

21.6.4.1 The Kerala State Mental Authority's Web site says: "Health has been defined as a positive sense of well being — physical, mental, social — and not merely an absence of illness. Mental health, thus, is an integral component of total health so mental health is not merely an absence of mental illness. It is a balance between all aspects of life like emotional, economical, spiritual, as well as physical which shows how we feel and think about our self, others and how we face life's situations."[18]

21.6.4.2 "Mental healthcare activities in the State of Kerala are governed by the Mental Health Act, 1987 enacted by the Government of India and the State Mental Health Rules, 1990. The State Mental Health Authority established in 1993 under Section 4 of the Act is responsible for regulation, development and coordination of all activities in the State connected with mental health," says the Comptroller and Auditor General of India's audit report for 2010.[19] In Kerala, 5.87 per cent (18.66 lakh) of the total population as per the 2001 census is affected with mental illnesses such as psychosis, bipolar disorder, alcohol and drug abuse and so on compared to the all India figure of 2 per cent.[20]

21.6.4.3 The statistics that are used to show the extent of mental health problems are taken from HDR 2005, which in turn has sourced this from the Kerala State Mental Authority Web site (Table 21.18).

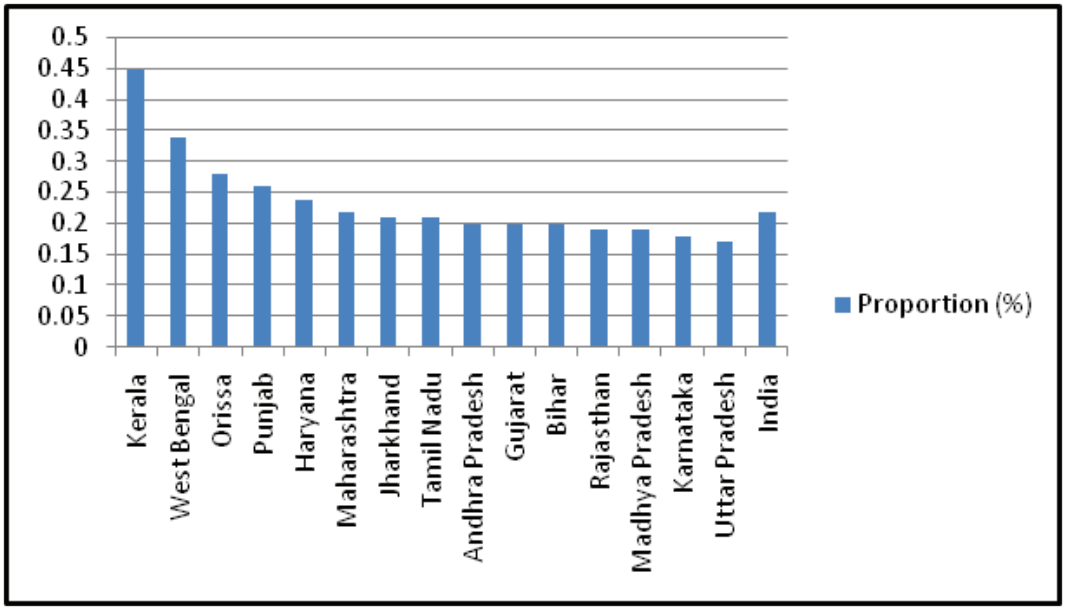
Table 21.18.
The Extent of Problem of Mental Health in India

Indicator	Statistic
Population of Kerala (2001 Census)	3,18,38,619
Prevalence of Psychiatry Disorders (58/1,000 population)	18,46,640
Prevalence of Severe Psychiatric Disorders (10−20/1,000 population)	3,18,386−6,36,772
Neurosis and Psychosomatic Disorders (20−30/1,000 population)	6,36,772−9,55,159
Mental Retardation (0−1% of all children up to 6 years)	18,267−36,535
Psychiatric Disorders in Children (1−2% of all children up to 6 years)	36,535−73,071

Sources: Kerala State Mental Authority Web site, http://www.ksmha.org/kerala.htm via State Planning Board, Government of Kerala. 2006. Human Development Report 2005. Prepared by the Centre for Development Studies, Thiruvananthapuram

21.6.4.4 The 2001 Census shows that 0.45 per cent of Kerala's population is mentally disabled, which is the highest amongst all the states in India (Figure 21.4). The corresponding all-India figure was 0.22 per cent.

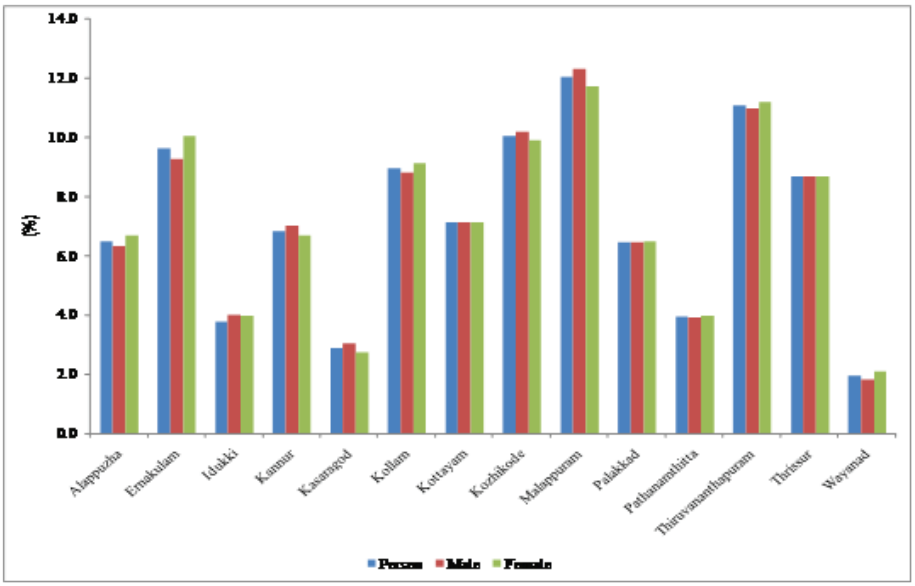
Fig 21.4
State-wise Distribution of Mentally Disabled (%): 2001



Source: Census 2001. Office of the Registrar General and Census Commissioner, India.

21.6.4.5 District-wise analysis using the census of mental disability (2001) reveals that the incidence of mental illness is relatively high in Malappuram, Kozhikode and Thiruvananthapuram as shown in the Figure 21.5.

Fig 21.5
District-wise Distribution of Mentally Disabled: 2001 (% share of State).



Note: y axis represents proportion of mentally disabled people in respective districts out of total number of mentally disabled people in Kerala

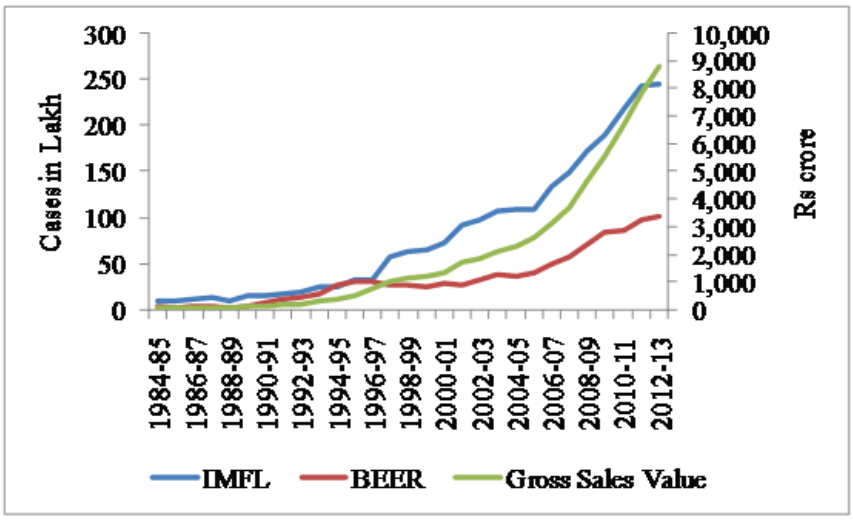
Source: Census 2001. Office of the Registrar General and Census Commissioner, India

21.6.4.6 The CAG (2011) sums it up thus: "A review of the mental healthcare facilities revealed absence of proper mental health planning; non-achievement of objectives of the Mental Health Policy 2000; non-utilisation of Central funds; inadequate infrastructure facilities; shortage of manpower and inadequate monitoring of mental health care facilities available in the State."[21]

21.6.5 Rising alcoholism

21.6.5.1 The Alcohol and Drug Information Centre-India (ADIC-India) estimates that per capita consumption of alcohol in Kerala is 8.3 litres per annum.[22] The age at which alcohol consumption begins has also decreased steadily from 19 years (1986) to 13 (2001).[23] Sales data reveals a sharp increase in sales since the mid−1990s (Figure 21.6). This could be due to a ban on toddy in that period, which led to increased reporting of consumption. Yet, even after that, there has been a continuous increase in the consumption of alcohol. Projections based on linear models indicate that sales of Indian Made Foreign Liquor (IMFL) will increase from 188 lakh cases (2009−10) to 287 lakh cases (2031−32). This is an increase of 58 per cent over the Perspective Plan period. Over the same period, sales of beer are projected to increase from 85 lakh cases (2009−10) to 116 lakh cases (2031−32), an increase of 35 per cent.

Fig 21.6
Sales of IMFL and beer and net sales value of alcohol in Kerala: 1984−85 to 2012−13



Source: Kerala State Beverages Corporation Ltd. Web site: http://www.ksbc.kerala.gov.in/homemain.htm

21.6.5.2 Using unit level NFHS-3 data, NCAER has obtained a profile of male drinkers. Results reveal that while 45 per cent of males residing in Kerala drink, in other states this figure is only 34 per cent. This is observed in almost every socio-economic category. Only among two categories —'professionals, technicians and management' and 'service sector workers' is the incidence of drinking lower in Kerala, compared to other states.

21.6.5.3Intensity of drinking is also generally higher in Kerala (14 percent drink almost daily), relative to other states (11 percent drink daily). In particular, a higher proportion of persons aged 50-54 years and widowers and separated persons in Kerala drink daily, compared to other states.

21.6.6 Catastrophic health expenditure

21.6.6.1As already indicated, the use of private healthcare institutions is very high in Kerala and it does not show much variation across income classes. Even in the lowest income quintile, over 50 per cent of the patients utilise private care. One of the reasons for the high use of private care is the perceived poor quality of public healthcare services. The use of private healthcare services (in the pre-insurance situation) entailed huge out of pocket expenses. There is considerable variation in health expenditure by households between rural and urban areas and also across districts.

21.6.6.2 Interestingly, despite the considerable variation in expenditure across districts and locations, the variation across income classes is not found to be high. Consequently, for certain income classes at the lower end, health expenditure represents 40 to 70 per cent of their annual incomes (Narayana, 2008[24]). Such high out of pocket expenditure is on account of the utilisation of private facilities and isa heavy burden on the poorer segments of the population.

21.6.7 Civil registration but no data for local health planning

21.6.7.1 India, being a British colony till 1947, had civil a registration system introduced in the late 19th century. It has continued, with various changes in the respective Acts. In Kerala, the Director of Panchayats is the Chief Registrar of births and deaths. The Additional Director of the Department of

Economics and Statistics is the Additional Chief Registrar. At the local government level, the Secretaries of Gram Panchayats, Health Officers of Corporations and Health Inspectors of Municipalities are the Registrars. Thus, vital registration is the responsibility of the local governments, whether urban or rural (Government of Kerala, 2010). Kerala is listed along with Tamil Nadu and Goa as the states with 100 per cent civil registration (Tiwari, 2011[25]). But the only way residents have an opportunity to see the civil registration data being used is in the Annual Vital Statistics Reports (AVSR) put out by the Department of Economics and Statistics of the State with a delay of over three years. And these reports provide little understanding of vital events. There is hardly any description of the data, and the civil registration process and the form in which the data is available is not explained. While the percentage of cases of delayed registration is mentioned at the aggregate level, no further disaggregation by districts or lower level administrative units is provided.

21.6.7.2 Such aggregate reporting or computation of rates in the AVSR is not of much use for any monitoring or action by local governments. As far back as 1859 Fox (1859[26]) had stated that, "The mere comparison of two populations throws very little light on their relative healthiness or vitality. Their different distribution as regards age must be taken into account, and then we can fairly place them side by side," (quoted in Bellhouse and Genest 2005[27]: 178). The English social statistician William Farr had recognised the problem over 20 years earlier, and introduced the standardised mortality ratio in 1865. Without the proper comparison of mortality rates or the investigation of the causes of mortality at the local level in Kerala, it is difficult to expect public health initiatives from the local governments.

21.7 Strategies of Recent Years

21.7.1 Upgrading government institutions

21.7.1.1 Recognising the importance of public sector institutions in healthcare, some major investments have been made in recent decades. Efforts to upgrade public institutions in Kerala to meet the Indian Public Health Standards and investments in the medical college hospitals are some of them. This has gathered momentum. After about 30 years, the state government has decided to open 10 medical colleges, one in each district, so that every district will have a medical college. The first of these has opened in Manjeri in Malappuram, while the construction of medical colleges in seven other districts has begun.

21.7.1.2 A systematic upgrade of government hospitals so as to obtain quality accreditation from the Quality Council of India has also begun. The National Accreditation Board for Hospitals is the constituent of the Quality Council, which awards accreditation to hospitals in India. About 208 hospitals in the country have so far received accreditation and 11 of them are in Kerala. Four of the hospitals that have received accreditation are in the public sector and they range from taluk hospital to general hospital to specialised women and children's hospital. Kerala is the only state with so many government hospitals obtaining accreditation. In the years to come, all hospitals will strive to obtain accreditation.

21.7.1.3 One of the problems of the department of health in Kerala, till recently, was the lack of concern for data. Steps have been taken to solve this problem too. In a major initiative, all hospitals under the department of health have been linked to a central server to build a comprehensive database of all persons obtaining treatment for lifestyle diseases, communicable diseases and mother-child healthcare. The database will be of immense use in improving the quality of service and health planning at the state and district levels.

21.7.1.4 In recent years, the trend across the world has been moving towards getting as much of treatment as possible at home and minimising the number to be treated in medical institutions. Kerala's department of health has also recognised the importance of such an approach and has initiated a 24-hour 'doctor on call' scheme. By calling a telephone number, timely advice from a doctor

will be made available. Drugs are available to all patients receiving treatment at government facilities.
21.7.1.5 In India, the spread of primary healthcare centres (PHCs) was largely a part of the India Population Health Project. It had a large rural focus, recognising the fact that India was largely rural and spreading the message of population control required greater efforts in rural areas. Thus, PHCs came to be established in rural areas and there was a gap in primary care in urban areas. This void will now be filled by the plan to set up PHCs in urban areas. A decision has been taken to open PHCs in all five corporations and 10 municipalities in the State. Other municipalities will be gradually included in the scheme.

21.7.2 Financial protection against catastrophic healthcare expenditure

21.7.2.1 The felt need

21.7.2.1.2 By the turn of the century it was becoming evident that Kerala's celebrated system of equitable public healthcare services was under stress. People belonging to the lowest income deciles too had begun utilising private care, incurring large out of pocket expenses. The Chief Minister's Relief Fund was inundated with applications for financial help. The government was, thus, forced to design schemes for financial protection against catastrophic healthcare expenses. Around 2005, the then state government designed a tax-financed insurance scheme for the poor, where the families had to pay only the cost of the smart card. Enrollments were carried out by the Kudumbashree groups throughout the State in early 2006 and a private insurance company was paid the premium for a benefit package of Rs 30,000 and entrusted with the responsibility of providing insurance services.

21.7.2.2 Rolling out a scheme

21.7.2.2.2The change of government in 2006 and the muted response of the insurance company to continuing the scheme led to a change in its design. The new government was intent on creating a scheme with comprehensive coverage of inpatient and outpatient care for the lower income classes. The premium would be financed by the government and the family had to bear only the cost of the card at the time of enrollment. But the financial burden of such a scheme was too high for the State to bear at that time. It was around this time that the Government of India announced the RashtriyaSwasthyaBimaYojana (RSBY) to be rolled out over five years in all districts of the country. The Government of Kerala decided to implement the RSBY, as 75 per cent of the premium would flow from the Central Government, reducing the burden of the State to that extent.

21.7.2.2.3The Government of Kerala while adopting RSBY decided to simultaneously implement it in all districts of the State. It decided to empanel all government hospitals in the scheme by updating their facilities and providing incentives to medical personnel so that the scheme's members would obtain responsive treatment. It was also decided to involve local governments to raise the enrollment rate. Thus, the State rolled out the RSBY with over 80 per cent of eligible families enrolled and over 50 per cent of all empanelled hospitals from the government sector.

21.7.2.3 Rashtriya Swasthya Bima Yojana

21.7.2.3.1 RSBY is a health insurance scheme sponsored by the Government of India, for providing free and quality inpatient care to families falling below the poverty line (BPL). It promises inpatient treatment facility up to Rs.30,000 on a paperless, cashless and floater basis to a maximum of five members in a family, for a period of one year through selected public and private hospitals with pre-fixed medical and surgical rates for treatment in the general ward. RSBY does not cover outpatient treatment cases. A minimum period of 24 hours inpatient treatment is required for getting the benefits under the scheme. More than 1,100 surgical procedures with pre-fixed rates are included in the benefit package.

21.7.2.3.2 RSBY is a cashless scheme operated through a smart card with a chip embedded in it. The card's readable zone will carry the photo and name, in English and the local language, of the head of the family. The non-readable zone will have the names and address of all the other members of the family, with a group photo of all family members and impressions of their left and right thumbs.

21.7.2.3.3 The scheme is implemented through an insurance company selected through a tender process for a period of one year. The Government of India pays 75 per cent of the premium and the state pays the rest. Three important features of RSBY are: there is no age limit for joining the scheme; it covers existing diseases; and a transport allowance of Rs 100 is paid in cash to the patient at the time of discharge from the hospital. The maximum transportation allowance payable in a year is restricted to Rs 1,000. It has a component to pay the wages foregone as well.

21.7.2.3.4 The scheme began with the coverage of the BPL population (as per Planning Commission norms). In Kerala, it covered 11.79 lakh families. Gradually, the scheme has been extended to cover families of participants of Mahatma Gandhi National Rural Employment Guarantee Scheme who have worked for more than 15 days in the previous year, street vendors, domestic workers and so on.

21.7.2.4 RSBY to CHIS

21.7.2.4.1The Planning Commission norms for categorising a family as BPL were too restrictive and covered only around 11.79 lakh of the 65 lakh families in the State. RSBY coverage, however, was restricted to these 11.79 lakh families. The restrictive definition of the poor was not acceptable to the State as it had about 10 lakh families who were poor, but not recognised as BPL according to Planning Commission norms. But these families too needed protection against catastrophic health expenditure. The scheme implemented in the State was, therefore, broadened to include other categories of households to make it a universal health insurance scheme that all sections of society could join irrespective of whether they were above poverty line (APL) or BPL. Kerala is the only state with such a facility. The schemes are being jointly run under the banner Comprehensive Health Insurance Scheme (CHIS). A special purpose vehicle called CHIAK (Comprehensive Health Insurance Agency, Kerala) has been formed and entrusted with the task of running the schemes.

21.7.2.4.2APL families who are interested in getting coverage under the scheme will have to pay the entire premium with no government subsidy. The premium of BPL families is paid by the government. All the families, however, have to pay a registration fee of Rs 30 every year. As per the scheme's norms, this amount can be used by CHIAK for administrative expenses. After the initial years, when APL families were allowed to join the scheme, the Government of India raised objections that it might lead to the problem of adverse selection and concentration of bad risks affecting the continuation of the scheme. Hence, APL families are currently not being enrolled in the scheme.

21.7.2.5 The finances of the scheme

21.7.2.5.1 The progress of the scheme is presented in Table 21.19. The number of families covered has steadily increased to reach 30 lakh by 2013-14. Total claims as a proportion of the premium crossed 100 per cent from the very first year requiring an increase of the premium. The premium increased from Rs 435 in the first year to Rs 745 in the third year to over Rs 1,000 in the fourth year. The premium came down in 2013-14 because a different insurance company entered the scene. Thus, the CHIS is fulfilling a felt need in the State.

Table 21.19.
Progress of the Scheme (CHIS)

Year	Number of Families Enrolled (Lakh)	Premium Paid (Rs. crore)	Numberof Claims (Lakh)	Claims Paid (Rs. crore)
2008-10	11.78	51.27	1.64	56.00
2010-11	18.75	82.14	3.65	125.00
2011-12	28.12	210.00	6.99	211.00
2012-13	28.28	311.00	7.00	198.00
2013-14	29.68	218.00	5.00*	148.00*
2012-13	28.28	311.00	7.00	198.00
2013-14	29.68	218.00	5.00*	148.00*

*Note: * up to December 2013.*

21.7.2.5.2 One of the issues highlighted in the context of the increasing use of private facilities by the lower income groups as well, was the poor quality and poor response of institutions in the government sector. Financial protection in the form of RSBY offered all those enrolled in the scheme the option of using the private sector. Interestingly, instead of the proportion of users of private institutions increasing over the years, the share of government hospitals in the total has steadily increased (Table 21.20). The proportion, which stood at 60:40 between private and government hospitals initially, has changed to 30:70 by the fifth year. The large investments in government institutions and the incentives for medical personnel working there have brought about a change, increasing their utilisation.

Table 21.20
Utilisation of CHIS by Sector

Year	Claim Settlement (Count in Lakh & amount Rs. in crore)							
	Govt. Hospitals			Private Hospitals			Total	2011*
	Count	Amount	%	Count	Amount	%	Count	Amount
2008-10	0.48	18	40	0.95	27	60	1.43	45
2010-11	1.44	52	46	2.16	61	54	3.60	113
2011-12	3.78	119	56	3.20	93	44	7.00	212
2012-13	4.82	125	70	2.18	56	30	7.00	181

21.7.2.5.3 Seeing the wide acceptance of the RSBY/CHIS and high utilisation, the state government proposes to extend coverage for the sixth year (2014-15) to 35 lakh families including members of the various welfare fund boards, its pensioners, all SCs and STs, families engaged in fishing and workers in various unorganised sectors. Collection of data on these families has been done through Akshaya Kendras, the government-supported centres set up to spread e-literacy and e-governance, spread across the State.

21.7.2.6 The organisation of the scheme

21.7.2.6.1 The nodal agency for implementing the scheme in Kerala is CHIAK that operates with a nucleus of six personnel in Thiruvananthapuram and a district coordinator in each of the 14 districts of the State. The implementation of RSBY/CHIS in the State brought awards and appreciation for Kerala from the Central Government from the first to the fifth year of the scheme. The award in the first year was for the best scheme implementation, while in the second to fifth years, it was for maximum utilisation percentage.

21.7.2.6.2 While United India Insurance Co Ltd was the insurer for the first four years, Reliance General Insurance Company Ltd took it up in the fifth year. As Reliance has agreed to run the scheme on existing terms for one more year, the government has decided to extend the contract for implementing RSBY/CHIS in the State for the year 2014-15 also. The task of renewing the membership of the existing 30 lakh families and enrollment of the 5.52 lakh newly registered families was started in the second week of February throughout the State. The government has allocated Rs 50 crore under RSBY and Rs 150 crore under CHIS for implementing the scheme during the 2014-15 financial year.

21.7.2.7 CHIS Plus

21.7.2.7.1 A new scheme of providing tertiary care, with a benefit package of maximum Rs 70,000 for critical illnesses such as cancer, cardiac disease and renal failure, to all RSBY and CHIS card holder families was designed during 2010-2011. The scheme, named CHIS Plus, was launched by the middle of February 2011. During 2012, CHIS Plus coverage extended to diseases relating to the liver, brain and accident trauma care.

21.7.2.7 .2 The scheme is implemented in all the five Government Medical Colleges in the State, Regional Cancer Centre, Malabar Cancer Centre and a few district and general hospitals. Implemented through a non-insurance route, the scheme has benefited around 51,000 patients during the last nine months of 2013-14 and the claims have totalled Rs 47.26 crore.

21.7.2.8 Karunya Benevolent Scheme

21.7.2.8.1 An ageing society with a heavy burden of terminal diseases will need tertiary care. The RSBY benefit package does not cover tertiary care, while CHIS Plus covers limited tertiary care for those registered under the scheme. This leaves out other groups for whom tertiary care treatment becomes unaffordable and may, therefore, require assistance. Perceiving such a felt need, Kerala's Finance Minister designed a scheme called Karunya Benevolent Fund (KBF) to meet the tertiary care expenditure of deserving individuals. Unlike CHIS, which is a cashless scheme, the KBF requires prior authorisation in the form of an estimate of expenditure to be obtained from the consulting doctor and countersigned by the authorised person of the hospital where the treatment is to be obtained. This signed form has to be submitted along with a prior sanction form indicating family characteristics (BPL/APL), annual income and so on. A committee headed by the district collector authorises treatment and the amount is sanctioned as per the details furnished in the pre-sanction form. The amount is paid to the hospital, which has to submit the utilisation certificate. In addition, there is also a provision to provide one-time assistance of Rs 3,000 per family. Treatment can be availed of at all government hospitals and empanelled private hospitals.

21.7.2.8.2 KBF is funded by earmarking revenue from the weekly Karunya lotteries. The KBF has collected Rs 254 crore in the first two years of its operation. It has provided assistance to about 30,000 persons and the disbursement is close to Rs 310 crore. The beneficiaries hail from all the districts. Interestingly, most of the beneficiaries have availed of treatment in Government Medical College hospitals, Regional Cancer Centre, Malabar Cancer Centre and Sree Chitra Thirunal Institute for Medical Sciences and Technology.

21.7.3 Role of local government

21.7.3.1 Following the 73rd and 74th amendments to the Constitution of India, space for a third tier of government was created. Kerala took the lead in devolving many functions and funds to the local governments. About one-third of the plan funds was devolved to the local governments so that they were enabled to plan for economic development with social justice.

21.7.3.2 In the healthcare sector, primary and secondary care institutions were transferred to local governments. Their responsibilities included the maintenance of institutions, providing hygienic drinking water and sanitation, improving the supply of medicines and health accessories at healthcare centres. The financial autonomy attained by the local governments turned them into self-governing institutions, empowering them to intervene in the preventive, curative and promotional aspects of healthcare.

21.7.3.3 Along with building infrastructure for safeguarding the health of the population under its jurisdiction, local governments are also responsible for initiating preventive and promotional approaches to improve their health status. In the current Kerala context of an aging society with increasing incidence of lifestyle diseases and a resurgence of communicable diseases, local governments could have taken two sets of initiatives — foster behavioural changes to reduce lifestyle diseases and change living environments to control the resurgence of communicable diseases. It is, however, doubtful if local governments have achieved much success in driving such initiatives.

21.7.3.4 Though many central and state government schemes such as Total Sanitation Campaign and Clean Kerala Mission have been functioning in the State for over a decade, the desired results have not been achieved owing to the lack of a public health approach by the local governments. This comes out vividly in many micro level studies and to quote one such,"… though waste disposal and processing is a key responsibility of the panchayats, the initiative of the three Gram Panchayats in these aspects was limited. They have spent some amount under this title. In fact, it was restricted to the cleaning of streets and fixing waste bins in public places. An attempt to process garbage was initiated only by Venkitangu Gram Panchayat by constructing a biogas plant for processing biodegradable waste. Moreover, all the three panchayats made no serious effort to control the lifestyle diseases that are the newly emerging challenges in the healthcare sector." (Benson Thomas and Rajesh, 2011: 14[28])

21.7.3.5 An added challenge is the National Rural Health Mission (NRHM) which says that the burden of communicable and non-communicable diseases in Kerala is on the rise (NRHM 2008:5). Innovation introduced by NRHM could have raised the capacity of local governments to use registration data for specific public health interventions. However, these innovations are mostly in healthcare, such as accreditation of hospitals and medical laboratories, e-banking and debit card practices, information systems, bridging manpower gaps and so on. There is hardly any innovation in either public health or building capacity for data collection and analysis. Further, the flow of resources from the central government to the local governments resets their priorities. The lack of measures or indicators of health at the local level does not allow for local public health initiatives to take precedence over global concerns such as infant mortality and maternal mortality. Incentive structures have been directed at taking pregnant women to hospitals or children for immunisation as these numbers are easily measurable.

21.7.3.6 The incentive structures, however, had evinced other responses. The local governments have tried to change the image of public healthcare institutions. Substantial amounts were spent on creating infrastructure, as almost all rural local governments gave importance to the construction of buildings. Many new buildings of sub centres of PHCs and anganwadis came up all over the State. Importance was given to the provision of furniture and medical equipment in the transferred institu-

tions. While the appointment of medical officers and other staff in the institutions still rested with the state government, the local governments employed doctors on contract basis to improve the quality of services, often drawing from NRHM funds.

21.7.3.7 The local governments made a great effort to promote sanitation too by subsidising latrine construction in all houses. It was so rapid that the proportion of households having a sanitary latrine in the house showed an increase of 40 percentage points between 1991 and 2001, with the level reaching 84 per cent by 2001 (Census, 2001). Further, the gains were significantly higher for the scheduled caste and scheduled tribe households. By now, the percentage of households having a latrine is close to 100, for which credit should go to the local governments.

21.7.3.8 The situation would have been different had death rates been measured at the local level using civil registration data. Under the Public Health Act of 1848, a duly certified district mortality exceeding a norm, empowered the local population to call for the intervention of the General Board of Health. Having a similar process is perhaps unthinkable in the Kerala context despite 100 per cent civil registration. Yet, this is probably the way forward as a number of communicable diseases require local attention, which the local governments are best positioned to give.

21.8 The Seven Pillars

21.8.1 Vision, mission and goals

Vision

21.8.1.1 Kerala will ensure 'health for all' by 2030. It will provide health security to each and everyone by 2030. It will have a highly innovative, affordable and accessible health system that all Keralites can trust. It will have a health system that is accessible when people need it, regardless of their ability to pay.

Mission

21.8.1.2 The mission is:

- Good health and well being for all Keralites throughout their lives.
- Timely and equitable access for all Keralites to a comprehensive range of health and disability services, regardless of the ability to pay.
- A high-performing system in which people have confidence.
- Active involvement of consumers and communities at all levels.

Goals

21.8.1.3 Health for all

- Increase the health expenditure to GSDP ratio from 0.6 per cent in 2012 to 4-5 per cent by 2027-31.
- Reduce MMR from 81 to 12 per 1 lakh live births.
- Reduce IMR from 13 to 6 per 1,000 live births.
- Eradicate communicable diseases.
- Prioritise health areas to include mental diseases, alcoholism and suicide.
- Increase the number of hospital beds from 34.6 per 10,000 in 2004 to 70 per 10,000 by 2030.
- Increase the number of nurses from 12.4 per 10,000 population in 2004 to 65 by 2030.
- Increase the number of doctors from 9.9 per 10,000 population to 17.2 in 2030.
- Provide health insurance cover to all.

21.8.1.4 Government health institutions: Coverage and quality

21.8.1.4.1 Kerala has already taken steps to fill the space created by the absence of PHCs in urban areas. But it may be an approach that uses 'yesterday's institutions to face the problems of tomorrow'. It might be necessary to think of institutional structures that suit the rapid urbanisation in the form of urban agglomerations taking place in the State. The strategy may, perhaps, be to ensure good coverage by having primary care and public health institutions spread out across the urban agglomerations. There has to be a combination of both primary care and public health as the population has become highly mobile and needs to be under continuous surveillance for many communicable diseases.

21.8.1.4.2 To ensure quality of government institutions, a systematic upgrade of government hospitals for quality accreditation from the National Accreditation Board for Hospitals (NABH) has already begun. The task before the department is to see that all its institutions obtain accreditation and maintain quality standards without fail.

21.8.1.5 Private healthcare under regulatory framework

21.8.1.5.1 Kerala has a large number of private healthcare providers of all types. A large number of hospitals are empanelled to provide services in the CHIS. It may, therefore, be necessary to bring all of them under some regulatory framework so that people trust the quality of the care provided. It may also be necessary to bring some regulation of the fees charged by private healthcare providers. This is to ensure that hospital charges have some bearing on the quality of services delivered, which is currently not the case. The rates could be fixed based on systematic studies carried out by organisations with expertise in the area. Kerala already has a project called Costing Study for Designing Payment to the Service Providers and it could be entrusted with the responsibility of developing a fee structure for hospitals based on the different quality standards followed by different facilities.

21.8.1.5.2 As the State develops a system for universal coverage (see below), empanelling a large number of private healthcare providers will become necessary. In addition to the adherence to NABH accreditation, they may also be brought under rate regulation. They will be free to practice, but subject to all professional regulations as well as quality and rate regulations so that people get fair treatment.

21.8.1.6 Financial protection: Towards universal coverage

21.8.1.6.1 A scheme called Universal CHIS Plus that offers tertiary care cover for all families in designated hospitals in the State can be developed to offer universal healthcare coverage in Kerala. As CHIS enrollees are already covered under the CHIS Plus scheme, the new scheme could provide tertiary care treatment to all non-CHIS families in the State, with the objective of extending health protection to every household in the State. The experience of CHIS Plus can be used to design and implement the new scheme. In moving towards universal coverage, it may be necessary to bring CHIS Plus, Karunya and the numerous Welfare Fund Board schemes together so that it truly becomes universal.

21.8.1.6.2 The benefit package will have to cover cashless, paperless treatment benefit of Rs 200,000 (or more as required) for all family members, for heart and liver diseases, cancer, neurological and nephrology conditions and accident trauma care. Treatment procedures will have to be predetermined, with specific and fixed rates for each procedure. The Costing Study for Designing Payment to the Service Providers project, which is already working on rates for surgical procedures and packages, could be commissioned to address issues related to determining the rates of the proposed universal healthcare scheme.

21.8.1.6.3 An anticipated threat to the proposal can be a situation of low registration and adverse selection, where only a few families register and a majority of them seek treatment. An element of compulsion, therefore, has to be brought in for the scheme's success. One approach could be to involve local governments in the scheme. If the local government sensitises people in its area about the scheme and gets a certain proportion of non-CHIS families enrolled in the scheme, then the problem of adverse selection could be avoided. The local government could also pay part of the premium, say 30 per cent, from its own sources, with the rest being paid by the family.

21.8.1.7 Local Government at the centre of health planning

21.8.1.7.1 One of the early realisations of the public health movement in the UK was that any comparison of mortality at the local level called for a uniform system of registration. While the civil registration system in Kerala is a colonial legacy, it has not become part of deliberations at the level of the local governments, as it has remained a part of state level bureaucracy.

21.8.1.7.2 Kerala's literate population has not been sensitised to the system of civil registration as a rich source of data for measuring vital rates at the local level. Such sensitisation and the investigation of the causes of any large deviations at the local level should have come up for discussion in the Gram Sabhas. This would have, in turn, driven improvements in the system of registration as well as systematic analysis and use of data. That would have spawned systematic public initiatives to face the challenges of communicable diseases. The absence of such efforts is a lost opportunity to strengthen local democracy and public health responses to deal with Kerala's healthcare challenges.

21.8.1.7.3 Population Census data should also be available to the local bodies to plan their activities in health and related areas. It may be instructive to take a look at what Sri Lanka and Bangladesh have done in recent years. In the Sri Lankan Census, the following information is available: Population by age, sex, ethnicity and so on. Housing by numbers, material, electricity, water, sanitation and so on. The level of disaggregation is district; divisional secretary's (DS) division (with population between 10,000 and 100,000) that are comparable to our Gram Panchayats and Municipalities; and Gram Niladhari Division (with 100-300 households) that are like our wards.

21.8.1.7.4 The Sri Lankan Census site (www.statistics.gov.lk) provides the following information: population by sex and age, by ethnicity, by religion, by reason for migration, with data provided by district and by DS Division. Information on amenities is provided on the following lines — house by type, by principal material of wall, by principal material of roof, by source of drinking water, by principal type of lighting, by toilet facilities and so on. The same data is provided at the Gram Niladhari Division as well. Sri Lanka's achievements are commendable, especially since information was presented on the site soon after the Census was completed. The level of disaggregation at the Gram Niladhari level is worthy of mention. All information is easily accessible, thus empowering a local level planner.

21.8.1.7.5 Bangladesh has gone one step further. They conducted their most recent population census more or less at the same time as India. The country has published a report titled, 'Child Equity Atlas: Pockets of Social Deprivation in Bangladesh'. Explaining the rationale for the report, its authors say: "Bangladesh and the Maldives are the only two countries in the SAARC region to have achieved the MDG of reducing by two-thirds, the under-five mortality rate (U5MR). Among SAARC countries with a large population size, Bangladesh clearly stands out with the highest Annual Rate of Reduction of U5MR (on average a 5.3 per cent annual rate of reduction between 1990 and 2011). These are truly remarkable achievements." But they are not content with that glory, and add: "But the question is: Has Bangladesh made the progress with equity? The reality, however, is that the progress is uneven — disparities exist in effective coverage of basic social services by geographic regions, rural-urban, gender, wealth, ethnicity, and other dimensions."

21.8.1.7.6 The specific objectives of the report include the following: Harness the detailed information available in the census, done once in 10 years, to have reliable data at below-district levels at virtually no additional cost. Make the census data more accessible and user friendly so as to unearth child-centred inequities such as marriages of girls aged 15 to 19 years, 'real child workers' and so on. The expectation is that local governments will use the Atlas to good effect.

21.8.1.7.7 It is time India's Census too moved in a similar direction to strengthen the hands of the local governments. These, together with the civil registration data will go a long way in health planning at the local level. That should be the goal for 2030.

21.8.1.8 Public health prioritisation

21.8.1.8.1 One of the most quoted definitions of public health is 'the organised response by society to protect and promote health, and to prevent illness, injury and disability'. It is often criticised for being closer to an ideal, for in most countries, public health is organised to only a limited extent and the involvement of society in the 'to protect and promote health' aspect is severely constrained by the narrow power base of public health (Mooney 2008[29]). Public health is poorly organised because it gets little deliberative space in society and loses its character as a social institution since public health experts, most often medical doctors, tend to dominate the domain. Public health being social in nature is, "the summation and impact of the effects of the workings of several social institutions including, most obviously, housing, education and healthcare, but also other less tangible institutions such as freedom of speech, equality before the law, tax policy and income distribution." (Mooney 2008:3) As the workings of several inter-related social institutions are involved, any effort at change would require political intervention, which is the product of a deliberative democracy with space for citizens' involvement in decision-making around public health.

21.8.1.9 Vulnerable population groups

21.8.1.9.1 One of the major health issues before Kerala is the care of its vulnerable population. An integrated system to prevent both communicable and non-communicable diseases along with schools and colleges to spread awareness is to be established. Specific guidance to ST women through trained anganwadi workers to address various health problems prevailing among them is required. Violence against women (VAW) cases need to be managed by trained doctors and more sensitivity needs to be developed towards such cases. The health requirements of the aged population also need to be emphasised in terms of both physical and mental health. (See Chapter 22.)

21.8.1.10 Behavioural changes to reduce alcohol consumption

21.8.1.10.1 Alcohol consumption has become a major problem in Kerala with a huge health cost. In the next decade-and-a-half, the State has to bring it down drastically. Three approaches may be taken to achieve this. The first is the classical knowledge, attitude and practice approach. People have to be approached at all levels to understand the adverse effects of alcohol. It could be in schools, entertainment halls and community functions. The limitations of such approaches should also be fully recognised.

21.8.1.10.2 Taxation too is an instrument used in controlling alcohol consumption. But in Kerala, the instrument has been used rather bluntly. It is time systematic attempts are made to study the price effect on consumption. It could be differential taxation of different alcoholic beverages and also of different package sizes. The state government has the monopoly on liquor sales in Kerala. Yet, it has not used the massive amounts of data at its disposal, due to its monopoly seller status, to study or curb the consumption of liquor. This situation has to change if taxation has to become an instrument in the State's hands.

21.8.1.10.3 The adverse selection problem has been mentioned in the context of universal coverage. Alcoholism must be used as a tool in the differential provision of healthcare coverage. For example, alcohol-related episodes of illness or diseases could be subjected to co-payment.

Reference

1 *Human Development Index (HDI) is a composite Index which measures the three critical dimensions of well-being, such as (a) longevity: the ability to live long and healthy life, (b) education: the ability to read, write and acquire knowledge, and (c) command over resources: the ability to enjoy a decent standard of living and have a socially meaningful life.*

2 *The infant mortality rate in Kerala is the lowest among the Indian states. Life expectancy is the highest for both male and female. Sex ratio is favourable to females.*

3 *Panikkar,P.G.K..,and C.R.Soman.1984.Health Status of Kerala. Thiruvananthapuram: CDS Dre`ze.J., and Sen,A.,.2002. India: Development and Participation: NewDelhi:OxfordUniversity Press*

4 *Cladwell, J.C 1986. Routes to low morbidity in poor countries. Population and development review,12(2).*

5 *Parts of this chapter draws heavily from the Ph D thesis titled, User's Choice of Health Care Provider under Multiple Providers, HariKurup K K 2013 submitted to the Jawaharlal Nehru University, New Delhi. Medical care facilities run by non-governmental organizations, charitable and religious groups are more often classified in the health literature as not-profit. But this classification is not appropriate in the Kerala context as these institutions often behave like for-profit facilities.*

6 *Central Bureau of Health Intelligence brought out the first publication "Health Statistics of India: 1951-1953". This was followed by subsequent issues covering the Health Statistics up to the year 1975. The above said publication was modified and brought out as "Pocket Book of Health Statistics of India" till the year 1980. The annual publication "Health Statistics of India" was revived from the year 1981 and continued up to the year 1985. However, from the year 1986 onwards this annual publication was renamed as "Health Information of India" & was published up to the year 2005. From the year 2005, the Health Information of India was improvised while covering various gaps and CBHI came out with the first issue of "National Health Profile of India 2005". From the year 2006, the National Health Profile replaced the Health Information of India. This publication "Health Information of India" contained information on health and related aspects such as population, vital Statistics socio-economic indicators, pattern of government investment and expenditure on health, public health statistics, etc.*

7 *Details on number of hospitals and number of beds include data for private and voluntary hospitals also.*

8 *See Annexure Table A.3.2 for district-wise distribution of the number of beds in public and private hospitals of Kerala.*

9 *Although there are differences among scholars on the appropriateness of the recall period, a general consensus is that shorter the reference period lesser the relapses and better the responses. However, there is a related problem in terms of not being effective in addressing issues of seasonality of diseases.*

10 *Kannan,K.Petal(1991). Health and Development in Rural Kerala, KSSP, Trivandrum.*

11 *Perception on morbidity could be related to the levels of literacy. The literacy rate among ST population at the national level is desperately less than the general population.*

12 *Episode-wise details are not available for outpatient care from the NSSO. Hence comparison of outpatient and inpatient care is based on the number of persons who sought care.*

13 *State Planning Board. 2013. Kerala Economic Review 2012. Government of Kerala, Thiruvananthapuram.*

14 *The number of Leptospirosis cases could not be confirmed from CBHI. Therefore, the numbers have been taken from the following source.State Planning Board. 2013. Kerala Economic Review 2012. Government of Kerala, Thiruvananthapuram.*

15 *State Planning Board. 2013. Kerala Economic Review 2012. Government of Kerala, Thiruvananthapuram.*

16 *Regional Cancer Centre, Thiruvananthapuram Website. http://www.rcctvm.org/lifestyle%20and%20cancer.htm.*

17 *Murthy, N.S. and A. Mathew. 2004. Cancer epidemiology, prevention and control. Current Science.86(4). February 25 and Jayalekshmi P, Gangadharan P, Mani KS. 2006. .Cancer in women in Kerala- A transition from a less developed state.Asian Pacific J Cancer Prev. 7.186−190.*

18 *Kerala State Mental Authority Web site: http://www.ksmha.org/.*

19 *Comptroller and Auditor General of India. 2011. Audit Report (Civil) for the year ended 31 March 2010.*

http://mhpolicy.files.wordpress.com/2011/05/cag-report-on-audit-of-mh-sector-in-kerala-2010.pdf.

[20] *Comptroller and Auditor General of India. 2011. Audit Report (Civil) for the year ended 31 March 2010. http://mhpolicy.files.wordpress.com/2011/05/cag-report-on-audit-of-mh-sector-in-kerala-2010.pdf.*

[21] *Comptroller and Auditor General of India. 2011. Audit Report (Civil) for the year ended 31 March 2010. http://mhpolicy.files.wordpress.com/2011/05/cag-report-on-audit-of-mh-sector-in-kerala-2010.pdf.*

[22] *Ramanathan, H. N. and V. P. J. Raj. 2007. Prohibition! A Constitutional Promise and the Reality - A study on Indian Made Foreign Liquor Markets in Kerala.International Conference on Marketing and the Society. Indian Institute of Management –Kozhikode.*

[23] *Ramanathan, H. N. and V. P. J. Raj. 2007. Prohibition! A Constitutional Promise and the Reality - A study on Indian Made Foreign Liquor Markets in Kerala.International Conference on Marketing and the Society. Indian Institute of Management –Kozhikode..*

[24] *Narayana.D.2008. Safeguarding the Health Sector in times of macro economic instability (chapter 7:High Health Achievements and Good Access to Health care at Great cost: the Emerging situation in Kerala.)*

[25] *Tiwari.D.K 2011.Civil registration system in India. http://e.unescap.org/stat/crvs/vs-Mar11/session7-India.pdf*

[27] *Bellhouse and Genest 2005A Public Health Controversy in 19th Century Canada http://projecteuclid.org/download/pdfview_1/euclid.ss/1121347639*

[28] *Benson Thomas, K. Rajesh .2011. Decentralisation and interventions in Health Sector: A critical inquiry into the experience of local self government in Kerala. ISEC. Bangalore.*

[29] *Mooney,G. 2008 Public Health, Power and community autonomy, paper presented at the International Seminar,The Health transition in India: Public Health, Governance and Market 19-21 Feb 2008,Institute of Development Studies, Kolkata.*

Chapter 22

SOCIALLY VULNERABLE GROUPS

Chapter 22

Socially Vulnerable Groups

22.1 The Socially Vulnerable Groups

22.1.1 The goal of Kerala Perspective Plan 2030 (KPP 2030) is to achieve sustainable inclusive growth. This involves, among other things, providing protection to socially vulnerable groups. Social vulnerability refers to the inability of certain population groups to withstand adverse impacts from multiple stressors to which they are exposed. These impacts are due, in part, to characteristics inherent in social interactions, institutions and systems of cultural values. This chapter comprehensively analyses the challenges being faced by vulnerable groups and develops an appropriate plan to upgrade the management and provision of services to these groups to the developed countries' standards. The vision around which the strategy has been developed is: "A social system that contributes to maintaining human dignity." Five population groups are identified as socially vulnerable:

- Women
- The aged
- Linguistic minorities
- Differently-abled
- Others

22.1.2 The strategies involve not just alleviation of circumstances, but rather, a careful analysis of different vulnerabilities, how these can be prevented or diffused and, in general, the levels of social infrastructure that must be established for enhancing the quality of life of these groups.

22.2 Empowerment of Women

22.2.1 The empowerment of women has been a central feature of the international agenda since 1945 when the Charter of the United Nations was signed. It was the first international agreement to affirm the principle of equality between women and men. On December 10, 1948 the General Assembly of the United Nations adopted and proclaimed the 'Universal Declaration of Human Rights' in which the United Nations reaffirmed their faith in fundamental human rights, the dignity and worth of the human person and the equal rights of men and women. The United Nations Conference on Environment and Development (UNCED) Agenda 21 (1992) mentions women's advancement and empowerment in decision-making, including women's participation in 'national and international ecosystem management and control of environment degradation', as a key area for sustainable development. The importance of women's empowerment in demography was underlined in the International Conference on Population and Development (ICPD) in Cairo in 1994. The conference stressed that women should be empowered to make informed choices with respect to their health and reproductive outcomes. The 1995 Copenhagen Declaration of the World Summit on Social Development (WSSD) argued that empowering people, particularly women, to strengthen functional capacities is a major objective of development. The participatory nature of the process of empowerment was recognised in the Copenhagen Declaration. The report of the UN Fourth World Conference on Women called its Platform for Action 'an agenda for women's empowerment', meaning that the principle of shared power and responsibility should be established between women and men at home, in the workplace and in the wider national and international community (UN, 1995).[1] The importance of women's empowerment in the developmental process has been highlighted in recent international discourses

too. The 2012 World Development Report argued that 'gender equality is smart economics'. Empowering women can contribute to higher productivity, income growth and poverty reduction. In a dynamic context, empowering women has substantial positive inter-generational effects as it can improve opportunities and outcomes in subsequent generations. Finally, it is widely recognised[2] that empowerment can enhance development decision-making by increasing diversity within the political system. Incorporating women in the decision-making process improves outcomes in natural resource management and local provisioning of local public goods.

22.2.2 Empowerment of women has been one of the important building blocks of the 'Kerala Model' of development also. The spectacular success of the State stems from its accomplishments in health and education, and the contributions of women in these areas have been significant. The achievements in literacy and education have positively influenced the status of women in the state. Kerala's high levels of human development and gender development are the result of its achievements in the field of health and education for women.

22.2.3 Another of Kerala's notable features is its demographic characteristics, particularly its sex ratio (defined as the number of females per 1,000 males). Kerala had a favourable sex ratio of 1,058 in 2001; this increased to 1,084 in 2011. In comparison, the sex ratio for India was 933 (2001) and 940 (2011). Kerala is the only Indian state where the sex ratio has historically been above unity. Similarly, in terms of literacy, life expectancy and mean age at marriage, women in Kerala score higher than those in any other state in the country. In 1950, when India became a republic, the female literacy rate at the national level was merely 7.9 per cent. Kerala's female literacy at the same time was four times higher (32 per cent).[3] Similarly, in 1950, while female life expectancy at the national level was only 31.7 years, the same was 42.3 years in Kerala. Thus, historically, favourable ground was set for Kerala's women while most Indian states had a poor record in this regard. Perhaps, this paved the way for Kerala's outstanding achievements in women's development, and as a result, the increase in overall human development. The National Human Development Report ranked Kerala as the leading state in terms of Human Development Index, Gender Equality Index and Gender Empowerment Measure.[4]

22.2.4 However, recent analysis of data — coupled with media reports and studies by Non-Governmental Organisations (NGOs) — bring out another side of the story. The incidence of crimes against women, rape and sexual harassment is high in Kerala; female health issues have assumed alarming dimensions; autonomy of women in household matters; and their participation in economic activities is low. This calls for a closer look at the social, educational and economic status of women in Kerala, and the need to develop a comprehensive strategy for women's empowerment.

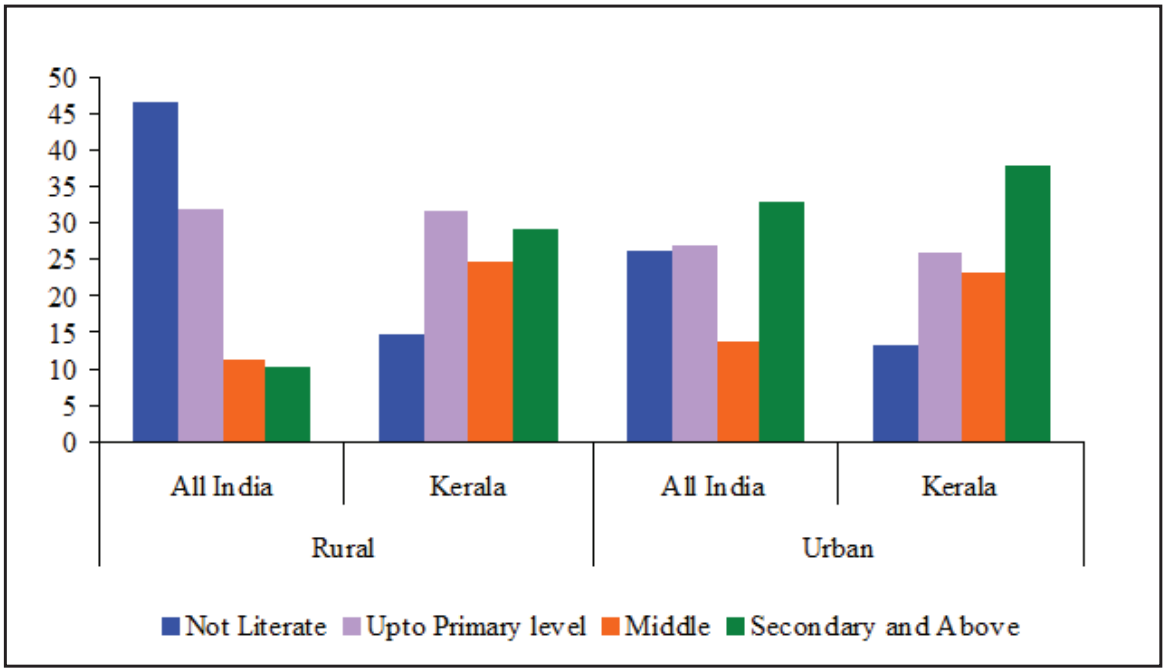
22.2.1 Female empowerment: The current status

22.2.1.1 The status of women is assessed in terms of educational attainment, economic empowerment, health attainments, crimes against women and social empowerment.

Educational empowerment

22.2.1.2 Overall educational attainment:NSS data from the 66th Round (2009−10) reveals the extent to which women in Kerala are ahead of women in other states with respect to educational attainments (Figure 22.1). While 47 per cent of rural women are illiterate in India, in Kerala this figure is only 15 per cent. In urban areas, the percentage of illiterate women in India and Kerala is 26 per cent and 13 per cent respectively. The proportion of women with at least a secondary education is three times more in Kerala than in rural India; in urban areas also, the figures are in favour of Kerala by 5 percentage points. This is also confirmed by the third round of the National Family Health Survey of 2005-06 (not shown here).[5]

Fig 22.1
Education levels of Females in India and Kerala : 2009-10(Per 1000)



Source: National Sample Survey Round 66 on Unemployment and Employment

22.2.1.3 Representation in higher education[6]:Figures released by the Ministry of Human Resources Development (MHRD) indicate that in Kerala, out of every 100 students about 54 are women; in India, on the other hand, only 40 out of every 100 students are women. The Gender Parity Index[7] estimated by the MHRD also reveals that Kerala is ahead of other states. Kerala's Gender Parity Index of 1.18 (against India's 0.74) is below only Goa, Daman and Diu, Chandigarh and Dadra and Nagar Haveli.

22.2.1.4 Estimates of the proportion of women in under graduate (UG), post-graduate (PG) and M.Phil./Ph.D. courses in Kerala and India are given in Table 22.1. Overall, representation of women in M.Phil./Ph.D. and PG courses in Kerala is higher than all-India levels. However, representation of women in UG courses is lower than the all-India level by about 6 percentage points.

Table 22.1.
Representation of Females in Higher Education: 2008-09

Year	Kerala			India		
	Girls	Total	Percentage	Girls	Total	Percentage
Ph.D./M.Phil.	942	1,800	52.3	37,436	92,211	40.6
PG-Arts	6,944	9,518	73.0	3,66,452	7,53,068	48.7
PG-Science	6,849	8,519	80.4	1,99,751	4,39,725	45.4
PG-Engineering & Technical	877	2,203	39.8	21,904	76,565	28.6
PG-Medicine	758	1,351	56.1	14,443	35,596	40.6
PG-Education	157	195	80.5	14,661	26,892	54.5
PG -Others	2,002	3,121	64.14	7,17,269	16,02,243	44.77
PG-Total	18,529	26,707	69.4	8,05,713	18,33,507	43.9
UG-Arts	45,214	72,532	62.3	2,89,6841	63,04,595	45.9
UG-Science	48,978	68,371	71.6	8,90,617	21,48,956	41.4
UG-Engineering & Technical	33,715	99,071	34.0	5,54,947	19,28,998	28.8
UG-Medicine	11,682	17,009	68.7	1,54,236	3,18,588	48.4
UG- Others	27,889	47,486	58.7	12,80,274	31,71,733	40.4
UG	16,7478	30,4469	35.3	57,76,915	1,38,72,870	41.6

Note: UG: under graduate UG and PG is post graduate PG.
Source: Statistics of Higher and Technical Education: 2009−10. Ministry of Human Resource Development

22.2.1.5 Analysis of the representation of women in specific streams reveals that in Kerala, women are better off in terms of representation in all courses. In particular, a much high proportion of women are enrolled in science (UG and PG) and medicine (UG) in Kerala, compared to all-India figures. While the representation of women in engineering and technology courses in Kerala is higher than in other states, there is scope for improvement.

22.2.1.6 Table 22.2 indicates the Gender Parity Index (GPI)[8] in enrollment at primary, secondary and tertiary levels for both Kerala and India. It shows that Kerala not only succeeded in eliminating the female-male disparity at all levels of education, but has also shifted it in favour of females. At the all-India level, the ratio remains unfavourable and the gap with Kerala increases with increase in the level of education.

Table 22.2.
Gender Parity Index at Primary, Secondary and Higher Education Levels for Selected Years: Kerala vs all-India Average (2004−05 to 2007−08)

		2004−05	2005−06	2006−07	2007−08
Primary Education	Kerala	1	1	1.01	1.01
	India	0.95	0.94	0.94	0.98
Secondary Education	Kerala	1.04	1.03	1.07	1.08
	India	0.79	0.8	0.82	0.85
Higher Education	Kerala	1.22	1.12	1.14	1.1
	India	0.71	0.69	0.69	0.7

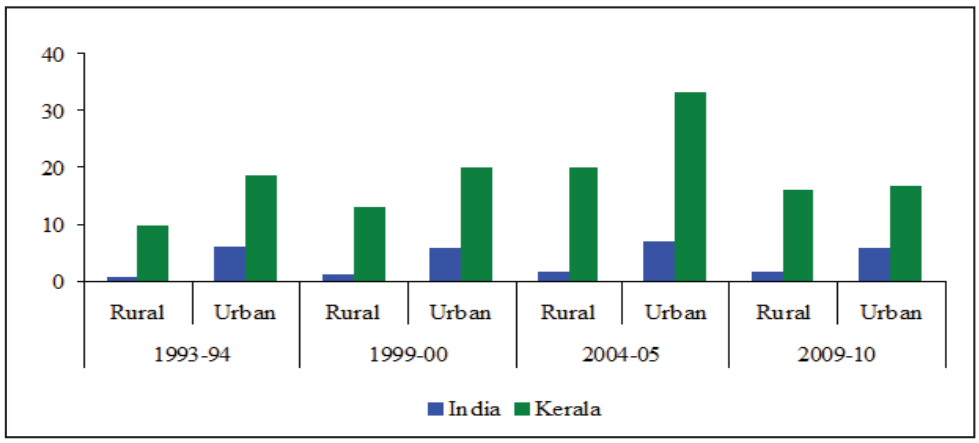
Source: Central Statistical Organisation, Ministry of Statistics and Programme Implementation, Government of India. Millennium Development Goals: India Country Report 2011.

22.2.1.7 Prima facie, therefore, it appears that Kerala is ahead of other states in terms of representation of women in education, particularly higher education.

Economic empowerment: Participation in economic activity

22.2.1.8 As discussed in Chapter 1, in both rural and urban areas female unemployment rates in Kerala are higher than all-India levels. In fact, in the NSS 66th round the difference in unemployment levels (between Kerala and India) was about 15 and 11 percentage points in rural and urban areas, respectively.

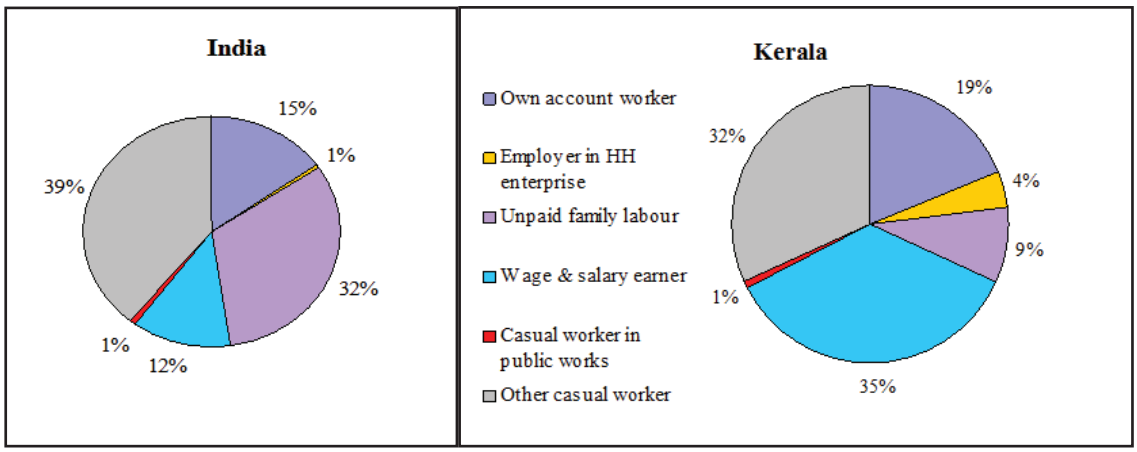
Fig 22.2
Female Unemployment Rates in Kerala and India: Across NSS rounds (per 1000)



Source: National Sample Survey Round 66 on Unemployment and Employment

22.2.1.9 Nature of Female employment activity: Analysis of the principal activity status of women workers (Figure 23.3) indicates that the proportion of regular wage and salary earners is three times higher in Kerala than in India. Moreover, the proportion of female workers engaged in the household sector (as own account workers, employers and unpaid family workers) is substantially lower in Kerala, compared to all-India figures. These are positive developments. Similar changes are observed in the rural and urban sector.

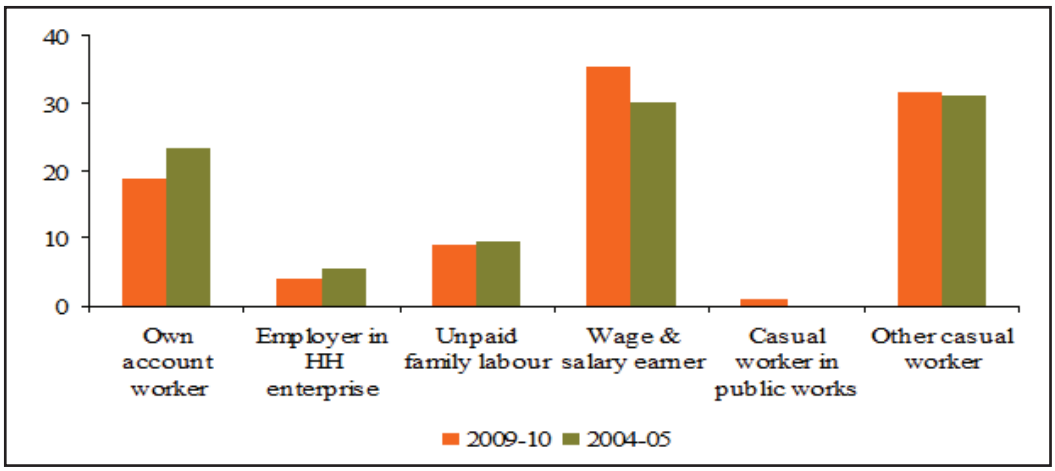
Fig 22.3
Distribution of Female Workers by Principal Activity Status: 2009−10



Source: National Sample Survey Round 66 on Unemployment and Employment

22.2.1.10 Figure 22.4 shows that the share of regular wage and salary earners has increased between 2004-05 and 2009-10, while the share of own account workers has gone down. Other changes in activity status are marginal. This rules out the possible worsening of women's employment status in Kerala.

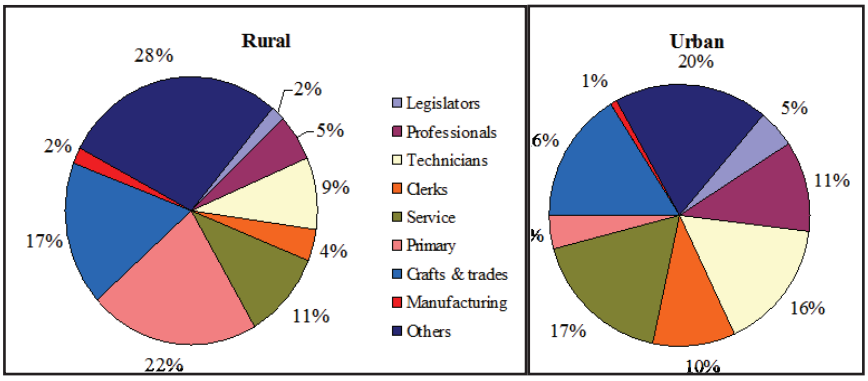
Fig 22.4
Distribution of Female Workers by Principal Activity Status in Kerala: 2004-05 and 2009-10



Source: National Sample Survey Round 66 and 61

22.2.1.11 Nature of jobs taken up by women: Classification of female workers by occupational categories (Figure 23.5) reveals that in Kerala's rural areas, most female workers are engaged in the residual 'others' category (28 per cent),[9] followed by primary sector (22 per cent) and service sector (11 per cent). In urban areas, women workers are concentrated in the 'others' category (19 per cent), service sector (17 per cent), technicians (16 per cent), professionals (11 per cent) and clerks (10 per cent). Women engagement is, thus, found to be skewed towards low productivity categories.

Fig 22.5
Classification of Female Workers in Kerala by Occupation: 2009−10



Source: National Sample Survey Round 66 on Unemployment and Employment

22.2.1.12 Education and participation in economic activity is often identified as a necessary condition for empowerment. While Kerala has made sufficient progress in women's education, analysis of

NSS data reveals that the situation with respect to participation in economic activity is an important challenge before policymakers.

22.2.1.13 Wage patterns — Male vs. female: Using statistical techniques[10] geometric mean of daily earnings has been estimated and presented in Table 22.3. Estimations are based on NSS unit level data from the 61st and 66th rounds. It may be seen that male wages are always higher than those of women. This holds across NSS rounds, place of residence and for both wage and salaried workers and casual labourers.

Table 22.3.
Analysis of Discrimination in Daily Earnings of Wage and Salary Earners and Casual Labourers in Kerala & India: 2004–05 and 2009–10

Round	Occupation		Place	State	Daily male wages (`)	Daily female wages (`)	Difference* (%)	Discrimination** (%)
66th round (2009–10)	Wages & Salary earners	9,518	Rural	Kerala	240.45	167.71	43.37	106.65
				India	231.93	132.64	74.85	86.07
		2,203	Urban	Kerala	295.39	187.04	57.93	94.14
				India	261.68	177.29	47.6	81.71
	Casual Labourers	1,351	Rural	Kerala	205.03	104.75	95.73	99.22
				India	100.37	68.37	46.8	93.77
		3,121	Urban	Kerala	205.24	91.11	25.26	100.55
				India	113.03	67.31	67.92	95.95
61st round (2004–05)	Wages & Salary earners	72,532	Rural	Kerala	131.39	88.58	48.32	94.38
				India	129.12	68.66	88.05	79.38
		99,071	Urban	Kerala	141.73	98.58	43.78	97.46
				India	140.31	81.75	71.64	77.01
	Casual Labourers	47,486	Rural	Kerala	123.76	60.97	1.03	102.45
				India	54.02	32.81	64.62	92.09
		30,4469	Urban	Kerala	116.15	52.84	119.79	103.51
				India	64.11	38.14	68.08	94.70

*Note: * Difference shows simple percentage difference in wages between males and females; ** Discrimination means that part of wage difference which cannot be explained by difference in education and experience. Its calculation is based on the decomposition methodology provided by Oaxaca (1973) and Blinder (1973). The number may be greater than hundred per cent when the gap is located in the tails of the distribution and is difficult to interpret.[11]*

Source: Estimated using NSS unit level data for 61 and 66 rounds.

22.2.1.14 A part of this could be due to the gap in average age and educational attainments between male and female workers. But in part, it could also be due to gender discrimination. Using the 'decomposition methodology' given by Oaxaca (1973) and Blinder (1973)[12], wage difference between males and females is 'decomposed' to estimate the latter. Estimates of the extent of discrimination (Table 22.3) reveal the presence of significant gender discrimination in both the formal sector and among casual labourers. However, such discrimination is higher in Kerala than in India. This is not surprising as the gender difference in educational attainments is marginal in Kerala. However, one positive aspect of recent growth in Kerala has been a decline in the extent of discrimination since 2004-05. With the exception of the rural formal sector, discrimination has decreased slightly in Kerala, against an across the board increase in discrimination in India.

Health challenges

22.2.1.15 Women's health in Kerala has become a prime concern over time. The chapter on health has shown in detail that while Kerala's basic health indicators are the best in India, it is still not comparable to developed countries' standards. Maternal mortality ratio is 81 per one lakh live births (2010) versus 12 per one lakh live births in Canada. Total fertility rate is significantly below that of developed countries. However, infant mortality ratio (under age 1 year) was 13 per 1,000 live births in 2011. The corresponding number in the UK is four. The main health concerns facing Kerala's women are: mental illness; lifestyle diseases including diabetes, hypertension, thyroid-related problems, obesity; and terminal illnesses like breast cancer. Further, ageing, specifically, is hard on women. Elsewhere in this document, challenges of unwed mothers in the case of ST women and lack of access to healthcare for minorities are discussed. To summarise them here, some of the serious female health concerns that the policymakers face include:

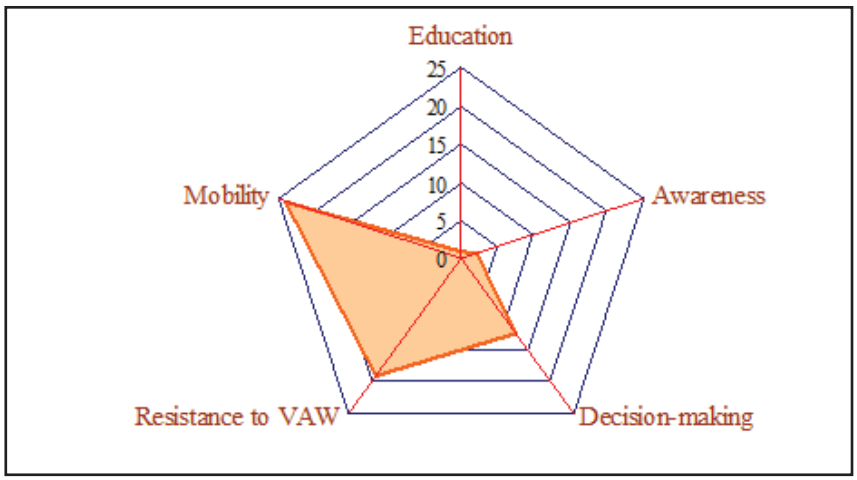
Social empowerment:

22.2.1.16 NFHS-3 elicits information on several parameters reflecting the empowerment of women. These are organised into four empowerment indicators:

- Awareness: The awareness indicator comprises information on educational attainments, control over money, holding of savings account and knowledge about loan programmes.
- Decision-making within household.
- Mobility and attitude towards females.
- Domestic violence against women (VAW).[13]

22.2.1.17 Kerala ranks second to Goa in terms of women's awareness (Figure 22.6). In terms of other indicators, however, it does not compare so favourably. In decision-making, Kerala ranks 12th; its rank is even lower for attitude towards VAW (19) and mobility (24). The overall indicator — a simple average of the four indicators — ranks Kerala 8th out of 29 states. States where women are more empowered than in Kerala are Goa, Delhi, Himachal Pradesh, Maharashtra, Mizoram, Sikkim and Tamil Nadu. While NFHS measures of empowerment have been widely criticised by feminists and researchers in gender studies for being unreliable, this analysis does raise questions about the extent of inclusiveness of Kerala's human development model.

Fig 22.6
Kerala Rank in Different Empowerment Indicators: 2004−05

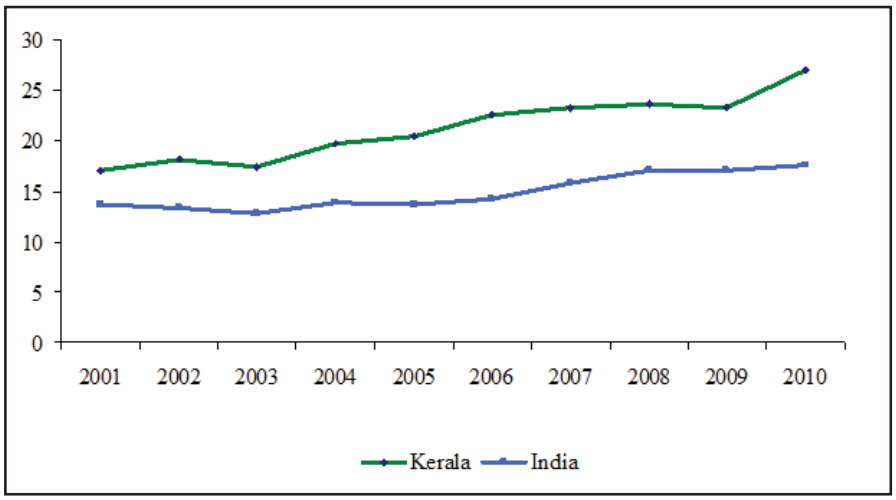


Source: Based on the Health and Family Welfare, Government of India. Kerala.National Family Health Survey (NFHS–3) India.2005–06.International Institute for Population Sciences, Mumbai.

Crimes against women

22.2.1.18 A troubling trend in Kerala has been the gradual increase in crimes against women in the last decade (Figure 22.7). In Kerala, reported crimes as a proportion of population have increased by 58 per cent from 17.1 (2001) to 27.1 (2010). This is 54 per cent higher than the all-India level. This could be, in part, due to a high rate of reporting in Kerala. But that does not mean that this issue is over played. The incidence of crime against women is significant in the State, which calls for serious policy interventions.

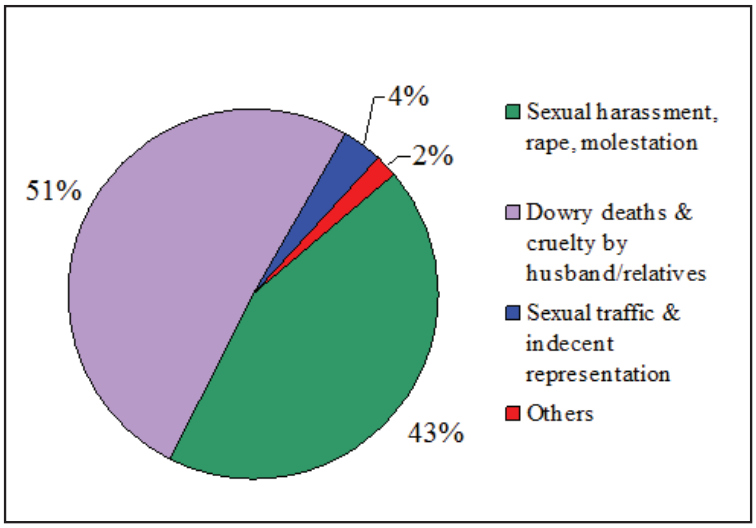
Fig 22.7
Trends in Crime Rates in Kerala and India: 2001 to 2010



Source: National Crime Record Bureau

22.2.1.19 Analysis of the type of crimes against women (Figure 22.8) reveals that cruelty by husband and relatives constitutes the main form of crime against women. Such crimes comprised 51 per cent of all crimes against women in Kerala in 2010. The combined total of sexual harassment, rape and molestation is also very large (43 per cent of all crimes against women).

Fig 22.8
Classification of crimes against women: 2010



Source: National Crime Record Bureau

22.2.1.20 A study on the safety of women in cities undertaken in Thiruvananthapuram, Kozhikode, Kochi and Thrissur brings out the magnitude and nature of sexual harassment in Kerala.[14] About 98 per cent of the 800 women surveyed in Thiruvananthapuram reported facing sexual harassment, generally taking the form of verbal and visual abuse. Maximum harassment is faced when using public transport. Similar results are reported in other cities.

22.2.1.21 Another major form of crime against women is rape. This comprised 7 per cent of crimes against women in 2010. Although the rates of rape reported are not markedly higher than that at all-India levels (1.8 in India and Kerala), alarming signs are that it has increased by 12 per cent over the last decade, and shows a steadily increasing trend since 2003 — in fact, the incidence of rape has increased by 60 per cent between 2003 and 2010.

22.2.1.22 It is widely acknowledged that education is a key to women's empowerment. In Kerala, gender disparity in educational attainments is eliminated. Yet, serious challenges remain. The worrying aspect of women's empowerment is education's inability to address men-women equality. This calls for direct intervention by the state.

22.2.1.23 The main obstacles to women's emancipation are structural and cultural, and mostly rooted in the reproduction of unequal gender relations in the household and community. This inequality manifests itself in women's widespread inability to access and control productive resources, most notably land and agricultural services. Women find it difficult to graduate to more prominent positions in market-based agriculture.

22.2.2 Fostering gender equality in Kerala: Strategic framework

22.2.2.1 It is proposed that the Kerala government adopt gender mainstreaming (GM) as an overarching strategy. Mainstreaming gender perspectives is achieved through a process of assessing the implications for women and men of any planned action, including policies or programmes, in any area and at all levels. This process makes women's as well as men's concerns and experiences an integral dimension in the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and social spheres so that women and men benefit equally and equitably, and inequalities and inequities are not perpetuated. GM thus concerns equality of opportunity, while acknowledging that neither men nor women are a homogeneous category. Individuals' situation and needs vary in terms of factors such as age, socioeconomic status, ethnicity, disabilities, sexual preferences and religion. Therefore, GM means that every activity must consider, and shape itself in relation to, the conditions under which women and men can satisfy their needs. Accordingly, proposals and decisions must be analysed in terms of possible implications for both sexes.The strategy will be multi-pillared.

Pillar 1: Gender sensitisation

22.2.2.2 Gender sensitisation should pervade all spheres and all levels, from the top, down to the household level.

22.2.2.3 Gender sensitisation in schools

- Start a gender sensitisation programme for students of classes I to XII as part of the regular curriculum. Students of each gender, from an early stage of their lives, should be taught how to respect the other gender.
- It should also be integrated with classroom learning through various activities.
  From the Sakhi Web site an example of socialisation among the youth of Kerala[15] 'An example

of sex-segregated patterns of socialisation of young children in Kerala' is cited by MridulEapen — what she calls the 'unhealthy' arrangements in schools where boys and girls sit separately on two sides of the class. This, she says, restricts development of healthy interaction between boys and girls. These practices need to be modified.

- Appoint gender coordinators and gender trainers to conduct gender-training workshops for teachers and students.

22.2.2.4 Gender sensitisation in employment

22.2.2.5 It should be made compulsory for all employers in the public, private and cooperative sectors to have a Gender Policy with the following components:

1. Employment policy:

- The minimum percentage of women employees at various organisational levels should be determined.
- Ensure that equally qualified and experienced women are not passed over for promotions by giving preference to men.
- Interview panels/ recruitment committees should be aware of the gender policy of the minimum percentage of female representation.
- HR and managers hiring new staff should also be responsible for providing necessary orientation to new employees.
- Salary review committees should be constituted to eliminate gender-based disparities in salary structures where applicable.
- A 'gender focal person' should be included in staff appraisal committees to ensure the incorporation of gender perspective in appraisals.
- Maternity/paternity leave.

2. Sexual harassment policy:

- Develop a culturally sensitive sexual harassment policy.
- Create a definition of sexual harassment including both quid pro quo and hostile work environment, giving examples.
- An explanation of penalties (including termination) the employer will impose for substantiated sexual harassment conduct.
- A detailed outline of the grievance procedure employees should use.
- A clear statement that anyone found guilty of harassment after investigation will be subject to immediate and appropriate disciplinary action.
- A clear understanding of and strict rules regarding harassment of or by third parties like clients, customers and so on.
- Additional resource or contact persons available for support and consultation.
- An express commitment to keep all sexual harassment complaints and procedures confidential and time bound.
- Provisions for training of employees at all levels, an anti-retaliation policy providing protection against retaliation to complainants, witnesses, complaints committee members and other employees involved in prevention and complaints resolution.
- Promote discussions on the subject in all training sessions on gender equality.
- Establish a sexual harassment committee to look into cases of sexual harassment as well as other problems arising out of possible gender conflicts between local culture and job requirements, as and when required.
- Provide means of dealing with independent investigations of allegations, should that be necessary.

3. Capacity building/Gender sensitisation:

- Provide gender sensitisation training for all existing employees and new ones.
- Continue consultations, along with briefings and training at regular intervals. This can be done either in-house or by using outside expertise.

- Develop in-house capacity of staff to ensure that the gender perspective is included in all project activities.
- Quarterly staff meetings to discuss gender issues among the staff or projects.
- A system of feedback on the practicality and impact of the Gender Action Plan, once it is in place, perhaps through the 'gender focal person'.

4. Publications /communications:

- Language used must be gender sensitive.
- Ensure that all publications and publicity material, as well as material used in e-mails and on the Internet is gender sensitive.

22.2.2.6 Employers in the unorganised sector should also be subjected to strict regulation on sexual harassment.

22.2.2.7 Gender sensitisation in public services and utilities

- Adequate public utilities for women.
- Gender sensitisation in the provision of public utilities and services. Easily accessible public amenities, well-lit streets and sidewalks, CCTV monitored and well-lit bus stops, gender-sensitised bus drivers and conductors, CCTV monitored buses and trains and so on are some examples of gender mainstreamed public services and utilities.[16]
- Mobile phone apps for women may also help them feel secure.
- The police must especially be well trained in this aspect.

Pillar 2: Economic Empowerment

22.2.2.8 Gender inequalities in economic opportunities, such as gender wage gaps and the concentration of females and female-led enterprises in less remunerative jobs and sectors is a feature of Kerala's economy. Such inequalities persist despite the existence of policies aiming to provide an enabling environment in which women are able to balance their multiple roles and flourish as economic actors. One of the reasons why such policies are ineffective in attaining their objectives is the presence of constraints that impinge on women's ability to flourish as economic actors. Such constraints may be found in households, markets and informal and formal institutions. Thus, policymakers must act to improve gender equality in economic opportunity. Notably, policymakers should focus on three primary areas: reducing the time constraints associated with women's household roles; increasing women's access to resources; and establishing a level playing field by reforming institutions.

Reducing the trade-offs between women's household and market roles

22.2.2.9 Women's household roles, such as care giving, affect their decisions as economic actors. A key policy priority is to reduce the impact of household roles on their economic lives. Policies need work around existing norms to reduce the impact that these roles have on women's economic activities. For instance:

- In rural areas where infrastructural constraints limit women's access to markets and energy and water sources, policies targeted at improving existing infrastructure are likely to have the greatest impact on women's ability to manage time.
- In urban areas, on the other hand, policies to increase access to affordable childcare should be considered, particularly where informal mechanisms for childcare are more limited. The introduction of day care centres for children of working mothers would actively help in reducing the work-home imbalance. In the formal sector, addressing parental leave policies will help level the playing field for men and women and may serve to ameliorate gender divisions of labour within households.

Increasing access to land and other productive resources

22.2.2.10 Access to land affects women's economic opportunities since land is an important productive asset and form of collateral. According to a study conducted, the incidence of violence among women is 49 per cent if they don't own a house or land; it reduces to 18 per cent for women who own land and 9 per cent for women with land and a house.[17] And as with education, access to land assets and income generated from land contributes to women's voice and influence. To that extent, policies promoting equal access to land also affect agency. Kudumbashree, the women-oriented community-based poverty alleviation programme started in 1999, has proved to be successful in this direction.[18] This experiment revolves around three critical components — micro-credit, entrepreneurship and empowerment and aims to reach out to families through women, and communities through families. This vast network needs to be strengthened and leveraged to reach out to women who have been susceptible to domestic violence of any form, divorce or sexual harassment.

22.2.2.11 Along with enhancing access to land, improving access to agricultural extension and rural livelihoods promotion services for female farmers will also improve their income. This is important given the feminisation of the agricultural sector due to migration of male workers. Acquiring knowledge and skills in agriculture and other rural livelihoods can, however, be extremely challenging particularly when extension services are orientated around traditionally male focused activities or when training occurs outside rural villages, limiting female participation. Policies must be framed to ease this constraint over the period of the Perspective Plan.

22.2.2.12 Simultaneously, policies should be directed towards improving access to finance among female entrepreneurs by shifting their financial portfolios away from informal sources of credit towards more formal credit institutions. Since women generally have limited assets that may serve as collateral and also often have more limited credit histories than men, they are more likely to be restricted in their sources of borrowing. Beyond financial constraints, training programmes that improve business skills may be implemented to address gender differences in entrepreneurial capital.

Enabling gender equality in the labour market

22.2.2.13 Given the asymmetries existing between male and female workers in the labour market in Kerala, it is necessary to address such inequities through protective legislation. This is important given the level of sexual harassment reported in the State. However, such protective legislation should be designed carefully and be constantly revised so that it does not serve to reduce the employability of female workers. It is also necessary to promote female participation in all sectors and in all jobs (management and below). This is likely to increase information on the competencies of women as leaders, and may also be a way to establish environments that are more attuned to issues faced by women. Skills training programmes can be used as a means to reduce occupational segregation by encouraging women to move into non-traditional professions. This will reduce gender stereotyping, particularly when paired with apprenticeship opportunities. Good practices from developed countries may be adapted in the Kerala context. For example, in the US it is illegal to ask prospective employees for personal information that is not job related. Employers should not be asking about one's race, gender, religion, marital status, age, disabilities, ethnic background, country of origin or sexual preferences.[19]

22.2.2.14 Enlisting the support of the private sector is important in this context. Encouraging companies to promote greater transparency in recruitment and promotion procedures can level the playing field for women and can help achieve greater female representation, particularly at the managerial level. A programme targeting managers and union representatives in the private sector to train them in discrimination and equal opportunity issues related to the recruitment process may be introduced. Supportive organisational policies can also help women acquire relevant competencies and move to managerial levels.

22.2.2.15 The state government can establish a committee to analyse the nature of affirmative action and identify provisions in the Employment Equity Act that are of potential relevance to Kerala.

Pillar 3: Social Empowerment

22.2.2.16 This means a set of policies and programmes to strengthen the voice and participation of women in households, communities and society.

Reduce gender-based violence through a multi-pronged approach

22.2.2.17 Reducing discrimination against women and gender-based violence requires action on a number of fronts: efforts to strengthen women's voices within the household; enactment and enforcement of appropriate legislation and strengthening women's access to justice; provision of adequate support services for victims of violence; and use of the media to provide information on women's rights to increase social awareness, and to shift social norms with respect to violence.

22.2.2.18 A two-pronged policy is proposed here:

- Creating an effective preventive network: This entails not only addressing the issue from the school level to inculcate appropriate norms among male students, but also planning the use of public spaces and transport to enable easy and safe access for women.
- Offer protection and support to those exposed to violence or harassment: Special shelters for these women, with facilities for physical treatment, psychiatric counselling and group therapy may be set up in appropriate numbers. These can be availed of either as a day patient or as an inpatient.

22.2.2.19 In this context, the introduction of Nirbhaya(fearless) by the Kerala government in July 2012 assumes significance. This policy is based on the report of a five-member committee, chaired by Sugathakumari, suggesting a multi-pronged strategy for providing safety to women and children. Nirbhaya is a comprehensive action plan, with multiple stakeholder convergence, that sets out a five-point agenda prevention, prosecution, protection, rehabilitation and reintegration. It envisages steps like sensitising society to the problem, empowering vulnerable groups, targeting contributory factors (like alcoholism, gender discrimination and consumerism), crime mapping, establishing community vigilance groups in high risk areas, toll free lines and help booths, introducing strong laws and special fast track courts for prompt justice to act as a deterrence, and establishing rehabilitation centres to educate victims, help them heal, become empowered and integrate with society. The action plan is supposed to be executed with the aid of Jagratha Samithisand Kudumbashree at the grassroots level. While it is too early to predict to what extent Nirbhaya will be successful, if implemented effectively, it can serve as a useful short-term launch pad for a more comprehensive plan to narrow the agency gap across gender. The government may consider a time bound audit of the scheme to identify its successes and weaknesses.

Strengthen women's endowments and economic opportunities in support of agency

22.2.2.20 Positive gains in gender equality in economic opportunities and endowments can lead to gains in agency across multiple domains. These include: skills, knowledge, access to resources, finances and other productive assets.

22.2.2.21 It is proposed that a ten-year programme to enhance women's entrepreneurial skills be introduced. The objective of the scheme should be to increase the number of units set up by women entrepreneurs and ensure sustained growth of existing units run by women entrepreneurs. The programme may be developed around the following components:

- Using the media and camps in vocational and technical institutes to motivate women to set up entrepreneurial units.

- Facilitating the flow of information and advice to ensure establishment of business units and their development.
- Assistance in establishing and operating specialised projects.
- Development of financing opportunities.
- Development of attitudes and role models.
- Increasing and updating research on women's entrepreneurship to facilitate their entry into business.

22.2.2.22 Another scheme with the potential to improve women's role in economic activity is a skill development programme for unemployed women. Unemployed women aged 18−25 years can be given subsidised short-term training in technical skills such as desktop printing, data entry, multimedia and similar areas. The government may enter into an agreement with specific skill providers for this purpose.

Transform social norms and practices through role models

22.2.2.23 Providing a forum for successful women to act as an inspiration to other women and girls can help the evolution of gender perceptions. Women in leadership positions can serve as effective role models for other women and girls. Female teachers are among the first professional women who show girls that being active outside the home is socially acceptable. These women serve as agents of change in the communities they work in by educating and socialising children beyond gender stereotypes. Experience shows that exposure to positive female role models from an early age can help break the cycle of gender inequality across generations. Policymakers can also support and encourage the media to promote positive messaging that will help change gender norms.

Gendering urban development through sociotope mapping

22.2.2.24 Sociotope[20] mapping is a method used in community planning to obtain information about social conditions. It is a method used to facilitate planning of a community's social dimension, and has been successfully used in cities such as Gothenburg and Stockholm.[21] A gendered sociotope mapping project has been introduced in Gotland, Sweden. This project seeks to collect information on:

- How women and men use and perceive a certain place.
- How accessible is the place and what qualities does it have.

22.2.2.25 Sociotope mapping captures people's experiences via questionnaires, interviews, workshops and field studies, and the resulting information is then complemented with city officials' own observations. Questionnaires provide a comprehensive view of how different places are being used. Interviews and workshops offer more in-depth insight. Field studies can yield general impressions and spontaneous reflections of how citizens use an area and move around there. All the results are finally outlined on a map, giving a good overview of the information. It enables incorporation of the user perspective that is generally missing in community planning and urban development schemes, helping planners allocate resources to the right locations, enabling them to prioritise areas that citizens actually perceive as unsafe instead of the ones planners believe are unsafe based on statistics, which, after all, do not reflect people's feelings of not being safe.

Pillar 4: Female Health

22.2.2.26 Health policy for women has to be multi-pronged:

a. General community: The precise structure of the system is discussed in the chapter on health. The structure of the system has to be modified to address both communicable and non-communicable diseases. While the system has to be strengthened for communicable diseases and maternal health, it needs to be built in favour of non-communicable diseases. Monitoring

of the child has to start from the beginning. Schools are the best place to deliver healthcare and advice. Colleges are also a place offer preventive healthcare initiatives. As in developed countries, annual health check-ups have to be brought into the system to lower the incidence of non-communicable diseases.

b. Scheduled Caste (SC) and Scheduled Tribe (ST) women: While the SC women can be targeted along with the general community, the ST women need specific guidance. The ST women from each tribe and specific geography should be monitored and specific guidance given. Sickle-cell anaemia and problems of unwed motherhood need hand-holding, and specific physical and social infrastructure needs to be designed for that. Anganwadi workers within the SC and ST groups have to be trained to deliver healthcare.

c. Geriatric care: Homes for the elderly, instituting preventive health care systems and so on are some of the ways to take care of ageing women.

d. Mental health: Health insurance needs to cover mental health issues. Detailed psychological help for mental health patients needs to be given.

e. VAW: A modern health system needs to incorporate the best practices from around the world to deal with cases of violence against women (VAW) in a sensitive manner. Doctors and nurses need to be trained accordingly. The victim needs not only physical help, but also counselling. And the health system needs to be designed in a way to deal with VAW victims in a holistic manner.

Pillar 5: Legal Empowerment

Strengthen the legal and institutional environment

22.2.2.27 A key element here includes the institution and enforcement of legislation to create an enabling environment for an equal voice and influence regardless of one's gender. Programmes that increase women's knowledge of the law with respect to violence and human rights and increase the capacity of justice service providers to address women's issues also contribute to greater safety and security among women.

Improve women's access to justice through mobile courts

22.2.2.28 Programmes that increase women's knowledge of the law, help them access the formal justice system and encourage them to exercise agency through formal mechanisms may be initiated. Technology can help women access the justice system. One option is to introduce mobile courts, which can make access to legal redressal easier and less expensive for litigants, particularly from poor households in rural areas. The experience of mobile courts in rural areas of China and Indonesia shows that they can provide a solution to the problem of accessibility and security for women who wish to exercise their rights in the legal system, but are unable to access the court. In countries such as Indonesia, the waving of court fees for poor and marginalised groups has increased the ability of women to bring their cases to court. The justice system can also adapt to better address the specific needs of women in the justice system. Countries can institute gender sensitivity training for officials in the system, as well as increase the representation of women in all institutions charged with formulating, implementing and enforcing the law. Similarly, women's' courts and fast track courts may be set up to deal with sexual harassment and rape cases.

Complaints channel for reporting harassment and violence

22.2.2.29 Set up women's cells or committees, which will create 'complaints channels' such as a telephone hotline or e-mail address for any woman in distress. Many complaints can be resolved effectively and positively through informal methods. Kudumbashree groups may be trained to operate these cells. SC and ST women may need special help with this aspect.

Pillar 6: Political Empowerment

Take active measures to enable women's participation in the policy domain

22.2.2.30 Implementation of political reservation systems has contributed to increasing women's participation in electoral politics in a number of countries. The quota-based political reservation system in Kerala opens the doors to women in politics, and provides a relatively fast track for women to enter politics. Evidence from India shows that public opinion about female political leaders has improved with increased exposure. However, as with affirmative action in the labour market, there are concerns about the pipeline of qualified candidates, along with possible doubts about the qualifications of women elected through a reservation system (independent of their actual qualifications).

Creating space for women's collective action

22.2.2.31 Formation of women's professional groups can provide a space for women to interact, learn and advocate for gender equality. These groups can equip their members with access to a global network of women's business associations for information and advocacy on their behalf. More specifically, these organisations can offer access to contacts for sources of credit, access to training in international trade issues, access to mentoring, as well as access to the more basic skills of operations management and marketing. Kudumbashree is already playing an important role in this regard in rural areas. Other versions of this programme may be initiated to reach out to more women.

Pillar 7: Gender Budgeting

22.2.2.32 The concept of gender budgeting was introduced in 80-odd countries in the mid 1980s. Essentially, it is aimed at the national level, with a few exceptions. Gender budgeting was formally institutionalised in India in 2005-06. The gender budget, announced with the general budget, takes into account the total magnitude of resources designated for women in a particular year. It contains two parts: Part A considers schemes in which 100 per cent of the funds are directed to women, while Part B takes into account programmes where at least 30 per cent of the funds are meant for women. The Kerala government may adopt such a practice, with periodic reviews of the budget to evaluate outcomes.

Pillar 8: Women with disabilities

22.2.2.33 Women with disabilities are one of the most marginalised groups in society. Women and girls with disabilities encounter further discrimination, as they are exposed to greater risk of physical and sexual abuse, denial of their reproductive rights and reduced opportunities for marriage and family life. The government should implement measures to uphold the rights of women with disabilities and protect them from discrimination. In particular, measures should be implemented to ensure equal access to health services, education, training and employment, and protection from sexual and other forms of abuse and violence.

Pillar 9: Outcome Evaluation

22.2.2.34 To ensure that the suggested measures are not introduced without proper implementation, Kerala should consider adopting a Gender Equality Outcome Evaluation Exercise. This evaluation should identify the measures taken to achieve gender equality, measure the progress achieved, estimate the costs and benefits of such measures, incorporate public feedback into the exercise to identify failures and suggest appropriate measures to be undertaken in the next decade. It should also set out the parameters by which performance in gender mainstreaming in the next decade is

to be evaluated. These indicators can be used to evaluate the outcomes of gender□specific and mainstream interventions and policies, and help reveal barriers to success. They can provide vital information for adjusting programmes and activities so that they improve the achievement of gender equality goals and do not create unintended adverse impacts on women or men.

22.2.2.35 Appendix 22A provides the indicators of gender empowerment used by various organisations. However, it is important to ensure that what is measured is relevant to specific regions, countries and local situations. Therefore, a broad set of such measures will need to be developed by the government to evaluate the impact of its gender-specific programmes.

22.3 The Elderly

22.3.1 Ageing: A demographic perspective

22.3.1.1 Kerala is in the midst of a unique and irreversible process of demographic transition that has resulted in an enlarged population of the elderly (See Chapters 1 and 21). This calls for a policy response, as members of this segment are particularly dependent on others for their daily needs, economic support and healthcare. A comparison with other states shows that from the 1980s, Kerala had outpaced other states in ageing (Table 22.4).

Table 22.4
Share of Aged in Population (%): 1961 to 2026

Year	India	Kerala	Andhra Pradesh	Himachal Pradesh	Punjab
1961	5.6	5.8	6.2	7.4	6.6
1971	6.0	6.2	6.4	7.2	7.5
1981	6.3	7.6	6.4	7.5	7.7
1991	6.6	8.8	6.5	7.8	7.6
2001	6.9	10.6	7.2	8.8	8.7
2011	8.3	12.3	9.1	10.3	9.7
2021	10.7	16	12.2	12.9	12.6
2026	12.4	18.3	14.2	14.7	14.6

Source: Bansod, D. and L. Subaiya. 2011. Demographics of Population Ageing in India. BKPAI Working Paper No. 1 United Nations Population Fund (UNFPA). New Delhi, 2011.

22.3.1.2 An important indicator of the extent to which the population has aged is the Index of Ageing. This is defined as:
Index of Ageing = (Population aged 60 years and above) *100/ (Population aged 0-14 years).

22.3.1.3 Trends in the Index of Ageing for Kerala and other rapidly ageing states are given in Table 22.5. Starting from a comparatively lower index value, Kerala has aged rapidly. By 1981 the State was ahead of others in terms of the Index of Ageing. In 1961 Kerala's index was 43 per cent below that of Himachal Pradesh, but projections for 2026 reveal that Kerala's ageing index will be 23 per cent above that of Punjab.

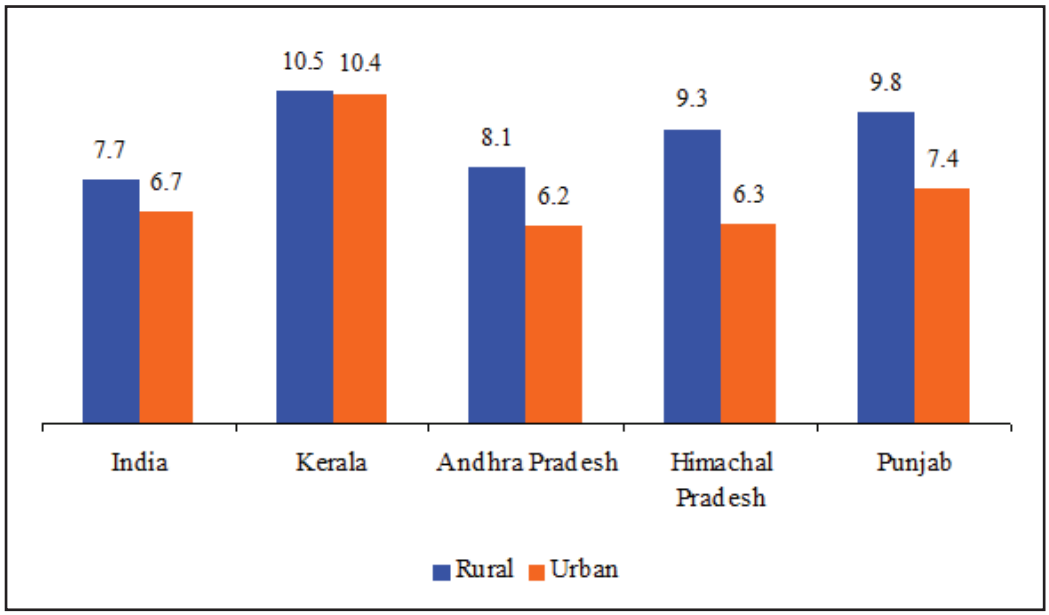
Table 22.5
Index of Ageing in Kerala and Selected States: 1961 to 2026

Year	India	Kerala	Andhra Pradesh	Himachal Pradesh	Punjab
1961	13.7	13.5	15.8	19.3	14.8
1971	14.0	14.8	15.6	17.4	17.8
1981	15.0	20.8	16.3	19.0	20.7
1991	17.6	28.9	18.1	21.0	21.2
2001	19.4	40.5	22.3	28.2	27.7
2011	28.4	54.2	36.3	41.4	38.9
2021	42.5	79.7	56.5	61.0	58.7
2026	53.0	97.4	70.4	74.4	74.7

Source: Bansod, D. and L. Subaiya. 2011. Demographics of Population Ageing in India.BKPAI Working Paper No. 1 United Nations Population Fund (UNFPA). New Delhi, 2011..

22.3.1.4 An analysis of the distribution of the aged by place of residence reveals that in India, as well as in other rapidly ageing states, the proportion of the aged is higher in rural areas. In Kerala, in contrast, the share of the elderly in the population is about the same in both rural and urban areas (Figure 22.9).

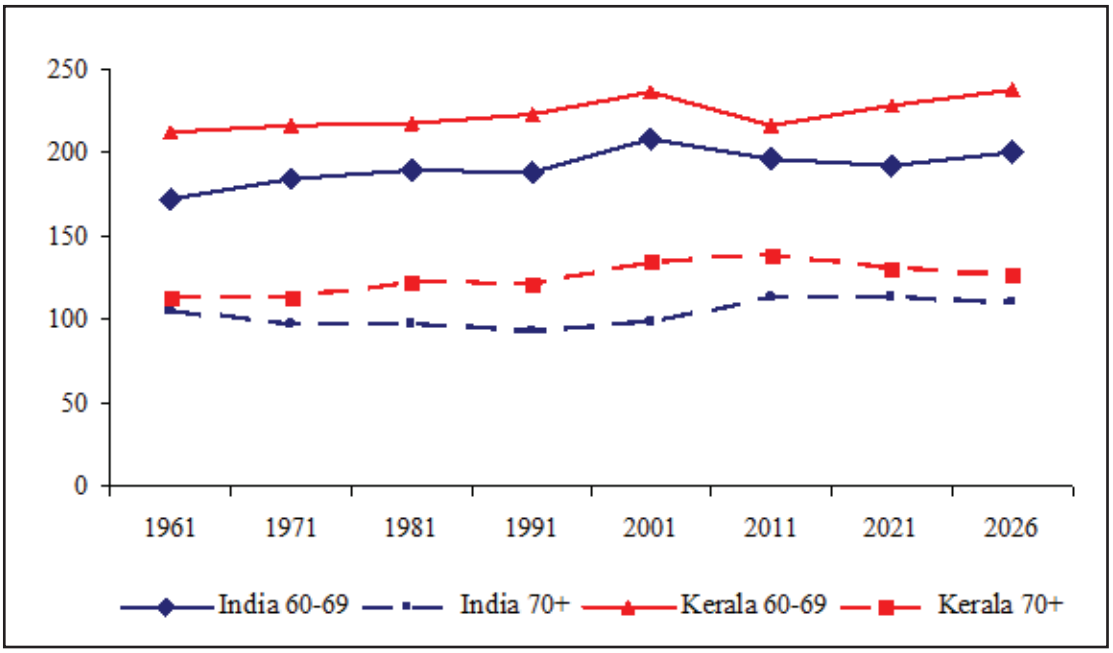
Fig 22.9
Distribution of Aged by Place of Residence in Kerala: 2001



Source: Census of India, 2001

22.3.1.5 Kerala has a sex ratio (number of females per 1,000 males) above 1,000. Trends in the sex ratio for the elderly also reveal that the number of females will be higher than the number of males in both the 60-69 and 70+ age groups (Figure 22.10). Moreover, as female longevity is higher, the sex ratio increases for the 70+ age group. Targeting elderly females is, thus, a major challenge facing policymakers.

Fig 22.10
Sex Ratio among Elderly in Kerala and India: 1961 to 2026



Source: NCAER based on Development Report, 2005

22.3.2 Ageing — a social challenge

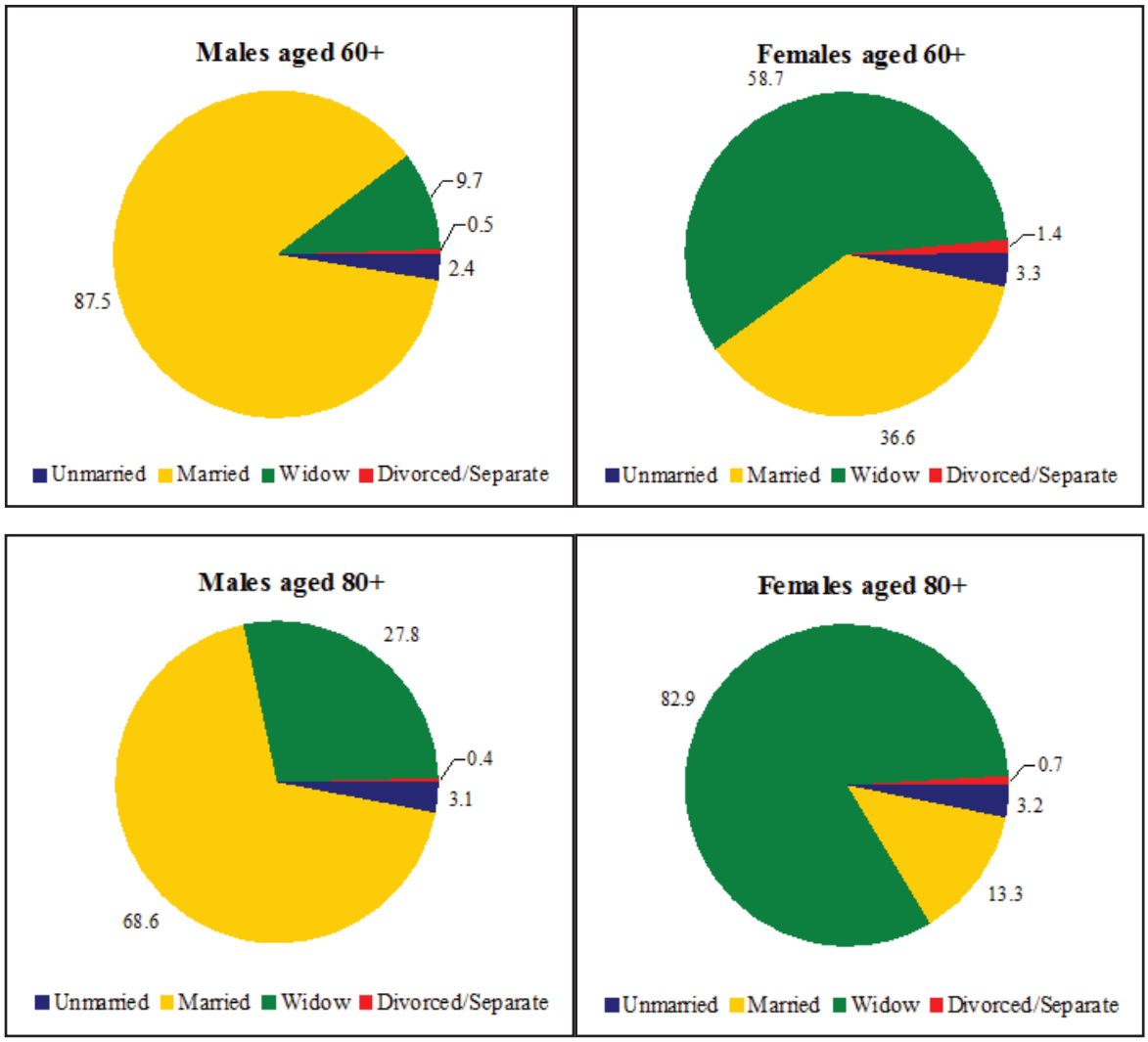
22.3.2.1 As Figure 22.12 shows, the sex ratio is high among the elderly, particularly among the 70+ population. This, coupled with the nature of Kerala's social structure, implies that ageing represents more than a demographic issue. It represents a social challenge for policymakers. This is clear if two aspects are considered:

- Marital status of the elderly.
- Living arrangement of the elderly.

22.3.2.2 Figure 22.11 presents the distribution of the elderly by their marital status. About 88 per cent of elderly males are married, compared to around 37 per cent of females (a gap of about 51 percentage points). The gap increases to 56 percentage points if the 70+ group is considered. This is expected, given the differences in longevity across gender. What should be noted here is that an elderly woman is more likely to lose her spouse than an elderly man. The loss of a spouse is disastrous for either sex in terms of the psychological effect. However, the effect is greater for widows rather than widowers because of two reasons:

a) Women generally do not own economic assets.
b) Status of females (low to start with) deteriorates even more if they are widows.

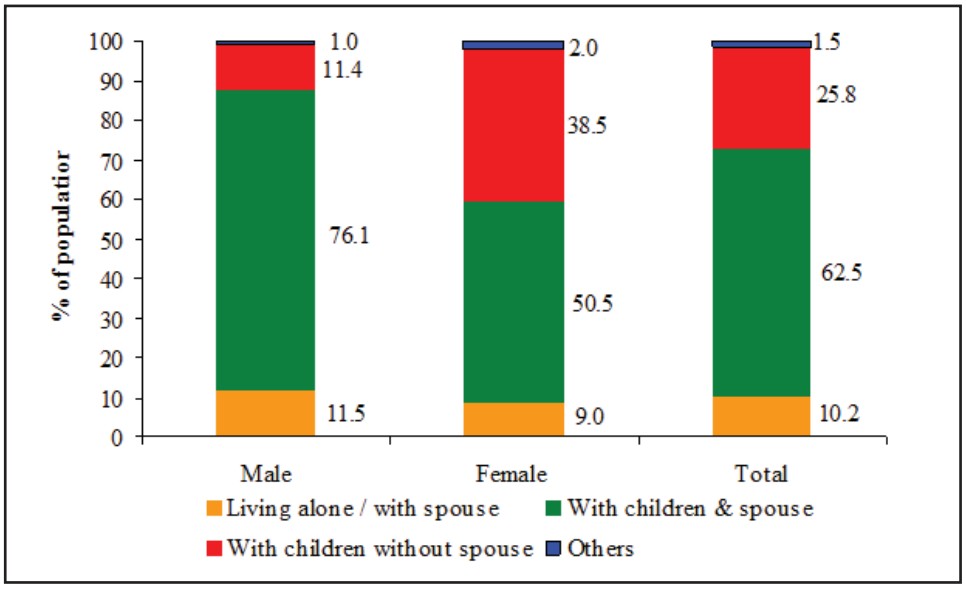
Fig 22.11
Distribution of Elderly by Marital Status: 2001



Source: Census of India, 2001

22.3.2.3 With the break up of the joint family system, an increasing proportion of the aged live in nuclear families with their spouses, rather than in inter-generational households. Further, studies have shown that work pressures and physical strain on children, coupled with rising costs of living intensifying the competition for scarce family resources, adversely affects relations between the elderly and their family members (Agewell Foundation, 2010[22]). Such trends are marked in urban areas where social isolation and lack of social networks is more common. In Kerala, there is the added factor that emigration rates are very high and have increased over the years. Figure 22.12 shows that a high proportion of elderly females, relative to elderly males, live without a spouse.

Fig 22.12
Living Arrangements Among Elderly in Kerala: 2004



Source:Agewell Foundation 2010. Agewell Study On Changing Trends Of Old Age. Agewell Research and Advocacy Centre. September

22.3.2.4 Starting from an initially disadvantaged position in a patriarchal society, the status of women deteriorates sharply as they lose their functional importance within the family.[23]

22.3.3. Ageing — A health issue

22.3.3.1 Analysis of NSSO 52nd and 60th Round data highlights one aspect of the plight of the elderly in Kerala. Analysis of NSS data reveals that the reported health status of the elderly has worsened between 1994−95 and 2004−05. While 48 per cent of the elderly in Kerala reported a poor health status in 1995−96, this figure increased to 52 per centin 2004−05. However, there is no significant gender difference in reported health status. This is also confirmed by econometric analysis. Results also reveal that health status is better among the relatively younger sections of the elderly or those residing in urban areas, with higher education levels and from affluent households. Interestingly, while males report better health status if they are economically independent or reside with their spouse, the health status of women does not vary with either living arrangements or extent of economic dependency.

22.3.4 Active ageing: Strategic policy suggestions

22.3.4.1 The Madrid Conference proposed a new vision of ageing, emphasising "… achieving healthy, active, productive, successful and positive ageing to the very end through lifestyle modifications and interventions that work," (Andrews, 2002).[24] Healthy and active ageing calls for active involvement of the elderly in social and community life (through steps like appropriate design of disabled-friendly transport systems and public spaces), promoting healthy lifestyles and attacking underlying socio-environmental factors responsible for poor health among the elderly (through provisioning of housing facilities, for instance).

22.3.4.2 The vision of the strategic plan is that: “Every older Keralite is able to live with dignity and independence, in a place of their choice with appropriate and affordable support and care services as and when they need them.”

22.3.4.3 The State is proactively involved in creating enabling conditions for the elderly population to enjoy this phase of life.[25] However, a lot of the attention so far has been on health services and infrastructure creation, while a broader approach is now required:

22.3.4.3.1 Pillar 1: Promote physical activity (Also see Chapter 21)

- Implement a broad based community education campaign for healthy and active ageing targeting lifestyle changes and other prevention strategies, which can be adopted throughout a person’s life to improve the quality of life.
- Develop and implement targeted community programmes for physical activity among older people.
- Provide advice about physical activity in all health and social care settings for older people.
- Support local governments to create an environment and infrastructure that motivates people of all ages to participate in physical activity (particularly active transport).
- Promote the civil engagement of older people and strengthen the role of volunteering.
- Promote ‘hobby clubs’ for the elderly across the State.
- Ensure that public utilities and infrastructure including roads and transport are ‘aged-friendly’, so that the elderly can use them easily.

22.3.4.3.2 Pillar 2: Public support to informal care-giving with a focus on home care, including self-care

- Design strategies for training older adults in self-care and for training informal caregivers.
- Design volunteer-based programmes to take care of senior citizens.
- The younger generation can be involved in initiating care programmes for the elderly, either voluntarily (For example, senior secondary students as a part of their voluntary activities can spend time with senior citizens, reading to them, taking care of them, listening to their stories and so on) or on an entrepreneurial basis under an institutionalised scheme (on similar lines as R&D-based programmes).
- Create regional networks of providers of services to the elderly, to consolidate and maximise the local provision of ageing-related services.
- Conduct a research programme to identify service models and services that most effectively assist individuals experiencing different sorts of difficulties, maximise their independence and ability to live in their own home as long as possible.

Pillar 3: ICT-enabled independent living for the aged

22.3.4.3.3 Kerala needs to leverage the ICT revolution to support its ageing population. ICT solutions must cater to the daily needs of the elderly, and also to their need for independent living. Areas in which ICT can offer support include:

- Social communication: Using technology such as broadband, to enable the elderly to stay in touch with family and friends through audio and video calls. This will help them overcome any possible social isolation.
- Daily shopping, travel, social life and public services: Enable easy access over the Internet to various services such as ordering goods online, especially when reduced mobility makes physical shopping more difficult.

- Safety, including things such as making sure external doors and windows are locked/closed when leaving the house or sleeping, checking for water or gas leaks, turning all but one light off when going to bed and so on.
- Reminders: Memory problems tend to be associated with ageing and thus support may be needed to take medication and carry out household tasks.
- User-friendly interfaces are required for all sorts of equipment in the home and outside, taking into account the fact that many elderly people have impairments in vision, hearing, mobility and dexterity.
- Telecare and telemedicine open up new opportunities for providing medical care in the home. There are many new developments in ICT-based home care including ways of monitoring well being and providing a secure home environment. Personal health systems include wearable and portable systems for monitoring and diagnosis, therapy, repairing/substitution of functionality and supporting treatment plans for individuals with a chronic disease (for example cardiac disease or diabetes), complemented by tele-monitoring and telecare, thus avoiding hospitalisation.
- Support for people with cognitive problems, especially to enable them to stay at home and remain active for as long as possible through cognitive training, reminders, GPS tracking and so on. Such support can also include those who care for people with cognitive problems.
- Support for more efficient workflows in care, by integrating health and social care by sharing information, monitoring and follow-up to interventions across different organisational and physical boundaries.

22.3.4.3.4 Future developments in many of these areas are underpinned by some key emerging technologies.

Pillar 4: Adapt health systems to the needs of the aged

22.3.4.3.5 As people grow older, they become more prone to falling ill, while the cost of treatment increases. Empirical studies reveal a high incidence of ailments and disabilities such as visual impairment or loss of eyesight, cataract, orthopaedic and locomotor-related ailments, depression, Alzheimer's disease, Parkinson's disease and so on. Further, the incidence of chronic diseases will also increase with age. Consequently, the elderly population will require better coordinated and more patient-centred care. Key areas where policy needs to focus include:

- More regular follow-up of chronically ill patients and better coordination of care. A growing share of the elderly have chronic conditions — and the aged often suffer from multi-morbidity — while medical care systems have become more specialised and fragmented over time.
- Enhanced preventive health services: Primary and secondary prevention are of particular importance. Policies in this area include vaccinations, reducing substance abuse and screening for diseases such as glaucoma, cancer, diabetes and hypertension-related ailments. Policies can also include programmes against violence and suicide or efforts to reduce accidents, for example through the promotion of safe homes and environments for the elderly.
- Greater attention to mental health: Mental illness, which can take on a range of forms from depression to dementia to psychiatric disorders, is common among the elderly and requires institutional care. Policies to address wider determinants of mental health such as social isolation, poverty and discrimination and housing may also be required.
- Encourage better self-care: Increased health literacy and access to technology such as the Internet may provide at least well-off individuals with the potential for a greater understanding of their condition and how to adapt their lives to best deal with it.

22.3.4.3.6 There are a number of actions that can make existing health and healthcare systems better suited to the needs of the elderly. Increased attention to better coordination of care and, where feasible, improved models of primary care to enhance follow-up are desirable.

Pillar 5: Providing institutional care to the aged

22.3.4.3.7 The Kerala government has established old age homes and day care centres for the care, protection and rehabilitation of the aged by providing food, clothing, medical services, shelter and other services. The 2011 Economic Review reports that there are 14 old age homes with 697 inmates against a sanctioned strength of 1,250. There is also a day care centre and old age home with a sanctioned capacity of 75 people (with 23 inmates). The 2011 Economic Review says that existing institutions lack facilities for counselling and geriatric care. The physical, emotional and psychological problems faced by the elderly due to ageing demand that these institutions are revamped. Participation and involvement of NGOs and other welfare organisations can be thought of to ease or share the financial burden of revamping and providing the required facilities in these institutions.[26]

22.3.4.3.8 A two pronged policy may be adopted:

Increase number of old age homes: Assuming a constant capacity (in terms of bed/population ratio), then sanctioned capacity will have to be increased to 1,998 in 2026. If the assumption is that demand for such facilities increases by 3 per cent every five years (based on rates of decline of co-residential arrangements), then sanctioned capacity will have to be increased to 2,058.

Improve facilities: It is also important to improve the facilities in such old age homes. A triple-layered system may be useful in this context. Elderly people who are not well-off can be catered to by the public sector, with basic facilities such as medical care, counselling, exercising facilities, group recreation and so on. Demand from the middle income households may be met by establishing facilities through public-private initiatives (PPI). Elderly people from affluent households, who can afford to pay more, can be lodged in old age homes established by the private sector. Such homes should have accident-related facilities and also facilities to rehabilitate elderly patients with locomotor-related ailments.

22.3.4.3.9 The number of day care homes should also be increased. Such centres may be a useful alternative to the 'home visit system' prevalent in many developed countries. This will allow working couples to admit their parents in such centres during working hours, reducing chances of falls and accidents. It will also help create social networks among the elderly, which will minimise their feeling of isolation and depression

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Pillar 6: Ensuring economic security for the aged

22.3.4.3.10 To meet the social and demographic challenges of ageing in Kerala, comprehensive social security measures are needed to ensure basic entitlements in the form of income security, health and housing for the elderly. Successive governments in Kerala have introduced various social security measures for the aged. Currently, there are about 35 such schemes in Kerala — of which 16 are fully funded by the state. In addition, there are 26 'welfare fund boards' providing welfare assistance, income security and employment to workers in the unorganised sector. Details available for the 26 welfare fund boards show that there are 59.2 lakh members enrolled in these organisations. Of them, 16.3 lakh are in the agriculture sector and 11.6 lakh in the construction sector. Female workers outnumber males in industries such as cashew, tailoring, coir, bamboo and beedi manufacture. In the Anganwadi Workers Welfare Fund Board, all the enrolled workers are female. Similarly, in tailoring, 85 per cent of the workers are female. On the other hand, in the welfare boards for groups such as toddy workers and abkari workers, over 99 per cent of the workers are male. The coverage of these welfare schemes is very high — 70 per cent of the workers and 28 per cent of the population aged 15-59 years are covered by them. Reducing the cost of delivery of these schemes will be an important challenge in coming years.

22.3.4.3.11 While Kerala has made considerable progress in extending social security coverage to the aged through the mechanism of tripartite welfare fund boards, many of the existing schemes require a clear perspective and restructuring to improve their delivery mechanisms to ensure cost effective delivery. A 'Frame Legislation' can be enacted to bring in a degree of perspective and order to all social security initiatives. This will enable consolidation of the current set of enactments and executive orders, and provide guidelines for working out future schemes and eliminate the need for individual legislations, apart from providing a standard set of basic operating policies and procedures.
22.3.4.3.12 It is proposed that the 26 sectoral welfare boards be merged and standardised (See Chapter 13 for details). The scheme may be extended to groups that are currently excluded from the programme. The delivery system should be computerised to facilitate efficient disbursement and chip-based social security cards should be introduced to facilitate universal access and prevent leakage and malpractices. There is, thus, a need for better quality delivery of services. It is essential to upgrade institutions and also to make provisions for hitherto relatively neglected areas and groups, especially the ageing population.

22.4 Disability

22.4.1 Disability

22.4.1.1 According to figures based on the 2001 Census, 2.7 per cent of the State's population is disabled. The all-India average is 2.1 per cent. Kerala is, in fact, the third largest state in terms of the prevalence of disability; Jammu and Kashmir (3 per cent) and Odisha (2.8 per cent) are the top two states.Tamil Nadu is not far behind with 2.6 per cent of its population being disabled. The proportion of the disabled in Andhra Pradesh and Karnataka, is, however, below the national average. The disabilities found in the State include chronic fits, difficulty in moving, visual impairment, speech impairments and so on. There are also more women among the disabled in the State.

22.4.1.2 Out of a total of 866,598 disabled people in the State, 445,511 are females and 421,088 males. The number of disabled people is the highest in Malappuram (98,793). Thiruvananthapuram district (88,044) is in second place and Ernakulam (84,333) is third. There are 121,324 people in the State with vision problems. Here again, Malappuram has the largest number of people with this problem, 13,831. Thiruvananthapuram has 12,326 and Ernakulam 11,807 people in this category.

22.4.1.3 About 1.17 per cent of Kerala's population has mobility-related problems. Notably, 43 per cent of the State's disabled population belongs to this category. Around 10.3 per cent of the disabled population and 0.28 per cent of the State's total population (89,260 people) have chronic fits.

22.4.1.4 It is significant that the NSS Round on disability in 2002, which shows Kerala's disability rate to be 2.2 per cent, also placed it third among the Indian states and union territories in terms of the proportion of the population with a disability.

22.4.1.5 The Indian government has built a strong institutional set up, with detailed policies and guidelines on disability. In India, the legislative framework for the protection of the rights of the disabled is covered by several acts:

- Mental Health Act 1987: This Act consolidated and amended the law relating to the treatment and care of mentally ill persons and has better provisions with respect to their property and affairs.
- The Rehabilitation Council of India Act 1992: This Act sets out to regulate the training of professionals in rehabilitation. The amendment to the Act in 2000 gave the additional responsibility of promoting research to the Rehabilitation Council. The major functions of the council include the recognition of qualifications granted by universities in India for rehabilitation professionals and also recognition of qualifications from institutions outside India.

- The Persons with Disabilities (Equal Opportunities, Protection Of Rights and Full Participation) Act 1995: This Act provides 3 per cent reservation for disabled people in poverty alleviation programmes, government posts and in state educational facilities, as well as other rights and entitlement. The specific objectives of the Act are: prevention and early detection of disabilities; education; employment; affirmative action; non-discrimination; research and human resource development; and social security.
- The National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act 1999: This Act provides for the constitution of a national body for the welfare of people with autism, cerebral palsy, mental retardation and multiple disabilities. It provides guidelines to enable and empower people with a disability to live as independently and as fully as possible within, or as close to, the community to which they belong.
- National Policy for Persons with Disabilities Act 2005: The National Policy, released in February 2006 recognises that people with disabilities are a valuable human resource for the country and seeks to create an environment that provides them equal opportunities, protection of their rights and full participation in society. Its aim is to ensure better coordination between various wings of the state and central governments

22.4.1.6 In addition to the legal framework, extensive infrastructure has been developed in India for disabled persons under these Acts and includes the establishment of the following institutions:

- Institute for the Physically Handicapped, New Delhi.
- National Institute of Visually Handicapped, Dehradun
- National Institute for Orthopaedically Handicapped, Kolkata
- National Institute for Mentally Handicapped, Secunderabad
- National Institute for Hearing Handicapped, Mumbai
- National Institute of Rehabilitation Training and Research, Cuttack
- National Institute for Empowerment of Persons with Multiple Disabilities, Chennai

22.4.1.7 India also draws support from international bodies to complement its legal framework. It is a signatory to the United Nations Convention on the Rights of Persons with Disabilities and the Biwako Millennium Framework for Action:

- The United Nations Convention on the Rights of Persons with Disabilities: Member countries that have signed and ratified the Convention must promote, protect and ensure full and equal enjoyment of all human rights by all persons with disabilities. It applies to everyone with a disability and covers all areas of life including education, employment, health, culture, liberty and accessibility.
- The United Nations Economic and Social Commission for Asia and the Pacific's Biwako Millennium Framework for Action: In May 2002, the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) adopted the Biwako Millennium Framework for Action. The framework outlined issues, action plans and strategies towards an inclusive, barrier-free and rights-based society for people with disabilities in the Asia-Pacific region during the 2003-2012 period. It identified seven priority areas for action:

  1. Persons with disabilities, family organisations.
  2. Women with disabilities.
  3. Early detection, early intervention and education.
  4. Poverty alleviation through capacity building, social security and sustainable livelihood programmes.
  5. Training and employment including self-employment.
  6. Access to built environments and public transport.
  7. Access to information and communication, including information, communication and assistive technologies.

In all, 21 targets and 17 strategies to support the achievement of the targets were identified. At a high-level intergovernmental meeting held in Bangkok in September 2007, it was agreed to adopt the BiwakoPlus Five. The BiwakoPlus Five provides additional actions in the seven priority areas as well as an additional 25 strategies.

22.4.1.8 In addition, most international agencies have integrated the programmes and policies on disability. For instance, WHO promotes a medical rehabilitation approach to disability issues; UNESCO promotes inclusive education policies; ILO has a policy of including disabled people in their employment; and UNICEF focuses on prevention of impairment in children through health and immunisation programmes.

22.4.1.9 Future strategies will need to be built around the guidelines provided by national and international agencies. Kerala needs to set out a high-level policy framework to give coherence and guidance to various departments' activities in disability-related areas covering:

- The definition of disability.
- Early detection and prevention: Vaccination, specialised care during pregnancy, early detection and training.
- Encourage and educate for a non-disabling society:
  - Develop national and local anti-discrimination programmes.
  - Include the perspectives of disabled people in ethical and bioethical debates.
  - Encourage on-going debates on disability issues.
  - Increase awareness among people with disabilities of their rights and opportunities through a range of communication activities.
- Ensure rights of disabled people:
  - Provide education to ensure that disabled people understand their rights, recognise discrimination and are able to be self-advocates.
  - Educate agencies responsible for supporting children and families about the rights and abilities of disabled parents.
- Education for the disabled:
  - Ensure that no child is denied access to their local, regular school because of their impairment.
  - Support the development of effective communication by providing access to education through sign language, communication technology and human aids.
  - Ensure that teachers and other educators understand the learning needs of disabled people.
  - Ensure that disabled students, families, teachers and other educators have equitable access to available resources to meet their needs.
  - Improve schools' responsiveness to and accountability for the needs of disabled students.
  - Improve post-compulsory education options for disabled people, including promoting best practices, providing career guidance, increasing life-long opportunities for learning and better alignment of financial support with educational opportunities.
- Provide opportunities in employment:
  - Provide education and training opportunities to increase the individual capacity of disabled people to move into employment.
  - Provide information about career options, ways to generate income and assistance available for disabled people.
  - Investigate longer-term incentives to increase training, employment and development opportunities for disabled people.
  - Encourage the development of a range of employment options, recognising the diverse needs of disabled people.

  - Ensure disabled people have the same employment conditions, rights and entitlements as everyone else, including minimum wage provisions for work of comparable productivity.
  - Enforce the legal requirement of 3 per cent employment for the disabled in the public sector.

- Foster leadership by disabled people:
  - Encourage disabled people to take part in decision-making as service users, as staff in the delivery of services and in the governance, management, planning and evaluation within all services that disabled people access.
  - Assist self-help initiatives, service delivery and advocacy organisations run by disabled people for disabled people.
  - Support the establishment of a leadership development and mentoring programme for disabled people.
- Foster an aware and responsive public service:
  - Develop mechanisms to ensure that all government policy and legislation is consistent with the objectives of the Disability Strategy.
  - Adapt public sector training to ensure that service development and service delivery are consistent with the Disability Strategy.
  - Ensure the locations and buildings of all government agencies and public services are accessible. For example, there should be handicapped ramps for easy access to buildings, reservation of the nearest parking spaces for handicapped people and so on. Classrooms should also be accessible to the disabled. Require all new scheduled public transport to be accessible. For example, buses with a handicapped lift and seatbelts that wheelchairs will not roll over.
  - Encourage the development of accessible routes to connect buildings, public spaces and transport systems. For sidewalks, at appropriate intervals, there should be ramps so that wheelchairs can be pushed easily, lifts, escalators and pedestrian lights with sounds that enable blind people to cross.
  - Develop nationally consistent access to passenger services where there is no accessible public transport.
  - Improved performance of service delivery leading to improved outcomes for persons with a disability.
- Support e-enabled quality living for disabled people.
- Draw on the strategy for the aged.
- Create a well-developed care system.
- Develop a highly skilled workforce to support disabled people.
- Develop a health service network.
- Collect relevant information about disabled people and disability issues:
  - Ensure that guidelines for research funding take into account the need for research on disability issues. Include disabled people in the development and monitoring of the disability research agenda and enable them to put forward their own experiences in the context of the research.
  - Collect relevant and useful information about disability through all relevant surveys to inform the research programme.

22.4.1.10 For implementation, it is proposed that:

- Each relevant department mainstreams the disability policy.
- The overall policy framework is developed by a ‘separate body for disability’, which will also be responsible for overseeing its implementation by various departments.

- Each department sets aside a part of its funds (specified in the policy framework) for implementing the strategy for the disabled.
- The administrative body for the disabled may set targets based on the guidelines provided by the Biwako Millennium Framework for Action and monitor its implementation.

22.5 Linguistics Minorities

22.5.1 Multi-linguistic minorities in Kerala and strategic initiatives

22.5.1.1 Kerala has a long history of in-migration, particularly from the neighbouring state of Tamil Nadu. Other major linguistic minorities in Kerala include people who speak Kannada, Tulu, Konkani, Marathi and Urdu, besides the Mahl speaking people of Kasaragod district. In addition, there are small Gujarati, Sikh, Bengali, Bihari and Oriya populations in the State. The setting up of global education and health cities in Kerala will further attract students and professionals from different parts of the country and abroad. This will require a well-designed policy to create the right environment for a multilingual and multicultural society. Kerala has implemented measures for safeguarding the interests of its linguistic minorities. In 2009, Kerala won recognition for its commendable performance in implementing the scheme for safeguarding linguistic minorities. However, in the absence of institutionalised efforts, there have been signs of dissatisfaction emerging in the State.

22.5.1.2 It is proposed that the State develop a long-term strategy to create enabling conditions for linguistic minorities, with the following underlying principles:

- All individuals in Kerala will be entitled to mutual respect and understanding regardless of their diverse backgrounds.
- All individuals and institutions in Kerala should promote and preserve diversity.
- All individuals in Kerala (regardless of background) will work together to build a positive and progressive future and this cooperation is to be encouraged so as to enhance Kerala's standing as a great place to live in.
- All individuals in Kerala are equally entitled to access opportunities and participate in and contribute to the social, cultural, economic and political life of the State.
- All individuals in Kerala have a responsibility to abide by the State's laws and respect the democratic processes under which those laws are made.
- All individuals and institutions should recognise Kerala's diversity as an asset and a valuable resource benefiting the State.

22.5.1.3 Strategic initiatives

- Gather accessible information about culturally diverse groups within the community.
- Undertake projects to build awareness of cultural collections in the community and develop the capacity for communities to care for them in the most appropriate way.
- Increase awareness, usage and care of records, and implement a 'community archives' strategy to enhance support for regional groups and organisations.
- Ensure that workforce practices, systems and processes support and reflect cultural diversity within the community.
- Assess the effectiveness of services provided to culturally diverse groups within the community.
- Linguistic policies for all public service delivery by all public departments.
- Undertake initiatives for the socio-economic development of ethnic minorities, specifically within the Socio-Economic Development Programme for ethnic and mountainous areas. Establish regulatory frameworks and an enabling policy environment to respect the identities,

languages, cultural diversity and traditions of minorities. Eliminate all discriminatory policies and practices, which adversely affect their interests.

22.6 Other Groups

22.6.1 There are numerous other vulnerable groups in society, which are too small to be identified, but are a part of Keralite identity and essential for the vibrancy of the economy. The strategy is to identify the nature of the vulnerability and then assess whether mainstream programmes can address those issues. If they cannot, the task is to determine what sort of targeted policies will benefit the specific minority. Targeted policies should follow the framework of KPP 2030.

- Economic empowerment: Link the vulnerable groups with the mainstream organised sectors. For example, artisans who make musical instruments may be linked with the tourism and ICT sectors. As part of this process, tourists can be directed to the places where the artisans make their instruments. The government, through the Kudumbashree programme, can assist with marketing and branding the instruments (thereby increasing their value even further) and even help sell them. Organising concerts in which local instruments are played, can help popularise their use. Similarly, local museums can display musical instruments made in Kerala.
- Human capital: Encourage vulnerable groups to preserve their particular cultural identity, while mainstreaming them. Avenues for health and education should be provided to them, with a way to upgrade skills. For example, centres of excellence may host artisans for preserving and spreading knowledge, thus creating opportunities for others to learn a particular craft. In short, knowledge in any form must be nurtured.
- Environmental: Environmental concerns, if any, should be mainstreamed and be a part of the overall strategy.
- Social empowerment: Reduce their vulnerability and make them independent over time. Social security, health financing and other forms of assistance and entitlements can help minimise the groups' vulnerability.

22.7 Conclusion

22.7.1 The socially vulnerable sections need to be empowered both socially and economically. It is essential to involve the larger community in this effort, to develop common understanding, share experiences, identify common guidelines and principles and identify challenges and the means to overcome them. It is also crucial to identify what has been learned and what still needs to be learned. Without a great deal of active support from the community, the state can fulfil only a small part of its responsibility to protect socially vulnerable groups.

Appendix 22A

The Gender-related Development Index (GDI) adjusts the Human Development Index (HDI)

It covers three dimensions, and adjusts it for female — life expectancy, education and income. It is important to note that the GDI is not specifically a measure of gender inequality.

The Gender Empowerment Measure (GEM)

It seeks to measure relative female representation in economic and political power. It considers gender gaps in political representation and in professional and management positions, as well as gender gaps in incomes.

Gender Gap Index of the World Economic Forum

GGI indicators include the following dimensions:

- Economic participation: male and female unemployment levels, levels of economic activity, and remuneration for equal work.
- Economic opportunity: duration of maternity leave, number of women in managerial positions, availability of government-provided childcare, wage inequalities between men and women.
- Political empowerment: number of female ministers, share of seats in parliament, women holding senior legislative and managerial positions, number of years a female has been head of state.
- Educational attainment: literacy rates, enrolment rates for primary, secondary and tertiary education, average years of schooling.
- Health and wellbeing: effectiveness of governments' efforts to reduce poverty and inequality, adolescent fertility rate, percentage of births attended by skilled health staff and maternal and infant mortality rates.

Social Watch's Gender Equity Index (GEI)

- Education: measured by the literacy gap between men and women and by male and female enrollment rates in primary, secondary and tertiary education.
- Participation in the economy: measured by the percentage of women and men in paid jobs, excluding agriculture, and by the income ratio of men to women.
- Empowerment: measured by the percentage of women in professional, technical, managerial and administrative jobs, and by the number of seats women have in parliament and the numberof decision making ministerial posts held by women.

The Gender Status Index (GSI) of the AGDI

The GSI is based on three components: social power, economic power and political power. Each of the three main components has the same weight in the calculation of the GSI. Within each block, each component also carries the same weight.

1. The social power component(capabilities) consists of two sub-components:
   - Education: measured by levels of school enrolment and dropout, and literacy levels of girls and women.
   - Health measured by levels of child health, new HIV infection and time spent out of work through illness.
2. The economic power component (opportunities) consists of three sub-components:
   - Income measured by women's income from agriculture, from work in the formal and informal sectors and from cash transfers.
   - Time use or employment measured by time spent in economic activities and in employment.
   - Access to resources measured by access to the means of production and to management positions.
3. The political power component(agency) consists of two sub-components:
   - Representation in key decision making positions in the public sector.
   - Representation in key decision making positions in civil society.

Source: Based on ECA 2004:13

The Cambodian Millennium Development Goals(CMDGs)

CMDG3: Promote gender equality and women's empowerment

Target: Reduce significantly gender disparities in upper secondary education and tertiary education:

- Improve the ratio of girls to boys in upper secondary education from 48 per cent in 2001 to 100 per cent in 2015.
- Improve the ratio of girls to boys in tertiary education from 38 per cent in 2001 to 85 per cent in 2015.
- Improve the ratio of literate females to males (15–24 years old) from 87 per cent in 1998 to 100 per cent in 2010.
- Improve the ratio of literate females to males (25–44 years old) from 78 per cent in 1998 to 100 per cent in 2010.

Target: Reduce significantly all forms of violence against women and children:

- Increase the proportion of cases of domestic violence counselled by qualified personal to 100 per cent by 2015.
- Increase the percentage of the population who are aware that violence against women is wrongful behaviour and a criminal act to 100 per cent by 2015.
- Develop and implement laws against all forms of violence against women and children according to international requirements and standards by 2005.
- Collect annual statistics to monitor violence against women by 2005.
- Develop and implement a Prevention Plan by 2005.

Source: Gender Equality Indicators: What, Whyand How? Prepared for the DAC Network on Gender Equality by JustinaDemetriades in 2009, based on BRIDGE's Gender and Indicators Cutting Edge Pack (2007),
http://www.bridge.ids.ac.uk/reports_gend_CEP.html#Indicators
http://www.oecd.org/social/gender-development/44952761.pdf

Reference

1 *Fourth World Conference on Women. Beijing, China, September, 1995 website. http://www.un.org/womenwatch/daw/beijing/fwcwn.html*

2 *Chattopadhyay, R. and E. Duflo. 2004. Women as policy makers: Evidence from a randomised policy experiment in India. Econometrica, 72(5):1409–1443.*

3 *State Planning Board, Government of Kerala. 2010. Gender and Development. Economic Review 2009..429*

4 *Planning Commission, Government of India. 2002. National Human Development Report 2001. March.*

5 *Ministry of Health and Family Welfare, Government of India.Kerala.National Family Health Survey (NFHS–3) India.2005–06.International Institute for Population Sciences, Mumbai.*

6 *All the statistics in this paragraph are from the following source:*
Ministry of Human Resource Development, Government of India website. Statistics of Higher and Technical Education 2009−10..httphttp://mhrd.gov.in/statistics_data?tid_2=158.

7 *Gender Parity Index means the number of female students enrolled to the number of male students.*

8 *Gender Parity Index (GPI) in enrolment at primary, secondary and tertiary levels is the ratio of the number of female students enrolled at primary, secondary and tertiary levels in public and private schools to the number of male students.*

9 *Unskilled workers in primary sector, mining, construction, manufacturing, etc.*

10 *Mincerian wage function Mincer, J. 1958. Investment in Human Capital and Personal Income Distribution.The Journal of Political Economy. 66(4):281−302. August.*

11 *Fairlie, R. W. 2003. An Extension Of The Blinder-Oaxaca Decomposition Technique To Logit And Probit Models.Economic Growth Center, Yale University.http://www.econ.yale.edu/growth_pdf/cdp873.pdf. November.*

12 *Oaxaca (1973) and Blinder (1973) have shown that it is possible to decompose the gender gap in wages between an explained component (that may be attributed to differences in experience and educational attainments) and an unexplained or residual part. The latter is often taken to be a measure of the extent of discrimination by the market. Oaxaca, R. 1973. Male-Female Wage Differentials in Urban Labour Mar-*

kets.International Economic Review. 14(3): 693-709. Blinder, A. 1973. Wage Discrimination: Reduced Form and Structural Estimates. Journal of Human Resources. 8(4): 436.455.

13 *The variables going into each of these factors are stated in Appendix A.*

14 *Sakhi Website. http://sakhikerala.org/?page_id=194.*

15 *Sakhi Website. http://sakhikerala.org/?page_id=194.*

16 *The Sakhi Website notes the absence of public toilets for women. Anecdotal evidence also suggests missing well-maintained and well-lit public toilets for women in government buildings. Even a simple audit on availability of lights, accessibility, soaps, drying towel/paper, dustbins and general cleanliness of female bathrooms can lead to a substantial improvement in standards.*

17 *This study by BinaAggarwal is reported in the Twelfth Plan Working Report on Gender Development. Ministry of Women and Child Development, Government of India. 2011. XIIth Five Year Plan Report of the Working Group on Women's Agency and Empowerment. http://planningcommission.nic.in/aboutus/committee/wrkgrp12/wcd/wgrep_women.pdf.*

18 *Kudumbashree Website. www.kudumbashree.org.*

19 *Connecticut Department of Labour.Your Job Search Guide. http://www.ctdol.state.ct.us/lmi/pubs/job-search_guide.pdf*

20 *A sociotope is a defined space that is uniform in its use values and social meanings. It can be described as the collective life world of a place (Greek: topos, 'place' from tóposkoinós, common place; pl. topoi), its use and meaning, in a specific culture or group of people.*

21 *Another model city is, Vienna, Austria. It adopted gender mainstreaming of cities as a philosophy in 2005. The city asked women what made them feel safe and designed public spaces accordingly. City of Vienna website. http://www.wien.gv.at/english/administration/gendermainstreaming/.*

22 *Agewell Foundation 2010. Agewell Study on Changing Trends Of Old Age. Agewell Research and Advocacy Centre. September*

23 *Bagchi, K. (ed.). 1997. Elderly Females in India; Their Status and Suffering. Society for Gerontological Research and Help Age, New Delhi.*

24 *Andrews, G. 2002.Second United Nations World Assembly on Ageing, Madrid, Spain, 2002. Available from: http://bit.ly/WCq58e (accessed on 20/6/06).*

25 *State has formulated the Old Age Policy 2006 (See Appendix 23B)*

26 *State Planning Board, Government of Kerala. 2012. Gender and Development. Economic Review 2011.*

Chapter 23

PLANNING FOR THE SOCIALLY MARGINALISED GROUPS

Chapter 23

Planning For The Socially Marginalised Groups

23.1 Social Justice

23.1.1 The World Summit for Social Development, which took place in Copenhagen in March 1995, was an important opportunity for the world community to focus its attention on the nature and roots of current social problems and trends. In particular, the agenda of the Summit specified three areas of concern — the reduction of poverty, the generation of productive employment and the enhancement of social integration. In the face of seemingly intractable problems of institutional breakdown and mass exclusion in various parts of the world, the subject of social integration has assumed increasing importance in public debate.

23.1.2 Meaningful progress towards social sustainability can be better achieved through measures that promote social inclusion and protect the human rights of all. The marginalisation of any social group can have a significant detrimental impact on poverty reduction, democratic governance, environmental sustainability and conflict prevention. It may lead to social tensions and socio-political instability, which will, in turn, reduce investment and hence growth also.[1] Overcoming the marginalisation of socially excluded sections, thus, has direct benefits for national development processes and the achievement of inclusive growth. Social exclusion has its roots in India's historical divisions along lines of caste and tribe. The exclusion of certain groups has kept them trapped, unable to take advantage of opportunities that economic growth offers. Culturally rooted systems have perpetuated inequality traps, which prevent these groups from breaking out. This is because these socially excluded groups experience greater challenges in accessing rights, entitlements and opportunities, and in moving out of poverty. Although the growth process in Kerala has been more inclusive than in other states of India, there are historical inequalities that have persisted over time and remain a potential source of conflict within the State. Kerala must, therefore, focus on developing a policy approach to address marginalisation of socially excluded groups such as Scheduled Castes, Scheduled Tribes, artisans and fisher folk.

While artisans and fisher folk are covered in the chapters on the handloom industry and fisheries, this chapter focuses on Scheduled Castes and Scheduled Tribes.

23.2 Status of Socially Deprived Castes

23.2.1 Scheduled tribes

23.2.1.1 Historically, *adivasis* (or STs), comprise a small proportion of Kerala's population. According to the 2001 Census, STs with a population of 3.6 lakh accounted for 1.14 per cent of the State's population. As per the Tribal Survey of 2008, the population of STs was 4.26 lakh, which constituted 1.27 per cent of Kerala's population. District-wise distribution of the ST population shows that 35.85 per cent of the *adivasi* population resides in Wayanad, comprising over 18 per cent of the population of the district. About 12.3 per cent of the State's ST population lives in Idukki and constitute almost 5 per cent of the district's population. Thus, almost 50 per cent of the tribal population is concentrated

in the hilly districts of the State. Kasaragod, Kannur and Palakkad are other districts that have some concentration of the ST population. The Paniya, comprising about a fifth of the ST population, are the largest tribe in Kerala. They reside mainly in Wayanad, Kozhikode and Malappuram. *Adivasis* live mostly in rural areas (96 per cent of Kerala's ST population does) in places such as forest land, forest fringes and wildlife sanctuaries. This implies that access to land and forest resources is very important to STs, economically and socially.

Education

23.2.1.2 The latest Tribal Survey places the literacy rate among the STs at 74.4 per cent as against 47.1 per cent at the national level (in 2001). While this is higher than the national average ST literacy rate, it is much below the general literacy rate of Kerala (See Chapter 10). The literacy rate of the STs varies from 94 per cent in Kottayam to 57.6 per cent in Palakkad. However, literacy varies widely across tribes. While Malayarayans report a literacy rate of 97 per cent, Cholanaikans have the lowest literacy rate of 34.5 per cent. As regards education level attained, while 33.1 per cent have a primary education, the share of graduates and above remains as low as 0.3 per cent. Only 4.25 per cent of the population has technical and diploma certificates.

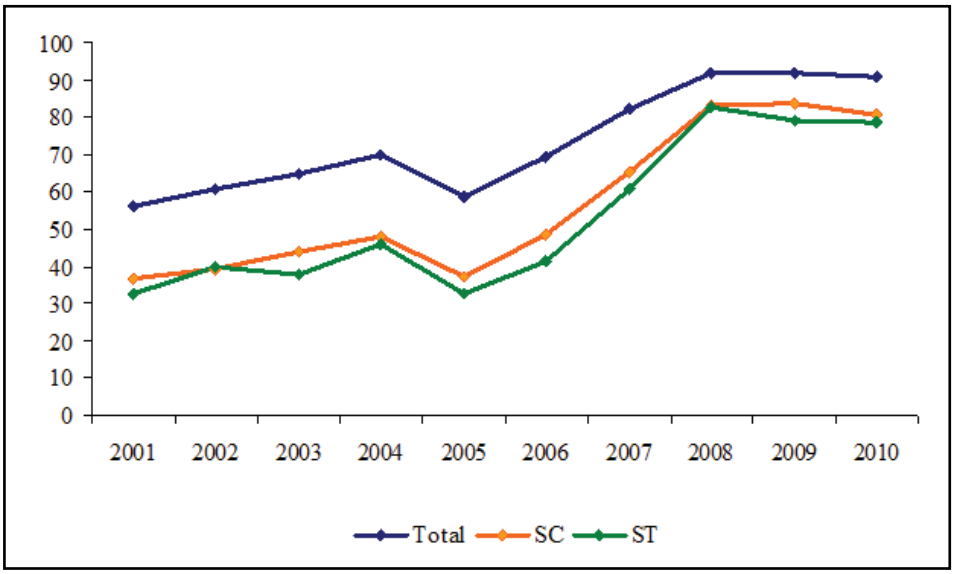
23.2.1.3 Gross enrolment ratio at higher levels of education among STs in 2009-10 is estimated by the MHRD to be 13.9. This is lower than that in states such as Chhattisgarh, Himachal Pradesh, Uttar Pradesh, Uttarakhand, West Bengal and the North-eastern states. Gender parity in Kerala is, however, expectedly higher than unity (1.05). Among the major states, only Uttarakhand has better figures on this parameter.

23.2.1.4 Since educational backwardness is the main hurdle to the socio-economic progress of the STs, top priority is given for their educational development in the State. The ST department distributes educational concessions, scholarships and other kinds of assistance to tribal students from the pre-primary to the post-graduate level. Apart from being exempted from all kinds of fees, they are also given a lump-sum grant to buy books, stationery and apparel, and a monthly stipend at varying rates. To impart primary education to tribal children living in remote settlements, 24 centres have been set up under the 'Peripatetic Education Centres of PTG's' scheme. In order to provide residential education to tribal students from remote areas, the ST department runs 108 pre-matric hostels and three post-matric hostels, offering boarding, lodging and tuition facilities, in the State. There are 29 single teacher schools that provide pre-primary education to tribal children living in very remote and inaccessible areas. Of these, 27 are in Idukki district. In addition, tribal children receive pre-primary education from kindergartens and balawadis that function under local self-governments and the ST department respectively.

23.2.1.5 Further, in order to provide quality education to ST students, 18 Model Residential Schools function under the ST department — 15 Ashram Schools in tribal sub-plan areas, two Ekalavya Model Residential Schools and one Special Model Residential School (100 per cent assistance under Art. 275[1]). The Model Residential Schools have achieved impressive results in the last few SSLC (Secondary School Leaving Certificate or class 10) examinations. These efforts have had a favourable impact on the educational development of tribal children.

23.2.1.6 Analysis of trends in the performance of ST students in the SSLC examination in the last decade reveal an increase in the proportion of students passing the SSLC exam between 2005 and 2008 (Figure 23.1). However, there has been a marginal deterioration in this figure since 2008.

Fig 23.1
Percentage of students passing SSLC Examination in Kerala by Caste: 2001 to 2010



Source: Ministry of Human Resource and Development

Health status

23.2.1.7 Analysis of data from the 60th Round of the NSS (2004-05) shows that the proportion of ailing persons (PAP) is 16 per cent amongst STs, against the all-Kerala figure of 24 per cent. Various measures have been taken to provide timely medical attention to STs. The Health Services Department has established 63 PHCs in tribal areas. In addition, the ST Development Department has four midwifery centres, 17 ayurveda dispensaries, three allopathy dispensaries/out patient clinics, one ayurveda hospital, two mobile medical units and one allopathy hospital in Mananthavady. In 2007, the Nalloornad and Attappady hospitals under the ST Development Department were transferred to the Directorate of Health Services (DHS). Homoeo dispensaries also function in tribal areas under the tribal sub-plan of the respective department. The health department also conducts medical camps in tribal areas to diagnose diseases.

23.2.1.8 The NSS data on morbidity should be interpreted with caution, as the health status is self-reported. It has been argued[2] that if a community is deprived, this may then affect its perceptions and expectations from society, and increase the chances of reporting satisfactory health status. A recent study taking clinical observations found that "Comparison of the age and sex standardised prevalence of morbidity between tribal and non-tribal groups reveals a higher prevalence of underweight, anaemia and goitre among tribal members. When morbidity prevalence is further disaggregated by tribal and caste groups, a strong gradient is observed between social groups for underweight, anaemia and goitre, with the Paniya group having the highest prevalence, followed by the other Scheduled Tribes, and the lowest prevalence among Other Backward Class and Forward Castes."[3] Thus, the tribal groups seem to have severe health deprivation issues.

23.2.1.9 Looking at the proportion hospitalised in the year preceding the survey shows that 11 per cent of STs had sought treatment as an in-patient, compared to a similar proportion for all social groups. The NFHS-3 (2005-06) report for Kerala also observes that 52 per cent of ST women suffer from anaemia, while 15 per cent of ST women were severely thin. The 2001 State Development

Report made observations about the large number of deaths due to starvation, poor quality of living environment and lack of access to medical care. The State Development Report also observed that a high proportion of STs suffered from TB (tuberculosis), leprosy, scabies and several water-borne diseases. It cited a survey undertaken by the All India Institute of Medical Sciences (AIIMS), New Delhi that found that nearly one out of every seven STs in Wayanad and Palakkad suffered from sickle cell anaemia.

23.2.1.10 Studies by the health department as well as AIIMS show that nearly 15 per cent of the tribal families in Wayanad and Palakkad districts have traits of the genetic condition 'sickle cell anaemia'. In order to tackle the problem, the Kozhikode Medical College has set up a sickle cell anaemia unit with an electrophoresis machine. In addition, programmes for rehabilitating sickle cell anaemia patients are also undertaken in Wayanad district. The Swami Vivekananda Medical Mission, Kerala receives financial assistance to rehabilitate sickle cell anaemia patients from Wayanad's ST communities through vocational cum production centres. During 2007-08 a new scheme, 'Complete Healthcare Programme for the Tribals', was implemented by the department. So far 27,657 people have benefited from this scheme.

Employment

Table 23.1.
Changes in Occupational Patterns Among ST and SC Population in Kerala

Categories	Kerala		ST		SC	
	1991	2001	1991	2001	1991	2001
Main worker (as %age of population)	28.53	25.87	36.82	29.75	40.28	30.17
Male main worker (as %age of male population)	44.82	41.77	47.22	41.54	51.11	40.66
Female main worker (as %age of female population)	12.81	10.85	26.72	18.51	29.42	19.9
Percentage of Cultivators to main workers	12.24	7.12	3.1	1.61	12.24	7.12
Percentage of workers in household industries to main workers	25.54	12.4	53.79	29.48	25.54	12.4
Percentage of service sector workers to main workers	2.58	3.35	2.44	2.6	2.58	3.35
Work participation rate	15.17	77.13	10.7	66.31	15.17	77.13

Source: Planning Commission (2008) State Development Report.

23.2.1.10 Analysis of 2001 Census data reveals that while 26 per cent of the total population were 'main workers', the corresponding figures for the ST population were around 30 per cent (Table 23.1). It indicates that a moderately higher proportion of the STs were workers when compared to the general population. The ratio of female workers belonging to STs is almost double than that of other populations. It is significant that the decline of workers in the total population was marginal during the decade 2001, compared to 1991; it was substantial for STs during the period. The decline in the proportion of main workers, both male and female, is not a welcome change as it is indicative of growing unemployment, underemployment and deprivation among the population. An analysis of Table 22.1 also indicates excessive dependence of STs on agriculture (55 per cent) for their livelihood as against only 20 per cent for the total population. The Tribal Survey 2008 shows that more than 75 per cent of the tribal workers were engaged in agriculture and allied sectors, largely as agricultural labour.

23.2.1.11 In Kerala, as per Rule 14(a) of the Kerala State and Subordinate Service Rules 1958, 8 per cent reservation in public service is provided to SCs and 2 per cent to STs. Total representation of SC/ST employees in government service as of January 1, 2009 was 11.85per cent (for SCs it was 10.07 per cent and for STs, 1.78 per cent). It shows that SCs and STs, together, had already achieved more than 10 per cent reservation. While the STs did not achieve the target of 2 per cent, the gap was marginal.

23.2.1.12 The State Human Development Report observes that STs are mainly engaged in low-skilled, low-paid activities. It also comments on the dual wage system prevailing in tribal dominated regions — with STs being paid much lower wages than agricultural labourers from other social groups. Analysis of NSS 66th Round data (2009-10), however, raises doubts about the need for such pessimism (Table 23.2).

Table 23.2.
Differences in land ownership and cultivated and daily earnings between ST and non-STs – 2009-10

Social group	Non-ST	ST
Daily earnings of agricultural labourers-Rural (Rs)	182.68	172.02
Daily earnings of wage & salary earners-Rural (Rs)	361.06	455.33
Daily earnings of wage & salary earners-Urban (Rs)	303.27	259.77

Source: Estimated from unit level NSS data 66th round (2009-10).

23.2.1.13 Indeed, adivasi agricultural labourers earn lower wages than non-ST agricultural labourers. Yet, after controlling for education and age, the gap is only 3 per cent. An interesting finding is that if educational level of STs is raised to that of non-STs, then the wage rate of adivasi agricultural labourers would rise by 4 per cent. Decomposition of wage gap using the Oaxaca-Blinder method also shows that if educational attainments of STs and non-STs are identical, then the latter would get lower daily wages. In fact, STs would earn about 70 per cent more than a similarly educated and experienced non-ST worker. This underlines the importance of improving educational attainments for the successful integration of STs in the urban informal sector. What is worrisome is that this does not reflect in poverty ratios.

Deprivation and poverty

23.2.1.14 The incidence of poverty has risen among STs in Kerala. In 2004-05, the proportion of STs below the poverty line was 46 per cent; in 2009-10 this increased to 52 per cent. Corresponding all-India figures are 40 and 45 per cent.[4] This calls for a review of land redistribution measures and the extent to which STs can access land resources and infrastructure services, secure employment and are covered by social security measures.

23.2.1.15 Another possible method of assessing economic status of STs is through an index capturing their access to basic necessities. The index of deprivation reported in the Human Development Report 2005 is based on deprivation in housing quality, access to drinking water, good sanitation and electricity for lighting. The incidence of deprivation among STs is 57.9, while that for the total population is only 29.5 (Table 23.3). In 10 districts, STs have a deprivation index above 50. These districts include Wayanad, Idukki and Palakkad, which have the highest share of the State's ST population.

Table 23.3.
District-wise Deprivation Index in Kerala: 2005

District	ST			ST			ST	
	Index	Population share	Rank	Index	Population share	Rank	Index	Rank
Thiruvananthapuram	54.4	11.87	13	60.1	5.74	10	39.5	11
Kollam	47.8	10.34	8	50.7	1.43	5	30.4	8
Pathanamthitta	50.3	5.19	10	54.6	1.8	7	31.1	9
Alappuzha	45.9	6.38	6	40.1	0.86	3	29.6	6
Kottayam	42.1	4.81	4	43.1	5.04	4	25.1	3
Idukki	40.8	5.1	2	65.3	14	13	42.7	13
Ernakulam	29.3	8.44	1	37.2	2.76	1	15.5	1
Thrissur	42.0	11.34	3	37.5	1.33	2	24.7	2
Palakkad	52.9	13.85	12	65.3	10.89	12	40.4	12
Malappuram	46.2	9.14	7	56.8	3.37	8	28.6	5
Kozhikode	48.8	6.43	9	50.9	1.63	6	28.3	4
Wayanad	51.5	1.07	11	66	37.36	14	46.3	14
Kannur	43.8	3.17	5	57.7	5.48	9	29.7	7
Kasaragod	62.7	2.89	14	61.3	8.33	11	37.6	10
Total	45.5	9.81		57.9	1.14		29.5	

Source: GoK (2005) Human Development Report: Kerala.

23.2.1.16 The Tribal Survey 2008 reveals that conditions did not improve substantially over time. More than 90 per cent of the families surveyed had their own houses, but of them, 54 per cent were damaged; 48 per cent of the houses (with students) were not electrified. Further, 47.75 per cent of the households had no toilets; 27 per cent of the colonies were not electrified and over 15 per cent had no drinking water supply within 500 metres.

Land redistribution

23.2.1.17 If one examines the socio-economic status of STs in the post-Independence period in Kerala, two important points emerge. Historical inequalities that existed between STs and other communities since Independence have been reduced considerably — mainly as a result of anti-poverty measures and trickledown effect of economic growth. However, such inequalities have not been totally eliminated, but linger to form social divisions.

23.2.1.18 Increasing alienation of STs from their traditional land and forest holdings has been commented on by different committees (GoK, 1962; GoK, 1979). Such reports note that land holdings of STs have declined steadily since Independence due to alienation, lease and mortgage. The State Development Report notes that only 9 per cent of the disputed cases have been resolved and only 6 per cent of the disputed land restored. At different points of time, various commissions have recommended protection of tribal rights to land. And acts such as the Kerala Scheduled Tribes Act (Restriction on Transfers of Land and Restoration of Alienated lands) of 1975 have been passed. However, recommendations or provisions have remained dormant, or implementation stopped, after facing opposition from non-tribal groups. The amendments of 1996 and 1999, along with the Kerala Restriction on Transfers and Restoration of lands to Scheduled Tribes Act of 1999, may be cited in this context.

23.2.2 Scheduled Castes

23.2.2.1 According to the 2001 Census, the Scheduled Caste (SC) population constitutes 9.8 per cent of the total population of the State. The growth of the SC population has been 8.2 per cent, which is 1.2 percentage points lower than the growth of the total population (9.4 per cent) in 1991-2001. The proportion of SCs declined further to 7.2 per cent according to 2011 figures. The SCs are overwhelmingly rural, with 81.8 per cent residing in rural areas. Among the districts, Palakkad has the highest proportion of SCs (16.5 per cent) followed by Idukki (14.1 per cent), Pathanamthitta (13.1 per cent) and Kollam (12.5 per cent). Kannur district has the smallest SC population (4.1 per cent), preceded by Wayanad (4.3 per cent) and Kozhikode (7 per cent) districts.

23.2.2.2 Hinduism is the predominant religion of the SCs (99.9 per cent) in Kerala. An infinitesimal number of SCs are followers of Sikhism and Buddhism. The state has a total of 68 Scheduled Castes as enumerated in the 2001 census. Pulayan is the most populous caste, forming 33.3 per cent of Kerala's SC population. Cheruman is the second largest SC. These two castes, along with Kuravan, Paraiyan, Kannakan, Thandan and Vettuvan castes constitute 78 per cent of the total SC population. District-wise distribution of the individual SCs shows that Pulayan, numerically the largest caste, accounts for the highest proportion (76 per cent) of the total SC population in Ernakulam district, followed by Alappuzha and Kottayam (56 per cent each), whereas Cheruman and Kuravan have the highest proportion in Palakkad (38 per cent) and Pathanamthitta (36 per cent) districts respectively. The largest proportions of the four other major SC groups, Paraiyan, Kannakan, Thandan and Vettuvan, are in Idukki, Malappuram, Kollam and Thrissur respectively.

Educational status

23.2.2.3 The SCs have shown an encouraging trend in the level of literacy. More than three fourths of the population aged 7 years and above are literate. The overall literacy rate of SCs, which was 80 per cent in the 1991 census, increased to 83 per cent in 2001. This is significantly higher than the national average of 55 per cent for SCs. According to the latest SC survey, it has gone up to 90 per cent. SCs are thus comparable with the general category in terms of the rate of literacy.

23.2.2.4 However, they lag behind in terms of tertiary education. The SC survey shows that the proportion of literates who have attained education up to the primary level is 34.54 per cent, while 31.09 per cent have a secondary level of education. Graduates and post-graduates represent 2.18 per cent and 0.40 per cent respectively. Altogether, 1,113 youth, including 700 boys and 413 girls, have acquired a B.Tech. There are 302 medical degree holders among the SCs (143 males and 159 females). Diploma and certificate holders in engineering and technical branches constitute 0.84 per cent of the population.

23.2.2.5 The drop out rate among SC students is very high. Approximately 10.9 per cent of the students left educational institutions during the period of their study. The drop out rate at the higher secondary level works out to 22.07 per cent, while at the high school level it is 9.75 per cent. Over 10 per cent of the students enrolling for graduation and post-graduation programmes leave the institutions without completing the course. This is despite the fact that the department offers various educational schemes such as scholarships for pre- and post-matric studies, Model Residential Schools, assistance to students studying in self-financing colleges and e-Grantz for the distribution of educational concessions to SC students during the eleventh plan period. In addition, under the Ayyankali Memorial Scheme, selected students from standards IV and VIII are provided with continuous special tuition and counselling.

23.2.2.6 Approximately half the SC communities, do not have access to secondary and higher secondary schools in their neighbourhood. In addition, 26.76 per cent of SC communities are at least

2.5 km away from the nearest upper primary school, while 15.77 per cent are at a similar distance from the nearest lower primary school. A positive trend, however, is the convergence in the proportion of SC students qualifying in the SSLC examination (see Figure 23.1 earlier). This convergence occurred post 2005.

Employment status

23.2.2.7 The SC Survey of the Government of Kerala shows that the Scheduled Castes population in the age group 15-59 years is 1,636,211. Of them, 831,629 persons (50.82 per cent) are engaged in various occupations. The unemployment level among educated Scheduled Castes is higher than the State average of all the educated unemployed; 59.53 per cent of those who have passed the SSLC and 76.60 per cent of SC plus-two certificate holders are unemployed. The unemployment level among graduates is 63.56 per cent and it is 54.60 per cent among post-graduates. Even SC youth with engineering and medical degrees are unemployed.

23.2.2.8 Table 23.1 above shows a sharp decline in the proportion of main workers among the SC community. This is much higher than the decline in the population as a whole. The decline is slightly larger among male SCs, compared to females. This could also be due to increasing enrollment in education. Analysis of the proportion of main workers engaged in different occupational categories indicates that there has been a sharp shift from the primary (where SCs previously worked as agricultural workers) to the tertiary sector. This is welcome as a similar trend is observed for Kerala's workforce as a whole.

Health

23.2.2.9 The NFHS-3 report for Kerala provides some information about the health status of SCs. For instance, out of 268 currently married SC women surveyed, 77 per cent were reported to be using contraceptive methods, while 70 per cent used modern methods. Figures for ante-natal and post-natal check-ups are very high. Out of 74 SC women surveyed in Kerala, 93 per cent had received three ANC (ante-natal check-up) check-ups, 99 per cent had delivered in a health facility and 89 per cent had received post-natal check-ups. It was also found that 47 per cent of the children and 38 per cent of the women suffered from anaemia.

23.2.2.10 According to the SC Survey, physical disability and mental disease are the two factors that mainly affect the health of Scheduled Castes. In all, 4.5 per cent of families and 1.71 per cent of people in the Scheduled Castes suffered from mental and physical disorders and required palliative care and the compassion of society; 3.1 per cent of the SC population was suffering from different types of chronic diseases. Terminal diseases such as cancer, tuberculosis, heart diseases and so on are the major ailments that spread among the Scheduled Castes.

23.2.2.11 The SC Survey shows that public health institutions are far away from most Scheduled Caste habitats. In the case of 6,914 habitats (26.27 per cent), distance to community health centres is above 25 km. The distance to primary health centres for 8,768 habitats (33.28 per cent) is above 5 km. Ayurveda and homoeopathic dispensaries/hospitals are also not located within reasonable distances of the habitats. Worryingly, there are a few remote settlements in Idukki, Palakkad, Thrissur, Wayanad and Malappuram where such healthcare facilities are still lacking. Extending health facilities to such remote areas remains a major challenge before the government.

Infrastructure

23.2.2.12 The problem of drinking water is more acute in SC communities. Among the SC families, only 26.53 per cent have access to protected water. In the case of scattered families, water connec-

tions are available only for 21.38 per cent of families. More than 62 per cent of the families in SC habitats experience scarcity of drinking water. Altogether, 86,318 families do not have sanitary toilets. It is estimated that 15.3 per cent of SC families do not have toilets. It has been estimated that 81,840 houses (14.50 per cent) of Scheduled Castes have not been provided with electricity.

Poverty and deprivation

23.2.2.13 The incidence of poverty among SCs stood at 32.2 per cent in 2009-10. This is substantially lower than the all-India poverty level for SCs. The incidence of deprivation among SCs is 45.5, while that for the total population is only 29.5 (Table 23.3). Deprivation level of SCs is particularly high (above 50) in the districts of Kasaragod, Thiruvananthapuram, Palakkad, Pathanamthitta and Wayanad. Specifically, Vedan, Nayadi, Kalladi and Chakkilian are the most economically, socially and educationally backward castes. The majority of these sub-castes are landless and reside in huts built on 'poramboke' land and suffer from malnutrition. Special emphasis is needed for the development of these communities, including provision of land and homes. The destitute families among the Scheduled Castes are enumerated at 31.06 per cent. They comprise families of unwed mothers, widows, divorcees, victims of atrocities, orphans and so on. The unwed mothers, widows and divorcees constitute 16.39 per cent of the female population above 15 years. In this group, widows represent the majority, accounting for more than 95 per cent.

23.3 A strategy to Tackle Social Inequality

23.3.1 Social or ethnic inequalities are a universal feature of multi-ethnic Asian societies. Because of historical factors, they are often entrenched in institutions and practices and are, therefore, much more difficult to address than other forms of inequality. The persistence of caste-based inequalities in India is due to socio-economic and historical factors, the way labour markets are structured and the differential access to governance institutions. Labour markets may be segmented on the basis of caste because of past public policies, unequal development or efforts by specific castes to protect advantages. They get trapped in a vicious cycle of weak economic and social status, which reinforce each other. Public policies and market segmentation may lead to physical segregation of socially marginalised groups — tribal colonies, for example — further reinforcing prejudice and antagonism against them. It is, therefore, necessary to give a major push to their economic status.

23.3.2 The vision of the strategy is to create a society in which every Keralite is entitled to live with human dignity.

23.3.3 Objectives will be to achieve:

1. Objectivity in the identification of the vulnerable population.
2. Equity in service delivery.
3. Efficiency in service delivery.
4. Accessibility for all the eligible.

23.3.4 The proposed strategy is multi-pillared. It recommends:

- Affirmative action
- Development programmes
- Social upliftment through a people-centric approach

23.3.5 Pillar 1: Strengthen the system of identifying beneficiaries of public assistance programmes

- Improve system of selecting beneficiaries (including people not in households) for affirmative action.
- Increase awareness of the availability of and eligibility criteria for social assistance programmes.
- Strengthen the capacity of the main implementing agencies through proper training.

23.3.6 Pillar 2: Strengthen affirmative action

23.3.7 In India, affirmative action in the form of quota-based reservation, is a major instrument for reducing horizontal inequalities. Critics argue that by undermining merit-based competition, such policies create distortions within the economy and may produce inefficient outcomes. This imposes heavy costs on the economy, particularly during a recession. There is also a possibility that communities become dependent on quotas, eroding their capability for independent vertical mobility. However, there is also evidence that affirmative action can be highly effective. The experience of Northern Ireland, Malaysia and South Africa shows that, if properly used, such policies may reduce social conflict, freeing resources for growth. There are studies[5] for India too that have confirmed the positive effects.

23.3.8 A potential danger is that the benefits of affirmative action may be appropriated by the top (creamy) layer. This worsens intra-group and, hence, vertical inequality. In India, for instance, many reservations extended to SCs/STs are unclaimed because SC/ST students from poor households are unable to meet even the relaxed requirements because of deficient primary and secondary schooling. Therefore, the strategy needs to:

- Target the neediest members of the population.
- Integrate affirmative actions within a comprehensive framework rather than implement them as a group of loosely connected ad hoc measures with independent objectives.
- Combine affirmative action with assistance either in terms of knowledge (management assistance, additional training and so on) or money (sponsorships, research assistantships and so on).
- Cash transfers: Replace other forms of grants with a conditional cash transfer programme to the neediest of the SCs and STs.

23.3.9 Pillar 3: Empower STs while protecting their habitat and culture

23.3.10 In Kerala, the government earmarks funds for Special Component Plan (SCP) and Tribal Sub-Plan (TSP) from the State Plan Outlay in proportion to the ratio of the population of SCs and STs to the total population of the State. This allows planners to introduce a wide range of schemes for the all-round development of the targeted groups. The annual allocation of funds to SCP/TSP has increased sharply from Rs 398.3 crore and Rs 90.8 crore in 2002-03 for SCs and STs respectively to Rs 1,178.3 crore and Rs 284.2 crore in 2011-12.[6] The development programmes cover almost all aspects of vulnerabilities — housing, health, land, marriage and education. These measures are targeted at:

- Providing housing to SCs/STs in the State.
- Providing SCs/STs with land for construction of a house and assistance for house construction or to purchase land.
- Monetary support for the provision of education, treatment, drinking water, electricity, roads and so on.
- Assistance for the marriage of SC/ST girls.
- Self-employment schemes.

- Filling critical skill gaps through a corpus fund for skill development.
- Water supply and sanitation, communication facilities, foot bridges, improvement of education and health and so on.

23.3.11 Affirmative action has been less successful for STs than for the SCs because the basic assumption is that the model generating incomes of the better-off group is also applicable to these tribes. This approach does not take into account the prejudices historically engrained in cultural and institutional structures. This acts as a drag, reducing the effectiveness of policies that simply allocate funds to the ST communities. It is necessary to realise that Scheduled Tribes may have income generation models that are fundamentally different from those of historically favoured communities. Such models often contain inbuilt compensatory effects, which partially reduce the negative effects of institutional and market-based discrimination. Only by identifying the parameters of these models and appreciating the traditional practices and institutions that act as a compensatory effect, can caste-based inequality be redressed effectively and economically.

23.3.12 Some tribal groups that are geographically concentrated in Idukki and Wayanad districts, are historically dependent upon forest resources. Their traditional way of life makes them less capable of adopting the income-generating model of forward castes. Returns on investment in education and land will also depend on the opportunities available in the local economy. Therefore, policies that address caste-based inequalities must take into account such cultural differences and geographic effects. This calls for territorial affirmative action, focusing on the spatial organisation of opportunity. Such geographical targeting should be appropriately tailored to, and narrowly focus on, the problems, needs and situation of households from specific communities. The core idea is to develop policies delivering services and investing in areas specific to needs of the locality. The VanaSamrakshanaSamithi (VSS), for instance, is a right step in this direction. This has had a substantial effect on empowering forest dwellers.

Economic empowerment

23.3.13 The government needs to find means to address issues relating to ST lands, forests, estates and associated resources. STs will experience a transformational change in economic productivity when they have a more active role in the use of the resources that are the backbone of their contribution to the economy. To achieve this, STs need access to more support services, including educational-support services. The government needs to create new models of compulsory schooling, which are better at meeting the requirements of the STs. It also must ensure greater collaboration with the science and innovation sector, targeted export strategies, financial support and greater participation and engagement of STs in all these domains. The action plan is about creating the right settings and opportunities for them to achieve these changes and thus keep improving their lives.

Promote education

23.3.14 Participation in early childhood education is vital for every child's development and for preparing them for future learning. Early childhood education can support future educational achievement. Currently, ST children participate in early childhood education at a lower rate than the general population. Some strategies to change this situation are:

- The Department of Education will need to create partnerships with communities and identify successful models of schooling.
- Expand schooling based on models adapted to suit the requirements of the STs.
- Target greater transition from school to tertiary level education.
- To improve the performance of ST students, target them with better public services. Hold schools accountable for their performance.
- Engage counsellors and mentors to work with ST students.

Employment

23.3.15 Vocational skills are as important as academic skills for the transition from academics to a vocation. Therefore, academic qualifications should be promoted along with vocational qualifications. In addition:

- Opportunities for ST students to gain work experience while studying will help them develop practical skills for future employment.
- Foster partnerships between schools, training providers and industry. However, it is important to ensure that these partnerships are linked with industry.
- Build a network of registered training providers who can offer their courses in the tribal environment or focus specifically on the needs of tribal learners. Demand-side signals should guide education and training providers about the types, levels and nature of skills and qualifications sought, which influences education delivery. Tribal cooperatives and other micro enterprises could also provide useful information about their particular needs, which will be of interest to both learners and education providers.
- Build entrepreneurial, management and governance capability.
- Promote connections between tribal enterprises and the business services available to them to build their management capability. Providing them with the right services such as business facilitation services and incubators will enhance their ability to increase scale and improve productivity.
- Promote linkages between innovation systems and tribal enterprises and cooperatives. They can be connected to the proposed district hubs that focus on specialised skills.
- Regularly publish official statistics about their contribution to and participation in the economy.
- Provide market intelligence and facilitate business networks to enable tribal enterprises to enter and grow in export markets. Particular barriers encountered by firms are — limited advice on overseas government regulations and tariffs; limited access to finance; language and cultural differences; limited experience; inadequate knowledge of target markets; an inability to rapidly increase supply; and limited access to distribution networks. Therefore, projects that ensure the continuous flow of information to these enterprises are necessary.
- The departments of agriculture and industries should work with tribal landowners and local authorities to identify and direct resources to land blocks with the potential for development.

Increased financial literacy and domestic savings

23.3.16 Financial literacy will allow STs to make the most of their income and resources. It places them in the best position to build savings and financial assets, which are key aspects of economic self-development. In addition, savings and asset creation initiatives can foster and support educational ambition as well as greater social mobility. Thus, the government will have to investigate new ways to build financial literacy and also consider alternative delivery mechanisms and budgeting services.

23.3.17 The government will need to explore the merits and feasibility of establishing savings schemes targeted at tribals and increase flexibility within existing schemes to enable accumulation of savings for education, home ownership and other asset development. This can be combined with financial literacy and retirement income programmes. These services should be well targeted, tailored and delivered to the members of the saving schemes.

Box 23.1

Savings Scheme for tribes in New Zealand

WhaiRawa is a savings scheme established by NgāiTahu(a Maori tribe of southern New Zealand) to support its members to achieve increased personal financial wealth in the medium to long term. The scheme supports a culture of saving and asset building, and aims to assist members of the tribe access higher levels of tertiary education, increased levels of home ownership and increased emphasis on retirement savings. Currently, an estimated 16,700 tribal members have joined the successful scheme, which has been operating for five years and continues to grow. The scheme offers savings benefits and contributions to members, including matching contributions for children and adult members and additional distributions to all members. Members of WhaiRawa can withdraw their accumulated savings for tertiary education, a first home purchase or retirement. WhaiRawa also helps members improve their understanding of financial and investment matters through education and training programmes.

Source: WhaiRawa Web site: http://www.whairawa.com/

Box 23.2

ICAN: Indigenous Financial Counselling Mentorship Programme (Australia)

The Indigenous Consumer Awareness Network (ICAN) provides consumer education, advocacy and financial counselling to clients across Australia. A partnership between ICAN and the Commonwealth Bank of Australia resulted in the Tribal Financial Counselling Mentorship, described as a 'nation first'. The programme provides support to aboriginal and Torres Strait islanders to undertake accredited training in the Diploma of Community Services (Financial Counselling). Graduates also gain a full understanding of the rights and obligations of their clients. Most of the graduates live in the communities they are going to serve. They are employed by ICAN to help improve financial literacy levels of the whole community, further increasing their ability to empower indigenous consumers.

Sources: Indigenous Consumer Awareness Network (ICAN). Indigenous Financial Counselling Mentorship Program 2012. Course brochure. Australia. Indigenous Consumer Awareness Network (ICAN) Web site: http://ican.org.au/about-us/ican-program/Commonwealth Bank of Australia (2012). 'More Indigenous financial counsellors graduate'.

23.3.18 Pillar 4: Mainstream Scheduled Castes

23.3.19 While the culture of STs needs to be protected, an all out effort should be made to mainstream SCs. There is an urgent need to reorient and focus the strategy in order to support the less privileged by providing them with quality education and promoting values such as self-denial, temperance, forethought, thrift, sobriety and self-reliance, which are essential to take them into the national mainstream.

23.3.20 It has been seen earlier that the educational attainments of SCs are comparable with those of the general category. However, the employment scenario needs improvement. This means that the action plan should focus on the following:

- Improve their representation in tertiary education.
- Promote entrepreneurship (see the action plan for the STs).
- In addition to economic empowerment, it is important that they are socially empowered. This requires changes in social relationships and institutions, and in discourses that exclude poor

people and keep them in poverty. Their involvement in local associations and inter-community cooperation mechanisms can contribute to social empowerment by improving their skills, knowledge and self-perception. Local associations, such as farming cooperatives or micro-finance groups, also act as self-help mechanisms through which poor people organise their economic activities.

- Initiate public debates on social institutions and their relevance.
- School curriculum at an early level should include courses on social issues, norms, international laws and agreements regarding human rights to inculcate in students respect for each other and to make them global citizens.

23.3.21 Pillar 5: Develop infrastructure: The targeted approach

23.3.22 Geographical targeting should also acknowledge the fact that location may keep deprived communities backward. This is especially so if such communities reside in areas that are remote, more difficult to integrate and costlier to reach with social services and physical infrastructure. To help redress current inequalities that impact SCs and STs, it will be necessary to identify and remove the conditions that have caused their isolation and social exclusion.

23.3.23 Simultaneously, there is a need for specific interventions within development programmes geographically targeted at poor areas:

- For instance, it is necessary to strengthen the basic infrastructure — housing, sanitary systems, roads, transport, water and energy — in their habitats and connect their habitats with the rest of the economy. The target should be to achieve 100 per cent access to these facilities.
- Given the importance of human capital formation in improving welfare of SCs/STs it is necessary to understand why investment in education of SCs/STs is not paying off. For instance, the drop out rate is high at the secondary level among SCs, while a high proportion of STs are either illiterate or without formal education. Reasons for this phenomenon should be identified and integrated into the planning process.
- Creating permanent and sustainable livelihood sources for marginalised sections is another essential component of strategies to improve their welfare.
- Health is another issue that requires urgent attention. Inequalities in health are multifactorial. They are influenced by issues such as environment, housing, educational achievement, material wealth, discrimination and lifestyle. Therefore, reducing health inequalities cannot take a 'one size fits all' approach and requires a multitude of efforts at different layers of society, engaging a wide variety of stakeholders. These stakeholders range from government level through local statutory level and local voluntary sector level, to the grassroots, community level.
- Sources of leakages in financial assistance should be identified and suitably plugged.

23.3.24 Pillar 6: Empower the marginalised sections through ICT: People-centric approach

23.3.25 There has been a shift in development thinking from top-down approaches based on economic growth and transfer of technology to people-centred development. There is greater emphasis on the cultural and local dimensions of development. It is also more widely accepted that human development requires dialogue, interaction and sharing of ideas for social change and innovation to occur. The government needs to promote these interactions through a project that may involve participation of young students.

23.3.26 New information and communication technology (ICT) has created the information and knowledge society. Experiments with ICT are demonstrating that the benefits of the information

revolution can have positive consequences for economic and social development. But infrastructure, access and use are still limited for vulnerable groups in rural areas. They are on the wrong side of the digital divide and risk further marginalisation. They thus have limited participation and voice in the public sphere and in decision-making processes affecting their lives. There is a need to create an alternative framework for communication interventions that are truly people and participation oriented. They can be connected through radio, television and other media channels. These are the most widely available and affordable mass media for disadvantaged groups. There have been experiments in some developing countries, particularly in Africa, with community radio. Radio is currently the only medium that is accessible even in remote rural communities where infrastructure is inadequate. It is cheap, portable and needs little maintenance. These advantages are leveraged in African countries to reach out to people to disseminate information and education. In almost all African countries, projects have been launched to empower the marginalised segments through radio, especially community-owned radio stations. In China, radio and TV universities have been set up for the underprivileged sections.

Box 23.3

Yasarekomo: A communication experience by indigenous people in Bolivia

In 1994, with assistance from FAO, the Asamblea del Pueblo Guaraní (APG), the main organisation of the Guaranìtribe in Bolivia, established a rural communication unit the Unidad de Comunicación Guaraní (UCG), in the Chaco region of Bolivia. The goal of the unit was to improve the quality of life of isolated and marginalised native communities and support indigenous development initiatives. With training from FAO, the Guaranì villagers applied intercultural communication approaches to share knowledge and information using video training packages and community radio. The UCG received assistance from FAO for three years, and then continued independently for an additional six years, generating income by producing intercultural communication material and implementing communication for development plans agreed with APG and co-funded by the government, municipalities and NGOs. The UCG then decided to carry out a self-evaluation in collaboration with the APG and other indigenous organisations of Bolivia. The results confirmed the validity of the participatory and intercultural communication approaches applied to advisory services.

Source: FAO, 2004. Yasarekomo, Unaexperiencia de comunicaciónindígena en Bolivia

23.3.27 Box 23.3 provides a case study of Bolivia. There are several such case studies. For them to be effective, governments should create regulatory frameworks and an enabling policy environment for communication with the poor. Legislation and equitable policies are essential if communication is to become a real tool for poverty alleviation. A shortage of people trained in new functions may be a constraint for designing and implementing participatory communication programmes. This calls for organising training programmes and developing course curricula. Finally, new instruments and indicators will have to be devised to effectively assess the impact of participatory communication processes on disadvantaged groups.

23.4 Role of Local Governments

23.4.1 Local governments have been in existence for about two decades and need to be entrusted with the responsibility of implementing many of the strategies enumerated above. They understand best, local problems and the specificities of the population groups and are better placed to address them.

23.4.2 Local self-government institutions such as panchayats and village assemblies (Gram Sabhas) were ostensibly created to hear the voices of the disadvantaged. The constitution of special assemblies of tribes (Oorukootam) and recruitment of tribal promoters is intended to enable the tribal people to access the numerous development schemes. Despite these actions, tribes in India remain the most deprived groups on a number of fronts including health.

23.4.3 A recent study of the Wayanad tribes presents evidence of a deprived tribal group's own views and experiences of health in India. The findings emphasise the cyclical nature of the realities of poverty, indebtedness and illness, rooted in oppression. This is a trap that is comparable to feeling 'like a goat tied to a hook'. Breaking out from this trap requires a two-pronged approach. First, there is a need to overcome barriers to access and increase culturally appropriate services. Kerala faces a challenge in reducing intra-state inequities in health and access to care, but as it is in an advanced stage of its health transition there are opportunities to focus on tribal groups. Although there are currently some services provided for tribes, there is insufficient attention from policymakers to ensure that the marginalised tribes actually benefit. Further research should examine the supply side of the available public programmes and services available for tribes and whether these programmes recognise the diversity of needs and cultural preferences of different tribes. Second, there is a need to promote voice and aspiration in Paniyas and other totally marginalised groups. Richer and more powerful groups aspiring to pursue the lives they desire, have the capacity to articulate their demands and take advantage of opportunities. This includes those benefits and special schemes designed for tribal populations — better-off tribes are able to navigate the opportunities offered to them and convert them to achieve health and well being. Marginalised tribes are not. The challenge is how to create 'real opportunities' for marginalised tribes.

23.4.4 Establishing institutions of local governance with mechanisms for participation such as village or tribal assemblies, do not, in themselves, lead to the voices of the oppressed being heard. Such a strategy assumes that these groups have equal capacities to participate. Improving the capacity of tribal populations to aspire to and benefit from public interventions — including allocating resources and control over how these resources are spent — is likely to lead to more effective tribal development policies and, consequently, better health. To help guide policymakers, three avenues of research are suggested. First, there is a need to better understand how marginalised tribes view health and illness in order to develop more culturally appropriate services. Second, breaking the cycle of debt, impoverishment and poor health will need to be re-examined in the wider setting of the full historical context and inter-generational dynamics among marginalised tribes. Finally, both the role of the capacity to aspire and the sense of resignation among oppressed populations are understudied determinants of health. Further investigation of these determinants may prove to be a missing link in how to improve the health of marginalised groups. Addressing these research questions requires a broad framework integrating health system factors and the social determinants of health, while ensuring the participation of these populations in the process.[7]

23.4.5 Local governments have participatory avenues for the marginalised, such as STs and SCs. They are represented in local governments, proportionate to their share of the population. They are also represented in committees and positions such as Presidents of local bodies. But they have not succeeded in effectively channelling resources into schemes and programmes for the benefit of SCs and STs. This is an area that calls for some critical studies and action.

23.5 Conclusion

23.5.1 In conclusion, it needs to be emphasised that correcting caste-based inequalities requires sensitivity and experimentation. Innovative approaches need to be promoted. Community participation and sensitivity is important in promoting these approaches. Further, without political inclusiveness, it is difficult to implement remedial policies. Finally, it is essential to develop cultural sensitivity. Unless the state embodies a culture that is inclusive in nature, placing equal value and visibility on the practices of all groups, affirmative action is bound to fail. Local governments also have a crucial role to play, as they are better placed to ensure political and community participation, cultural sensitivity and inclusiveness.

Reference

1 *Alesina and Rodrik 1994, Birdsall, Ross and Sabot 1995, Sylwester 2000, Easterly 2000 all obtain a negative partial correlation between income inequality and economic growth using data over a long time span .*

2 *Husain, Z. andGhosh, S. (2011) "Is health status of elderly worsening in India- A comparison of successive rounds of National Sample Survey data," Journal of Biosocial Science, 43(2): 211-231.*

3 *Haddad et al.,(2012) "Health divide" between indigenous and non-indigenous populations in Kerala, India: Population based study BMC Public Health 2012, 12:390 doi:10.1186/1471-2458-12-390*

4 *Note that the methodology for estimating poverty line changed in 2009-10 as a result of the recommendations of the Tendulkar Committee. On the other hand, the recall period was different in the 50th round. This implies that the poverty estimates are comparable for only 1999-00 and 2004-05.*
All-India estimates of poverty were calculated using all-India poverty lines. In contrast, NSSO calculates number of people below poverty line for each state and aggregates them to get all-India figures. Hence, our figures will not match with those of NSSO.

5 *Aggarwal Aradhna, Johnes Geraint, Freguglia Ricardo S. and Spricigo Gisele, 2010. Education and Labour Market Outcomes: Evidence from India. Available at SSRN: http://ssrn.com/abstract=1744058 or http://dx.doi.org/10.2139/ssrn.1744058*

6 *Economic Review 2011a. State Planning Board, Government of Kerala.*

7 *KS Mohindra, D Narayana, Slim Haddad. 2010. "My story is like a goat tied to a hook." Views from a marginalised tribal group in Kerala (India) on the consequences of falling ill: a participatory poverty and health assessment. J Epidemiol Community Health 2010; 64:488e494. doi:10.1136/jech.2008.086249*

Chapter 24

GOVERNANCE FOR SUSTAINABLE PROSPERITY IN KERALA

Chapter 24

Governance For Sustainable Prosperity In Kerala

24.1 Imperatives of Better Governance for Sustainable Prosperity

24.1.1 The term 'governance' refers to the act of governing or the authority to rule and control. According to the UNDP, governance is[1]: "The exercise of economic, political and administrative authority to manage a country's affair at all levels. It comprises mechanisms, processes and institutions, through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences." There is growing recognition world wide that achieving excellence in governance is crucial for any economy to prosper. Quality governance provides a framework in which an economy can function efficiently and deliver services effectively. Sustainable development, in particular, cannot be achieved without quality governance. It will require a change in traditional thinking, tools and methods of governance. Achieving efficient, effective and ethical governance is, therefore, a crucial challenge in attaining the objective of knowledge-driven sustainable development proposed in the Perspective Plan.

24.1.2 The preceding chapters have presented an outline of what it will take in economic, fiscal, social and ecological terms for Kerala to move towards sustainable prosperity within a generation. Economic prosperity will require Kerala to promote a knowledge-based economy with social and environmental sustainability. For social sustainability, the government will have to undertake robust measures to ensure inclusion of the underprivileged sections of society. For sustainability in ecological terms, Kerala will have to move towards a cleaner economy with lower intensity use of environmental resources and energy. All these measures will require institutional, organisational and cultural changes in governance to improve its quality and deliver on the vastly increased duties of the government envisaged in the report.

24.2 Dismal Initial Conditions of Governance

24.2.1 There are several internationally recognised ratings based on the quality of governance on different dimensions. Appendix 24A provides a list of these indicators. Such indicators contribute to a better understanding of governance and have been used by policymakers for reforms in governance and monitoring. Four Nordic countries, Denmark, Sweden, Finland and Norway, are invariably among the top 10 countries on these indicators. On the other hand, India's performance has been rather dismal. In Transparency International's (TI) index for 2012, India was ranked 94 out of 176 countries and territories, behind Zambia, Malawi, China, Sri Lanka and Tunisia. The poor quality of governance in India is evident in other institutionalised ratings as well. A study by Transparency International India,[2] which covered 11 areas of public service — police (crime/traffic), judiciary, land administration, municipal services, government hospitals, electricity (consumers), PDS (ration card/ supplies), income tax (individual assesses), water supply, schools (up to class 12) and rural financial institutions (farmers) shows that police ranks at the top in the corruption index. Judiciary (lower courts) and land administration are rated next. The corruption in government hospitals is mostly to do with the non-availability of medicines, patient admissions, consultations with doctors and availing of diagnostic services. Despite reforms, electricity utilities figure high on the corruption index.

The public distribution system (PDS) has a lower corruption index score because the problems of ordinary people dealing with the PDS have more to do with leakages in the system, rather than direct monetary corruption.

24.2.2 There have also been attempts to assess state-wise performance of governance in India.[3] The findings are ambiguous. In some studies, Kerala comes out somewhat better than average. In a study by Debroy, Bhandari and Aiyar (2011), Kerala ranks 10th among the Indian states and has performed moderately (see, Appendix Table 24B.1 for a tabular summary of these studies). In others, Kerala is among the top performing states in terms of quality of governance.[4] Interestingly, there are also studies that have put Kerala in the poor governance category.[5] If the State is to achieve sustainable prosperity as proposed in this Perspective Plan, it has a lot to do to improve governance.

24.3 Building Blocks of Governance for Sustainable Development

24.3.1 Sustainable competitiveness means transforming the State into a competitive and dynamic knowledge-based economy, with a plan to link social and environmental objectives to all areas of the state's policy. Governance for sustainable competitiveness will also require:

- A change in traditional thinking, tools and methods.
- A pluralistic approach with horizontal coordination between various departments and diverse parties, and vertical coordination between multiple levels of governments.
- Structural changes in the dominant institutions.
- Delivery of goods and services.
- Conformity with the law, regulations, published standards and community expectations of accountability and openness.

Central to good governance are the concepts of commitment, leadership, authority, accountability, transparency and stewardship.

Commitment

24.3.2 It is often said that without commitment throughout society, sustainable competitiveness will not happen easily. Governance for sustainable competitiveness will invoke this commitment across all its organs and society at large.

Strong leadership, culture and communication

24.3.3 Strong leadership is a critical element, which underpins how a country/region shapes its future. There are several instances of a powerful leader changing the economic course of his/her country. Helmut Kohl of Germany, Brazil's LuizInácio Lula da Silva and Kim Dae-jung of South Korea are some of the leaders who were instrumental in the transformation of their countries.

Strategic directions through perspective planning

24.3.4 The government must set the strategic policy targets and directions that will ensure the best outcomes for communities. Perspective planning is a process by which the state government envisions the future of the State; sets the mission, targets and priorities; and develops a strategic policy framework to achieve the targets. This decision making process requires a deep understanding of competing priorities across social, economic, environmental and fiscal dimensions. It also requires collaborative efforts and coordination across different layers of the government in developing policies and strategies and evaluating performance.

Ensure consensus building

24.3.5 In a pluralistic society, there are multiple interest groups. It assures a variety of inputs to the government, a variety that is a flexible and stabilising element. These interest groups can also pull the bureaucracy in different directions through lobbying. Good governance requires mediation of different interests in society, to reach a broad consensus on what is in the best interests of the whole community. A society's well being depends on ensuring that all these groups feel that they have a stake in government decisions and do not feel excluded from the societal mainstream. This requires that all groups, particularly the most vulnerable, have opportunities to improve or maintain their well being.

Accountability

24.3.6 Accountability and review structures provide assurances to officials and the community that strong financial management practices exist and are adequately reviewed and monitored. Institutions and mechanisms need to be in place for procedural review, and monitoring and evaluation of performance.

Transparency

24.3.7 Accountability for the performance of the entire government ensures that government actions are transparent to the community.

Rule of law

24.3.8 Adherence to the rule of law is the fundamental prerequisite for good governance. Rule of law means fair legal frameworks that are enforced by an impartial regulatory body for the full protection of stakeholders. Impartial enforcement of laws requires an independent judiciary and also an impartial and incorruptible police force.

Ethics and integrity

24.3.9 The government sector's standards and codes of practice ensure integrity in the performance of official duties, due process for the use and release of information and stewardship of the processes. This ensures that people are treated equitably and fairly and have access to information and decision-making. This requires freedom of information, an employees' code of conduct and community complaint resolution systems.

24.4 What Needs to be Done

24.4.1 The strategy is based on six pillars which include building institutional capacity, upgrading e-governance, ensuring fiscal sustainability, introducing administrative reforms, creating human capacity and instituting strict monitoring and evaluation processes. The following sections provide the action plan for each of these pillars. Strengthening local self-government is also part of this transformation, which is taken up separately.

Pillar 1: Build institutional capacity

24.4.2 Institutions refer to structures and practices that frame activity within each of the other dimensions. They shape outcomes across the economy, society and the environment. Sound legislative and administrative frameworks are fundamental to the efficient and effective implementation of the knowledge-based sustainable development strategy. This strategy is particularly challenging from an

institutional perspective. This is because it requires that different departments work collectively and collaboratively, different government layers plan and implement programmes collaboratively and the knowledge base is created and strengthened. Thus, institutional arrangements have to be flexible and adaptable. Legal institutions also need to act impartially. It also requires full protection of human rights, particularly those of minorities.

24.4.3 Internationally, it has been recognised that the failure to promote sustainable competitiveness is due to institutional rigidities as well as the inadequacy of good governance tools. Sustainable competitiveness is not the responsibility of a single department. It requires cross-sectoral, cross-disciplinary and cross-organisational collective action. It requires collective effort, from the grassroots community right through to top-down legislative changes. Institutional arrangements and governance mechanisms need to respond to these sustainable development challenges. It requires a transformation in the way the government handles changes in social, economic and cultural institutions. This, in turn, requires upgrading human capital, organisational capacity and, most important, institutional capacities. This means that organisations and individuals will have to develop different sets of knowledge and skills to operate differently and, more specifically, collaboratively. Thus, the policies and acts pertaining to education, health, construction, infrastructure development, energy and water will have to be modified to establish a new work and organisational culture.

24.4.4 The action plan will involve changing the traditional ways of governance, as follows:

- Integrate the economic, social and environmental dimensions of decision-making across society.
- Evolve complex systems of horizontal and vertical governance, where decision-makers remain responsible to citizens, communities and other stakeholders. This requires flexibility in practices.
- Develop appropriate political frameworks for iterative rounds of 'future-visioning', goal identification, policy design and implementation.
- Adopt a long-term focus and maintain political support for long-term adjustment, despite the fluctuating short-term preoccupations of politicians and electorates.
- Develop a better understanding of ecological processes and of economic/social/ecological interactions, as well as of the possibilities of (and the limits to) their conscious adjustment.
- Structure engagement as a learning process, so that governments and other social actors can acquire experience, experiment with options and draw lessons from failure.
- Strengthening the capacity of social institutions to adapt successfully in response to pressures and unexpected shocks. For example, by encouraging diversity and experimentation in the socio-technological sphere or by extending deliberative and collaborative interactions among societal organisations.

24.4.5 New Zealand is experimenting with appropriate institutions for sustainable development by first setting up sustainable cities. Kerala can draw on this experiment and use its global cities as laboratories to test these changes.

Pillar 2: Utilise the game-changing potential of ICT: E-governance

24.4.6 ICT is a game-changer for governance: Areas it can impact include delivery of public services, taxation and regulation and monitoring of government activities. Kerala has been a forerunner in e-governance and it needs to use its resources to fully exploit this new tool for improving governance. There are at least three dimensions in which ICT can help improve the efficiency of government:

- **First, G2G (government to government):** Different government departments often operate in silos, unaware of what other departments are doing and not acting in a concerted manner. This needs to completely change. Sustainable competitiveness is about vertical and horizontal coordination of governance. This coordination may be maintained through intra-nets and communication.

- **Second, G2B (government to business):** Government expenditure and revenue form a big share of GDP, and in pre-ICT regimes there is often a great deal of scope for corruption and inefficiencies due to inadequate information. With ICT, government procurement programmes can achieve a new level of transparency and thereby improve efficiency and integrity of the system. Through better G2B, the government can also improve its tax administration.
- **Third, G2P (government to public):** Regardless of a country's stage of economic development, its government makes payments to and collects payments from individuals and businesses. Financial resources are also transferred between government agencies. These flows cover a wide range of economic sectors and activities and, in most cases, the overall amount of such flows is large. By going electronic, governments can save on costs and improve safety, transparency and efficiency of these payments.[6]

24.4.7 Thus, as a tool of good governance, e-governance has become an integral part of any economy that strives to achieve transparency, reliability and affordability in its services.

24.4.8 According to the World Bank (AEOMA Report): "E-Government refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth and/or cost reductions."

24.4.9 Taking the same vision forward, the National E-Governance Programme (NeGP), a flagship programme of the Government of India was launched in 2006. It consists of 27 mission mode projects (MMPs), at both the central and state levels. These MMPs were initiated in the areas of pensions, income tax, MCA21, passport and visa, immigration, banking, central excise, UID, MNIIC, e-office and insurance at the central level. Integrated MMPs included CSC, e-courts, EDI, India Portal, NSDG, e-biz and e-procurement. On the other hand, at the state level the following MMPs were initiated: land records (NLRMP), road transport, agriculture, police, treasuries, municipality, e-district, commercial taxes, gram panchayats and employment exchange.

24.4.10 Since its inception, NeGP has implemented many programmes successfully. A few of the projects that have attained outstanding success across the country are Gyandoot (Madhya Pradesh), Akshaya (Kerala), Bhoomi (Karnataka), eSeva (Andhra Pradesh), HP-Kuppam (Andhra Pradesh), RASI-Rural Access to Services through Internet (Tamil Nadu), WARANA (Maharashtra), CARD (Andhra Pradesh), and Sukhmani (Punjab). However, despite India's reputation as a leader in IT, its score in the international e-government development index prepared by the UN is quite low. It was only 0.3829 in 2012 as against 0.9283 of the leader, Republic of Korea and 0.5359 of China and 0.4949 of Indonesia. It was, however, higher than Pakistan (0.282), Nigeria (0.2676) and Bangladesh (0. 2991) as presented in Table 24.1.

Table 24.1.
E-government Development Index and Rank for Selected Countries

Country	Rank	Score
Republic of Korea	1	0.9283
Netherlands	2	0.9125
United Kingdom	3	0.8960
Denmark	4	0.8889
United States	5	0.8687
France	6	0.8635
Sweden	7	0.8599
Norway	8	0.8593
Finland	9	0.8505
India	22	0.382
Pakistan	27	0.282
Nigeria	28	0.2676
Bangladesh	29	0.2991
Asia Regional Average		0.4992
World Average		0.4882

Source: E-Government for the People, Department of Economic and Social Affairs, UN 2012

24.4.11 Over the past decade, Kerala has also implemented many e-governance programmes at the state level. Some of the major e-governance programmes that have been implemented in the State so far are summarised in Table 24(C) in the Appendix. In all, 81 e-governance programmes are currently functional in Kerala.[7] Some of these e-governance programmes have attracted a lot of attention. Programmes such as FRIENDS, Akshaya, Em-Power Kerala, E-Krishi, KISSAN Kerala, hsCAPNIC, Sulekha Plan monitoring system and Sevana have won many national and state-level awards. Even though the State is flooded with a number of e-governance programmes, very few studies have actually tried to make an assessment of these initiatives. Some of the studies that have assessed the performance of certain major e-governance programmes are[8]: The success of programmes such as FRIENDS and Akshaya have been evaluated by Madon (2004) and Nair (2008).[9] Other programme evaluations of SPARK, CAPNIC and DC*Suite–Suite of Applications for e-Collectorate have been evaluated by Raghunathan (2008).[10]

24.4.12 The quality of e-governance is measured along three dimensions (United Nations' E-government index):

- Infrastructure
- Human capacity
- Online services

24.4.13 The action plan for carrying forward the e-governance programme is, thus, threefold:

Create adequate infrastructure

24.4.14 Readiness depends on an enabling environment that includes:

- Mature technical infrastructure in various government departments.

- Civil service willing to re-engineer, share information and treat citizens as customers whose satisfaction is primary.
- Deep Internet penetration or presence of many public access points.
- Legal framework that fosters public confidence and supports a government mandate to conduct transactions online.
- Political commitment from departmental champions and managers.

Capacity building

24.4.15 E-government projects need to spend about 10 per cent of their budget on training and capacity building. Awareness of project benefits has to be raised among senior civil servants and political leaders. Training is required for project managers, who need to define project deliverables, negotiate with consultants and vendors and manage outsourced development efforts. Clerical staff need to be trained on specific applications. Supervisors and managers need to be trained on using information. And citizens need to be made aware of online services available to them and their usage.

Readiness for automation

24.4.16 An important aspect of initiating e-government is documenting existing procedures and simplifying them into tasks that can be completed in a few steps, without compromising their basic purposes. The process of simplifying documents and workflows, points of approval and audits is termed re-engineering. Most e-government projects that have reduced processing time and costs have done so through substantial process re-engineering. Such re-engineering must precede any efforts at automation.

Online services: Move up the ladder

24.4.17 There are four stages in implementing e-governance:

A. Presence on the Web: The first and the most basic stage of any e-government project is marked by its presence on the Web, which acts as a common place for distributing information to the public.

B. Interaction between citizen and governments: This second stage is marked by the presence of an interactive Web interface, where some kind of communication occurs between the government and its citizens through the Internet. For instance, the simple task of downloading forms to be e-mailed to the concerned authority.

C. Complete transaction over the Web: This stage involves transactions between citizens and the government being performed and completed on the Internet. For example, the payment of bills and taxes belong to this stage.

D. Integration of services: This is the highest level of e-government, where technology is utilised to its full potential. In this stage, various government departments share information and also offer online services to citizens. It is characterised by the integration of G2G, G2P and P2G (reverse) interactions.

24.4.18 As part of their efforts to advance citizen services, the developed countries are paying greater attention to the concepts of an integrated government portal and the re-engineering of back-office processes while designing their e-government capabilities. The UN report identifies South Korea as the leader in e-government. Leading e-government practices, including those of Korea, are outlined in Box 24.1.

Box 24.1

Leading Practices

The United States

The US' integrated portal has an easy-to-navigate design and collects and consolidates, in one place, all information and services for its citizens. This includes agency services at the state and local level, which vastly increases the effectiveness of user search and uptake.

Brazil

An increasingly popular model is being used in Bahia, Brazil, where citizen assistance service centres integrate federal, state and municipal agencies in a single location. The centres are in convenient locations (such as shopping malls and major public transportation hubs), offer tremendous time savings and deliver services with courtesy and professionalism. The centres also reduce overhead costs for the government because most agencies save on the rent paid for property used earlier to interact with the public.

South Korea

The main Web site of the Korean government has been made so user friendly that almost all services are available on it, locally as well as nationally. The main government portal is a gateway to services through multiple channels, by theme as well as by subject. People can also have customised channels by providing information such as age, gender and services of interest. Powerful back office connectivity offers advanced categorising functions, which can list results by Web site services and news, including at the local level.

A key factor that makes Korea a world leader in e-governance, is the massive revolution in downloadable mobile applications, which are available from its national portal. The cross sector applicationsare compatible with both iPhones and android devices. They are, for instance, used in e-learning, whichallows students to take lessons on their mobile phones, in subjects such as social studies, maths and English. Jobcastis anotheruser-friendly application that enables individuals to know about job availability in the Republic of Korea, along with relevant legislations governing labour.

Singapore

Singapore is among the leaders in the use of private cloud computing for leveraging ICT infrastructure and services. In September 2009, it became the first government in Asia to equip all its teachers with Web 2.0 communication and collaboration tools, under an open standard cloud platform. Singapore's 'citizens portal' provides an extensive range of online payment services that are listed by agency as well as bill type. Payments range from taxes and fees to fines and licenses and can be made through multiple channels such as credit card, direct debit, Internet banking and even by phone.

Australia

Australia's national portal provides numerous features, enabling citizens to engage with the government in the policy-making process. The government provides a 'have your say' section that is located on the home page of the portal. This section links to a 'public consultations' section where citizens can send their comments and suggestions on draft regulations to the respective ministries, mainly by e-mail. The portal also provides the outcomes of previous consultations. Also located in this section is a blogs page that provides links to various government blogs and a Twitter page that shows a list of all government Twitter ids.

Malta

As part of the e-government strategy to enhance citizens' communication with the government, Malta provides timely notifications and alerts to citizens about government services of interest, through multiple delivery channels. 'Malta myAlerts' provides citizens with a one-stop-shop for all notifications sent by email and SMS, allowing citizens to be instantly notified about various government services. These services are updated continuously to provide the latest information on governmental notifications. 'myAlerts' also provides citizens with news regarding on-going and new e-government initiatives.

Source: E-Government for the People, Department of Economic and Social Affairs, UN 2012

Pillar 3: Ensure fiscal sustainability

24.4.19 Fiscal sustainability refers to whether the Government is able to maintain current policies without major adjustments in the future. It is recommended that the government of Kerala develops its own Fiscal Sustainability Act, with the aim of maintaining a 'prudent' level of public debt. Governments are free to define what is prudent. They are also required to set a long-term — at least 10-year — objective for debt and must show how that objective will be reached. This requirement aims to protect the financial position of future governments. This will require a vastly increased level of resource mobilisation by the public sector through better tax administration, increased savings through the social security system, increased cost recovery from public utilities and increased surpluses from public enterprises on the one hand, and efficient and focused spending on the other. It should also aim at phasing out some of its expenditure.

24.4.20 The proposed model is the model of economic and social management practised in the Nordic countries. As noted in Table 24.2, in the Nordic countries, government revenue accounts for nearly 50 per cent of GDP and the government, with the private sector and labour unions, plays a key role in the economy.

Table 24.2.
Share of General Government (% of GDP)

Countries	Revenue	Outlays
Finland (2008)	53.4	49.0
Germany (2009)	44.5	47.6
Netherlands (2009)	46.0	51.4
Denmark (2009)	55.9	58.8
Norway (2009)	56.0	46.2
Sweden (2009)	54.0	55.2
United States (2009)	30.8	42.0

Source: Government Finance Yearbook, 2010, IMF

24.4.21 These countries tax heavily but also spend efficiently. They provide superb public health, quality childcare, proficient public education, quality infrastructure and remarkable social equality. The results are low unemployment rates, small budget deficits, low poverty and small trade deficits. These countries also enjoy high social mobility, life expectancy and life satisfaction. Nor have they suffered slower growth in per capita incomes. From 1980 to 2009, the US per capita income grew by an average of 1.7 per cent. Northern Europe averaged about the same.

Pillar 4: Reform of the administrative system

24.4.22 E-governance, of course, only provides an instrument for improving governance. The extent to which governance will actually improve will depend on the quality of the administrative service that Kerala can develop. The tenth report of the 'Second Administrative Reforms Commission of the Government of India-Refurbishing of Personnel Administration' provides a comprehensive list of reforms needed. The Commission has proposed a wide-ranging agenda of reforms, which includes reforms relating to recruitment, training, tenure, domain competency, creation of a leadership cadre incorporating some elements of a position-based Senior Executive Service, performance management, exit mechanisms, creation of executive agencies, accountability for results, a code of ethics and enactment of a civil service legislation. While these reforms focus on the Indian Administrative Services and are not under the purview of the state governments, Kerala should take similar initiatives for state and local service officials too.

24.4.23 Kerala is one of the states without a state administrative service. It draws officers from the central services and promotes personnel from the state service. It is seen that the largest number of officers who enter the administrative service are from the revenue department, the reasoning for which is not clear. In a world where almost every government department requires personnel with knowledge of the subject domain, getting generalists from a single department may, perhaps, not be the most efficient way of running the administration. The government needs to move in the direction of enhancing the subject knowledge of the officers at the top.

24.4.24 The basic qualifications for entry into government service are also kept at rather low levels. Once an individual has entered government service, movement up the hierarchy is largely time-based. Such a system is inadequate in a world where the economy is knowledge driven. In-service training may be of some use, but suffers from some serious limitations. Horizontal entry at various levels may be of relevance and Kerala has to make an effort at changing the governance system.

The key recommendations are as follows:

- Every government employee should undergo mandatory training at the induction stage and also periodically during his/her career. Successful completion of these training programmes should be a minimum necessary condition for confirmation in service and subsequent promotions.
- There is a need to introduce competition for senior positions in government. Also, applications to fill high-level posts should be invited from interested and eligible people from outside the government service, and also from eligible serving officers.
- The existing performance appraisal system should be strengthened on the following lines: Appraisal to be more consultative and transparent; performance appraisal formats to be made job specific; performance appraisal to be a year round process; and guidelines to be formulated for assigning numerical rating.
- For motivating state officials, there is a need to recognise their outstanding work, including through state awards. Awards to recognise good performance should also be instituted at the state and district levels. It must be ensured that selection for such awards is made through a prompt, objective and transparent mechanism because neither subjectivity nor a lack of transparency should compromise the value of such awards.
- Accountability: A system of two intensive reviews — one on completion of 14 years of service and the other on completion of 20 years of service — should be established for all state government employees. The first review, at 14 years, will primarily serve to apprise the official of his/her strengths and shortcomings, which will influence his/her advancement in service. The second review, at 20 years, will mainly serve to assess the fitness of the official for further continuation in government service. The services of officials, who are found to be unfit after the second review, at 20 years, should be discontinued.

- Disciplinary proceedings: The minimum statutory disciplinary and dismissal procedures required to satisfy the criteria of natural justice should be spelt out.
- There is a need to safeguard the political neutrality and impartiality of state officials. The onus for this lies on the political executive too. This aspect should be included in the 'Code of Ethics for Ministers', as well as the 'Code of Conduct for Public Servants'.

Pillar 5: Improve human resource capacity

24.4.25 Rising community expectations and the changing technological, professional and skill requirements in the post-Perspective Plan period will increase the pressure on government officials to deliver services to the community. It is, therefore, crucial that the workforce remains highly skilled and motivated. There needs to be greater emphasis on workforce planning and skills development of government officials. Personal skills of government officials will need to be improved, including ways to communicate, cooperate and work collaboratively. Regular training programmes and well-structured programmes in governance may be initiated to build human capacity.

Pillar 6: Institutionalise monitoring and evaluation

24.4.26 For implementing the principles of good governance, different strata of society will also have to participate in monitoring the State's performance. It is, therefore, argued here that in order to achieve the desired outcomes, all strata of society must become a part of the development process. They must monitor the performance of the government on a regular basis and contribute to its achievements. To some extent, this work is being done by NGOs such as the Public Affairs Centre in Bangalore and Pratham, which prepare regular report cards on the performance of some sections of society. But given its importance, monitoring of public service delivery needs to be undertaken on a larger scale. An institutional mechanism focused on monitoring can be created for this purpose.

24.4.27 It is proposed to set up an agency for independent evaluation and monitoring of the performance of government programmes, particularly its performance under the Perspective Plan. The need for this has been noted in the Twelfth Five Year Plan (p.292) also. It will prepare regular report cards on how well different segments of the government are performing their duties, as specified in their own oaths or job descriptions. Such report cards may act as a catalyst for self-improvement, as well as an alert for appropriate action by supervisory authorities.

24.4.28 For effective functioning of such an agency, the Kerala government has to improve the quality of its data and streamline the organisation and functioning of its different departments, so as to minimise over-lapping responsibilities and establish clear performance indicators.

24.5 Indicators of Governance

24.5.1 New global standards of governance are emerging. Citizens of developing countries are demanding better performance on the part of their governments, and are becoming increasingly aware of the costs of poor management and corruption. Many countries are seeking help from international agencies to diagnose governance failures and find solutions. These developments have led to new interest in measuring the performance of governments using indicators of governance and institutional quality. Table 24.3 provides access to many of the existing indicators by indicator source[11] (Also see Appendix 24A for more indicators). While some performance indicators are based on objective data, others are based on subjective evaluations of a small number of experts, while yet others are based on surveys of investors, experts or the general public. The government should select the indicators that are most appropriate and set up channels for their periodic update.

Table 24.3
Selected Governance Indicators (A Partial List)

Sources	Indicators
WDR97 (Private sector survey)	Policy unpredictability, quality of government services, corruption and red tape, and judicial unpredictability
CPIA (World Bank)	Property rights and rule-based governance, quality of budgetary and financial management, efficiency of revenue mobilisation, efficiency of public expenditure, transparency, accountability, and corruption
KKZ (Kaufmann, Kraay and Zoido-Lobaton)	Graft, rule of law, voice and accountability, political instability and violence, Government effectiveness, regulatory burden
TI (Transparency International)	Corruption Perceptions Index
Freedom House	Political freedoms, civil liberties
BERI (Business Environmental Risk Intelligence)	Bureaucratic delays, contract enforceability, nationalisation risk and policy stability
Heritage	Property rights, Black Market regulation
GCR (Global Competitiveness Report)	Civil service independence from politics, competence of public sector personnel, tax evasion and effectiveness of police force
WCY (World Competitiveness Yearbook)	Bribing and corruption, tax evasion, public service exposure to political interference, personal security and private property
CIM (Contract intensive Money)	Contract enforcement and property rights
Telephone delays	Quality of government service delivery

Source: The World Bank

24.5.2 Strengthen local self-governments

24.5.2.1 In recent years, decentralisation has become the mantrafor improved service. In the last 25 years, over 75 countries have sought to transfer responsibilities of the state to lower levels of government. In most cases, the lower levels of government have been run by elected members, thus improving accountability. Services seem to work better when there are strong institutional structures for participation and accountability. India too went in this direction in 1993 by amending the Constitution (the 73rd amendment on rural and 74th on urban decentralisation) to create legal, constitutional and political justification for the devolution of political autonomy to local bodies — the Panchayati Raj Institutions (PRIs), Municipalities and Municipal Corporations. Subsequently, in 1994, Kerala passed its Act providing the necessary legal framework to initiate decentralisation. Among the Indian States, Kerala stands at the forefront of decentralisation, for in 1996 the State decided to devolve more powers and funds to local governments and launched the 'People's Plan Campaign' for participatory local level planning.

24.5.2.2 Kerala's achievements in decentralisation are well known. It has held regular elections and made the district level planning bodies functional. It has also transferred administrative responsibilities in the areas of education and health to the local governments. Thus, the local governments have become responsible for service delivery not only in the conventional areas such as roads, street lighting, water supply and sanitation, but also for the delivery of education and health services. The gains in terms of outcome measures in these areas have been considerable in recent years as is shown by the analysis of National Family Health Survey data by Alkire and Seth (2013). The Population Census (2011) data confirms that the gains across social groups have been equitable.

24.5.2.3 Early thinking on decentralisation was informed by the view that public officials in a centralised government may be malevolent and may not be responsive to local needs. They may

not understand the local needs and preferences. The second wave of thinking on decentralised governance took the completely opposite view — to that of the early thinkers — stating that public officials are benevolent and inspired by public interest. Decentralised governments are closer to the people and ensure higher participation, allowing for matching preferences with policies. The result is efficient use of resources and better outcomes. A third wave of thinking takes a slightly different view of the subject, replacing benevolent officials with self-serving elected public officials whose actions are often governed by motives of re-election. This is the broad theoretical context in which the gains in efficiency and equity of decentralised governance are to be assessed.

24.5.3 Decentralisation in Kerala

24.5.3.1 In the proposed long-term vision, establishment of knowledge hubs at district levels will be a key element for achieving and sustaining long-term prosperity in Kerala. Local governments will play a crucial role in designing these hubs with participation from the public and operating them in an efficient and democratic manner. For social sustainability of prosperity, there is a need to ensure full employment, providing income security for those who lose jobs and ensuring social security for the disadvantaged. These functions will be carried out most efficiently at the local government level. Similarly, for ecological sustainability involving protection of the delicate ecological balance in coastal areas and water bodies as well as forest areas, the strategies will be locality-specific and local governments will have to play a crucial role.

24.5.3.2 For decentralised planning and local government — as in other matters of macro-strategy for combining growth with equity, stability and sustainability — Kerala may have a lot to learn from the Nordic countries. In the Nordic countries, local government expenditures and revenues account for as much as 20 per cent of GDP as against about 10 per cent in other OECD countries. These countries have found local authorities to be the most efficient agencies of the state for delivery of social and economic services at local levels. There are, of course, many difficult issues in the division of revenues between local and state levels, equalisation of the access to different localities for essential services and the extent of authority to be given to local governments in designing their taxation system and their borrowing programmes. The experience of the Nordic countries in these matters provides a rich body of knowledge, which Kerala can study profitably and use to design its own long-term programme of decentralised local government.

24.5.3.3 Kerala is fortunate to have a long-standing tradition of robust local government, just as the Nordic countries do. Following the 73rd and 74th Constitutional Amendments introducing decentralised governance, this process was taken further. In the Ninth, Tenth and Eleventh Plans in Kerala, a framework for decentralised planning was developed and the increased role of local governments was promoted. Over time, the Kerala case has been recognised the world over, as a sort of model for local participation in decentralised planning. There has been extensive participation of various strata of society in local level planning. About 25 per cent of the Annual Plan allocation of the State Plan has been apportioned to local bodies. This is in the form of untied Plan grant for implementing projects for local development according to the wishes of the people. Kerala has also enabled the transfer of powers, functions and personnel to local authorities. At the same time, in order to minimise the risk of capture by local elites, the State has earmarked a certain percentage of grants to local authorities for underprivileged groups.

24.5.3.4 This process of reliance on local government has to be accelerated substantially. The enhanced role of the state in the provision of health, education, sanitation, urban infrastructure, housing and waste disposal will increasingly devolve to local authorities. This will require a considerable strengthening of the resource mobilisation capacities of local governments in Kerala. Own resources, which formed only about 11 per cent of resources in 2000-01, will have to increase to about 50 per cent by 2040 if the Nordic pattern is to be replicated. Among the sources will be: property

tax; car-related taxes; full cost recovery of utilities including electricity, water and sanitation; other local taxes such as entertainment taxes; and, above all, utilisation of dividend locked in underutilised land under local authorities or obtainable through conversion of land from low productivity rural use to high productivity urban use.

24.5.3.5 The competencies of local administrations will have to be improved, along with the increase in their responsibilities. In addition, officials from line departments will have to report to elected officials.

24.5.3.6 By 2040, nearly 80 per cent of Kerala's population will live in urban areas and issues of local government will revolve around a limited number of urban agglomerations, rather than a multitude of municipalities and village panchayats. This will give rise to large economies of scale in local government and make it easier to develop competencies of local government bodies. The Nordic experience has shown the need for a consolidation of municipalities into larger units to exploit economies of scale. In view of the dispersed nature of urbanisation in Kerala, this issue of consolidation of municipalities will be a priority in the State and it will have to think of a unique 'Kerala model of urban governance'.

24.5.3.7 The recent review of decentralised planning and local government presented in the Economic Review 2012 identifies, among other things, lack of vision in district planning as one of the weaknesses of the current system. It appears that a large part of the activities of local governments are focused on meeting immediate needs, most often in social sectors, and adequate attention is not given to long-term economic, social and ecological needs. They also focus on small projects and not on large integrated projects.

24.5.3.8 Kerala Perspective Plan 2030 could be a useful instrument for creating long-term plans for district development. If the vision of a prosperous Kerala presented in this plan is to be realised, then districts will have to become the centres of action. It is recommended that each district prepare a plan for a knowledge-hub suited to its conditions, which will promote development of health, education, tourism, industries and agriculture, with the long-term objective of achieving affluence within one generation. These perspective plans should have a clear timeline for implementation of the long-term vision and should be reflected in the annual and five-year plans prepared by district governments. The early experience of Kerala might be of help in this regard.

24.5.3.9 Kerala began its decentralisation drive with a 'big bang' through a massive transfer of functions, functionaries and funds, across ten months, in 1996. The approach taken was one of giving responsibilities and then building capacity, giving powers and then setting up systems, transferring resources and then putting in place accountability arrangements. The expectation was that the local governments would learn by doing, as capacity cannot be created in a vacuum. The entry point was planning — a 'people's plan' campaign was launched to set the agenda and instil enthusiasm. The responsibilities transferred to the local governments ranged from village roads and other district roads (District Panchayat), roads connecting two villages (Block Panchayat) and minor local roads (Village Panchayat). Responsibilities such as irrigation, water supply, electrification and street lighting were transferred to the panchayats (all three tiers).

24.5.3.10 A number of functions in the area of human development were transferred to the local governments. In education, primary education has been devolved to Gram Panchayats and secondary education to District Panchayats. In health, primary health has been devolved to Gram Panchayats, first referral units to Block Panchayats and secondary health to District Panchayats. Integrated Child Development Scheme and welfare pensions have been passed on to the Gram Panchayats. Women and child development, Special Component Plan and Tribal Sub Plan have been devolved to all three tiers of local government. Planning and implementing economic development in agriculture and allied sectors, traditional and local industries and poverty reduction have all been devolved to local governments.

24.5.3.11 Unlike many other states, Kerala has constituted regular State Finance Commissions and their awards were mostly respected and implemented. Classical principles of decentralisation have been followed in Kerala by creating strong own fiscal domains of Gram (village) Panchayats by assigning a number of tax domains. Transfers have been large to match assigned responsibilities in three streams — development fund, maintenance fund and general purpose fund. Devolution formulae were constructed by the Finance Commissions and funds allocated on the basis of the formulae. Quality of funds has also been largely untied, giving freedom to the local governments to use it to meet local needs. The predictability of funds is ensured as the five-year allocation is approved in advance following the acceptance of State Finance Commission awards. 'Assuredness of Funds–Local Government-wise Allocation' presented as a separate Budget document assures free flow of funds.

24.5.3.12 With the larger transfer of resources to the local governments, the governance plan in Kerala has moved in the direction of improved account keeping and office management. The service delivery plans have been organised under three broad heads. Under human development services, health, education and child development have been devolved to various tiers of local government. Conventional civic services such as water supply, sanitation and street lighting have always been with the local governments. Increasingly, the welfare services of pensions and governance services of issuing certificates and licenses have also become the responsibility of local governments.

24.5.3.13 Some of the lessons from the Kerala experience are the following. Rapid decentralisation has several advantages as speed of the operation diminishes opposition. Once given responsibilities, local governments are forced to perform as there is pressure on elected governments to ensure that decentralisation succeeds. But decentralisation is not a one-off action and requires continuous effort by elected representatives as well as officials. Higher levels of governments also have a responsibility, as the 'own resources' of the local governments are inadequate to meet the devolved responsibilities. There is a need for transferring untied resources in a fair, transparent and equitable manner. The lessons related to planning are, that to start with, plans could emerge out of negotiated priorities, but have to gradually be based on data and analysis.

24.5.3.14 Like the rethinking called for about the institutional architecture required for the governance of urban agglomerations, there is a need for rethinking the administrative structure as well. Currently, the trend seems to be to replicate the archaic state bureaucratic structure of governance at the level of the local governments. This has to change to a lean and efficient administration to meet the needs of a globally competitive Kerala.

24.5.3.15 It is evident from initiatives such as the Kerala Local Government Service Delivery Project (KLGSDP) that there is a realisation that basic administrative and governance functions have to be restructured. The project aims at enhancing and strengthening the institutional capacity of the local government system to deliver services and undertake basic administrative and governance functions more effectively and in a sustainable manner. The specific context of the KLGSDP is that the Gram Panchayats and Municipalities in Kerala have more staff than in the other Indian States owing to their larger size and higher devolution of funds and functions. Along with the devolution of funds, the flow of centrally sponsored scheme (CSS) funds has also shown an increase in recent years. But institutional capacity has not been strengthened to match the increased fund flow. In particular, areas such as budgeting and planning, financial management and asset management have not been coherently integrated, updated and modernised to meet the new challenges. Further, the institutional capacity varies enormously across the Gram Panchayats and Municipalities of Kerala. The KLGSDP has been devised, recognising the need for a second generation of decentralisation reforms for expanding the local expenditure autonomy and strengthening local self-government institutional capacity. This process needs to be carried forward to transform the local governance system in Kerala.

24.6 Conclusion

24.6.1 As at the national level, improvement of governance in Kerala is a high priority for sustained economic progress. This need has been recognised for some time, but progress on making these improvements has been slow. As Kerala sets it priorities for development in the Plans to come, it must make more serious efforts at solving the problem of governance. Experience of states such as Bihar, Gujarat and Odisha, in recent years, has shown that political leadership can make a huge difference. Even with the existing institutional structure, a determined leadership with integrity can transform the whole structure of governance within a short period. Therefore, 'leadership matters'.

Appendix A 24.1

International Ratings of Governance

1. Aggregate Governance Indicators by Country and Year (World Bank)

Aggregate governance research indicators for 212 countries for 1996–2007, for six dimensions of governance:

- Voice and accountability
- Political stability and absence of violence
- Government effectiveness
- Regulatory quality
- Rule of law
- Control of corruption.

2. AGI Data Portal (World Bank)

A Data Portal that consolidates information on actionable governance indicators from a variety of sources including:

- Afro Barometer
- Business Environment and Enterprise Performance Surveys
- Country Policy and Institutional Assessments
- Doing Business
- Enterprise Surveys
- Global Integrity Index
- Human Resource Management
- Open Budget Index
- Press Freedom Index by Reporters without Borders
- Public Expenditure and Financial Accountability

3. Assessing Governance Dataset (ODI)

The dataset includes 30 indicators for 16 developing countries for the years 1996 and 2000. The data includes 5 indicators within 6 arenas of governance:

- Civil Society
- Political Society
- Government
- Bureaucracy
- Economic Society
- Judiciary

4. Corporate Corruption/Ethics Index (World Bank)

- Corporate ethics index
- Public sector ethics index
- Judicial/Legal effectiveness
- Corporate governance index

5. Corruption Perceptions Index (Transparency International)

Since 1995, the Corruption Perceptions Index (CPI) ranks 180 countries by perceived levels of corruption, based on expert assessments and opinion surveys.

6. The World Justice Project, Rule of Law Index 2012-2013 (www.worldjusticeproject.org)

The WJP Rule of Law Index® is an innovative quantitative assessment tool designed by The World Justice Project to offer a detailed and comprehensive picture of the extent to which countries adhere to the rule of law in practice. It includes:

1. Limited Government Powers
2. Absence of Corruption
3. Order and Security
4. Fundamental Rights
5. Open Government
6. Regulatory Enforcement
7. Civil Justice
8. Criminal Justice
9. Informal Justice

The dataset presents the factor and sub-factor scores for 96 countries in 2012 -2013. The WJP Rule of Law Index 2012-2013 does not include scores for 'Factor 9: Informal Justice'.

7. Country Policy and Institutional Assessment-CPIA (World Bank)

The CPIA index rates developing countries on a set of 16 criteria, grouped in four sectors: economic management, structural policies, policies for social inclusion and equity and public sector management and institutions.

8. Database of Political Institutions (Beck, Clarke, Groff, Keefer, and Walsh)

Contains data on political institutions for 1975-2009 for the following categories:

- Legislature
- Electoral rules
- Stability and checks and balances
- Federalism

9. DataGob Database (IDB)

Provides access to 400 governance indicators by country and year, in four major areas: democracy, markets, public sector management and rule of law. The indicators available through DataGob come from 30 different sources and the information on the methodology used to construct indicators is made available.

10. Economic Freedom of the World Index (The Fraser Institute)

Data for every 5 years from 1970-2000, annual data thereafter:

- Size of Government: Expenditures, Taxes and Enterprises
- Legal Structure and Security of Property Rights
- Access to Sound Money
- Freedom to Trade Internationally
- Regulation of Credit, Labour and Business.

11. The Global Integrity Index (Global Integrity)

Assesses the existence and effectiveness of anti-corruption mechanisms that promote public integrity. More than 290 discrete integrity indicators constitute the index, which are organised into six key categories:

- Civil Society, Public Information and Media
- Elections
- Government Accountability
- Administration and Civil Service
- Oversight and Regulation
- Anti-Corruption and Rule of Law

12. Governance Surveys Database (World Bank)

This database contains over 4,000 governance-related questions drawn from more than 25 surveys. Every question is categorised by sector, governance/decentralisation and type of question (for example, objective/participation/perception).

13. Open Budget Index by Country (CBPP)

The Open Budget Index is computed using the average of the responses to 91 of the questions on the Open Budget Questionnaire in 2006. These questions cover the public availability of budget information in seven key budget documents.

14. Polity IV Dataset (CIDCM)

Contains coded annual information on regime and authority characteristics for all independent states and covers the years 1800-2004. Indicators include:

- Indicators of democracy and autocracy
- Authority characteristics
- Polity regime transitions

15. Public Expenditure and Financial Accountability (PEFA) indicators (PEFA Secretariat)

Uses a comprehensive set of 31 indicators to assess overall performance of public financial management systems in six areas (currently available for roughly 50 countries, more assessments are underway):

- Budget credibility
- Budget comprehensiveness and transparency
- Policy-based budgeting
- Predictability and control in budget execution
- External scrutiny and audit
- Donor practices

16. Word Bank Country Diagnostic Surveys (World Bank)

Governance and Corruption Country Surveys contain information and data on governance and corruption vulnerabilities, based on surveys of citizens, business people and public sector workers.

Appendix A 24.2

studies on State-wise Analysis of Quality of Governance in India

Author & Period of Study	Dimensions for measuring quality of governance	Method Used to calculate quality of governance index	Results
1. Debroy, Bandari and Aiyar (2011)	Size of government, legal structure, property rights, and regulation of labour and business	Range equalisation	Kerala ranks 10th in their study and has performed moderately.
2. Mundle, Chakraborty, Chowdhry and Sidhkar (EPW 2012)	Delivery of infrastructure services, delivery of social services, fiscal performance, maintenance of law and order, delivery of legal services under the judicial pillar, and the quality of the legislature under the legislative pillar.	Three methods have been used: i) Principal component analysis (ii) Average of the sum of ranks (modified Borda scores) (iii) Average of the average of ranks"	Kerala is among the top five states in terms of quality of governance, as per all the three methods used.
3. Basu (2002), Draft Paper.	Crime rates, riots, industrial disputes and strikes, Gini index, and debt-income ratio.	Latent Variable Model (Principal component analysis)	Kerala is in the 'Poor governance category' according to this study.
4.Virmani, Sahu&Talwar (2006)	Public good, quasi public good, Government monopolised goods	Principal Component analysis	Kerala is among top performing states, in quality of governance.
5.Pradhan and Sanyal (2011)	Peace and stability, people's sensibility, social equality, management of government	Principal Component analysis	Kerala is among top performing states in the economy.

Source: Government Finance Yearbook, 2010, IMF

Appendix A 24.3

Table 24C: List of E-Governance Projects in Kerala

E – Governance Projects in Kerala
Kerala State Wide Area Network (KSWAN), State Data Centre, State Service Delivery Gateway (SSDG), Common Service Centre (CSC), e-Procurement, Aasthi-Asset Management System.
E-Governance initiatives in the Agriculture Sector
Karshaka Information Systems Services and Networking–KISSAN, E-krishi, DACNET, FISHNET Project, HORTNET Project, AGRISNET.
E-Governance initiatives in IT Infrastructure
Broadband Connectivity for Rural Government Offices, International Centre for Free and Open Source Software (IC-FOSS), Free and Open Source Software (FOSS), FRIENDS, Centre for Advanced Training in Free and Open Source Software (CATFOSS), Citizen's Call Centre (155300), Cloud Computing, Content Management Framework, Department WAN, Digitisation of Government Records, Rural IT Parks/Techno-lodges, Sameeksha-Village Documentation and Community Computing Centre, Secretariat Management System, Knowledge Archive Project (K-BASE), Mobile Governance, Dr SMS, Secretariat Wide Area Network (SecWAN), Special Post-graduate Education Expansion Drive in IT (SPEED-IT), State Spatial Data Infrastructure (New Scheme), Video Conferencing-VC, Webinar.

E-Governance Initiatives in the Finance, Commercial Taxes and Revenue Departments
BOUGETTE–Budget Preparation Software, EMLI (Effective Management of LC Issuance), KVA-TIS, BhoomiKeralam, e-Stamping, Any-Time Any-Where E-Filing of VAT Returns.
E-Governance initiatives in the Tourism Department
E-Submission of C-forms, Online Hotel Finder, Online Room Reservation, Online Tour Operator accreditation, E-Submission of Tourist Arrivals, Online Brochure Downloads, Royalty-free Video Clips on DVD, Online Video Sharing.
E-Governance initiatives in the Law Department
Law Information Management System
Other e-Governance initiatives
Chief Minister's SutharyaKeralam, Akshaya - e-pay, e-Payment, e-mail to all employees, En-tegramam - My Village, INSIGHT, Integrated Government Service Gateway (IGSG), Intelligent Enforcement System, IntraGOV, Payroll and Personnel Management System-SPARK, Public Key Infrastructure (PKI) – Digital Signature, AADHAAR and Unique Identification Authority of India (UIDAI), CERT-Kerala, e-District, e-Grantz, E-Gazette, Fair Value of Land, e-Governance Initia-tives in PWD of Kerala, Establishment of Geomatics Lab, Higher Secondary centralised Allotment Process (hsCap), Forest Management Information System (FMIS), Boat Registration Module, Export and Import Module, Integrated Treasury Management Programme, Core Financial Man-agement System (CFMS), FFP (A) & FFP (B), IT initiatives at the University of Kerala, Hospital Management System , TETRAPDS, Niyamasabha Knowledgebase (Archives), Research Project Automation System.

Reference

1. *http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/EXTMNAREGTOPGOVERNANCE/0,,contentMDK:20513159~pagePK:34004173~piPK:34003707~theSitePK:497024,00.html*
2. *India Corruption Study 2005 to Improve Governance, Centre for Media Studies/ Transparency International India, New Delhi, June 30, 2005.*
3. *Debroy B., Bhandari L. &Aiyar S. S. A. (2011), Economic Freedom of the States of India 2011, Academic Foundation, New Delhi.; Mundle. S ,Chakraborty P., Chowdhury, S. &Sidkar, S.(2012), The Quality of Governance How Have Indian States Performed? , Economic and Political Weekly,vol xlvii no 49; Basu,S.R (2002), ' Does governance matter ? Some evidence from Indian States' , Draft Paper presented VII th Spring Meeting of Young Economists, Paris, April 18-20, 2002; Pradhan, R.P and Sanyal, G.S, (2011), 'Good governance and human development: Evidence form Indian States ',Journal of Social and Development Science Vol. 1, No. 1, pp. 1-8, Feb 2011;*
4. *Mundle, Chakraborty, Chowdhry&Sidhkar (2012), Vrimani, Sahu&Talwar (2006) and Pradhan&Sanyal (2011)*
5. *Basu,S.R (2002), ' Does governance matter ? Some evidence from Indian States', Draft Paper presented VII th Spring Meeting of Young Economists, Paris, April 18-20, 2002.*
6. *www.worldbank.org/paymentsystems*
7. *http://egovreach.in*
8. *Madon R.(2004) ; ' Evaluating the Developmental Impact of E-Governance Initiatives: An Exploratory Framework" , The Electronic Journal on Information Systems in Developing Countries (EJISDC) 2004, 20,5, 1-13.*
9. *Nair K.B (2008), 'Fast Reliable Instant Efficient Network for Disbursement of Services (FRIENDS JanasevanaKendram)' Chapter 16, "Compendium of e-Governance Initiatives in India", Gupta P. &BaggaR.K , University Press.*

[10] *Raghunathan V.S (2008a), 'Centralized Allotment Process for the Professional Course Admissions—CAPNIC', Chapter 17 , "Compendium of e-Governance Initiatives in India" , Gupta P. &Bagga R.K , University Press. Raghunathan V.S (2008b), 'DC*Suite–Suite of Applications for e-Collectorate', Chapter 26, "Compendium of e-Governance Initiatives in India," Gupta P. &BaggaR.K , University Press. Raghunathan V.S (2008c), 'Service and Payroll Administrative Repository for Kerala—SPARK' Chapter 36, "Compendium of e-Governance Initiatives in India," Gupta P. &Bagga R.K, University Press.*

[11] *See also, http://siteresources.worldbank.org/INTLAWJUSTINST/Resources/IndicatorsGovernanceand InstitutionalQuality.pdf*