DEVELOPMENT MODELS, CASE STUDIES AND CROSS-CUTTING THEMES

SUBMITTED TO

KARNATAKA STATE PLANNING BOARD

PRICEWATERHOUSECOOPERS

JUNE 2008
## Table of Contents

PREFACE ................................................................................................................................. 1

1. INTRODUCTION .................................................................................................................. 2

2. DEVELOPMENT .................................................................................................................... 3
   2.1 HUMAN DEVELOPMENT ................................................................................................. 3
   2.2 INEQUALITY .................................................................................................................... 5

3. ECONOMIC GROWTH AND POVERTY REDUCTION ......................................................... 7
   3.1 GROWTH-INEquality-POVerty ........................................................................................ 7
   3.2 GROWTH-EMPLOYMENT-POVerty .............................................................................. 11

4. CROSS-CUTTING THEMES ............................................................................................... 15
   4.1 EQUITABLE ECONOMIC GROWTH .............................................................................. 16
   4.2 CREATION OF EMPLOYMENT POTENTIAL ................................................................. 16
   4.3 CAPABILITY ENHANCEMENTS OF PEOPLE ............................................................. 17
   4.4 ENVIRONMENTAL SUSTAINABILITY ......................................................................... 17
   4.5 GOOD GOVERNANCE ................................................................................................. 18

5. CONCLUSION ...................................................................................................................... 19

REFERENCES ......................................................................................................................... 20
PREFACE

Despite healthy economic growth, Karnataka still ranks 7th among the 15 major states of India on the Human Development Index (HDI), and there exist disparities across various groups within the state. To overcome these obstacles, and grow on a path of sustainable development, the state needs to focus its efforts by creating long-term measurable and tangible goals, and design and implement strategies in order to achieve them. In this context, the development of a long-term vision is a vital element. The Karnataka State Planning Board (KSPB) is keen to conceptualize the long-term vision for the sustainable development and inclusive growth of Karnataka. A study in this regard has been entrusted to PricewaterhouseCoopers (PwC), and this document forms a part of the study. This paper on 'Development Models, Case Studies and Cross-cutting Themes' constitutes the KD-5 deliverable of this assignment.

Deliverable Structure

<table>
<thead>
<tr>
<th>KD 1: Inception Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>KD 2: Perspectives, Dimensions and Strategies Paper</td>
</tr>
<tr>
<td>KD 3: Macroeconomic Profile &amp; Comparative Analysis</td>
</tr>
<tr>
<td>KD 4: Position Papers for various sectors</td>
</tr>
<tr>
<td>Agriculture</td>
</tr>
<tr>
<td>Industry &amp; Minerals</td>
</tr>
<tr>
<td>Irrigation</td>
</tr>
<tr>
<td>Energy</td>
</tr>
<tr>
<td>Transport Infrastructure</td>
</tr>
<tr>
<td>Rural Development</td>
</tr>
<tr>
<td>Urban Development</td>
</tr>
<tr>
<td>Healthcare</td>
</tr>
<tr>
<td>Higher Education</td>
</tr>
<tr>
<td>School Education</td>
</tr>
<tr>
<td>Social Sector</td>
</tr>
<tr>
<td>KD 5 &amp; 6: Enabling Strategy Paper</td>
</tr>
<tr>
<td>Cross-Cutting Themes: Development Models and Case Studies</td>
</tr>
<tr>
<td>Sectors</td>
</tr>
<tr>
<td>KD 7: Draft Vision</td>
</tr>
</tbody>
</table>

The purpose of this document is to identify an approach that would be best-suited for Karnataka's long-term development. Based on this approach, a broad set of policy clusters will be identified which will serve as cross-cutting themes while looking at sector-specific issues and challenges. These themes are expected to give direction and coherence to the process of identifying key focus areas and enabling strategies for the individual sectors. It will further help bind the sectoral objectives and targets to the overall vision of the state of Karnataka.
1. INTRODUCTION

A look at Karnataka’s development trajectory in the past few decades shows that its GSDP has grown consistently at around 6%. There has been a sectoral shift in terms of its composition, with the tertiary sector overtaking the primary sector as the major contributor to GSDP around 1990 (see Figure 1). While this is in line with similar patterns underway in other states of the country and many other countries around the world, what is particularly disturbing is the almost stagnant nature of Karnataka’s employment structure. With less than one-fifth of the GSDP share, agriculture still continues to employ over three-fifth of the state’s workforce.

Moreover, at a value of 0.33 between 1983-84 and 2004-05, the growth elasticity of poverty has been low in the state, even when compared to its neighbouring states. This means that Karnataka’s economic growth is not translating into a commensurate improvement in poverty reduction. A rapidly declining share of agriculture in GSDP contributed in part by its low relative growth rate and declining productivity with hardly any decrease in the proportion of population dependent on it for livelihood has translated into a situation where the output per worker in agriculture is less than one-seventh of that in services. This has led to increasing disparity in society and deprivation for a large proportion of the population which continues to depend on agriculture, and to the state’s below-average performance on poverty reduction.

Figure 1: Sectoral Composition of Karnataka’s State Domestic Product (1960-2008)

Source: Department of Economics and Statistics, Govt. of Karnataka

To understand these problems in the state’s development model and suggest policy focus areas, the following sections look at the existing literature on development studies identifying human development and inequality as the key themes of focus. Relationship between economic growth, employment and poverty reduction is also explored in an attempt to gain further insights into the state’s development concerns. Empirical evidence from other comparable states and countries around the world is used to illustrate and reinforce important assertions.
2. DEVELOPMENT

Development as a concept manifests itself in diverse ways in the development studies literature\(^1\). The more neutral and non-evaluative usages look at development as a fundamental or structural change (as in the GDP of a country) or as an action and/or intervention aimed at effecting such a change (like structural adjustment programmes). The more evaluative usages of the term treat it on the one hand as improvement, a good change or an achieved improvement or a good state or situation and on the other, in an instrumental sense, as that which facilitates or enables improvement. In this sense, development is both value relative (it depends on what is considered progress) and theory relative (it depends on theories about what will lead to that progress).

The renewed focus on development policies in the 1940s was primarily driven by the progress in economic growth theory that had occurred through the preceding period in the 1930s as well as the 1940s, mainly in the countries of the West. It was dominated by the vision that poor countries are just low-income countries, and the focus was simply on transcending the problems of underdevelopment through economic growth, such as increasing GDP. Over time there has evolved a reasonable agreement, though, that the process of development is highly complex, as it is not 'reducible to any specific set of policy goals, empirical trends, or normative statements' which necessitates looking beyond merely economic aspects\(^2\).

2.1 Human Development

In recent times, the concept of human development has found growing acceptance in national and international policy circles. Contrary to a predominant occupation with economic growth of nation-states, the focus here is on building capacities and creating societies where individual potential can be realized. According to noted welfare-economist Amartya Sen in his book "Development as Freedom", development has to be concerned with advancing human well-being and human freedoms\(^3\). This conception of development looks at poverty as ‘a deprivation of basic capabilities rather than merely low income’ and, therefore, argues in favour of enhancement of substantive freedoms, which provide an individual with the capabilities to choose a life she/he has reason to value, as the main objective and primary means of development. Substantive freedoms are seen as constituting – the opportunity/capability to achieve, the scope for autonomy in individual choices and immunity from interference by others\(^4\). Sen sees development as a process of expanding the real freedoms that people enjoy. This then leads to increasing the capability of people to lead the kind of lives they value\(^5\). It answers the moot question why we want development and endorses "freedom" as the ultimate objective of development. Sen argues that freedom is also a means of development as freedoms and rights contribute to progress. He shuns narrower interpretations of development as mere increase in GDP, economic growth or industrialisation and promotes a broader perspective of enhancement of economic, social and political freedoms as fundamental components of development. Development is seen as a way that removes deprivations, increases the choices of people and empowers them to choose the options they perceive as valuable. In the instrumental sense, Sen highlights the importance of political freedoms, economic facilities, social opportunities, transparency guarantees and protective security in the overall freedom that people need, to live the way they would like to live. It should be noted that each of these freedoms possesses strong inter-linkages and affect each other.

a. **Political Freedoms** – refer to presence of a democratic process where people determine who governs them and on what principles. It also incorporates the freedom of political expression and dissent

b. **Economic Facilities** – deal with the opportunity to utilise economic resources for production, consumption or exchange
c. **Social Opportunities** – concern access to Education, Healthcare etc. that affect an individual’s ability to lead a good quality of life.

d. **Transparency Guarantees** – it deals with the degree of openness people can expect in their social transactions. Guarantees have a direct role in preventing corruption, financial irresponsibility and subversive deals.

e. **Protective Security** – is associated with the need for social security net for those on the verge of vulnerability, e.g. unemployment benefits, statutory income supplements and adhoc arrangements to overcome disasters like famines.

Human development can be looked upon as "the process of enhancing individual and collective quality of life in a manner that satisfies basic needs (as a minimum), is environmentally, socially and economically sustainable and is empowering in the sense that the people concerned have a substantial degree of control over the process through access to the means of social power"\(^6\).

A human development approach does not restrict itself only to an objective of aggregate economic growth and how to maximize it, but, while trying to bring the focus back to people, explicitly engages with a more inclusive set of policies that can be of concern to their overall well-being – and which can provide individuals with the desired capabilities. A typical set of such policies could resemble the one that UNDP has proposed in its HDR 2003 *(see Box 1 below)*.

### Box 1: Human Development Policy for Escaping Poverty Traps – Multi-Faceted approach

Breaking out of poverty traps requires a comprehensive approach that deals with various issues. For countries trapped in poverty, six policy clusters are crucial:

1. **Investing in human development** – Basic services such as nutrition, health (including reproductive health), education, water and sanitation – to foster a productive and healthy labour force that can participate effectively in the world economy.

2. **Helping small farmers increase productivity** and break out of subsistence farming and chronic hunger – especially in countries with predominantly rural populations.

3. **Investing in infrastructure** – power, roads, ports, communications – to attract new investments in non-traditional areas.

4. **Developing industrial development policies** that bolster non-traditional private sector activities, with special attention to small and medium-size enterprises. Such policies might include export processing zones, tax incentives and other initiatives to promote investment and public spending on research and development.

5. **Emphasizing human rights and social equity** to promote the well-being of all people and to ensure that poor and marginalized people – including girls and women – have the freedom and voice to influence decisions that affect their lives.

6. **Promoting environmental sustainability and improving urban management.** All countries, but especially the very poorest, need to protect the biodiversity and ecosystems that support life (clean water and air, soil nutrients, forests, fisheries, other key ecosystems) and ensure that their cities are well managed to provide livelihoods and safe environments.

2.2 Inequality

Inequality is defined as ‘a lack of equality, … of opportunity, treatment or status’. We see that in the real world there is a vast disparity in the freedoms experienced by different sections of society across different aspects. These ‘unfreedoms’ have a direct impact on the quality of life and ability of people to live as they wish to. Usually, the following four types of inequality are generally found in societies:

- **Income inequality** is the most tangible, measurable and arguably most important type of inequality. This deals with the large gap between incomes of the rich and poor. In 2001, the World Bank estimated that more than half the people of this world live on an income of less than $2 per day, and of those, 40% actually have an income of less that $1 per day. Even these figures are being challenged for veracity and it is thought that the number of poor has been grossly underestimated by World Bank7,8.

- **Power inequality** rises out of the position that could be attributed to political clout and links a person has. This enables a person to unfairly exploit the system to his/her own advantage and also to prevent, through the use of coercion and subversion, any injustice from being rectified.

- **Gender inequality** is concerned with the discrimination faced by females in almost all aspects of life primarily due to their gender, e.g. preference of male child (leading to foeticide/infanticide), apportionment of food within a household, access to healthcare facilities and education, power relationships within household, political power etc.

- **Social inequality** is caused when people are faced with barriers relating to caste, race, language and religion. These social biases could preclude them from access to basic necessities like food, water, education, healthcare to complex needs like security, status etc.

There is no best method to measure income, gender or social inequality with any degree of certainty. Different processes and large approximations are currently being used. One common way is to disaggregate outcome indicators by income groups, gender or socio-economic groups and test for significant variance. The following tables indicate gender and social disparities along a few indicators in Karnataka.

**Table 1: Gender and Social Disparity in Karnataka - some indicators**

<table>
<thead>
<tr>
<th>Gender Disparity</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anemia prevalence</td>
<td>19%</td>
<td>51%</td>
</tr>
<tr>
<td>Agricultural Wage Rate 2007</td>
<td>Rs 72</td>
<td>Rs 43</td>
</tr>
<tr>
<td>Higher education GER</td>
<td>12.7%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Rural Literacy Rate</td>
<td>70%</td>
<td>48%</td>
</tr>
<tr>
<td>Urban Regular wage rate</td>
<td>Rs 222</td>
<td>Rs 151</td>
</tr>
<tr>
<td>Mean Years of Schooling (7-16)</td>
<td>4.62</td>
<td>4.29</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Disparity</th>
<th>SC/IST</th>
<th>Muslim</th>
<th>ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Poverty</td>
<td>54%</td>
<td>49%</td>
<td>33%</td>
</tr>
<tr>
<td>Urban MPCE</td>
<td>Rs 729</td>
<td>Rs 637</td>
<td>Rs 1138</td>
</tr>
<tr>
<td>Urban Female literacy</td>
<td>56%</td>
<td>71%</td>
<td>74%</td>
</tr>
<tr>
<td>Rural Female Mean Years of Schooling</td>
<td>3.22</td>
<td>3.68</td>
<td>3.84</td>
</tr>
</tbody>
</table>

Source: Directorate of Economics and Statistics, Govt. of Karnataka for Gender Disparity; Sachar Committee Report (2006) for Social Disparity

It is important to understand the existence of these disparities, as they contribute to social unrest and it is certain that inequality directly affects the freedoms that people wish to enjoy. Tracking disaggregated indicators also help frame directed policies towards specific population groups for more effective action. Even in the more developed countries, the life expectancy, educational levels, employment opportunities, along with income levels of specific socio-economic groups of society are astonishingly low compared to their more well off counterparts. Inequality is synonymous to injustice in many cases, especially in the case of power inequality. In many countries, law enforcement and judiciary act at the behest of those who exert influence and authority at the cost of being unjust. It is found that in all countries of the world, the income of
women is much lesser compared to men for the same work. Also, education and healthcare facilities are less accessible to women in many countries. Inequality also breeds social conflict. Evidence from cities in high-income countries like the USA highlights that areas with greater income inequality show increased crime rates. Internationally, social inequality and injustice is causing resentment among the burgeoning youth in the developing countries, who feel hopeless at their opportunities of progress. All the above lead to a vicious circle where inequality, if not tackled, leads to further widening of the gap. Breaking this spiral of downturn thus becomes an important concern of development.

For a long time, development had largely ignored the question of inequality, focusing on economic growth instead. This assumption is clearly challenged in face of ever increasing gaps in the living conditions across developed and developing nations and conditions of abject poverty seen today. Removal of inequality must, therefore, be a vital aspect of development of a society.
3. ECONOMIC GROWTH AND POVERTY REDUCTION

From a human development viewpoint, the nature and composition of economic growth is as important as the aggregate growth in incomes of nation-states. This is because aggregate income growth figures do not explicitly reveal which people have been better or worse-off. When capability enhancements of people is the principal objective desired to be achieved through development policy, the starting point has to be people, especially those whose freedom to choose a life that they would value, is compromised because they remain trapped in various manifestations of poverty – economic, social and political. While economic growth remains important, it is not the only factor that needs to be considered for providing the aforesaid substantial freedoms to people. The linkage between economic growth and poverty reduction is explored through two channels – inequality and employment – in the subsequent sections to further highlight this viewpoint.

3.1 Growth-Inequality-Poverty

The relationship between inequality, poverty and growth has been the centre of several research studies, though a definitive clarity is still elusive. A recent body of research explains a somewhat evident yet novel policy conclusion: “the rapid elimination of absolute poverty, under all forms, is a meaningful goal for development” and to achieve this goal a “strong, country specific combination of growth and distribution policies” is needed. It is suggested that poverty can be reduced by increasing income (growth) or a better distribution (inequality). A one percent decrease in poverty can be reached via a certain growth rate (the poverty-elasticity growth rate) or by a certain decrease in inequality (the poverty-inequality elasticity). More important, an increase in income is not necessarily a contradiction to a reduction in inequality. This idea has powerful implications: instead of focusing on growth alone to reduce poverty, policy makers must focus on both reducing inequality and enhancing growth at the same time (see Box 2 on how East Asian development models incorporated both these dimensions to achieve good results).

Box 2 : Development in East Asia – Growth and Equality

East Asian (Japan, South Korea, Taiwan, Singapore, Hong Kong and China) and Southeast Asian (Indonesia, Malaysia and Thailand) countries with the exception of Japan displayed a real per capita income in 1950 around or less than one-tenth that of the U.S. (the corresponding ratio for Japan was approximately two tenths). By the end of the 20th century Japan, Hong Kong, and Singapore had reached per capita real income levels between 70 and 80 per cent of that of the U.S., while Taiwan and South Korea enjoyed levels of incomes around 50 per cent of that of the U.S. Although the growth performances of Thailand and Malaysia were somewhat less spectacular they reached a relative income level between a fourth and a third of that of the U.S.

East Asia and to a lesser degree Southeast Asia adopted an essentially common core of policies and institutions, including at an early stage emphasizing agricultural development and education until the take-off point was reached and then gradually opening up their economies by encouraging trade and capital inflows to acquire state of the art technology while maintaining macroeconomic stability.

The economies of East Asia were able to achieve rapid growth without an increase in inequality during the late 20th century. High rates of growth provided resources that could be used to promote equality, while high degree of equality helped sustain the high rates of growth.

In Korea, Japan and Taiwan, land reforms were important in the initial stages of development. They had three effects – they increased rural productivity and income and resulted in increased savings; higher incomes provided the domestic demand that was important in these economies
before export markets expanded; and the redistribution of income contributed to political stability, an important factor in creating a good environment for domestic and foreign investment.

In later years, policies to ensure more equitable distribution of income continued to contribute to economic growth, with positive effects that more than offset the possible negative effects of reduced capital accumulation. These policies continued to contribute to political stability. High and increasing wages reduced inequality, made workers not only more satisfied but also more productive and promoted cooperative relations between workers and firms. While policies that attempted to restrict real estate speculation directed funds into the industry, they limited the increases in the prices of housing relative to what would otherwise have occurred. Such price increases would have led to demands for further wage increases and would have had particularly adverse effects on the very poor, who often seem unable to obtain adequate housing under such conditions.

Additionally, policies ensuring universal literacy both increased productivity and promoted gender equality. The emphasis on female education led to reduced fertility, thus mitigating the adverse effects of population pressure felt in so many developing countries, and it directly increased the supply of educated labour.


A recent strand on poverty literature has developed this idea under the name of “pro-poor growth” (see Box 3 for an indicative pro-poor growth policy – the cash transfer programme in Brazil). This has been defined as “growth that is good for the poor”. Two definitions of pro-poor growth have been proposed – absolute and relative. Absolute pro-poor growth “considers only the incomes of poor people”; relative pro-poor growth “compares changes in the incomes of the poor with changes in the incomes of people who are not poor”. Under the absolute definition, almost any growth pattern will be pro-poor (provided that the income of the poor increases over time). Relative pro-poor growth, on the other hand, implies a reduction on inequality; in other words, relative pro-poor growth means that the income of the poor grows faster than the income of the non-poor. A pro-poor growth strategy entails the removal of policy and institution induced biases against the poor, as well as the adoption of direct pro-poor policies.

**Box 3 : Bolsa Familia – Brazil’s Conditional Cash Transfer (CCT) Programme**

*Bolsa Familia* is one of the largest CCT programmes in the world, benefiting roughly 11 million families. It provides a monthly transfer to poor households with children up to 15 years of age and/or a pregnant woman, and a monthly transfer to extremely poor households regardless of their composition. The extremely poor households are entitled to a basic benefit of US$ 32. Whether poor or extremely poor, a household can receive US$ 10 for a pregnant woman or for each child up to a maximum of three children.

The programme started in 2004 with the merger of the existing conditional and unconditional cash transfer programmes of the Federal Government, specifically, *Bolsa Escola*, a minimum income grant related to primary education; *Fome Zero* and *Bolsa Alimentacao*, two income grants related to food security; and *Vale Gas*, a subsidy to help poor households buy cooking gas. Once created, *Bolsa Familia* was scaled up to include 11 million households by 2006.

*Bolsa Familia* aims to alleviate the income deprivation of poor households and to break the intergenerational transmission of poverty through income transfer and by enforcing conditionalities regarding education and health. The main conditionalities are: (i) children 6-15 years old must maintain 85 per cent school attendance; (ii) children up to six years old must have their immunisation status confirmed and, together with pregnant women, must have regular health check-ups.
An evaluation study conducted recently concluded that while the programme has not had a noticeable impact on aggregate household consumption, it has affected the share of the total household budget on certain important items like food and education. It has been effective in increasing school attendance and drop-out rates (other CCT programmes in Latin America – Oportunidades in Mexico, Solidario in Chile and Familias en Accion in Colombia – have also shown similar effects). Another survey confirmed positive impacts of the programme in terms of reducing wasting and stunting in infants. Bolsa Familia has also had a positive impact on labour force participation. The participation rate for adults, who benefited through this programme, was found to be 2.6 percentage points higher and this impact was higher for beneficiary women at 4.3 percentage points higher than non-beneficiaries.


An example is presented below to clarify matters. Table 2 shows a hypothetical society, (which closely resembles rural Karnataka as per the MPCE distribution of NSSO 62nd Round, 2005-06). In the initial condition the poorest 20 % of this society earn Rs. 300, those between the 20 and the 80 % earn Rs. 500, and the top 20 earn Rs. 1000. Two growth patterns are considered: the first one satisfies the definition of absolute pro-poor growth and the second only the relative definition (although it is also an absolute pro-poor growth pattern). Several conclusions can be drawn from this simple table. First, if the poverty line is Rs. 350, we might not reduce poverty at all with our absolute pro-poor strategy. Second, the overall growth rate in the column A is significantly more than column B, yet the effects on poverty might be non-existent. Third, inequality (indicated by the ratio of top 20% income to bottom 20% income) dramatically increased in column A by around 36%, but it was reduced, by 27%, in column B. Advocates of the absolute pro-poor growth definition might, however, say that the poor are better off in both cases as their incomes have gone up.

Moreover, there is a clear difference between these two cases: the welfare of the better off is not affected in any substantive way in either column, whereas for those in the bottom of the distribution it might be a matter of surviving or being able to invest in basic education and health. A growth pattern similar to column B will have a larger impact if the main policy objective of national governments and international organizations is poverty reduction because the bigger is the share of any increment to economic growth captured by poor people, the faster will be the rate of poverty reduction.

Table 2: Absolute and Relative Pro-poor Growth Scenarios

<table>
<thead>
<tr>
<th></th>
<th>Initial income</th>
<th>Column A growth rate</th>
<th>Column B growth rate</th>
<th>Column A: absolute pro-poor</th>
<th>Column B: relative pro-poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom 20%</td>
<td>300</td>
<td>10%</td>
<td>50%</td>
<td>330</td>
<td>450</td>
</tr>
<tr>
<td>Mid quintiles (20-80%)</td>
<td>500</td>
<td>25%</td>
<td>25%</td>
<td>625</td>
<td>625</td>
</tr>
<tr>
<td>Top 20%</td>
<td>1000</td>
<td>50%</td>
<td>10%</td>
<td>1500</td>
<td>1100</td>
</tr>
<tr>
<td>Total income</td>
<td>1800</td>
<td>36%</td>
<td>23%</td>
<td>2455</td>
<td>2175</td>
</tr>
<tr>
<td>Overall growth rate</td>
<td></td>
<td></td>
<td></td>
<td>36%</td>
<td>23%</td>
</tr>
<tr>
<td>Ratio of bottom 20% to top 20%</td>
<td>3.33</td>
<td></td>
<td></td>
<td>4.54</td>
<td>2.44</td>
</tr>
</tbody>
</table>

Adapted from Fuentes 2005
The reality of how Karnataka has fared in terms of poverty reduction also points us to the problems inherent in aggregate (and largely, absolute pro-poor) growth policies. Even though the GSDP has grown at a CAGR of 6% between 1983-84 and 2004-05, poverty has reduced only at a CAGR of 2%, giving an elasticity of just 0.33. Figure 3 below highlights this low growth elasticity of poverty (0.33 for Karnataka) in the past 20 years of Karnataka’s development – it is very close to the country average (0.28) while neighbouring states like Kerala (0.80) and Tamil Nadu (0.67) have been better able to translate their economic growth into reduction in poverty.

Figure 2: Karnataka’s GSDP growth and poverty reduction between 1983-84 and 2004-05

![Graph showing GSDP growth and poverty reduction over years]

Source: Central Statistical Organization and Planning Commission, Government of India

(GSDP and poverty figures for successive years have been normalized using their corresponding 1980-81 values to eliminate scale anomalies; Y-axis represents these normalized values)

Figure 3: Growth elasticity of poverty in select Indian states (1983-84 to 2004-05)

![Bar graph showing CAGR of GSDP and Poverty Reduction, with Growth elasticity of poverty]

Source: Central Statistical Organization and Planning Commission, Government of India
In Karnataka, it is also important to note that the absolute number of persons falling in the bottom four MPCE classes, (which corresponds to roughly the population falling below the 30th percentile in the all-India MPCE distribution) has grown from 1.97 crore in 1993-94 to 2.39 crore in 2005-06 (see Figure 4) – at a rate (21.3%) higher than the overall population growth rate (17.5%) during the same period. Though MPCE figures capture only consumption, at low levels of consumption, they are accepted as a reasonable proxy for income and hence, the proportion of persons falling in the bottom MPCE classes is a proxy to indicate high deprivation levels of the people.

**Figure 4: Persons falling in the bottom four MPCE classes (corresponding to roughly those below the 30th percentile of MPCE in the all-India MPCE distribution)**

Source: NSSO 50th and 62nd Rounds

### 3.2 Growth-Employment-Poverty

It is argued that the starting point for any programme of sustained poverty reduction must be the expansion of an economy’s production potential, as determined by the growth of its labour force, accumulation of human and physical capital, and technological progress\(^{11}\). Only such an expansion can create the basis for sustained increase in the incomes of everyone, including the poor. For a while, of course, redistribution of existing income can help alleviate poverty to some extent; and to the extent that this is possible without seriously compromising the growth potential of the economy, redistributive measures should certainly be undertaken. But it is reasonably clear that sustained increase in the income of the poor must be underpinned by sustained growth of potential output.

Given any shift in the production potential, the next parameter that has a bearing on the income of the poor is the extent to which growth in output expands the scope for improving the quantity and quality of employment – in short, the employment potential. The greater the expansion of employment potential, the greater the opportunity for reducing underemployment and raising the returns to labour – the two proximate causes of poverty (ibid.). The growth elasticity of employment potential is therefore an important intermediate variable that shapes the extent to which the growth of the overall economy translates into higher incomes of the poor (*Box 4 looks at how Indonesia’s higher growth elasticity of employment potential has translated into significant reductions in poverty*).
Box 4: The Employment nexus between Growth and Poverty in Indonesia

Indonesia entered the rapid growth phase in early 1970s. In the following three decades, GDP grew at the rate of 6.3 per cent, entailing a per capita GDP growth of 4.4 per cent. (This performance has of course been marred by the sharp economic decline that occurred after 1997 when Indonesia was hit by the Asian financial crisis.) Considering only the pre-crisis period, the economy grew at the average rate of over 7 per cent during 1970-1997, with per capita growth rate of nearly 5 per cent per annum. Such a sustained expansion of the economy over a period of nearly three decades has helped transform Indonesia from a poor economy to a relatively prosperous middle-income country.

In terms of economic policies, the period of growth can be split up into two parts – before and after 1985. Up to the mid-1980s, the driving force behind overall economic growth was rapid expansion of the agricultural sector, followed by a construction boom and import-substituting industrialisation. In the second half of the growth phase (1985-1996), Indonesia adopted the strategy of economic liberalisation and outward oriented industrialization.

Indonesia maintained a high rate of poverty reduction for more than two decades since the early 1980s by adapting its growth strategy to the changing structure of the economy. In the early stage of development the strategy of import-substituting industrialisation was complemented by a major thrust in agriculture and rural development in general. The strategy paid rich dividends in terms of both growth and poverty reduction. In particular, it resulted in an all-round increase in the demand for labour leading to a rapid rate of poverty reduction in all sectors of the economy, even though the strategy of industrialisation by itself was not capable of reducing poverty much beyond the urban sector. Poverty came down initially through reduction in unemployment and subsequently though increase in real wages.

As the strategy of balanced growth became unviable with the dissipation of its oil wealth, special emphasis was given to the strategy of outward oriented industrialisation. This strategy ushered in the process of Lewsian transition, drawing in surplus labour from agriculture in increasing numbers. So long as surplus labour existed, poverty reduction occurred primarily through growing employment in manufacturing where wages were higher than in agriculture. When the surplus labour got exhausted, in the early 1990s, poverty reduction occurred primarily through higher wages.


Of course, a high elasticity of employment does not necessarily entail higher incomes of the poor. All it does is to allow the working population as a whole to reduce their unemployment and underemployment and raise their returns to labour. In short, it expands the opportunities, generally. There remains the question, however, whether the poor are able to take this opportunity or whether it is grabbed mainly by the non poor workers, or even whether the opportunities are seized at all. Much depends on whether the poor possess the capabilities that will enable them to integrate fully into the workings of an expanding economy. These capabilities are primarily at the level of skill and associated endowments of the poor and whether they are consistent with the requirements of the increased employment opportunities. Most of the poor in traditionally agrarian societies are employed in the primary sector and unless their existing skills are upgraded through adequate training, their employability in other expanding sectors would remain a concern. Alongside improvements in skill-sets, there are other important issues like proximity to the new centres of employment, that require attention if the poor are to exploit the benefits of a high growth elasticity of employment potential. In their absence, this high elasticity translates to increasing inequalities and manifestation of regional and other social dimensions (e.g., feminization) of poverty.
Labour transition lags structural transformation of the economy

While Karnataka’s GSDP has consistently grown at a healthy rate of 6% between 1983-84 and 2004-05, this has not translated into an equally impressive growth in its employment potential. Moreover, while the share of the state’s income has been shifting away from the primary sector, the employment potential of the growing industries and services sectors has not been impressive (see Figure 5 below). Even though agriculture contributes only 18% to GSDP, there are still 61% workers dependent on agriculture for their livelihood which points to problems like underemployment and low returns to labour for a large proportion of the labour force of the state. Moreover, agricultural productivity in Karnataka has not seen any appreciable improvements (almost one-fourth of the total cultivable area in Karnataka is under ragi, bajra and jowar; however, increase in their yields over the past 50 years has been at a CAGR of only around 0.6%, 1.1% and 1.8% respectively) which has contributed to a low growth rate in the preceding few decades (0.8% between 1993-93 and 2004-05). This has meant that a large proportion of the population has remained trapped in a low productive employment.

Figure 5: Shift in sectoral composition of Karnataka’s GSDP and sectoral share of employment between 1993-94 and 2004-05

Tiffen’s model explaining the impact of growth on labour in an economy, illustrates a symbiotic relationship between labour in agriculture and other sectors. Typically, labour transition lags the transformation in the structure of the economy. In an agro-centric economy, almost all labour is absorbed in producing food for household/local consumption at low levels of productivity. Tiffin contends that many countries in sub-Saharan Africa are in this phase. In the transitory phase, labour is released gradually to growing non-farm rural, and labour intensive industrial and services sectors instigating a virtuous cycle of increase in incomes and diversification in demand for agricultural goods, and increasing purchasing power due to higher expendable incomes. However, the pace of transition of the economy (due to faster growth of industry and services sectors) outpaces the rate of labour transition, creating a gap that causes disparity in per capita output across sectors. In India, as well as Karnataka, this phase of transition is well on its way. As manufacturing and services sectors increase in productivity and incomes, labour moves to these sectors resulting in capital intensification of agriculture, as has occurred in more developed countries.
The practical applicability of this model is exhibited through some examples. Countries like Korea and Malaysia also had a predominantly agricultural economy and employment in the 1960s: Korea’s agriculture contributed to 43% of the GDP and 63% of employment in 1963, this has shifted to 3.4% and 7.9% respectively in 2005; Malaysia’s agriculture contributed to 28% of the GDP and 59% of employment in 1965, this has shifted to 8.2% and 13.3% respectively in 2005. These countries have rapidly been able to align their employment structures to the shifting nature of GDP composition (see Figure 7) and this is what the state should also aspire for.

Figure 6: Typical lag between labour and economic structural transition

The practical applicability of this model is exhibited through some examples. Countries like Korea and Malaysia also had a predominantly agricultural economy and employment in the 1960s: Korea’s agriculture contributed to 43% of the GDP and 63% of employment in 1963, this has shifted to 3.4% and 7.9% respectively in 2005; Malaysia’s agriculture contributed to 28% of the GDP and 59% of employment in 1965, this has shifted to 8.2% and 13.3% respectively in 2005. These countries have rapidly been able to align their employment structures to the shifting nature of GDP composition (see Figure 7) and this is what the state should also aspire for.

Figure 7: Transition of Employment Structure in Korea (1963-2005) and Malaysia (1965-2005)

Source: Bank of Korea, World Bank, Dept. of Statistics and Economic Planning Unit, Government of Malaysia
4. CROSS-CUTTING THEMES

Through the preceding discussions, it has been noted that economic growth, in itself, should not be the only focus of development policy, especially when the primary objective is reduction in poverty. It was noted earlier that a decent economic growth rate of around 6% has not translated into a commensurate reduction in poverty during the last few decades in the state of Karnataka. Of late, national and international policies have witnessed a growing influence of the human development paradigm, made popular largely by the United Nations Development Programme (UNDP) through its system of annual human development reporting. India and Karnataka have also followed this trend and have come out with human development reports in recent times.

Human development shifts the focus of policy making to people and advocates increase in people’s substantial freedoms as the primary objective of development. While economic growth is still relevant, it is equally important that this growth benefits all the people, especially those who find themselves marginalized from ongoing development interventions. In this sense, it is not enough to look at growth policies that merely result in an absolute gain to the poor but reorient policy making to ensure that the growth is equitable and the rate at which the poor gain is more than the rest of the population. To ensure that the poor gain more out of any aggregate growth in the economy, their incomes need to grow simultaneously and this can happen if economic growth policies are sensitive to the existing capabilities of the poor and does not lead to a net negative effect on their opportunities. Moreover, while a sustainable poverty reduction programme requires an expansion of the economy’s production potential, it is important that this translates into an increase in the employment potential, especially for the poor. This not only necessitates attending to capability enhancements of the poor in terms of their skills, education and health, it also requires a policy environment which makes it easier for the poor, with their rather limited economic, social and political endowments, to integrate themselves with the shifting nature and composition of employment opportunities (livelihood/earning/etc?). In Karnataka, most of the poor are trapped in traditional occupations like agriculture which offer low returns to their labour. In order that they are able to make a transition to a higher productive sector or even increase productivity within their existing occupation, they need to be equipped with adequate skill sets and familiarized with the shifting nature of technology and product/industry value chains. Along with capability enhancements achieved through education and skill development of the workforce, development policy should encourage creation of employment opportunities in the growing sectors which can offer higher returns to labour of this workforce.

Environmental sustainability is repeatedly being drawn into recent models of development because of its bearing on the capabilities of present and future generations. From a human development perspective also, the environment dimension requires special attention since its degradation in recent times has shown to erode capabilities of people, for example, when agricultural yields have stagnated due to reduced soil fertility resulting in increased vulnerabilities of the farming community.

While arguments continue to rage between the advocates of state and market oriented models of development, it is the hybrid model where both the state and the markets work in synergy that has demonstrated significant results when it comes to enhancements in overall quality of life of the people. The role of the state, therefore, continues to be important when it comes to development policy and programmes for poverty reduction through capability enhancements of the poor, and to leverage this, sound governance structures and systems are a necessity.

Given this background, a set of five cross-cutting themes are enlisted. These themes are expected to give direction and coherence to the process of identifying key focus areas and enabling strategies for the individual sectors. It will further help bind the sectoral objectives and targets to the overall vision of the state of Karnataka. A brief description of these cross-cutting themes follows.

1. Equitable Economic Growth
2. Creation of Employment Potential
3. Capability Enhancement of People
4. Environmental Sustainability
5. Good Governance

4.1 Equitable Economic Growth

Aggregate growth has been looked upon as generating surplus resources for the economy which, it was assumed earlier, would trickle-down and alleviate poverty. However, this does not seem to have happened for many economies of the third world till now, where, in spite of increasing national incomes, large proportion of population still continues to reel under poverty. The focus is, therefore, shifting from merely growth maximization to also the composition of growth so as to ensure that its benefits are equally shared by the various sections of society. This in turn requires that economic growth gets fuelled by contributions from all social groups, especially the poor and presently marginalized. And, for them to participate, the growth process needs to be equitable and sensitive to their existing endowments – in terms of both the sectors and regions where growth needs to happen. This will ensure that while the economy grows, the various forms of disparities – regional, urban-rural, male-female, caste-based etc. – do not get exacerbated.

Such an approach, for example, would be sensitive to the fact that a majority of the workforce in Karnataka is still employed in agriculture and allied sectors and hence, any economic growth strategy will have to incorporate growth in individual incomes of the farming community, which has stagnated over the past few years (evident from output per agricultural worker which has hardly seen any increase – from Rs. 14,600 in 1993-94 to Rs. 15,000 in 2004-05; at 1999-00 constant prices). This will require that alongside the creation of local employment opportunities in industries and services sector (especially in those sub-sectors which are relatively more labour intensive like textiles, agro-processing, tourism, healthcare, urban services, transport and logistics etc.) to enable the transition of workers out of agriculture, sufficient focus is also given to agricultural research and extension services to enhance the viability of rain-fed agriculture in the state – this latter point assumes significance because more than 75% of the agriculture is rain-fed today, and even with a full realization of the state’s irrigation potential, rain-fed agriculture will contribute to almost two-thirds of the state’s cultivable area.

Only a broad-based growth strategy will ensure that social equality is not compromised. While looking at sector-specific issues, an effort would be made to ensure that this importance of distributional equity finds a reflection in suggesting growth oriented policies and measures.

4.2 Creation of Employment Potential

As shown in Figure 5 above, Karnataka’s structure of employment has not kept pace with the shifting sectoral composition of its economy. This means that a large proportion of its workforce, employed in agriculture, contributes significantly less to the state’s economic growth than the smaller proportion employed in industries and services. This misalignment in the nature of Karnataka’s growth has contributed to a low growth elasticity of poverty. If the growth in aggregate incomes has to contribute to reduction in poverty, it needs to translate into growth in individual incomes. This can happen if the growing sectors are able to create enough opportunities where the poor can be gainfully employed. This further requires that not only does growth happen in sectors where capital-intensity is high, e.g., heavy industries, but also in labour intensive sectors which have traditionally absorbed a large pool of labour force, like tourism, trade, transport and small scale/ village industries. Policy for incentivizing investments in these sub-sectors should be encouraged through favourable tax regimes, subsidized land and credit availability etc. The state should also ensure adequate provision of infrastructure in terms of good quality road/rail/port connectivity and energy to enable local economic development.

It is important to accelerate the movement of labour from a lower to higher productivity employment. This is intricately linked to the next cross-cutting theme of enhancing the capabilities
of individuals, so that they are better placed to exploit wider opportunities. Therefore, the sectoral shift in labour must be managed and accelerated to match the sectoral composition of the economy. Moreover, along with the shifting sectoral composition of GSDP, it should be ensured that labour-intensive sectors get adequate policy support even if it may mean a slight compromise with aggregate income growth in the short term (as brought out in Table 2).

4.3 Capability Enhancements of People

Proper health and education are amongst the basic capabilities that people require to lead a good quality of life and contribute meaningfully to the overall good of the society, which includes, among others, improvements in production potential, creation of a conducive environment for mutual coexistence etc. A healthy workforce is a pre-requisite for any increase in labour productivities and so adequate care should be taken to ensure that children and adults receive proper nutrition and live in hygienic surroundings. Additionally, quality healthcare facilities need to be easily accessible to the people to ensure that disruptions due to disease and illness do not go out of control. Disparities that currently exist amongst the various social groups and regions in terms of health indicators needs to be removed through better targeting of the health schemes. Relevant educational facilities should also be made available to the population to ensure that they are aware of existing and emerging realities – economic, social and political – and are well-equipped to handle and respond to them. The state has made impressive progress in terms of providing access to primary education mainly through implementation of the Sarva Shiksha Abhiyan. The focus now needs to shift to improving the quality of education and universalization of secondary education to reduce premature drop-outs from the educational system. The educational environment should particularly ensure that local realities also get factored in while designing curricular content and delivery mechanisms. Also, given that a large proportion of the workforce will require skill upgradation to move into higher productive employment, sufficient augmentation in capacity and strengthening of the vocational training institutions and delivery mechanisms will be required.

Moreover, in terms of both healthcare and education, it is extremely important to incorporate variations in existing endowments across social (including regional and age) groups and rationalize it through special focus on the marginalized sections.

The government needs to identify future growth sectors and create a conducive atmosphere for their growth. This implies that in addition to the formation of an appropriately skilled labour force through education and training, a comprehensive approach of supportive policies in infrastructure, and financial resources must be done concomitantly. All of this is expected to lead to overall improvements in productivity levels of the various factors of production—labour, capital and other natural resources.

4.4 Environmental Sustainability

It has been noted that all development is ultimately about expanding human potential and enlarging human freedom. It is about people developing the capabilities that empower them to make choices and to lead lives that they value. Environmental degradation and climate change threatens to erode human freedoms and limit choice, especially for the poor, through increased exposure to drought, more intense storms, floods and other environmental stress, which hold them back from building a better life for themselves and their children. Important components of human freedoms — and crucial ingredients of our quality of life — are thoroughly dependent on the integrity of the environment, including the air we breathe, the water we drink, the epidemiological surroundings in which we live, and so on and, therefore, development policy needs to be environment-inclusive. There has been a growing realization in recent times that the process of economic development has, in many circumstances, had destructive consequences on environmental sustainability — in Karnataka it shows up, for example, in depleting groundwater resources and deteriorating soil fertility across the state, degrading air quality and increasing
noise levels in urban centres such as Bangalore. These unfavourable effects need to be clearly identified and firmly resisted while charting a sustainable path for the state’s development.

A sustainable development should be able to meet the needs of the present generation without compromising the needs of future generations and from this perspective it is important that the ongoing trend of degradation in environmental conditions is reversed. Initiatives that promote sustainable economic development like use of a greater energy-efficient technology for industries and households, intensified reuse of materials and equipment, migration to renewable energy sources, more efficient use of natural resources etc. should be encouraged by the government through proper incentive structures.

4.5 Good Governance

The governance structures need to reflect the understanding that they exist to facilitate a good quality of life for people. This requires the existence of adequate mechanisms through which the views of the people can be captured and used to inform government policy and programmes. The existing democratic system ensures this, but only to a limited extent. In a society like Karnataka’s where large scale inequalities still persist, it is important to ensure that people’s involvement, especially of those who are poor and marginalized, is sought on a more frequent and routine basis, for example, even during the design, implementation and monitoring of development interventions. Karnataka has been a pioneer in terms of elections to local government bodies; however, there is still a long way to go to institutionalize their role in the overall development space. Many a times, these local bodies do not have the capacity to understand the complex requirements and procedures involved in a large-scale planning exercise, which needs augmentation in terms of finances and availability of trained functionaries for integrating them into the overall development apparatus of the state. The local bodies are also not immune to elite-capture and therefore, along with decentralization, efforts are required to enhance the general levels of social and political awareness of the people which will make these bodies more accountable in their activities.

When the people are kept regularly informed of the government’s plans and activities, in a language that they are able to comprehend, there is an increased possibility of both resource allocations reflecting actual needs of people as well as expenditures consistent with ground realities. This can also ensure a better leverage of the state’s, often scarce, resources. Ensuring transparency in the way governments function should, therefore, be looked upon as an extremely important factor in capability enhancements of people. The government can do this through periodically bringing out report cards/ status updates on various governance dimensions and development schemes incorporating inputs from various stakeholders. The National e-Governance Plan provides for an elaborate ICT infrastructure in all the states right up to the gram panchayat level and this can be leveraged to keep the citizens informed about the financial and physical progress, allocations and expenditures on schemes etc.
5. Conclusion

The analysis presented in this document points to the problems inherent in the model of development that Karnataka has been pursuing in the past few decades. Although the state’s GSDP growth figures compare well with other states of the country, this can not be said about its track record in terms of poverty reduction, which is desperately in need of more concerted efforts. Increased misalignment of the state’s sectoral composition of GSDP with its structure of employment is a major reason why a relatively impressive performance in increasing aggregate output has not translated into commensurate growth of individual incomes, particularly for the poor. This is showing up in growing disparities amongst various sections in the society, for example between those employed in agriculture and services, as well as between the backward and forward regions of the state.

The existing situation in the state requires focussed efforts at enhancing individual capabilities, in line with the human development approach, which has become increasingly relevant in national and international development landscape. While aggregate economic growth continues to be significant, it is but one of the many complementary policy clusters required to ensure that people enjoy a good quality of life. The composition of this growth – in terms of its distribution across sectors and various income and social groups (which reflects a sensitivity to existing endowments of the poor) – is equally important. Moreover, if people employed in traditional occupation are to move out of poverty, adequate transition mechanisms need to be created through easier availability of appropriate education and skill development training opportunities. Whether the poor are able to leverage these opportunities is further contingent on proper investments to improve facilities in healthcare as well as other physical infrastructure like roads and energy in the state.

Based on the aforesaid understanding of Karnataka’s development problems and possible approach for course correction, a set of five cross-cutting themes – equitable economic growth, creation of employment potential, capability enhancement of people, environmental sustainability and good governance – have been identified in this document. The state’s policy environment needs to incorporate these themes as the basis for charting a future development path to contain large-scale deprivation and disparity in its society. The subsequent set of sectoral enabling strategy documents (KD6) will ensure that this understanding percolates through while drafting individual sector concerns and development priorities.
REFERENCES