

EMPLOYMENT POLICY
OF
ASSAM

DEPARTMENT OF LABOUR
GOVERNMENT OF ASSAM

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PREFACE

Responding to the Vision of the Honourable Chief Minister of Assam to guide the existing and emerging workforce in the state ensuring inclusive and equitable engagement, a Policy Guideline for Employment generation was envisaged. Thus, the First Employment Policy for Assam is evolved. The processes for developing this Policy document have been based on extensive research, consultations and inter- departmental deliberations which fructified in the finalisation of the Employment Policy for Assam.

The theme of the Employment Policy is rooted in the current global and national perspectives in Labour Market to optimise the economic outcomes associated with employment. Moreover, employment generation or creation is expected to be inclusive and targeted towards perceptible improvements in Quality of Life, rather than engagement in the labour market at sub optimal levels. Thus, the Labour market can no longer be viewed as a naturally evolving phenomenon. In order to ascertain the avowed objectives of equity and inclusiveness, appropriate guidance and policy support is necessary.

Evidently, in depth research on the current Labour Market, depicting the sectoral distributions and temporal trends was the priority area of the Policy document. In this pursuit, I have also prioritised the need for analysing the schemes/ opportunities available through different Government Departments as they are providing significant inputs in shaping the Labour market.

The Government of Assam acknowledges the valuable and sincere efforts of Shri. Shiladitya Chowdhury, who has been instrumental in conceptualising and developing the analytical framework of the report. He has been engaged since the inception of the formulation of this policy document and has diligently contributed till its finalisation. The Government is also thankful to Shri Veebish, E.M. Assistant Director and Shri M.N. Deka, Superintending Officer for providing support to Shri. Chowdhury.

The Government of Assam also acknowledges the useful and significant contributions made by Dr. Somnath Basu, UNICEF for working on the overall policy framework of the document and his ceaseless association with the development & preparation of the report.

Acknowledgements are also due to Smt. Farzana Samsul, Assistant Employment Officer, Directorate of Employment & Craftsmen Training, Assam and Shri Partha Sarathi Dhar, Junior Assistant, Directorate of Employment & Craftsmen Training, Assam for collection and collation of various inputs from various sources. They have also contributed significantly to data analysis and report writing.

I hope this document will serve the purpose of developing an enabling environment for employment generation and bringing in the improvements in quality of life of the workers of the state. This is the First Policy Document for Employment in the state. Policy makers and practitioners are expected to make full use of this document and improve its potential for better application in the future.

K.K. Mittal

Principal Secretary to the Government of Assam,

Department of Labour and Employment

Executive Summary

The Employment Policy of Assam has been documented with a view to provide a framework for planning and policy formulations in guiding the emerging employment scenario in the state. The foundation of the Employment policy is embedded in a *Vision Statement* that in line with the Government of India aims to provide decent working conditions and improved quality of life of workers. It also aims to ensure that child labour does not exist in hazardous sectors and provides for enhancing employability through employment services and skill development on a sustainable basis.

The Employment Policy delineates clear guiding principles pertaining to an inclusive framework wherein the marginal section of the society, the poorest of the poor and women are appropriately mainstreamed within the labour market. The bottom line is not limited to access employment or work but to create adequate income generation so that the quality of life of the incumbent is improved in a significant manner.

This document has 5 sections. The first section describes the national guidelines and the principles followed by the Department of Labour, Government of India in deriving the Results Based Framework for the Labour Market in India. It also discussed national trends in employment, in different sectors and future projections and its implications. The first section thus forms the basis for developing the document analysing specific employment scenarios in Assam.

National demographic projections indicate that the proportion of population in the working age group will increase to 64% by 2021 from 58% in 2001. This “bulge” in working population, popularly termed as “population dividend” can be a huge economic advantage if they are trained and guided to enter the employment market in a meaningful way. Assam having similar demographic trends, as the national scenario, will be faced with similar challenges to plan and implement employment generation policies that can optimise the economic advantage of the state.

The second section presents the employment scenario in Assam based on the analysis of NSSO employment data (50th, 55th and 61st rounds). The analysis indicates that about 89% of employment in Assam is in the unorganised sector. In rural areas about 74% of the workforce is in the Primary sector, though interestingly the tertiary sector employment in rural areas has increased from 17% (1993-94) to 23% (2004-05). In the Urban sector, predominance of tertiary sector is manifested by 84% employment in the sector. Between 1993-94 and 2004-05, both Labour Force Participation Rate and Workers Population Ratio in Assam have increased as is the case at the national level. It has also been noted that occupational mobility in Assam is very low and as good as stagnant, i.e., there have been very few people who have changed their establishment, status, industry or occupation (with reference to 2004-05 data considering two previous years).

A comparative analysis of GDP Growth vis-a-vis Employment Growth has indicated confusing trends; however, the general scenario of high disguised unemployment typical of a low productivity economy is aptly reflected by the fact that only 1% GDP growth in the agriculture sector has triggered 12% growth in employment.

Elasticity of employment to GDP across sector in Assam indicates that excepting for some sectors such as Manufacturing (0.07), Electricity (0.39) and Transport & Storage (0.15) in most cases elasticity is close to unity; signifying lower employment intensity. Elasticity is however close to unity in the agriculture, construction, mining and service sectors. It may be noted that while in agriculture there is surplus employment, it will continue to account for the additional labour force (in the form of disguised employment) in future times to come. Construction, mining and service sector on the other hand has potential for employment growth.

Thereafter, an analysis of 3 different scenarios having differential growth rates of 5.5% (baseline), 8% and 10% has been considered to project employment outcomes in Assam. The analysis indicates that Assam will achieve full employment by 2015 if the labour force increases at the rate of 1.5% and the economy is growing at the rate of 10%.

The third section contains a detailed account of sectoral employment policies, the basic features of every sector, potential of growth and employment. It also has a detailed account of the inputs required for promotion of employment in different sectors, in terms of skill development, investments, development of infrastructure and broad policy framework related to macro level policy discussions. Suggestions ranging from credit support for individuals to sectoral investments have been elucidated in this section. One critical component of the third section is given in the framework for data collection for the employment sector. While analysing employment data in the second section confusing projections were recorded; this could not be rationally explained. It was apprehended that the quality of data was not adequately satisfactory and hence the stress on appropriate methods for data collection followed by concurrent Monitoring and Evaluation has been suggested.

The fourth section, presents a framework for Monitoring and Evaluation of the Policies that are suggested to be implemented. This M&E framework suggests generation of a concurrent database on various parameters of the employment sector that needs to be documented accurately and also analysed periodically to ensure that the policy prescriptions are moving in the right direction.

Finally, the fifth section attempts to construct the "Way Forward" which has been presented broadly in two sub sections; firstly, a unique documentation of employment generation schemes of all government departments have been collated. Secondly, a Plan of Action matrix indicating key policy measures to be adopted across different sectors has been developed. It is worthwhile to mention that different government departments are implementing extremely significant and high value employment generation schemes, at times with a view towards poverty alleviation and in many cases to support economic viability of certain sectors (handloom, fisheries). There are also cases of Governmental interventions to boost trade (tourism, inland water transport) and at times interventions for general promotion of sectoral outputs (Diaries, Horticulture, etc.). However, if this entire gamut of employment generation in terms of financial allocation/ resources, employment generated and associated productivity of the sectors is presented in a single canvass, an colossal scope to generate inclusive employment in tandem with improvement in quality of life is strongly manifested. Unfortunately, the information, activities and policy prescriptions of different departmental schemes are widely scattered and disconnected. Any effort to institutionalise a single platform for information on employment generation through different

departmental schemes may be a path breaking initiative towards planning for the labour market.

Given that astronomical resources are being dedicated to employment generation through different departmental schemes, every attempt should be made to ensure that the resources are better managed. This can be achieved by attaining specialised knowledge of the labour market and services to ensure sustainability to the schemes. A monitoring mechanism will very well develop an inventory for the State on attributes of the labour market (unemployment, availability of skilled/ unskilled labour, wage rate, etc.), potential of sectoral growth, availability of credit, etc. and provide specialised guidance to implement different departmental schemes.

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Section 1: National Perspective

While interventions to improve the social and economic well being of the population has been a central concern of the development sector, a policy to address the employment scenario becomes imperative to ascertain that the population is also having equitable access to the opportunities that are emerging in the economy. The concern is not limited to generate employment, but to ensure that employment leads to improvement in quality of life and has lasting impact on overall human development in the society.

Given that a large section of the employment market is unorganized, a guiding framework for protecting the rights of the workers becomes imperative. The Results Framework Document (2010-11) of the Government of India has delineated the Government's Vision to achieve – “Decent working conditions and improved quality of life of workers, ensuring India without child labour in hazardous sectors and enhancing employability through employment services and skill development on a sustainable basis”.

The current Employment Policy is being formulated, keeping in view the above Vision, taking into cognizance the national framework and then incorporate state specific issues corresponding to the emerging employment scenario, demographic trends, and existing & potential resources. Similar to the principles enshrined in the National level Annual Report to the People on Employment, the State Employment Policy has adopted an inclusive approach that takes into consideration the general employment market as well as targeted approach to address the needs of special categories.

This document has five sections. In the First section, a summary of the national perspective is presented. In the context of the national perspective, the Second section analyses the employment scenario in Assam, focusing on temporal trends in different sectors as well as analysis of the current scenario in the context of social and economic development in the state. The Third section depicts a canvass for rolling out the employment policy. Section Four deals with the Monitoring and Evaluation of the proposed policy which is an essential component for policy. Finally, the Fifth section presents a summary of existing employment opportunities in different sectors, supported by respective Government Departments and presents a detailed roadmap for employment generation elucidating existing opportunities that can be explored and interventions required to facilitate equitable and inclusive employment.

The National Perspective

The national employment policy of the Government of India has an all encompassing perspective to achieve productive employment generation that takes into account the national agenda for inclusive growth. In India, the growth in employment has not been commensurate with the impressive double digit economic growth rate and the limited trickle - down effect of the economic activities/ opportunities to the lower levels has been a matter of concern.

The overall framework of the national economic policy aims to induce a mechanism of distributive justice in the employment market in order to ensure inclusive growth. Hence, the Government of India has taken special measures to identify excluded groups to include them in the labour market.

Noticeably, the proportion of population in the working age group (15-59 years) is slated to increase from 58% in 2001 to 64% in 2021 (Census projection reports). Between 2011 and 2016 an additional 63.5 million persons will be entering the category of 15-59 years with the bulk of increase happening in the relatively younger age group of 20-35 years. This population “bulge” in the working age groups is being viewed as a distinct national advantage and is popularly termed as “demographic dividend”.

Estimates of employment in India are quite complex, given the nature of labour market which is seasonal and has varied types of engagement of labour even within a working season. Thus, the definitions of employment are also quite complex (usual status, current status etc.). In 2004-05, the labour force varied from 385 million (as per Current Daily status) to nearly 459 million (as per Usual Principal and Subsidiary status). The variation is due to the fact that there are several *forms* of employment that needs to be defined exclusively to depict the characteristic of the labour market that has intrinsic implications on the well being and quality of the life of the working population. Obviously, the more comprehensive engagement in work ensures better standard of living, but nonetheless, other forms of engagement in the labour market needs to be accounted for to decipher the nature of irregular employments that can be converted to sustainable opportunities.

The participation of women in the workforce, a key parameter to depict the development index of nations, in India has been typically low (25 to 30% in rural

areas and 15 to 18% in urban areas). It is envisaged that women are engaged in several activities that do not get accounted for as gainful employment. Hence, the Government of India also feels the need of re-defining “economic activity”.

Employment and Unemployment Situation in the National Context

A comparative analysis of employment data available for the periods (a) 1983 to 1993-94 and (b) 1993-94 to 2004-05 indicates that for the first period the employment growth rate was 2.06% compared to 1.87% during the later period. However, it was encouraging to note that the growth in employment was particularly brisk during the early part of the current decade that coincides with the high economic growth rate (6 to 8%) at the national level. It may also be pointed out that the growth in employment was higher in the urban areas compared to the rural areas. Secondly the highest growth in employment has been recorded amongst the urban female category compared to the other three segments, namely, rural male, rural female and urban male.

Measures of unemployment are again a complex enumeration wherein “open unemployment” and underemployment status are considered by way of depicting the working status of individuals as per definitions of usual status. It has been noted that at the national level (2004-05), unemployment is higher in urban areas and more so amongst urban female in the age group 20 - 24 years. In rural areas as well, higher unemployment is recorded in the age group 15 – 24 amongst both male and female. The labour force for 2009-10 is estimated to be 520 million. This figure has been extrapolated considering the current growth rate of employment (adding 10 to 11 million persons per year) to 2014-15, wherein the labour force has been estimated to be 574 million. It has been estimated that the labour force at the national level must grow by 2.5% in order to achieve the target of 574 million persons by 2014-15 and in the process address the problems of open unemployment and under employment.

Quality of Employment

It is worthwhile to note that while the highest estimate of unemployment is 8.3%, the government estimate of poverty (2004-05) has been around 28%. This indicates that while people are employed they remain poor and often under the poverty line. The bulk of employment in both urban (45%) and rural (60%) areas has been in the category of “Self Employment”. This has been corresponding to decrease recorded in the category of “Casual Employment” in both rural and urban areas. In other words,

people have shifted from Casual to Self Employment at very low wage rates. Regular wage employment, which is the most sustainable option, has remained constant at about 7% in rural areas and 40% in urban areas. The challenge therefore is to enhance the skill of the labour force to enter the “Regular Employment” category particularly in the rural areas.

The Casual Workers are the most disadvantaged with insecure working contracts and low wages. In 2004-05, average wage for Casual work in rural areas for the males was Rs. 55 and for the females was Rs. 35. In the urban areas the wages were Rs. 75 and Rs. 44 for the males and females respectively. The rural casual labours (mostly agricultural labourers) form the single largest segment in the total workforce in India – characterized by low wage rate and also gender bias. Thus, despite higher employment rates, most people in this category remain poor. Thus policy measures are warranted to (a) enhance labour productivity and (b) introduce employment generation programmes to target open employment and under employment. Raising the wage levels of casual workers both in agriculture and non agriculture needs adequate policy attention, both in terms of securing the interest of the labour through stricter enactment of Minimum Wage Act and targeted employment generation.

Given the predominance of the unorganized sector in employment in India and that future growth in employment is also expected to happen in this sector, it will be important to introduce policy measures to ensure safe and decent working opportunities with adequate earnings.

Inclusive Employment Policies and Social Security Measures

The Government of India, as mentioned before is also focusing on addressing the socially excluded communities that are not very well represented in the national workforce. For instance, only about 6% STs and 12% SCs, OBCs and Minorities are regular workers as against 24% among others. The gender bias has been mentioned in the previous section.

The Migrant workers are another disadvantaged section. Inter district and interstate migration is high and growing, primarily corresponding to rise in urban unorganized economy. It is good to note that Child Labour has decreased from 5% in 1993-94 to 3% in 2004-05.

The NSSO survey of 2004-05 has also noted that Regular employment is lower in the poorer states. Assam falls in the category where only 10%-15% of Total Employment is Regular Employment.

In order to address these gaps, Active Labour Market Policies (ALMPs) are warranted. The employment generation programmes such as NREGA, Prime Minister's Employment Generation Programme (PMEGP), Swarnajayanti Gram Swarajgar Yojana (SGSY) and Swarna Jayanti Sahari Rozgar Yojana (SJSRY) have tremendous potential to address all the identified gaps in the employment market, including addressing supplementary incomes, inclusive employment and filling in the gender gaps. This has to be supplemented by Social Security measures such as:

- (1) Unorganised Workers Social Security Act 2008,
- (2) Rashtriya Swasthya Bima Yojana (RSBY),
- (3) Aam Admi Bima Yojana (AABY)
- (4) Indira Gandhi National Old Age Pension Scheme (IGNOPS)
- (5) Employees' State Insurance Corporation (ESIC)
- (6) Rajiv Gandhi Shramik Kalyan Yojana

Also it will be necessary to activate the provisions of the Employees Provident Fund Organisation (EPFO) and strictly implement the legal provisions available under the (a) Minimum Wage Act 1948, and (b) Contract Labour (Regulation and Abolition) Act 1970.

Skill Development and other Policy Issues

Finally, the low skill base of the Indian Economy has to be addressed. The NSSO data 2004-05 indicates that only 2% persons in the age group 15-29 years have received formal vocational training and around 8% are reported to have received non formal vocational training. This indicates that the larger proportion of youth population enter the employment market without any vocational training or in other words are unskilled. The present capacity for vocational training is for about 3.1 million persons, whereas an estimated 12.8 million persons enter the labour market every year.

The Government has taken various measures to address the need for skill development through the (a) PM's National Council on Skill Development, (b) National Skill Development Coordination Board and (c) National Skill Development

Corporation. The Government has also taken measures to upgrade 1896 Government Industrial Training Institute (ITIs). However, given the emerging global, national and local labour markets it would be extremely important to focus on the relevance of the vocational training that are offered in the ITIs. The Vocational Trainings should be tailored to suit the demand for labour and also there need to be substantial emphasis on quality of training.

The biggest challenge, however, is to link the incumbents with the labour market information. The people who are looking for employment are not informed about the employment opportunities and there is not much career counseling opportunities available currently. Employment Opportunities in present times are not limited to local markets and therefore the new entrants in the job market need to be better informed about the opportunities arising in the larger national universe. With time, the labour force should also be geared up to exploit global opportunities and therefore be prepared with the requisite skill sets.

To compliment the above factors, better enforcement of labour laws is required. The enforcement should be real and at the same time innovative, not restricted to “policing” of the employment conditions. The ultimate aim is to enhance quality and inclusive employment and make a positive impact on the overall labour market in the country.

Approach to Employment Planning: Situation Analysis

The approach to tackle unemployment has varied from time to time. In the initial years of planning process it relied primarily on the expectations of a rapid industrial development and subsequently on expectations that population growth will be limited. Therefore the planning process made no attempt to define an independent employment strategy; the overall economic growth was viewed as the ‘natural law’ for improving the employment situation. Thus, to start with, in the Five Year Plans, employment generation was viewed as part of the process of development and not as a goal to be pursued exclusive of economic development. These expectations did not materialize for various reasons. Seasons of severe drought and failure of monsoons exposed large sections of population to extensive deprivations. Successive plans, strategies, policies and programmes were, therefore, re-designed to bring about a special focus on employment generation as a specific objective. The seventies and eighties saw the emergence of special central schemes like NREP, RLEGP, IRDP,

etc. to provide wage employment through public works programmes and schemes to promote self-employment and entrepreneurship through provision of assets, skills and other support to the unemployed and the poor. While employment levels expanded steadily during the seventies and eighties, the rate of growth of employment continued to lag behind the emerging labour force. Unemployment among the educated showed a rising trend. Another feature of the employment situation is the sizeable proportion of the employed working at low levels of productivity and income. The eighties exposed the weakness in the then ongoing strategies of expanding public sector protecting it from competition.

Section 2: Employment Scenario in Assam

Background

Assam has experienced turbulent political scenario for more than a decade (particularly the 80s and the 90s), thus in the recent past the process developmental interventions in many sectors has been slow and inconsistent. With political normalcy restored since the past few years and improvements in the State's exchequer, investments and developmental interventions have experienced improvements. However, the State continues to be marked by low agricultural productivity, poor infrastructure, weak communications and nascent levels of industrial activity.

The growth of the national economy since the mid nineties has not really percolated to the region in general and Assam in particular. Being delinked from the national growth spectrum, the need for enhanced governmental interventions in social and economic development in the State has been recognized as a necessity.

It is also important to recognize the multi cultural fabric of the state, having diverse social groups, some being recognized under the sixth schedule of the constitution. This is coupled with the diverse landscape of the Brahmaputra valley and its catchment areas, characterized by difficult terrain, intermittently truncated by hilly and forest areas which has some of the most remote habitations of the country. Evidently, in order to address the need of varied population groups, any intervention strategy in the State need to be flexible to incorporate the complexities of the region both in terms of the socio-cultural mix as well as the constitutional framework in which they exist. The HDI Report 2004 has noted that the gap between Assam and the National average in terms of economic indicators has been widening since independence. The inter district inequalities are also quite significant¹.

1 In 1950-51 Assam's per capita income was 4.1 percent higher than the average for the country. By 1980-81 Assam's per capita income was 27 percent lower than the national average. By 1998-99 the gap had widened to 45.5 percent. Significantly, with the commencement of the process of liberalisation, and the concomitant process of modifying the role of the Government, the gap has appreciably widened. There is also inter-district inequity. The per capita income of the district with the highest income is more than three times that of the district with the lowest per capita income. In 1994-95, seven districts accounted for nearly half of the State Domestic Product the remaining 16 contributed the other half. The seven districts with the lowest per capita income accounted for only a seventh of the State Domestic Product. Kamrup district contributed almost a fifth of the State's GDP originating in the tertiary sector, and over a sixth of State's GDP in the secondary sector. At the other end of the scale, the North Cachar Hills district contributed 1 percent of the State's GDP in the secondary sector, and about 1.5 percent in the primary and tertiary sectors – HDI Report 2004

The HDI has further reported that the contribution of the primary sector to the Net State Domestic Product (NSDP) has declined from about 47.5 percent in 1980-81 to around 40 percent in recent years (2003-04). The primary sector however continues to be the largest contributing sector in the economy. The report has further indicated that the growth in the primary sector has averaged just about 2 percent in recent decades, the lowest amongst the three sectors. Despite the fact that agriculture accounts for only about a third of the State Domestic Product, it plays an important role in the economy, providing employment to 69 percent of the total work force. The HDI report has further indicated that urban unemployment in Assam is very high (9.8%; 1999-2000). It is also indicated that the rate of educated unemployed was more than the national average.

Demography, Health and Education

With a projected population of 30 million Assam has a sex ratio of 947 as per the Census 2001. The state is predominantly rural with nearly 87% of the population living in rural areas, the population mostly dependent on agriculture. The overall growth rate since the 1980s has been a little over 2 percent, not sufficient to generate surplus for investment, or create purchasing power in the rural sector to provide a market for local industries. As per the estimates of the Planning Commission (2001) nearly 36% of the population is below the poverty line. Nearly 6.85% of the population is SC while about 12.41% of the population belongs to ST communities.

Assam has shown marked improvements in its health indicators over the past 5 years with the percentage of Fully Immunized children increasing from 16% (DLHS 2, 2002-04) to 51% (DLHS 3, 2007-08) and Institutional delivery increasing from 23% to 35% during the same period². Currently Assam has an IMR of 56 and MMR of 480 and Total Fertility Rate of 2.6. The concern of child health is nonetheless manifested by the fact that nearly 40% of the children under 3 years of age is undernourished. Some of the key demographic and health indicators and the comparative figures at the national level is presented below:

² NRHM Assam

Table 1: Demographic and Health Indicators of Assam compared with National Figures

S. No.	Item	Assam	India
1	Total population (Census 2001) (in million)	26.66	1028.61
2	Decadal Growth (Census 2001) (%)	18.92	21.54
3	Crude Birth Rate (SRS 2008)	23.9	22.8
4	Crude Death Rate (SRS 2008)	8.6	7.4
5	Total Fertility Rate (SRS 2008)	2.6	2.6
6	Infant Mortality Rate (SRS 2008)	64	53
7	Maternal Mortality Ratio (SRS 2004 - 2006)	480	254
8	Sex Ratio (Census 2001)	935	933
9	Population below Poverty line (%)	36.09	26.10
10	Schedule Caste population (in million)	1.83	166.64
11	Schedule Tribe population (in million)	3.31	84.33
12	Female Literacy Rate (Census 2001) (%)	54.6	53.7

Compiled by MOHFW, Government of Assam website

An estimated 64% of the population is literate with more literate men (72%) than women (56%). The Gross Enrollment Ratio of the state is about 106 in Primary classes and 91 in Class VII and VIII. This further decreases to 44 in Class IX-X and 10.67 in Class XI and XII. This clearly indicates high percent of out of school children (5% in the age group 6-14 years) and low level of completion (for those who do not drop-out the chances of finishing school education is only 40%³). It may however be noted that during the nineties Assam has spent much higher than most states in elementary education⁴. The situation has improved since and currently with GER (Gross Enrollment Ratio) increasing to 137 for primary education and 97% completion rate the education scenario is showing a significant turn around.. Huge investments in building school infrastructure have also been a high point in the improvement in the Education scenario in Assam.

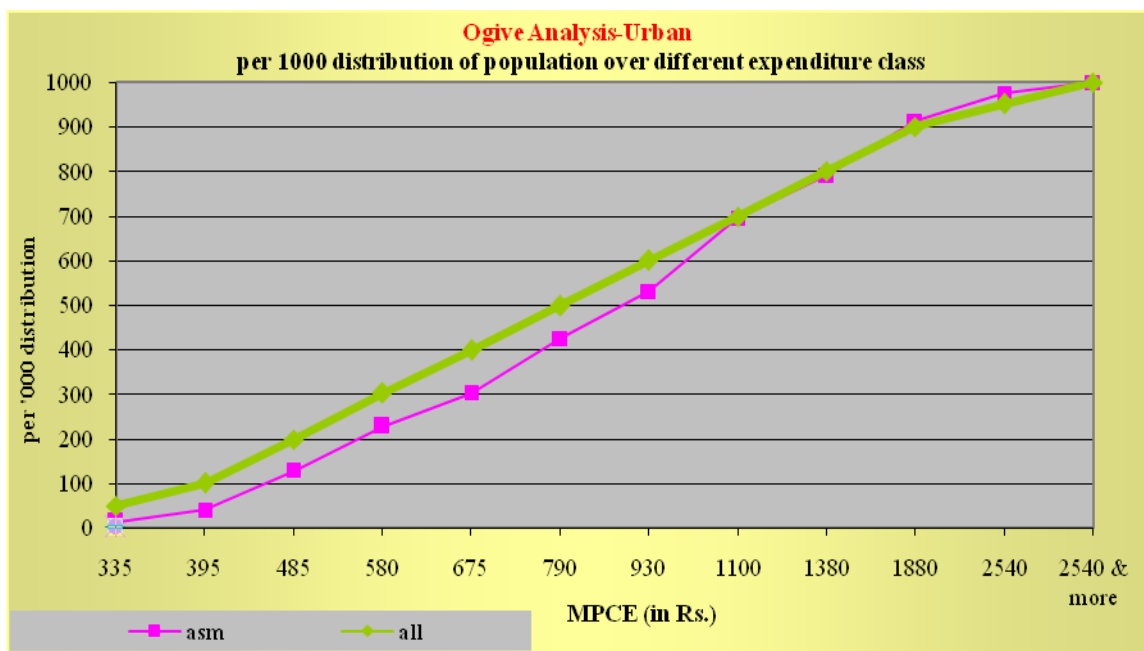
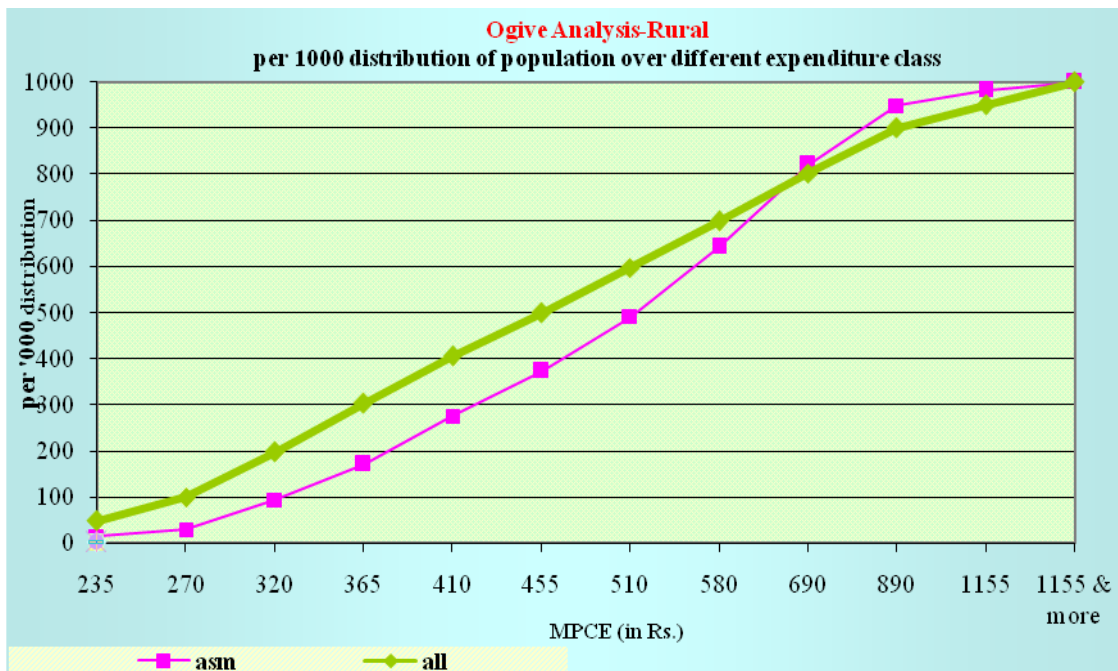
Poverty Scenario

In the NSS 61st round survey (2004-05) reports, detail analysis was carried out by classifying the population into 12 percentile classes (at 5%, 10%, 20%,....., 80%, 90%, 95%) of per capita monthly expenditure at all-India level, separately for rural and urban sector, which was necessary for analysis of survey results at the country level vis' a vis' the state of Assam

³ HDI Report 2004

⁴ Assam has spend about 3.5% of the State GDP on elementary education whereas most states spend between 1 and 2.5%

against the same set of MPCE classes. An Ogive analysis has been conducted to study the divergence of the distribution in Assam from the *all India MPCE percentile class distribution*.



If we look at the extreme end percentile classes in rural India, in the given figure above, we find that for the bottom 10 percentile class of the country (with Monthly per Capita Expenditure (MPCE) of Rs. 270 or less), the share of population in Assam was much less (2.9%). However at the higher end of the spectrum, was the top 10 percentile class- all India (MPCE more than Rs. 890), where 94.9% population of Assam enjoyed less than the stipulated MPCE level. It was interesting to observe that the poorer section of the people in

Assam had higher MPCE than their counterpart at the all India level in the rural area. On the other hand at the higher end the picture was somewhat opposite.

In the urban area, where the picture was somewhat similar at the top end of the spectrum (90.1% and 90% of population in Assam and in India respectively were below the MPCE level of Rs. 1880). At the lower end only 4.0% population was having MPCE less than Rs. 395 as against 10% at the country level.

Table 1.1 Population Share of Poorest and Richest states in the All India Percentile Classes (Rural)

	Population in the Bottom 10 Percentile Classes (i.e. MPCE ≤ Rs 270)	Population in the Top 10 Percentile Classes (i.e. MPCE ≥ Rs 890)
Assam	2.9%	5.1%
All India	10%	10%

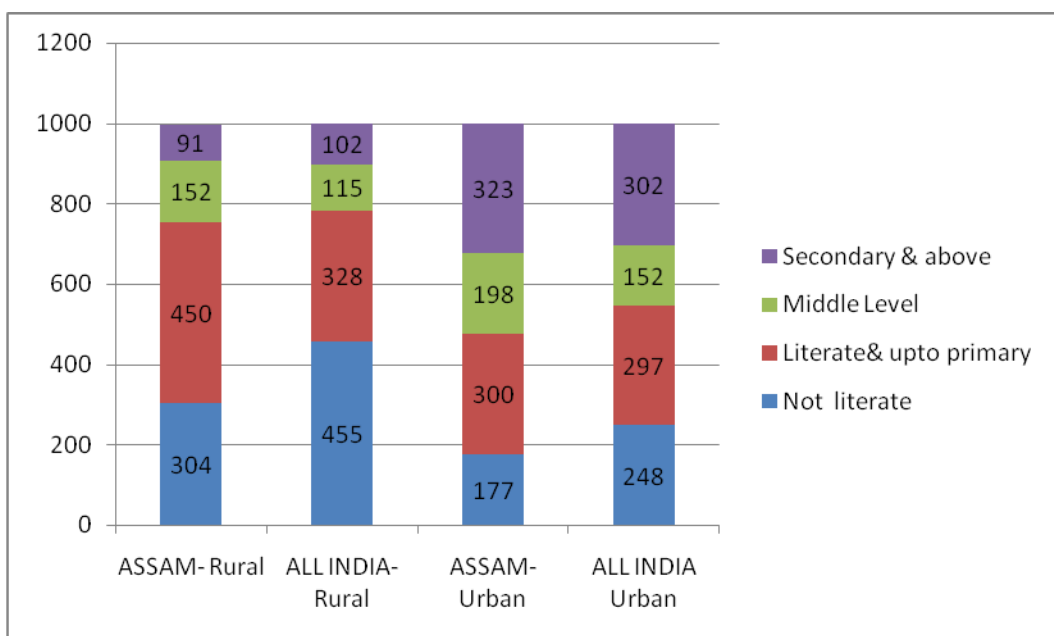
Table 1.2: Population Share of Poorest and Richest states in the All India Percentile Classes (Urban)

	Population in the Bottom 10 Percentile Classes (i.e. MPCE ≤ Rs 395)	Population in the Top 10 Percentile Classes (i.e. MPCE ≥ Rs 1880)
Assam	4.0%	9.9%
All India	10%	10%

Demographic Structure and Employability in Assam

As per the report of the National Commission on Population, 2006 the estimated population of Assam is about 30 million of which about 63 percent is in the age group of 15-59 with a fairly high (30%) young population in the age group of 0 – 14. The population growth rate has been estimated to be around 1.2%. The general education level of the state of Assam is better than the all India averages both in rural and urban sector. About 70% in the rural sector and 82% in the urban sector are literate.

Figure 1: Per Thousand Distribution of Population by General Education Level



Again, distribution of level of current attendance (per thousand population) among age group (5-14) shows that the state of Assam is way ahead of country's average.

Table 2: Per Thousand distribution of level of current attendance among age group 5-14

Categories	Male		Female	
	50th round	61st round	50th round	61st round
Rural				
Assam	758	875	726	868
All India	703	835	554	767
Urban				
Assam	820	900	807	843
All India	845	890	800	879

Note:

50th Round: (1993-94)

61st Round: (2004-05)

Composition of Employment

An assessment of socio economic scenario of the state and employment situation in terms of *time disposition* is very useful to understand the composition of the labour market. As per the results of the National Sample Survey conducted in 2004 – 2005, in Assam the composition of household types, classified according to their major economic activity, is as follows:

Figure 2A: Per Thousand distribution of Employment type in Rural Sector

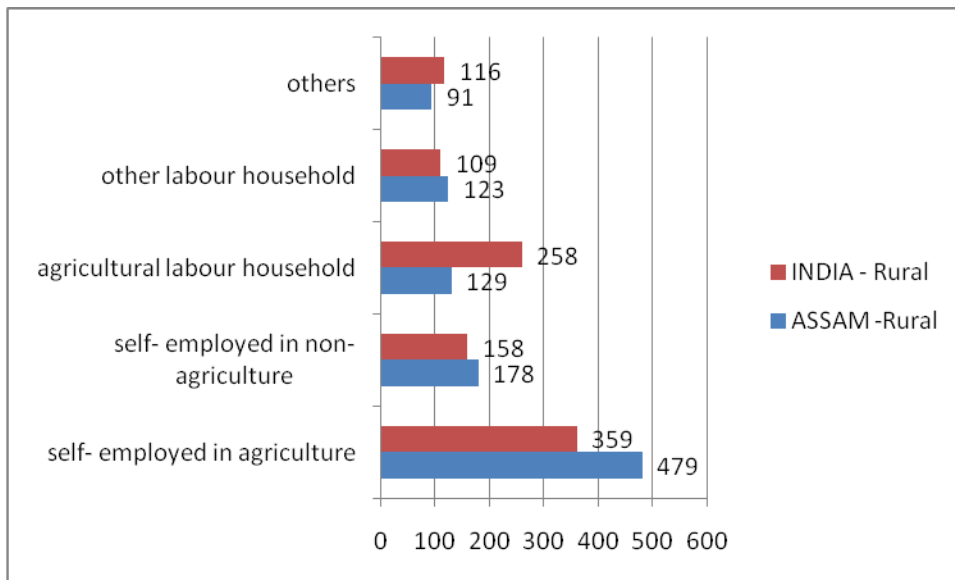


Figure 2B: Per Thousand distribution of Employment type in Urban Sector



In rural Assam about 66% of household are self employed, majority of the self employed are in agriculture (48%). Whereas in urban sector about 44% are regular wage/salary earner and about 36% are self employed. Casual labourers both in rural and urban sector are comparatively less. Land holding structure indicates that 61% are having small and marginal holdings and only about 6% are landless households.

At the outset, it may be pointed out that the composition of employed person in Assam is heavily tilted towards unorganised sector employment. Out of the total

employment of 10,493,692 about 89% of employment comes from the unorganised sector. The share of organised sector is restricted to only 11%.

Table 3: Composition of Employed persons in organised/unorganised sector

	Unorganised sector	Organised sector	Total
No of workers	9,326,192	1,167,500	10,493,692
% distribution	88.9	11.1	100

Source: 61st Round (2004-05) NSSO

The composition of the *usually working* population indicates that the majority of employment comes from the primary sector in the rural area. In the urban areas about 84% of the employed labour force work in the tertiary sector.

Table 4: Percentage of Usually Working Persons in the Principal Status and Subsidiary Status taken together by Broad Industry Divisions for Assam (NSS 50th, 55th and 61st Rounds)

Category of Employment	50 th Round	55 th Round	61 st Round	50 th Round	55 th Round	61 st Round
Sectors	Rural			Urban		
Primary sector	79.4	70.0	74.6	9.1	6.5	6.1
Secondary sector (Manufacturing)	3.5	4.0	3.1	10.4	7.2	9.8
Tertiary sector	17.1	28.1	23.3	80.4	86.3	84.1

50th Round: 1993-94

55th Round: 1992-2000

61st Round: 2004-05

Labour Force Participation

Labour Force Participation Rate (LFPR) for male in the rural areas is about 56%, in usual, weekly as well as daily status. This is more or less conforming to the national average. In the urban sector the male LFPR is about 59% which is higher than the national average. The LFPR for female as per the usual status is about 22% and as per weekly status 17%, which is significantly lower than the national averages. The LFPR for female in the urban sector is even more discouraging with only 12% as per the usual status category and 11% as per the weekly status category.

Table 5: Number of Persons in the Labour Force per 1000 persons (LFPR) according to Usual, Current Weekly and Current Daily status for Assam and India

Status	Male				Female				Total			
	Usual		Weekly	Daily	Usual		Weekly	Daily	Usual		Weekly	Daily
	ps	ps+ss			ps	ps+ss			ps	ps+ss		
Assam - Rural	556	564	555	542	123	216	165	128	353	401	372	348
all-India - Rural	546	555	545	531	249	333	287	237	401	446	418	387
Assam - Urban	582	591	586	579	93	120	110	99	344	362	354	345
all-India - Urban	566	570	566	561	148	178	168	150	366	382	375	364

Source 61st Round, NSSO, 2004-05

A comparison between 1993-94 (50th round of NSS) and 2004-05 (61st round) indicates that both LFPR and Workers Population Ratio (WPR) have increased in Assam for both rural and urban sectors. At the country level both LFPR and (WPR) remained constant in the rural sector; however perceptible increase has been observed in the urban sector for both the parameters.

Figure 3: Number of Persons in the Labour Force Per 1000 persons (LFPR) according to Usual, Current Weekly and Current Daily status

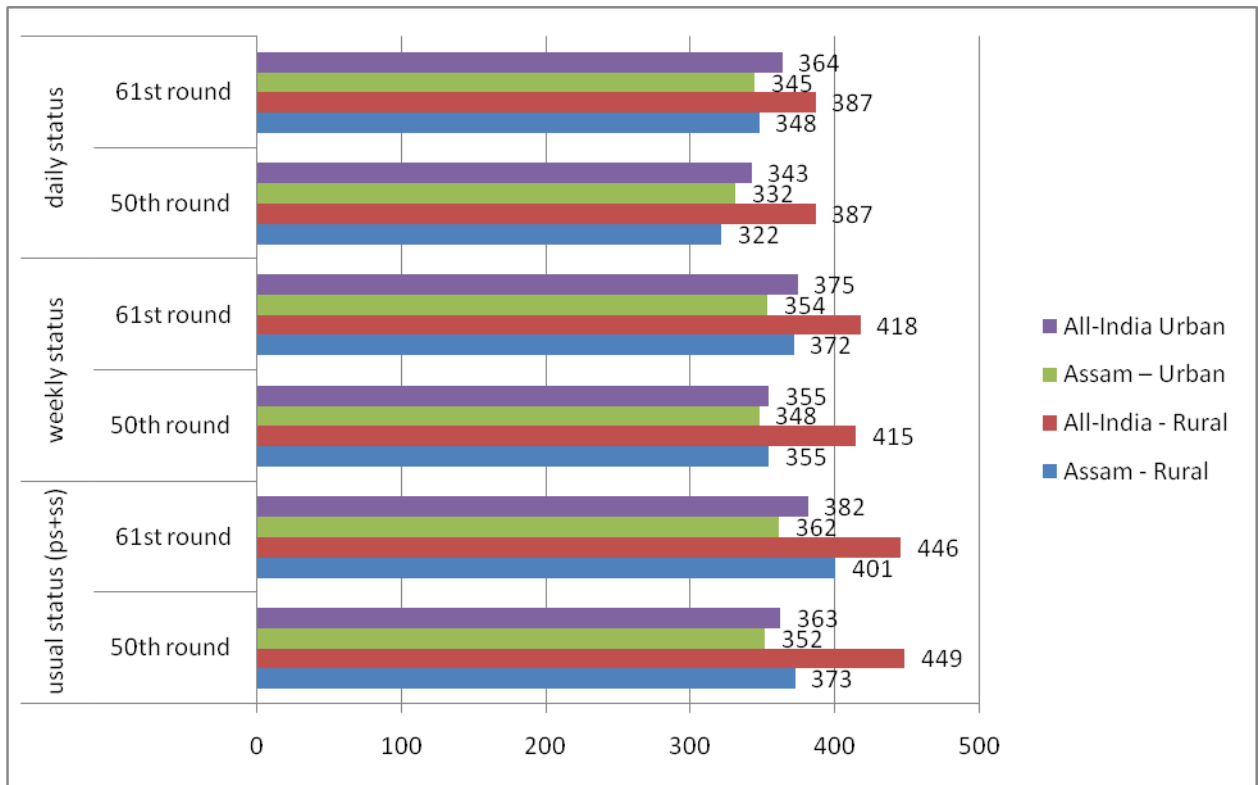
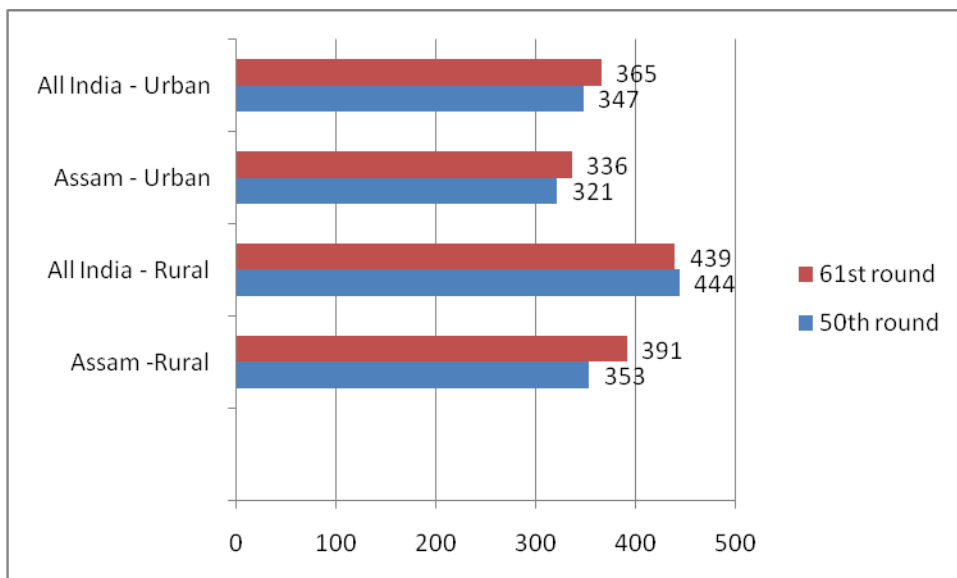


Figure 4: Per Thousand Usually Employed Persons (WPR)



Employment and Unemployment Scenario in Assam: Methodology

In India in general and in Assam in particular, since the agrarian sector has seasonal operations, **time disposition** and availability for work have been the criteria for measuring employment. The accepted method of measuring employment is the *usual status* of employment. Presently, however, the measurement of employment through *weekly status* is in vogue in the developed and many developing countries worldwide. In Indian states it is believed that frequent change of activity status and industry of operation does not take place in the labour market. Reliable estimates of employment/unemployment are generated through the country-wide detailed Sample Surveys conducted by National Sample Survey Organisation (NSSO) once in five years. The concept recognises time utilisation only. Quality of work or income does not get reflected in the approach.

Table 5: Age Specific Usual Worker (Principal & Subsidiary status taken together) for Assam and India

	Age Groups (in years)												
	05-09	10-14	15-19	20-24	25 - 29	30 - 34	35-39	40 - 44	45 - 49	50-54	55 - 59	60 & above	all (0+)
Assam - Rural	2	36	332	529	630	663	743	708	740	676	624	425	391
All-India Rural	3	71	415	623	733	769	812	809	808	769	720	448	439
Assam - Urban	2	17	180	335	442	578	632	654	703	579	557	166	336
All-India - Urban	3	41	241	458	586	633	658	661	638	616	532	228	365

A clear picture of the workers in different age group level can be seen from the Table 5. At all age group level the Workers Population Ratio (WPR) is lower than the national average. While at the younger age (below 14) lower WPR is a good sign, yet about 5% of the population of the age below 14 years are workers, which indicates existence of Child Labour, in the society.

Figure 6: Showing trends in age specific workforce participation Assam- India (Rural)

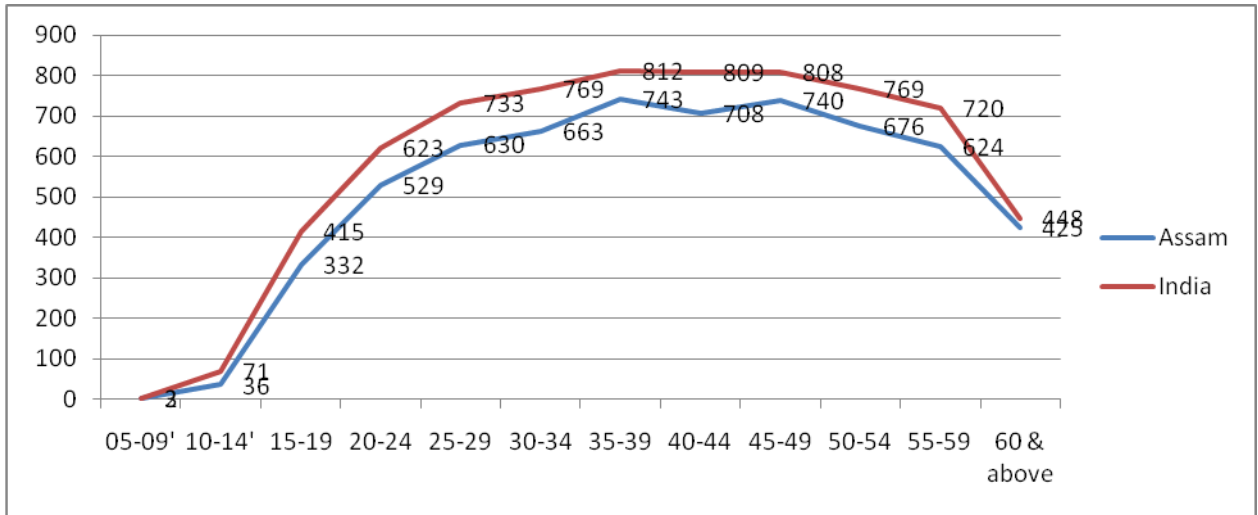


Figure 7: Showing trends in age specific workforce participation Assam- India (Urban)

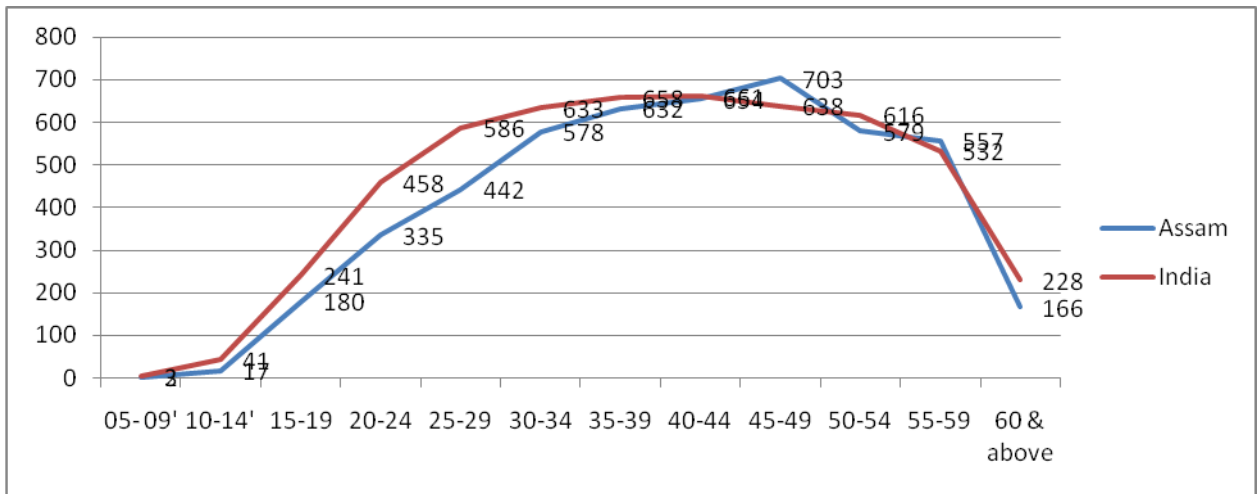


Table 6: Per 1000 distribution of Usually Working Persons in the Principal Status and Subsidiary Status taken together by Broad Industry Division (NIC 1998)

	Broad Industry Categories										
	Agriculture, etc.	Mining & quarring	Manu- facturing	Electri-city, water, etc.	Constr-uction	Trade, hotel & restaurant	Transport, Etc.	Other services			All
								Finance. Inter, business act. Etc.	Pub. Admin. Educn. Comm.. Serv. Etc.		
NIC-98 divisions	(01 – 05)	(10 – 14)	(15 – 37)	(40 – 41)	(45)	(50 – 55)	(60 – 64)	(65 – 74)	(75 99)	(01 – 99)	
Rural											
Assam	696	3	29	2	30	116	32	2	88	1000	
All- India	665	6	79	2	68	83	38	7	52	1000	
Urban											
Assam	883	0	37	0	8	11	2	1	57	1000	
All- India	833	3	84	0	15	25	2	1	38	1000	

Source: NSSO 61st Round: 2004-05

NSS 61st (2004-05) round gives the sectoral composition of the labour market (refer Table 6) having about 70 percent participation in the agricultural sector followed by 11% in Trade, Hotel and Restaurant and 9% in Public Administration, Education and Community Services in the rural areas.

An overwhelming 88 percent (in urban areas) are engaged in the agro-based industries followed by only 5.7 % in Public Administration, Education and Community services. A vast potential of Trade, Hotel & Restaurant has been explored by only 1 percent of the workforce. This may call for a large scale occupational mobilization through sectoral shifts from mainly the primary sector to other sectors which have potential for employment growth.

Persons unemployed per thousand (Table 7) as per Usual status⁵ is hovering around 45% which is more or less in conformity with the national average. But for females it is more than 80% which is about 13 % higher than the national average. It may also be noted that these figures include not only those who are seeking employment but also those who are not in the

⁵ See definition of Usual status

labour force⁶. The dependency ratio of more than 3, independently calculated by census authority also confirms this phenomenon⁷.

Table 7: Round wise Number of Persons Unemployed per 1000 persons according to Usual status

NSS Round		Rural		Urban	
		Male	Female	Male	Female
1	2	3	4	5	6
59 th Round Jan. 03-Dec.03	Assam	431	803	454	927
	India	453	689	459	854
60 th Round Jan.04-June 04	Assam	473	914	472	921
	India	473	772	469	879
61 st Round July04-June 05	Assam	449	791	449	891
	India	454	673	451	834
62 nd Round July 05-June 06	Assam	474	865	442	915
	India	463	776	466	879

Source: Report on Household Consumer Expenditure, Employment- Unemployment Situation in India (62nd Round National Sample Survey, 2005-06) & Economic Survey of Assam 2007-08

Distribution of Educated Job Seekers

The distribution of job seekers according to their skill level shows that a vast majority of the unemployed youths who have registered their names in the Employment Exchanges (about 80%) are unskilled. The placement opportunity of this group is also negligible.

⁶ Women are very often engaged in activities which are not defined as economic activities and hence not accounted for in the current database

⁷ Source: Census of India 2000

Table 8: Distribution of Educated Job Seekers as per the Live Register of Employment Exchange

Skilled/un skilled	Registration		Percentage Increase/Decrease in Registration	Placement		Numbers in Live Register	
	2007	2008		2007	2008	2007	2008
1	2	3	4	5	6	7	8
Skilled job seekers	24908	29823	19.7 Inc.	208	306	272678	291624
Unskilled job seekers	95246	104278	9.5 Inc.	91	127	1026688	1059887
Total	120154	134101	11.6 Inc.	299	433	1299366	1351511

Source: Employment Exchange, Assam 2007-08

The status of job seekers registered with the Employment Exchange as depicted in Table 8 is explained below.

Skill level of Labour Force

- The overwhelming majority of the work force not only in rural areas but also in urban areas, does not possess any identifiable marketable skills
- Most of the job seekers (about 80%) in Employment Exchanges are without any professional skills

Occupational Mobility

The occupational mobility in Assam is quite low compared to other states of the country as well as All India Average. In a way one can get a rough idea about the labour mobility in different states. For both males and females incidence of change of establishment is quite significant for the states like Chhattisgarh, Kerala, Maharashtra and Tamil Nadu. By and large the change of activity status, industry and occupation provides good measurement of dynamics in labour market, particularly the occupational mobility.

Table 9: Number of usual principal status employed persons per 1000 persons of age 15 years and above who changed their establishment of work, status of work, industry(division) of work and occupation of work (2 digit level) during the last 2 years.

Rural								
State/Union Territories	Male				Female			
	Establishment	Status	Industry	Occupation	Establishment	Status	Industry	Occupation
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andhra Pradesh	30	7	10	11	22	2	3	4
Assam	18	5	7	9	4	1	3	3
Chhattisgarh	149	8	8	11	161	1	3	3
Haryana	118	11	18	20	43	3	15	15
Kerala	130	19	29	25	87	14	14	15
Maharashtra	172	11	11	12	191	4	2	6
Tamil Nadu	190	11	14	17	184	4	4	6
West Bengal	84	8	12	12	78	11	8	9
All-India	74	7	9	10	87	3	3	4
Urban								
Andhra Pradesh	36	12	21	24	21	3	5	5
Assam	11	9	6	4	1	0	0	1
Chhattisgarh	90	12	26	22	161	11	13	4
Haryana	43	8	16	10	52	0	0	0
Kerala	100	24	31	37	58	26	26	21
Maharashtra	122	19	25	19	98	2	16	10
Tamil Nadu	115	10	19	19	118	4	9	9
West Bengal	52	6	9	9	93	3	12	5
All-India	65	11	16	15	66	5	9	7

Source: NSSO Report 61st Round 2004-05

Employment Generation Projections

Since labour is an important factor of production, an increase in output is normally associated with an increase in labour use or employment, which implies that the elasticity of employment is generally expected to be positive. However, in a normal economy, employment elasticity is typically expected to be less than unity because productivity per person employed is expected to increase over time, which implies that employment increases proportionally less than output.

Since productivity per person employed is an important determinant of wage rate and therefore the quality of employment, it is important to recognize that high employment elasticity are not necessarily the best way of achieving employment objectives. Ideally, high growth rate of GDP is expected to allow expansion of employment. It also assumes that productivity in the sector will grow to ensure higher real wages and growth of income per person employed.

In case of Assam it has long been a general perception that the economy is operating at a very low productivity level. The data also reveals a situation which cannot be explained by any economic theory. For example, the growth of employment in agriculture and allied services during the five years preceding 2004-05 was more than 30% and the growth of GDP in the corresponding period is only about 2%. This indicates that only 1% increase in GDP has triggered more than 12% increase in employment in the agriculture sector.

Table: 10: GDP Growth vis-à-vis Labour Growth

Sectors	2004-05		1999-00	
	labour growth	GDP growth	labour growth	GDP growth
Agriculture & Allied services	30.59145	2.45855		
Trade, hotel & restaurant			27.80858	-6.98318
Finance, Insurance & Business Services.	-43.0172	19.61368		

Again in the sector broadly comprising Trade, Hotel & Restaurant during the five year period preceding 1990-2000 a reduction of 7% in GDP resulted in about 28% increase in labour. In the Finance, Insurance & Business Services sector about 20% increase in GDP actually resulted in 43% reduction in employment growth. These are some aberrations observed in the available NSS data on Assam. The possible reasons for these aberrations are, (1) the

data quality may be far below the expected level and (2) large scale disguised unemployment especially in Agriculture and Trade, Hotel & Restaurant sectors. *This disguised unemployment is typical of a low productivity economy.*

Table 11 presents estimates of employment elasticity for the major sectors of the economy. The Table represents estimates of sector wise employment elasticity calculated on the basis of employment growth and GDP growth for three different periods spanning over the past decade. The estimated elasticity is less than unity in many cases though there are some exceptions (especially in agriculture, mining and construction sectors). However, it has been noted that in the electricity, transport & storage sectors there are indications of acceleration in the growth of productivity per person employed. This is a desirable outcome.

In manufacturing sector elasticity has been found to be very low. This is true for sectors where productivity per person employed is very low. It may also be noted that employment elasticity may be very low in sectors having high under-employment, which means there is considerable room for output to expand without an expansion in measured employment.

Table: 11: Elasticity of Employment to GDP

Broad Industry Groups	Assam		All India	
	elasticity (2004-05)	elasticity (1999-00)	elasticity (2004-05)	elasticity (1999-00)
Agriculture	1.0	1.0	0.58	0.0
Mining & Quarrying	1.0	1.0	0.54	0.0
Manufacturing	0.07	0.0	0.73	0.21
Electricity	0.39	0.0	0.68	0.0
Construction	0.0	1.0	0.72	0.95
Wholesale & Retail Trade	0.0	0.0	0.40	0.66
Transport, Storage & Construction	0.15	1.0	0.30	0.55
Finance, Insurance & Business Services	0.0	1.0	1.0	0.52
Community, Social and Personal and other Services	0.0	1.0	0.41	0.0
All Sectors	0.74	0.91	0.38	0.13

Alternative Employment Projections

Using the employment elasticity (Table 12), three alternative projections for employment has been calculated for the periods, 2014-15 and 2019-20, i.e. the periods corresponding to the

12th and 13th Plans. Three different assumptions about economic growth has been considered for measuring these estimates.

The three growth assumptions are:

- a base line scenario in which GDP grows at 5.5%,
- a high growth scenario with GDP growth at 8 percent and
- a rapid growth scenario with GDP growth at 10%.

The sectoral growth rates associated with these scenarios are presented in Table-12.

Table 12: Alternative Growth Scenarios

	Projections	GSDP Growth rate (annual)		GDP Growth		
		2005-09	current year	current annual growth rate	8 percent growth	10 percent growth
1.	Agriculture	0.6	2.4	0.6	0.9	1.2
2.	Mining & Quarrying	1.2	0.1	1.2	1.8	2.2
3.	Manufacturing	10.2	4.4	10.2	15.0	18.7
4.	Electricity, gas and water supply	6.4	1.5	6.4	9.4	11.8
5.	Construction	14.8	9.0	14.8	21.6	27.0
6.	Transport, Storage & Comm.	14.5	15.0	14.5	21.1	26.4
7.	Trade, hotels and restaurants	12.1	11.2	12.1	17.7	22.1
8.	Financial Services	8.2	14.9	8.2	12.0	15.0
9.	Community, Social and Personal Services	4.4	3.6	4.8	6.4	8.1
10.	GDP growth	5.5	6.3	5.5	8.0	10.0

Tables-13 presents the detailed employment outcomes for the economy as a whole and also for individual sectors associated with each scenario. Here, the projected employments for periods 2014-2015 and 2019-2020 in three alternative growth scenarios are presented. The projected employment has been calculated by using the relationships between employment and GDP. A log-linear model has been used for this projection. The projected elasticity is the constant slop of the model. If the economy is growing at the current rate of 5.5% and the labour force increases at the rate of 1.8% annually the percentage of unemployed person

would be 17% and 21% in the year 2015 and 2010 respectively. In case of a moderately high growth of about 8%, unemployment will be 8% and 11% in the year 2015 and 2020 respectively. However a high growth of 10% would reduce unemployment rate at about 2%.

If the rate of increase in labour force is about 1.5% annually a full employment could be achieved by 2015 if the economy is growing at the rate of 10%. However, examining the employment and unemployment situation in Assam it is expected that more women would be joining the labour force with the turn of the economy. Therefore the growth of labour force at the rate of 1.8% appears to be plausible.

Employment in Construction and Transport, Storage & Communication sectors will grow at a faster rate. Trade, Hotel & Restaurant sectors will also grow at a moderately high rate. However the manufacturing sector, which has an immense potential to grow in Assam, as such would require a special intervention for higher employment. The high employment in the primary sector is the real cause of concern. The agriculture sector which provides the highest employment is also hiding a large amount of disguised unemployment; indicated by high employment elasticity in the agriculture sector. The elasticity is bound to reduce with the turn of the economy and percentage of employment in agriculture sector is also likely to be lower over the years. The employment composition in the high growth scenario should change in favour of the secondary and tertiary sectors. The productivity of different sub-sectors is also likely to change and therefore it is expected that there would be large scale shift of workforce from agriculture to non - farm sectors. Moreover high growth scenario will attract both skilled and unskilled in-migrant workers.

However historically it has been observed that high productivity in agriculture sector push the labour in the non-agricultural sectors. A proper and scientific intervention through vocational trainings and skill development programmes can make the surplus agricultural labour force prepared to take up employment in the non-farm sectors. Therefore it is suggested that employment policies should undergo a review after every five years to address the skill building need of a captive workforce coming out of the agricultural sector for non-farm opportunities. There has to be attempts to develop appropriate and relevant skills to suit emerging opportunities in employment and also adequate information to opt for evolving opportunities.

Table 13: Employment Projections:

Broad Sectors	Estimated employment (2009-10) (in '000)	Projected elasticity	projected employment in 2014-2015 (in '000)			projected employment in 2019-2020 (in '000)		
			5.5% growth	8% growth	10% growth	5.5% growth	8% growth	10% growth
Agriculture and Allied	7325	0.8	7498	7658	7785	7672	7912	8103
Mining & Quarrying	40	-2.0	34	29	25	29	21	15
Manufacturing	465	0.2	507	546	577	549	608	654
Electricity, Gas and Water supply	393	0.8	476	552	613	558	673	764
Construction	78	1.0	111	141	165	144	190	226
Transport, Storage & Communication	2098	1.0	2979	3792	4435	3859	5078	6044
Trade, hotels and restaurants	522	0.5	650	769	863	779	957	1098
Banking & Insurance	67	0.9	84	101	113	102	126	146
Public administration & Other services	1392	0.6	1576	1704	1828	1760	1952	2139
All Sectors	12379	0.8	13915	15292	16405	15452	17518	19187
Population (in '000)	30003			31881			33686	
labour force growing @1.8% (in '000)	13890		16692	16692	16692	19660	19660	19660
Unemployed (in '000)	1511		2776	1399	287	4208	2142	473
Percent unemployed	10.9		16.6	8.4	1.7	21.4	10.9	2.4
labour force growing @1.5% (in '000)	13451		15786	15786	15786	18260	18260	18260
unemployed	1073		1871	494	-619	2807	742	-927
Percent unemployed	8.0		11.9	3.1	-3.9	15.4	4.1	-5.1

Section 3: Policy Framework for the Labour Market

Policy Outlines

A multi-pronged strategy is necessary for achieving the objectives of the employment policy for the state. Since the basic objective is to create more productive, sustainable and decent employment opportunities, economic growth itself has to be more employment-intensive. The suggested policy interventions are:

- Accelerating the rate of growth of GDP, with a particular emphasis on sectors likely to ensure the spread of income to the lower income segments of the labour force.
- Pursuing appropriate sectoral policies in individual sector, which are particularly important for employment generation.
- Implementing focused special programmes for creating additional employment for vulnerable groups that may not be sufficiently benefited by the more general growth promoting policies.
- Pursuing suitable policies for education and skill development.
- Ensuring that the policy and legal environment governing the labour market encourages labour absorption, especially in the organized sector.

This would require the pattern of growth to be oriented towards high employment generating sectors. Thus, in each sector and subsector, policy instruments are to be devised to favour more employment-intensive product pattern and technologies. However this straight-jacketed policy may not be commensurate with the overall economic development of the country and the state.

The planning commission, in its 11th plan document suggested a long term planning for north eastern states in general and Assam in particular. A two-pronged strategy is suggested comprising (a) all round infrastructure development (Road/Rail/Power/IWT/Airports) and (b) enhancement of productivity and scope of employment in primary sector including agro-based industry sector. The 11th plan document also suggested improvement in the security, law and order and governance scenarios. Also, measures need to be adopted to improve **employability** of labour force in the dynamically changing economic landscape of the state.

The social dimensions of employment in terms of special needs and treatment of women and disadvantaged groups has to be an underlying consideration in all aspects of employment policy.

Dissemination of proper and timely Employment information is an act of empowerment of the labour force. Proliferation of ICT technology for Employment information services is a good practice and important aspect of employment policy.

3.1. Policy Statements

Policy statements in this document are accordingly arranged under the following seven major heads:

1. Macro-economic Policies
2. Sectoral Policies
3. Labour Market Policies
4. Micro and Small Enterprise Development Policies
5. Skill Development Policies
6. Women Workers
7. Vulnerable Workers

3.1.1 Macro-economic Policies

- i. Assuming employment as a major goal of development, the growth model underlying planning should adopt a sector-focused approach, aiming at faster growth of sectors with high employment potential.
- ii. Systematic approach to infrastructure development (Road/Rail/Power/IWT/Airports) in the state. Resource requirement for development is huge. Many of these infrastructural assets (roads or airports) cannot be justified on the basis of economic viability, but these are vital for opening up the state and for better integration.
- iii. In the primary sector, recognising that the majority of workers are employed in agriculture where labour productivity is low, a higher productivity of agriculture is absolutely necessary to make employment more remunerative. While no significant increase in the number of workers can be expected in agriculture, greater use of both land and labour augmenting technologies, in land and water resource development must be attempted. However, significant employment may be generated by

employing appropriate technologies for conservation of water bodies, pisci-culture, horticultural crops, spices, Aromatic and medicinal plant, bio-diesel, bamboo cultivation floriculture, sericulture, dairy, poultry and piggery development , livestock development, tissue culture labs/nurseries, rural agro service centres, Greening the country through Agro Forestry, Energy Plantation for Biomass power Generation.

- iv. In the secondary and tertiary sectors, where large number of employment comes from informal sectors, productivity enhancement through augmentation of technologies in the specified fields where Assam has a great tradition like weaving, and garment making, ornamental wares, bell metal artifact should be explored. In the tertiary sectors Assam has a great potential in tourism sectors. Tourism sector should be one of the focus area for economic development and employment generation.
- v. It is recognized everywhere that development plays a two-fold role by generating employment directly and by improving employability by building human capabilities and skills. In contrast with other sectors, the state has a major role in the development of Human resources. Public investment in capacity building, therefore, requires to be significantly stepped up.

3.1.1.1 Fiscal and Monetary Policies

- i. Fiscal, monetary and credit policies have their own primary objectives. But focused efforts should be made to see that they are also related to the employment generation.
- ii. Several types of tax holidays, tax exemptions and differential duty rates are in operation primarily with the objective of encouraging investment. Such incentives should be calibrated to the employment outcome. Any investment proposal should reflect both direct and indirect employment and higher the employment generation higher the merit for fiscal incentives.
- iii. Public expenditure on activities with high potential for increasing employment creating capacity, such as irrigation, transport infrastructure, power and rural health education should get higher priority.
- iv. It is very important that credit is easily accessible to employment-oriented sectors such as self-employment, small and micro-enterprises etc. if necessary, on the basis of a fixed quota and/or by creating a separate development finance facility catering exclusively to the needs of this sector should be created.

- v. Procedure for assessment of 'Proposals for Investment Approval (PIA)' should include detail *labour budget analysis* including detail skill requirement for assessment of employment generation.

3.1.1.2 Trade Policy

- i. Employment generation is considered to be one of main objective of trade policy. Mechanisms need to be devised to effectively relate various policy instruments to employment outcomes.
- ii. Concessions given to units in Special Economic Zones (SEZs), may also be linked with employment, either as an over riding or additional criterion. For example, taking a cue from Tamil Nadu SEZ status may be given to the weaving, spinning of silk in Sualkuchi and pottery, bell-metal in Sarthebari and Hajo.

3.1.2 Sectoral Policies

3.1.2.1 Identification of Sectors

- i. It is essential that sectors and sub-sectors with high employment potential are identified and besides getting priority in growth strategy, sector-specific policies need to be evolved for their faster growth and greater employment orientation.
- ii. Sectors that can easily be identified for special treatment from employment viewpoint are agriculture, manufacturing, construction, retail trade, tourism and information and communication technologies (ICT). Recent experience has demonstrated that some of these sectors have considerable potential for faster employment growth while others need strengthening of their growth process to improve quality of employment. However some exercise needs to be carried out in detail at the sub-sectoral level.

3.1.2.2 Agriculture

- i. Agriculture must be targeted to grow at a high rate to ensure that those engaged in it are more productively employed.
- ii. Existing policy packages need to be strengthened and new agriculture extension programs to be evolved to facilitate diversification of agricultural products and shift from on-farm to off-farm activities.
- iii. Adoption of high-yielding seed varieties and introduction of farm-mechanization is essential for a quantum jump in production.

- iv. Farmers' and producers' organizations may be promoted and strengthened in order to be able to bargain for their rights as farmers.
- v. Direct government intervention is needed for scientific marketing network which will benefit to the producers through higher price realization of their produce.
- vi. A suitable mix of price and non-price incentives may be devised for the farmers both to compensate them for the current cost of production with a reasonable profit and to improve their capability to raise productivity.
- vii. Recognising that an overwhelming majority of farmers consist of small and marginal cultivators, it is obvious that a special focus is necessary for them in policy for agricultural development.
- viii. Quick transfer of modern scientific findings from lab-to-land can be beneficial for improvement of the sector
- ix. A strong package of support in respect of credit, inputs, technology and marketing may be devised to enable the farmer to realize their productive potential and enhance their remuneration from employment.

3.1.2.3 Retail Sector

India's rural markets are growing at double the rate of urban markets. The total number of rural households is expected to rise from 135 million in 2001-02 to 153 million in 2009-10 giving a tremendous push to the rural retail opportunity.

According to industry estimates, organised retail is currently growing at a rate of 35 per cent annually while unorganised retail growth is pegged at 6 per cent.

In India, the retail sector is the second largest employer after agriculture, although it is highly fragmented and consists of small independent owner. The Planning Commission of India has identified retail as a prospective employment generator. The industry is emerging as a 'sunshine' industry like the IT and ITES industry. The retail industry contributes to 13 per cent of the country's GDP. 21 million people are employed in the retail sector, which is 7 per cent of the total workforce.

It is estimated that about 1.5 to 2 million human resources are employed in the Organised Retail segment as of now. And this number is expected to increase to about 5.5 to 6.5 million by 2015.

3.1.2.4 Construction Sector

India being a fast developing country is also seeing the growth of its infrastructure at a frenetic pace. With the government's focus on infrastructure development along with the active participation of private sector, this segment is growing rapidly.

India requires a total investment of Rs 15 trillion in infrastructure by 2012. With over Rs 9 trillion investments promised by various private players in the next 5 years, India's infrastructure is set to improve rapidly with an estimated CAGR of 15 per cent.

Of the 15 million jobs that would be created in seven years time, around a million jobs would be created for engineers and the specialized skills category (Specialized and Skill Level II). An equivalent demand for around a million skilled technicians – diploma and ITI (Skill Level I) and skilled workers (vocational) is expected to be generated by 2015. According to our estimates, supply of manpower growing at a rate of 4%, there would be a shortage of around 1.6 million skilled persons.

The demand for unskilled persons would be of the order of 8,000,000 jobs (Minimal Education Category). So as to make such a huge number of persons available, the surplus labour in agricultural sector would have to be moved to construction industry. There is a need for identifying persons and providing suitable incentives to them such that this transition is made possible.

3.1.2.5 Automobile Sector

The global automotive industry production excluding two and three wheelers stood at 73 million units in the year 2007 growing by 4.4% CAGR over the past 5 years. Majority of the growth of the world automobile production came from Asia, which grew at 9.3% CAGR. Majority of the growth in Asia has been contributed by China (22% CAGR) and India (21% CAGR).

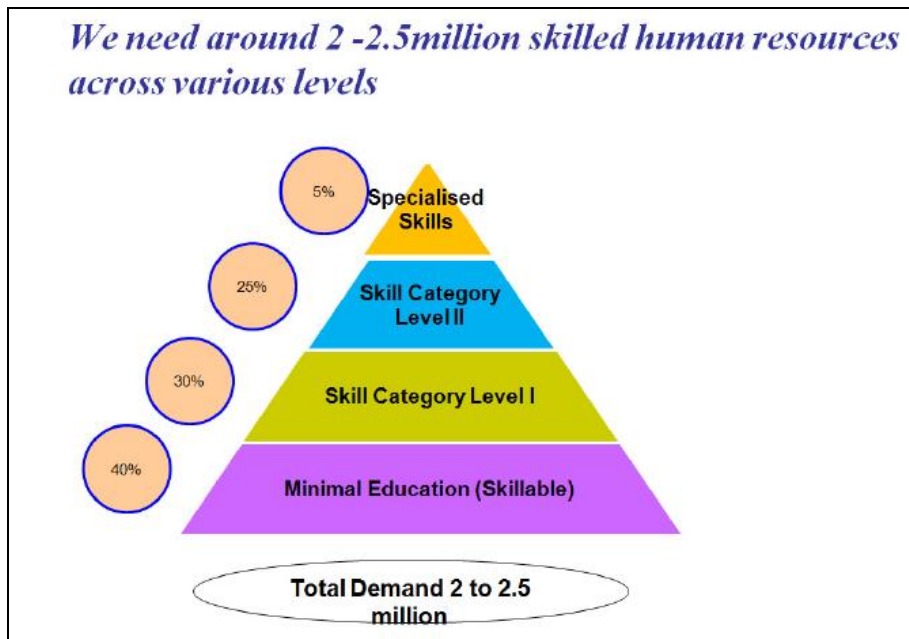
The focus of global players on the Indian market is expected to increase substantially with India ranking 10th in overall global production of automobiles. Low level of penetration and sustained economic growth in the region of 8-8.5% is expected to make India one of the top five markets for automobiles by 2020

The total number of vehicles plying on the Indian roads is estimated to be around 83 million, the bulk of which are two wheelers.

Maximum growth in the last 6 year period has been reported by commercial vehicles at nearly 22% followed by passenger vehicles, three wheelers and two wheelers.

The Indian automotive industry has the potential to emerge as one of the largest in the world. India ranks number two globally in the two-wheeler segment next only to China. It ranks 11th in car production and 13th in commercial vehicle production globally. With increasing industrial production and growing spending power of the Indian middle class households, the country is expected to make it to the top five markets in the cars and commercial vehicles segment by 2020.

It is envisage that by 2015, the opportunity landscape in automotive industry will have 2 to 2.5*1 million new (incremental) jobs to offer, considering the likely improvements in economic outputs and labour productivity. The break-up for such job opportunities in terms of skill level are as follows:-



IMaCS has analyzed the current skill gaps existing in the various functions of auto companies across different levels. This has been done from the experience of having mapped the human resource skills and suggesting proactive strategies to overcome the difficulties that may arise in the future due to under-skilled workforce in major states in the country and our interaction with the auto industry.

Profile of People on the Production Floor

Various levels of Employment	Qualifications	Key Functions
LEVEL 1	<ul style="list-style-type: none"> Usually those with no formal schooling 	<ul style="list-style-type: none"> Support for production activities Simple jobs drilling, rough machining
LEVEL 2	<ul style="list-style-type: none"> Studied upto Class XII, having simple job experience Fresh ITI students – Mechanics, welders, turners and filters 	<ul style="list-style-type: none"> Production Support for maintenance of machines
LEVEL 3	<ul style="list-style-type: none"> Engineers (degree or diploma holders) with 3-4 years experience 	<ul style="list-style-type: none"> Handle all production activities in a production line
LEVEL 4	<ul style="list-style-type: none"> Engineers (degree or diploma holders in production) with >5 years experience 	<ul style="list-style-type: none"> Responsible for all production activities in one shift
LEVEL 5	<ul style="list-style-type: none"> Engineers (degree or diploma holders) with more than 10 years experience 	<ul style="list-style-type: none"> Entire production planning of all shifts

3.1.2.6 Media and Entertainment Industry

The Indian Media and Entertainment industry, with a Compounded Annual Growth Rate (CAGR) of 15% is one of the fastest growing sectors in the country. Technological advances and liberal government policies favouring foreign direct investment (FDI) aid expansion of this sector.

The Media and Entertainment industry comprises of the following segments:

- Television
- Print
- Films
- Radio
- Music
- Animation
- Gaming
- Advertising – Internet and Outdoor.

Though the Television, Print, and Film segments dominate the Media & Entertainment space in India, new segments such as Gaming, Animation, Outdoor (Out of Home – OOH) and Internet advertising are gaining importance.

The current employment across these segments is estimated to be over 1 million persons. It is expected that the Private Final Consumption Expenditure (PFCE) on Entertainment would grow at a Compounded Annual Growth Rate (CAGR) of 13% to 14% between 2008 and 2022.

Accordingly, it is expected that the industry would continue to record growth rates between 13% and 14% till 2013.

Projected Human Resource Requirement – 2008-2022 (in '000)

Year	Television and Films	Print	Radio	Animation	Gaming	Total
2008	974	14	43	11	4	1,046
2012	1,311	18	65	19	13	1,425
2018	2,473	28	123	43	26	2,692
2022	3,705	36	185	74	39	4,040
Incremental between 2008 and 2022	2,731	22	141	64	35	2,994

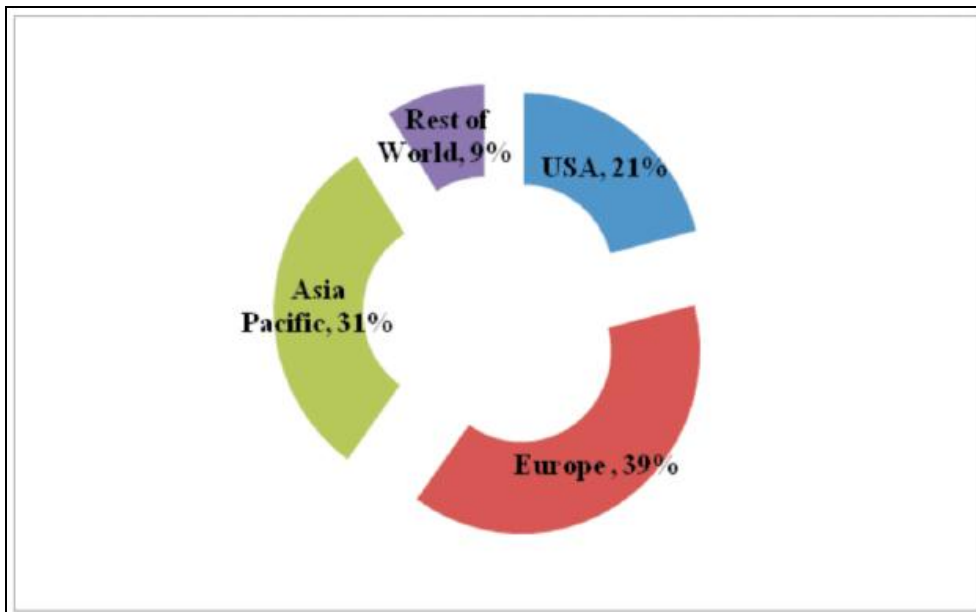
3.1.2.7 Food Processing Sector

Agriculture accounts for about 1/4th of the Indian economy but employs about 2/3rd of its population. India has about 161 million hectares of arable land of which 55 million is irrigated. Considering these factors, it is clear that there is immense potential for the agriculture sector, and therefore the food sector. Food processing enhances shelf life and adds value even if agricultural produce is merely cleaned, sorted, and packaged. Further processing into high value-added products garners greater revenue for the producer. Food Processing is also employment intensive in that for every Rs. 1 million invested, 1.8 jobs and 6.4 indirect jobs are created.

The Processed Food Industry is divided into the following broad segments:

- Primary Processed Food
- Value-added Processed Food

Major market for sale of processed food



The share of India in the global processed food trade is currently 1.6%. The Ministry of Food Processing Industries (MOFPI) has stated in its Vision 2015 that it aims to increase India's share from the current level to 3% of world processed food trade.

The major growth segments are likely to be:

- F&V, growing at 13%
- Dairy, growing at 11.5%
- Meat and Poultry, growing at 16.3%
- Marine Products, growing at 14.8%
- Beverages growing at 14.1%.

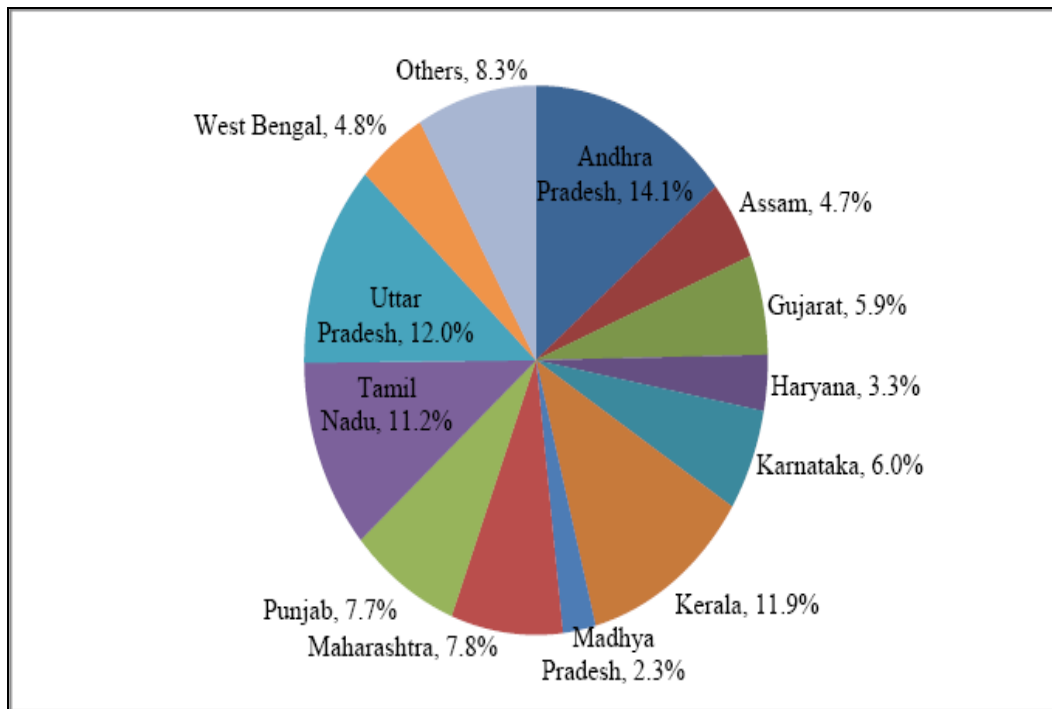
Current Employment Pattern in Food Processing Sector in India

Sector	Number of Persons (in million)	Percentage share
Organised	1.53	18
Unorganised	7.00	82
Total	8.53	100

Projected Size of Food Processing Industry till 2022 – Rs. Billion

Sector	2008	2012	2018	2022	CAGR (%)
Food and Vegetable Processing	159	259	543	887	13.1
Food Grain Milling	1,230	1,663	2,613	3,532	7.8
Dairy Product	572	881	1,686	2,597	11.4
Meat and Poultry Processing	369	675	1,673	3,063	16.3
Fish Processing	139	180	265	343	6.6
Bread and bakery	714	1,137	2,288	3,646	12.4
Alcoholic beverages	101	171	380	645	14.2
Aerated water/ soft drinks	338	451	693	932	7.4
Total	3,622	5,419	10,140	15,638	11.0

Share of various states in employment in the Food Processing Industry



3.1.2.8 Health

With one billion people, India constitutes 16% of world’s population. While most countries world over are facing stagnation or recession in its demographic growth profile the growing number of young adults is an asset to India. Its share of the working age population is expected to increase until 2025 and beyond.

In India, the healthcare delivery system has a hub and spoke model. This allows a three-tier referral system which helps in screening of patients at each stage and assures continuity of care at the next level of healthcare centre without over-crowding the highly skilled and technology intensive facilities with less complicated ailments that can be handled at centres with relatively lower level of facilities. Health being a State subject, it is delivered through the State health machinery of District hospitals (DHC), community health centres (CHC), primary healthcare centre (PHC) and the sub-centres. In the private healthcare delivery system as well, the individual doctor clinics, nursing homes, specialty hospitals represent the three levels of healthcare service delivered. However, in this case the referral is not as well structured as in the public healthcare delivery system. The Voluntary healthcare set-ups also follow similar model like that of private health sector. Each tier tries to operate as independent unit, but outsourcing high cost laboratory and imaging services is a trend to improve efficiency within each level of healthcare service delivery. The health insurance

industry, which hitherto accounted for only a small share of the total expenditure on health, may also be poised for a big leap, with private insurance products just round the corner. Notwithstanding this Health Tourism is a newer trend challenging the healthcare delivery system in India. Rising cost of care and big group of un-insured population in the west, cheaper air fares, information explosion, reputation of Indian doctors and nurses as highly skilled have forced the developed nations to look eastwards to seek healthcare-both curative and rehabilitative.

Human Resources Requirement

'Skill' in the healthcare sector is the capability to deliver effectively and efficiently cure and care in the sector to ensure physical, mental and social well being of individuals directly or indirectly. Hospital is a matrix organization that has a group of highly specialized experts to unskilled workers who take part in the service delivery to the sick and the immuno-compromised individuals. The healthcare delivery industry primarily requires five groups of specialized manpower. They are the doctors, nurses, the pharmacists, the laboratory and radio-diagnostic technicians, and the bio-medical engineers. While the pharmaceutical, equipment and insurance sector also requires the same group of specially qualified people, the quantum of employment in these industries is much lesser than the healthcare delivery industry, which is the main stream industry in the health sector. This apart there are generalists to support the functioning of the specially trained staff, such as the management staff, administrative staff, engineering and maintenance staff, housekeeping staff, dietary staff, and the security personnel.

Taking into account the nature work in the healthcare services delivery and the levels of service delivery, the manpower can be put under four major heads:

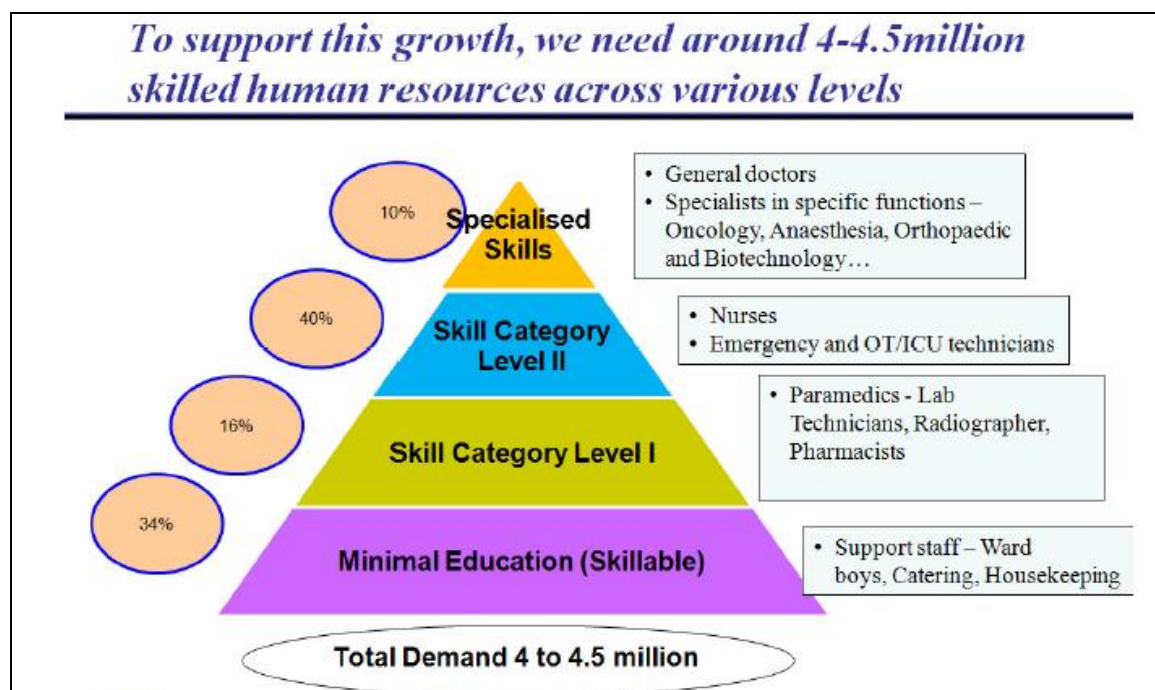
Specialized skills: At the helm of the service delivery are the personnel who treat the patients after taking into account the diagnosis. These are the clinicians and have various well-defined sub levels within their own category, like physicians, surgeons, specialized surgeons to increase efficiency and effectiveness of care.

Skill category level I: this level includes all the diagnostic assistants/experts to handle drugs, viz. lab technicians, radiographers, dark room assistants, pharmacists, and the dietician. They are also specialized manpower, with adequate training into their domains.

Skill category level II: this includes nurses, operation-theater and emergency technicians, who serve as the primary support functionaries to the clinicians to manage the patient care and patient progress as guided by the clinicians. A proper training at the colleges, coupled with good exposure to the actual functionality of the departments is a must for these personnel.

Minimal education (skill can be enhanced): this level includes the classes of ward boys, housekeeping staff, cooks, security personnel, among others. A formal education doesn't form a major criterion of their functionality at the hospitals; however, they form an important base of the hierarchy, which is essential for the smooth functioning of the hospital. Therefore, requires specialised skill set to operate in the healthcare setting, wherein provision of infection free, safe and secure environment to the sick is of utmost importance, unlike in other service industries wherein service is provided to the healthy individuals.

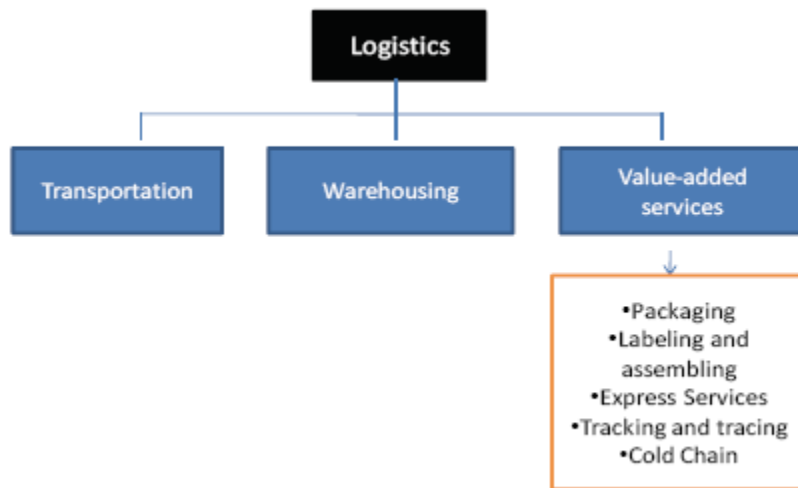
It is envisaged that by 2012, the opportunity landscape in healthcare industry will have 4 to 4.5 million new (incremental) jobs to offer, considering the likely improvements in economic output and labour productivity. The break-up for such job opportunities in terms of skill level are as follows:-



3.1.2.9 Transportation & Logistics

Logistics is defined as a business planning framework for the management of material, service, information and capital flows. It includes the increasingly complex information, communication and control systems required in today's business environment. The Transportation, Logistics, Warehousing and Packaging Sector in India is dominated by the unorganised segment. The employment is distributed across worker or supervisor or management levels in all segments with some unique feature particular to specific segments such as third party logistic providers, etc. Semi-skilled or minimally educated workers constitute a large portion of the employment.

Segments of the Transportation, Logistics, Warehousing and Packaging Sector



The Transportation, Logistics, Warehousing and Packaging Sector in India currently employ around 7.3 million persons. Of these, the maximum proportion is employed in the Road Transport Segment and personnel employed in the Road Transport and Rail Transport Segments constitute over 90% of the total employment in this sector in India.

3.1.2.10 Manufacturing

At national level the Manufacturing sector has shown a reasonably high employment growth in recent years, but Assam needs to develop manufacturing industries other than agro based industries. In the manufacturing sector, except for tea, paper, Jute, rubber and rice milling most of it has been in the unorganized sector where productivity and earnings are low, conditions of work are poor and social security mechanisms are virtually non-existent. Various fiscal measures, therefore, may be evolved to induce higher employment growth in

the organized sector and for providing better earnings, conditions of work and social protection to workers in the unorganized sector.

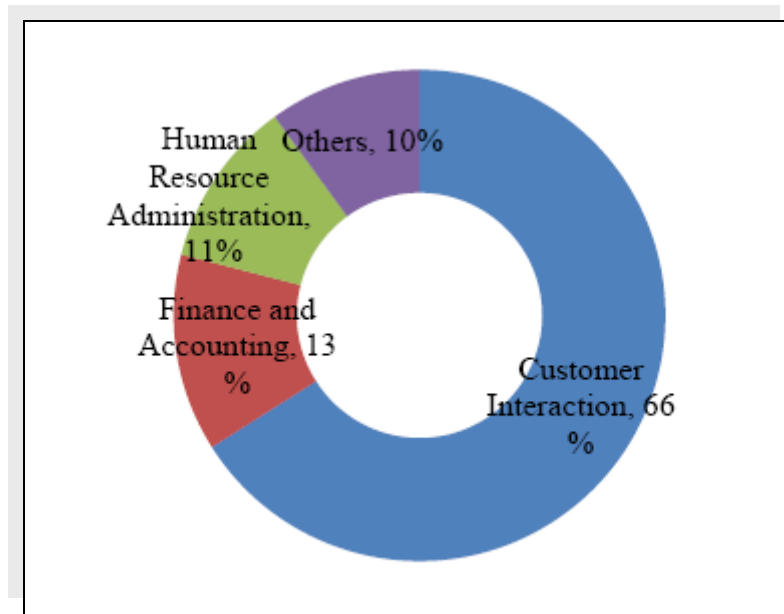
- i. A sub-sectoral approach to policy-making is necessary to improve employment intensity of manufacturing. Labour-intensive industries (e.g. textile products, beverages, food products, bamboo product and wood products) may be given special fiscal support and incentives to grow faster, including for sale in external markets.
- ii. While dereservation may be necessary and desirable in the present context, the SME sector needs to be compensated by adequate policy support in other spheres (e.g. credit, marketing) in order to sustain its growth and perform its important role in employment generation.
- iii. Labour-intensive sectors, particularly the micro and small enterprises, need to be provided strong technology and skill support through a package of extension services and training worked out to particularly suit their requirements.
- iv. Special package of support (may be declaring them as SEZ) should be developed for small, multiproduct clusters in backward areas particularly utilizing the forward and backward linkages that could be locally realized.

3.1.2.11 IT & ITES

The Indian IT and ITES Industry recorded a turnover of US \$ 60 billion in 2009, with exports accounting for about US \$ 47 billion and contributing to over 70% of industry revenues. The major segments of the Industry are IT Services, BPO, and Engineering Services, R&D, and Products. Much of the activity is centred on service offerings in Banking, Financial Services, and Insurance (BFSI), Hi-Tech and Telecom, Manufacturing, and Retail.

The domestic market contributes to over US \$ 12.5 billion in revenues (21%). If the hardware sector is included, this would touch US \$ 24 billion. The domestic market is also expected to be a major area of growth in the future with increasing IT adoption beyond hardware and expected to grow at 8% in the near term.

Major ITES segments



It is expected that the industry would employ about 7.5 million persons directly by 2022. A large portion of this employment is expected to occur in the ITES (BPO/KPO) exports sector, followed by IT exports and then in the domestic market. Assam is considered to be an 'uncut diamond' for information technology destination. The state has immense potential for development of IT & ITES services. The state has a very big educated young population who are fluent in atleast one foreign language. The ITES services providers should be invited to start Call Centres & BPOs in Assam. Direct and indirect fiscal incentive along with SEZ status should offered to the potential investors.

The creation of information kiosk has immense potential to offered employment to the educated rural youth and educated disabled persons (vulnerable people). These kiosks may be built up through PPP model in collaboration with BSNL. However the information kiosk can only be successful if Government takes up e-governance in phased manner.

Training and capacity building plays an important role in proliferation of IT & ITES. Each panchayat head quarter should have a Government run computer training centre with nodal training centre at district head quarter. The centres could build through PPP model.

3.1.2.12 Hospitality & Tourism Sector

Assam has a great potentiality to emerge as popular tourist destination. Unique Flora and Fauna, rich bio- diversity, hills, dense forests, wildlife and the mighty river Brahmaputra are significant attractions of the state. There is also a great attraction for the traditional art, music and culture of the state.

The prime segments includes

- i) Wild life Tourism
- ii) River tourism
- iii) Tea and Golf tourism
- iv) Rural tourism
- v) Heritage tourism
- vi) Religious tourism.

Potentiality of tourism exists in investing in Floating Hotels and Restaurants, Tourist resorts, Star Hotels, Recreational Parks, Golf Course upgradation. There may be investments made for modernization and management of tourism transport and conducting guided tours.

3.1.2.13 Handloom & Textiles Sector

Handloom sector though one of the most traditional sector of the state, has great potentiality for expansion particularly for the vast Indian market as well as the global market, though the proportion of employment of the sector at present is not one of the highest. This sector not only has great potentiality for export but is also a provider of livelihood to a major section of the population next only to Agriculture. The state has always been rich in muga and eri cultivation and accounts for 18.4 % of total cloth produced in the country.

3.1.3 Labour Market Policies:

Labour market policies range from regulating employment to ensure safety, fairness and equity at work or at promoting employment either by directly creating work or facilitating employment creation by providing information, training and placement services.

3.1.3.2 Labour Regulation

Labour regulation in India is seen, on the one hand, as providing excessive protection, to a small segment of workforce in the organized sector, and, on the other, leaving the overwhelming majority of those in the unorganized sector, completely unprotected, either because of the non-applicability of regulatory provisions, or because of ineffective implementation of provisions that apply to them. Some of the provisions of laws render adjustment of workforce inflexible, and thus adversely affect efficiency of production, on the one hand, and the employers' unwillingness to employ more workers, on the other. Thus regulatory regime in respect of labour requires to be closely examined with a view to devising ways to minimize this dualism. A minimum measure of social security must be available on a statutory basis to the hitherto unprotected workers.

3.1.3.3 Active Labour Market Policies

Introduction of NREGP, as the single and statutorily backed wage employment programme in all rural areas of the country has been a welcome and important step as a purposeful and focused active labour market policy. Its prime contribution is to provide supplementary employment, as a right, and, therefore, an assured income to rural households is beyond any doubt.

Safety Nets: The global economic crisis has lent new urgency to strengthening safety nets. The expansion of the NREGA has fortunately provided a social safety net in the rural areas. It will now be important to consider this and other alternatives for urban areas hard-hit by the economic downturn. Innovative and new schemes for urban renewal and construction and the delivery of public services can offer employment opportunities in the urban areas in a sustainable basis.

Labour market information services: The stake holders in the employment market are illiterates, students and youth in one hand and employers, trainers, industry and planners in the other. Presently the employment exchanges manually operated with obsolete guidance material, if not, virtually nonexistent career promotion activities. The scopes of employment exchanges are to be redefined to accommodate web casting of career, career counseling, state of art guidance matrix, handholding services (skill development) by creating study circles at every district head quarter, virtual communication with the stake holders, chat room guidance etc.

The road map for achieving these would be through capacity building, net-working of employment exchange, creating interactive web portal with proper linkage, regular interaction with the institutions and industry, empowerment of job seekers through computer literacy, certification of skills etc.

One of the major active labour market policy issues is **monitoring and evolution** of the demand and supply in the labour market. While the information on demand can be obtained from various administrative data like skill-requirement-wise Labour Budget analysis of all private and public investment, except employment exchange data, there is no direct method to estimate the supply of labour. **Periodic labour force survey** should be conducted to have a idea of the dynamics of labour markets.

Gender Issues: Gender should form an essential dimension in all aspects of labour market policy. Issues relating to women's work are dealt with in detail in a subsequent section separately. But, in the context of active labour market policies, the following points need special emphasis:

- Various special employment and poverty reduction programmes should insist on high participation of women.
- Training of women should aim at mainstreaming their employment rather than confining them to the stereotyped 'female occupations'.
- Labour market information and employment service and building of data base for employment should invariably be gender-specific.
- Special facilities (in the form of committees) will be established in clusters and large enterprises to ensure that basic conditions of work are provided for women workers and that no discriminatory practices are allowed. These relate to (i) sanitary, drinking water, eating and child care facilities, (ii) ensure the payment of minimum wages wherever applicable, (iii) enforcement of safety standards and (iv) representation of women in collective bodies of workers.

Organisation and empowerment for women: Given the greater deficit in organisation and representation of women workers, especially in the informal economy, special programmes and enabling conditions will be created for organizing informal women workers and strengthening their collective capacity.

The Self Help Groups of women have emerged as an innovative form of organisation for accessing credit (micro financing), marketing as well as other services. While encouraging the spread of this organisational form to areas where it is currently either absent or low presence, policies will be put in place to ensure that micro credit graduates from consumption smoothening to livelihood credit that will have a focus on the creation of productive employment with backward-forward linkages. In this connection the Kerala model of '*stree shakti*' may be studied and adopted for the state.

3.1.4 Policies for Micro and Small Enterprises

Given the predominance of micro and small enterprises in the non farm segment of the economy and the constraints they face in increasing productivity and creating decent work conditions, the need for special policies and programmes has been recognized for long. The following policies are therefore aimed to realize this objective.

3.1.4.2 Credit

One of the structural problems of the MSE sector is the low capital base of the enterprises and the corresponding low productivity. In addition, these enterprises also face a number of problems in accessing credit for working capital requirements.

Firstly it will be necessary to make the existing policies and programmes more effective. For this the Priority Sector Lending Policies of the banks will have to be revised in favour of the MSE sector. Lead Banks of the state should be requested to ensure compliance with RBI guidelines on access to credit by the MSEs.

Secondly, in collaboration with the lead banks Multi-purpose Swarozgar Credit Cards may be introduced to cover the entire non-farm sector along the lines of the Kisan Credit Cards. Professionals may be hired for counseling services and be given wide publicity about the schemes for the MSE sector.

Thirdly and most importantly, the state should devise a mechanism to harness the benefit of Government of India's dedicated National Fund for the unorganised Sector (NAFUS) for refinancing as well as developmental assistance exclusively for the micro enterprises.

Although the two self employment generation programmes namely, the Prime Minister's Rozgar Yojana (PMRY) and Rural Employment Generation Programme (REGP) may not be

in vogue they should be revived and reviewed and steps should be taken to merge them for greater effectiveness and better targeting.

3.1.4.3 Cluster Development

Taking into account the existence of a large number of clusters (manufacturing and/or services), the existing GOI's programme of Cluster Development should be enhanced to cover as many clusters as possible by providing schemes for the strengthening of infrastructure, banking facilities, skill upgradation centres, technology and innovation centres as well as such social sector programmes as housing, sanitation and social welfare.

The MSE sector has highly skill-oriented workers including in traditional/artisanal skills, specialising in the production of exquisite products (for example, specialised handloom clothes such as silk, muga, art craft like ornamental wares, sculpting, etc.). Geographical branding of such products and preservation of intellectual property rights are crucial. Schemes and assistance may be provided for such activities that would include education, awareness creation, documentation, and service provisioning, i.e., raw materials, designs, markets, etc.

- a. Innovative self employment schemes like multi-purpose service centres/job clubs may be formed. Two to five members can form a job club. An amount of 25% of the total project cost may be given as subsidy. The projects like Catering Unit, Agriculture, Bee Keeping, Sericulture, Rubber Nursery, Embroidery, Cool Bar, Dairy Farm, Tailoring & Embroidery, Jewellery Making, Ceramic Products, Earth Moving service, Piggery, Computer Sales, information kiosks may initially be taken up for financing
- b. A comprehensive review of the functioning of the District Industries Centres (DIC) may be taken up with a view to strengthen their capacity and orient them more as Counselling Centres, resource and convergence centres, and one-stop shops for micro and small enterprises through preparation of projects, skill development, periodic disaggregated data collection and dissemination of information.

3.1.4.4 Organisation of Industry and Workers

Recognising the role of MSE associations in policy formulation, advocacy, dissemination of information, steps will be taken to form such associations in places having no such

associations and strengthen their capacity of the existing ones. Recognising that workers' organisations in the MSE sector are few and need strengthening, it will be the endeavour of the Government to encourage formation of workers' organisations that will enhance their ability to secure basic conditions of work (e.g. toilets, drinking water, eating facilities), minimum wages, social protection, voice and representation, social mobilization/awareness generation, skill training and access to housing. The formation of Workers Facilitation Centres for such purposes as registration and servicing of social security will be encouraged.

3.1.5 Skill Development

Recognizing the enormous deficit in basic education and formally acquired skills by the working people, skill development will be recognized as an important component of active labour market policies of the government. The sectors which have been identified to examine the skill gap have been selected on the basis of the following criteria:

- (i) growth potentiality in terms of factor advantages ,
- (ii) significant contribution to the NSDP,
- (iii) projected growth rates and
- (iv) employment potentiality

3.1.5.1 Matching Training with Demand

- i. Labour market information systems may be set up adequately to annually assess the labour market requirements, identify labour intensive high-growth sectors, so that skills development can be planned and delivered accordingly to meet the demands.
- ii. The focus on skill training and development will fall on the informal or unorganised sector of the workforce. Appropriate programmes and schemes may be developed and introduced throughout the states to meet the requirements of such workers.
- iii. Recognising the inadequacy of institutional capacity in the public sector in training of trainers, policies and programmes may be introduced for the participation of the private sector as well as the nonprofit sector such as cooperatives, NGOs and philanthropic institutions.
- iv. To encourage acquisition of formal skill training by socially disadvantaged groups (e.g. SCs/STs) special packages will be introduced to provide scholarships, hostel facilities and tool kits.

3.1.5.2 Standards and Certification

The employability of trainees must be made the main focus of all future training efforts, including components such as curriculum development, training delivery, certification etc.

- i. A system of independent certification for candidates passing through skill training as well as trainers will be instituted with appropriate standards. This will be done at the state levels by designating competent institutions in public, private and non-profit sectors. A system of accreditation along the lines adopted by the University Grants Commission (in respect of institutions of higher education) may be introduced.
- ii. Greater involvement of industry in various initiatives mentioned above is crucial. To ensure greater involvement and interaction, existing and successful models will be assessed and their replication with appropriate adaptations will be taken up.

3.1.5.3 Linkage with Education System and other programmes

- i. From a long term point of view, skill training has to come through vocational education. Given the limited capacity of existing institutions, government will enhance the seating capacity (in public, private and non-profit sectors) by creating new institutions and offering vocational education as an option at the high school level of Class 9. Special focus will be given to rural areas and to youth from disadvantaged social groups.
- ii. Given the fact that a majority of the workforce has an educational level of less than 5 years (including illiterates), functional literacy programmes will be strengthened and extended. This will be done on the basis of a review of the achievements of the National Literacy Mission as well as the literacy campaigns carried out by civil society organisations.
- iii. Skill training and development will be made an important component of public programmes and schemes especially those focused on a large number of beneficiaries such as the National Rural Employment Guarantee Programme, National Rural Health Mission, Sarva Shiksha Abhiyan, ICDS and Mid-Day Meal Programme. This will give considerable advantage to women in rural areas as these activities are mostly, if not only, suited to them and predominantly spread over the villages in the states.

3.1.5 Women Workers and their Special Concerns

The National Employment Policy recognises the severe constraints faced by women workers in terms of (a) lack of recognition of their contribution in many economic activities that are not adequately measured, (b) discrimination specially heightened by social disadvantages and (c) wide gap in opportunities, wages and security as compared to men workers (d) lack of supportive structures to facilitate their employment..

3.1.5.2 Gender sensitive macro policies

Gender sensitive employment policies that take into account the special circumstances and problems of women will therefore enunciated from time to time. Such policies will aim at shifting women from invisible to visible work, from low productive employment, especially in agriculture, to high productive employment, and from low wage and no social security to higher wage with social security work conditions.

- i. Complimentary policies such as credit policies result in male bias. This will be corrected by taking special measures to access credit and such other facilities for women entrepreneurs and home based workers.
- ii. Technology policies often lead to more displacement of women than men workers. Promotion and innovation of gender sensitive technology will be undertaken in aiding women workers and enhancing their participation.
- iii. Formal credit agencies as well as employment and development institutions will be guided, and if necessary mandated, to link with the SHGs to provide a range of services. The models that are currently working in some states will have to be studied and adapted to the conditions of this state.

3.1.5.3 Identifying Sectors

- i. Sectors where women's participation is significant will be identified for specific focus as, for example, in agriculture, food processing, fishing, plantations, forestry, horticulture, export intensive manufacturing, tourism and care services with a view to introduce technology that are drudgery reducing and/or labour augmenting thereby creating conditions for employment generation, a decent work and higher productivity.
- ii. Policies and programmes for skill training and development for women will have a specific component of entrepreneurship development for women-headed micro and small enterprises.

3.1.5.4 Facilitating Structures

- i. Special institutional mechanisms will be created to cater to women's employment, such as information centres and organizational structures to promote decent employment in emerging sectors and activities.
- ii. Special attention will be given to the educational and skill training requirements of women workers thereby addressing, inter alia, the perceived bias against women workers in the labour market.

3.1.6 Vulnerable Workers

In an economy where an overwhelming proportion of workers are in the informal sector whose defining characteristics are low productivity, small size of enterprises and absence of job and/or social security to workers, vulnerability should be reckoned as all pervasive. However, there are specific segments of workers who are at a distinct disadvantage arising out of their helplessness in terms of local distress, distress induced migrants, working children, workers with physical challenges or those in bondage like conditions. A special program may be launched to identify this group of people and employment opportunities and need based training facilities may be created.

Section 4: Monitoring and Evaluation

While the role of the states has changed and evolved during the recent history, it is now increasingly apparent that good governance is important for achieving sustainable socioeconomic development. States are being challenged as never before by the demands of the new economic order.

Government and organizations all over the world are grappling with internal and external demands and pressures for improvements and reforms in public management. These demands comes from variety of sources including various development institutions, government, assembly/parliament, the privet sector, NGO's, citizens' groups, civil society, the media and so forth.

There has been a global sea change in public sector management as variety of internal and external forces have converged to make governments and organizations more accountable to their stake holders. Governments are increasingly being called upon to demonstrate results. Stakeholders are no longer solely interested in organizational activities and outputs; they are now more than ever interested in actual outcome.

Building an effective monitoring and evolution system essentially adds proverbial extra leg to the government's chair. What typically has been missing from the government systems has been the feedback component with respect to the governmental actions. This is why building an M&E system gives decision makers an additional public management tool.

The present scenario of monitoring and evaluation of employment and unemployment situation in Assam

The Sources of Labour and Employment Statistics:

The agencies responsible for employment and labour statistics are:

- (i) **Office of the Registrar General of India:** Work force in various industries classified, inter alia, by sex and for the smallest administrative unit (village/town).
- (ii) **NSSO and DES:** Data on general labour force participation are available at the State level from the sample surveys conducted by NSSO (Central sample) and DES (State sample).
- (iii) **Office of the Chief Inspector of Factories:** Employment in factories, classified by industry and sex; data available through statistical returns prescribed under various Acts like the Factories Act, Payment of Wage Act, etc.,

(iv) **Commissioner of Labour:** Employment in factories, classified by industry and sex; data available through reporting requirements under labour laws like Payment of Bonus Act, Child Labour (Prevention and Regulation) Act, etc.

(v) **Director of Employment and Self-employment:** data on employment in the organised sector classified by industry, occupation and sex; this is obtained through its Employment Market Information (EMI) programme.

Outputs

The following statistical outputs are generated by State level agencies

Statistical Outputs with respect to Labour and Employment

SN	Statistical Output	Agency Producing Output
1	Labour force/ work force participation by sex	DES (through NSS State sample) Participation in NSS is limited to field operations only : compilation tabulation, pooling and report writing is neglected.
2	Employment in factories by industry and sex	Chief Inspector of Factories
3	Employment in organized sector by industry and sex	Director of Employment & Training

Labour Statistics: The state Labour Commissioner is responsible for collecting statistics pertaining to Minimum Wages Act, Industrial Dispute Act, Contract Labour Act, Motor Transport Workers Act etc on statutory basis. The data at field level is collected monthly on closures, retrenchment and layoff, industrial disputes including work stoppages/gheraos by the Labour Inspectors and sent to the district labour officer who in turn sends to the head office. The data received from the districts are compiled at state level monthly/annually by the ministerial staff in the head office.

Employment statistics

These are maintained in the Directorate of Employment and Recruitments. The data relating to the number of candidates registered, placement on the job by category of employment,

industries, public and private, gender wise and so on are collected at district level by the office of District Employment Officer and then district reports are forwarded in the prescribed formats to the head office monthly, quarterly, half yearly, yearly. Then, based on these data, various tables are generated in the head office with regard to registration, placement and sponsoring of the job seekers, candidates by category and qualification, vocational guidance activities, registration and placement of SC/ST/OBC and physical handicapped, vacancies notified, and employment of displaced persons.

Frequency of data collection

The frequency of data collection is annual for data collected under provision of various Acts pertaining to labour. However, for data collected under the EMI programme, the frequency is quarterly and biennially. Data collected through detailed and thin surveys has a frequency of five years and one year respectively. Data collected through Census has a frequency of ten years.

Time Lag in release of data:

There is a time lag of 50-60 months for release of both labour and employment statistics. This is due to delays in getting reports from the districts in time on account of inadequate field staff in the districts and non-availability of statistical staff. No publication on labour and employment statistics is brought out by the concerned departments. There is no statistical cell in the office of the Labour Commissioner. All compilation is done by ministerial staff. There is no statistical cell in the Directorate of Employment and Craftsmen Training. The statistical work is looked after by the staff of the Directorate.

Quality

The quality of employment statistics suffers due to, among other reasons: (i) inclusion of closed factories as these cannot be excluded from the list of registered factories maintained by the Chief Inspector of Factories until they get de-registered; (ii) the data on factory employment becomes available with a considerable time lag of three years or more; (iii) the data on employment in the organised sector maintained by the Directorate of Employment and Training suffers from lack of completeness in the frame of establishments; (iv) exclusion of employment in the unorganised sector, agriculture and allied occupations in the private sector, and household establishments, among others; (v) poor response rate – 50-60% - even from establishments compulsorily required to render the employment returns; (vi) no scrutiny of returns received in the district office and Head office; and (vii) manual collection, compilation, consolidation and transmission of data.

The quality of labour statistics compiled by the Office of the State Labour Commissioner, responsible for data collection related to 26 Labour Acts, is adversely impacted due to (i) low response from the primary units and (ii) time lag in submission of returns, leading to delay in submission of State level information to the Labour Bureau, Gol.

The statutory returns submitted by the units under different labour laws are the major source of information. The adequacy and quality of data aggregated at the State level, therefore, is determined by the extent of response by the employers of the various industrial establishments. The response has generally been very low - less than 50 per cent with the exception of Factories Act, 1948 and the Plantation Labour Act, 1951¹. This results in severe under-reportage of data. The poor response rate is due to, among factors, complexity of forms and the duplication of same information on a number of forms. Further, whatever data is received from the units is also of inadequate quality, as the staff at the primary unit levels have little clarity on concepts and definitions used.

Overall scenario on availability of Statistics on key Indicators

SN	Statistical Parameter	Data Gap
1.	GSDP Estimates	Data gaps with respect to estimation of GSDP are several including: use of old indices / rates and ratios related to agriculture and allied fields that produce distortions in the NSDP estimates; data gaps in almost all the sectors/sub-sectors; exclusion of income derived from animal husbandry by-products, bamboo by-products, beetle leaves, floriculture, un-recognized educational institutions, expenditure on new constructions and repairs of residential buildings, among others.
2.	Estimation of District Domestic Product	Required statistics at the district level in respect of all sectors for estimation of DDP are not available. For example, production data of crops including horticultural and floricultural crops not covered under CCE are not available. Similarly, value of certain inputs used in primary sector (feed of livestock, irrigation charges, marketing charges, etc.) is not available. Also, service sector data is not available.
3.	Wholesale Price Indexes	WPI is not being compiled.
4.	Education Statistics	For literacy rates and adult literacy rates, the source is decadal population census. For intermittent years the rates become available only through NSS. Also, data for the State is not available with respect to children out of school classified by gender and castes
5.	Health Statistics	There is no mechanism of data collection on morbidity, mortality, pre-natal and post-natal health statistics from the private medical practitioners and voluntary and non government organizations. Also, data is not available on percentage of children fully immunized. Further, even with respect to government sector, key indicators of Health and Demography are not compiled at the state level.
6.	Birth and Death Statistics	Data at the district and block levels are not available with respect to birth rates, death rates, infant mortality rates, child mortality rates, maternal mortality rates, and prevalence rates of certain diseases.
7.	Employment Statistics	The data on employment and unemployment at district level are not available. Also, employment data is not available in respect of agriculture and allied occupations in the private sector, and household establishments.
8.	Forest Statistics	Data is not available on a number of important income generating parameters like head loads of fire wood consumed, wood used as cooking fuel, status of biodiversity resources, activities related to eco development of villages within the protected zones and the outer periphery, among others.

The above is a broad overview and limitation of the statistical system of the state. However this discussion is limited to creating an effective monitoring and evolution system employment policy outcomes.

Prioritization of statistical information system

Rationale: There is no gainsaying the fact that statistical information on economic (including agriculture and industry), labour and employment social (health and education), urban development, and environment (forest, water supply and sanitation) is an essential requirement of policy makers and administrators in the state government for development planning, macro and micro management of the economy, and monitoring of several mission-oriented programmes. Equally important, such statistical information is required by the business community for developing and executing their business plans. And, demand for statistics also emanates from the research community and the international agencies. Also, data on a number of parameters are required for monitoring progress vis-à-vis international programmes like the Millennium Development Goals to which India is a signatory. In view of the above, demand for statistics as a basis for prioritization has been conceptualised.

Methodology: inference on the demand-based priorities is on the basis of perceived demand (need) for statistics by policy makers, researchers and the business community. The demand (need) perceptions are to be derived on the basis of a priori understanding of need for data for both macro and micro management of the State's economy. The demand (need) for employment statistics has been categorized as high, medium, and low depending upon the criticality of statistics related to a given parameter for policy response.

Labour Budget Analysis

To measure the employment policy responds the high priority information would be to know the labour demand and labour supply situation at a given point of time. Demand of labour at various sectors can be assessed by the labour budget analysis of various departments. A comprehensive labour budget analysis for each and every project undertaken by various departments is necessary. For example, analysis of performance of NREGA will be done by P&RDD; this analysis will reflect the labour demand in the State. Measurement of labour supply is however not very strait forward.

Statistical system of the State should assign high priority on the labour budget analysis. As well as labour supply information. Month-wise and district-wise labour budget analysis Number of Households Expected to demand Wages Employment, number of mandays for skilled job, number of mandays for unskilled job and total mandays generated for project for each project (public or private) should be generated Department of labour and employment would be the nodal agency for labour budgeting and labour budget analysis.

Employment statistics that includes number of candidates registered in the public employment exchanges or private placement agencies, placement on the job by category of employment, industries, public and private, gender wise social group wise and religious group wise data are to be collected and consolidated data are to be kept on line.

Periodic labour force survey

The volatility in the economy, particularly in the context of economic integration with rest of the world has raised the concern of the policy makers, administrators and the stakeholders for an effective and informed decision support system. Absence of one such monitoring and evolution system for designing and implementation of inclusive growth is the periodic indicators on labour situations. Accordingly, on the recommendation of the National Statistical Commission (NSC), the Ministry of Statistics and Programme Implementation (MoS&PI) devise a methodology of periodic labour force survey (PLFS) for urban area only. The PLFS suggested by MoS&PI considers three basic indicators of labour market that are of interest to the planners and users are the labour force participation rate (LFPR), worker population ratio (WPR) and unemployment rate (UR). These indicators are generally constructed by cross classifying the labour force in respect of gender, age, educational level, industry and occupation. In the context collection and dissemination monthly/quarterly labour force data, annual reference period will not be suitable. For measuring the dynamic behavior of labour force in the short interval of a quarter, the approach of measuring employment using current weekly status (CWS) has been considered appropriate for generation of employment and unemployment indicators.

A stratified multi-stage design would be adopted with First stage units (FSU) being the latest UFS blocks and ultimate stage units (USU) being households. FSUs will be stratified within a State/region by size class of towns. Each million plus town will be a separate strata. Both FSU and USU will be drawn by SRSWOR Twenty five percent of selected FSUs for a quarter will be rotated in successive quarter to ensure 75% sample units to be common between successive quarters. A suitable sample size of FSUs per quarter should be surveyed to give estimates of WPR at 0.5% RSEs at All India level which in turn will ensure a reasonably good degree of accuracy of estimated parameters at broad sectoral breakup of the economy A recursive composite estimator for any parameter is proposed by combining the estimate based unmatched sample and linear regression estimate based on matched samples with previous occasion.

Section 5: Way Forward

The employment scenario, sectoral profile and temporal trends have been discussed in Section 2. Section 2 also provides different scenarios of growth in employment corresponding to growth in SGDP. In Section 3, a multi pronged and multi sectoral Employment Policy Framework has been elucidated which is further summarised in Annexure 2 of this document.

In the current section, an attempt has been made to collate initiatives of different Government Departments that have active employment generation policies backed by huge resource allocations. These policies implemented by different Government Departments are inclusive in nature and has the potential to address the needs to a large majority of the population.

While drafting the matrix on “Way Forward” in the overall framework for the Employment Policy of the state, Government interventions in active labour market available from different Departments were analysed. This includes employment generation in sectors which will follow a path of natural economic growth, such as Tourism and Transport and also inclusive employment generation through different rural & urban development schemes for welfare of the rural population, particularly the poor. Some departmental initiatives and the corresponding results are narrated below:

Panchayat and Rural Development Department (P&RDD): The P&RDD has a mandate to generate rural income through different employment generation schemes which are linked to poverty alleviation and improvement in quality of life of the rural masses. These programmes are designed to address inclusive programming around employment generation.

MGNREGS: Originally the SGRY scheme was implemented to promote wage earning for individual beneficiaries. A part of the fund allocated through SGRY was earmarked for the SC and ST for self employment ventures. From 2006-07 the SGRY has been merged with the national flagship employment generation programme NREGA and in 2008-09 the merger between the two programmes was completed. The NREGA, now renamed MGNREGS has provisions for issuing job cards to all eligible registered households of rural areas seeking manual work. At least 100 days of manual works are provided to the beneficiaries on demand. At present there are 35 lakhs job card holders in the state.

No. of Households provided with employment under the SGRY and NREGS schemes in Assam

Sl. No	Year	SGRY individual beneficiary: benefitted under IBS	NREGS No. of Households: Provided employment	Total Mandays generated in Lakhs mandays	
				SGRY	NREGS
1	2005-06	37,846		716	
2	2006-07	28,165	99,424	632.35	553.74
3	2007-08	6,204	1254800	334.20	487.86
4	2008-09	-	1877393	-	751.07
5	2009-2010	-	1977211	-	650.37
Total					

SGSY: Under this programme, self employment is provided to the rural BPL families through income generating activities of their own choice. Self Help Groups (SHGs) are formed and graded according to their performances⁸. After passing Grade I, the eligible SHGs are provided an amount of Rs. 10,000 as a revolving fund as Government subsidy. Together with the Government subsidy they also receive a supplementary bank loan of Rs. 15,000. On passing Grade II, they qualify for further bank loans and subsidies. The subsidies are given at the rate of 50% of the total cost of the scheme proposed by the SHG up to a limit of Rs. 1.25 lakhs. There are 204,851 Self Help Group in the state as on 31 March 2010. Given below is the achievement under the SGSY scheme from 2005-06 to 2009-10.

⁸ SGSY also has provisions for self employment or individual beneficiary schemes

Year – wise achievement under SGSY from 2005-06 to 2009-10 in Assam

Sl. No.	Performance Indicators	2005-06	2006-07	2007-08	2008-09	2009-10
1	SHG Formed	21,066	15,511	14,132	21,909	19,144
2	No. of SHG taken up Economic activities	5,772	5,873	11,355	12,468	9,712
3	Members of SHG assisted for Economic activities	55,333	66,188	98,590	136,178	103,837
4	Individual Swarojgaries assisted for economic activities	420	1399	1,671	6,550	6,582
5a	Credit disbursed (Rs. In Lakhs) - SHG	5,942.28	8,574.79	12,846.21	17,884.79	14,299.81
5b	Credit disbursed (Rs. In Lakhs) – Individual Swarojgaries	58.31	277.70	361.00	5,724.98	6,771.74
6a	Subsidy disbursed – SHG	3,769.87	4,994.96	7,795.58	11,187.23	9,270.56
6b	Subsidy disbursed - Individual Swarojgaries	43.11	120.24	249.33	5,101.89	3,700.88

In the context of Inclusive programming and for poverty alleviation, the income generation schemes of the P&RDD are very significant having issued 35 lakhs job cards under MGNREGS and formed more than 200,000 SHGs in the state under SGSY. The impact of these schemes in terms of its impact on the employment scenario in the state will have to be analysed. Also, it needs to be evaluated how far, the quality of life of the rural population has been improved through these income generation schemes. Nonetheless, they are strong initiatives that will be influence the employment scenario of the state.

Besides, the P&RDD will be introducing a special employment generation scheme for rural youths (both BPL and APL) from 2010-11. Under this scheme skill development trainings will be provided through the SIPRD (State Institute of Panchayats and Rural Development) and financial assistance will be provided through banks with subsidy from Government.

Urban Development Department

Under the Urban Development Department employment generation opportunities are made available through the poverty alleviation programme of SJSRY (Swarna Jayanti Sahari Rojgar Yojana). The SJSRY scheme is implemented in the state and is funded on a cost sharing basis of 75:25 between the Centre and the State Government. Under this programme, wage employment and Self Employment is created for the Urban Poor or BPL families living in urban areas (identified through a survey based on fixed criteria such as income, physical assets etc.).

This SJSRY has three distinct components:

- (i) Assistance to individual urban poor beneficiaries for setting up gainful self-employment ventures.
- (ii) Assistance to groups of urban poor women for setting up gainful self-employment ventures. This sub-scheme has been titled as "The Scheme for Development of Women and Children in the Urban Areas (DWCUA)".
- (iii) Training of beneficiaries, potential beneficiaries and other persons associated with the urban employment programme for upgradation and acquisition of vocational and entrepreneurial skills.

There is no minimum educational qualification for beneficiaries under this programme. However, to avoid an overlap with the Prime Minister's Rozgar Yojana (PMRY), *for self employment component*, this scheme is not applicable to the persons educated beyond the IXth standard.

In Assam the total employment opportunities created in the last 5 years directly or indirectly through wage employment and self employment schemes are given below:

Year	Employment opportunity created through Self Employment (USEP) (Persons)	Employment Opportunity created through Wage Employment (UWEP) (Lakh Mandays)
2005 – 06	1054	1.82
2006 – 07	1204	0.26
2007 - 08	130	9.75
2008 – 09	470	3.43
2009 – 2010	164	16.15
Total	3022	31.41

The SJSRY is a vibrant government scheme aimed towards poverty alleviation and focuses on the urban poor. It has strong inclusive perspectives addressing the marginalised communities, women, disabled and minorities. Evidently this initiative emerges as a huge compliment to the urban labour market which is expanding (housing, construction, service sector, hotels, restaurants etc.). Naturally scope of work for poverty alleviation is tilted more towards wage employment as the beneficiaries are generally poor and would not have the necessary entrepreneurship to pursue Self Employment. However, the fact that 31.41 Lakhs mandays of work generated through wage employment is a significant step towards poverty alleviation in urban areas.

Under this scheme there are provisions for skill training and entrepreneurial support for beneficiaries. However, there are possibly need of a more comprehensive understanding of the informal and open labour market. The idea is to build the capacity of the beneficiaries in tandem with market demand and link them with the open labour market.

Tea Tribes Welfare Department (TTWD): The significance of the TTWD becomes very high given that this department addresses the Welfare need of the Tea and Ex Tea Garden Workers, a community that constitutes about 20% of the population of Assam and is generally excluded from mainstream development of the state. The Tea Communities (workers and ex-workers given their geographical isolation needs targeted intervention in Welfare which is implemented through the following schemes:

1. Family Oriented Income Generation Schemes: Self Help Groups and Individual beneficiaries are eligible for a Financial Grant of Rs. 50,000 and Rs. 10,000 respectively. Activities include setting up services for “Tents and Decorators”, Fishery, Poultry, Piggery, Tea Nursery and Tailoring etc. During the period 2006 and 2009, 14,874 beneficiaries have availed this scheme.
2. Skill Development Training Centre: 50 Skill Development Training Centres have been established to provide professional training facilities to local youths in different trades like Carpentry, Masonry, Carpentry, Plumbing and Electrical works. Also, other trade related trainings such as Beauty Parlour, Cutting & Tailoring, Hair Dressing etc. have been added to accommodate women beneficiaries for self employment
3. The German BOSCH Company has imparted high profile training in trades like Electricians, Plumbing, and Carpentry & Masonry to 3100 participants during 2008-09 and 2009-10. All the participants have been provided high quality training and tool kits of the respective trades for their self employment
4. Under the Family Oriented Income Generating Schemes (Special Project), Power Tillers and Pump sets have been disbursed to beneficiaries for self employment in the Agricultural sector. 2653 beneficiaries have availed this scheme.
5. Besides training is also provided to about 434 participants for services as ANMs and Paramedics, since 2007-08. Under the Gramya Taxi Scheme, bank loans are given at subsidised rates to purchase taxis to 138 educated unemployed youths between 2008 and 2010.

The TTWD has plans to provide support to Tea Community people with more subsidies to purchase Auto Rickshaw / four wheel carts etc. also provide skill development in the areas of Cane bamboo products and other cottage industries. Special plans are also being contemplated to support Tea Community women to produce handloom products. However, it may be noted that though the initiatives taken so far are significant and directed towards creating skills outside the Tea industry, the outreach has been limited with modest numbers of beneficiaries having access to these schemes. There are three critical aspects associated with this very important initiative taken up by the State Government which may be delineated as follows:

- a) Limited numbers of beneficiaries reached
- b) Inadequate financial allocations to continue the programmes
- c) There is no evidence to show that the TTWD has a Roadmap to link the trained beneficiaries to the market and thus ensure sustained employment or income generation

Diverting the Tea Community youths to the market outside the Tea Industry is a huge challenge. The Tea Community population is culturally captivated in the social canvass of the Tea Workers habitations which are generally located inside the Tea Gardens. Being historically isolated, they are prohibited by a physiological barrier to venture out of the Tea Gardens. Though, the population in the Tea Garden labour lines have far exceeded the demand for labour in the Gardens, the additional or excess population derives a sense of security from the social homogeneity of their physical environment which is mutually excluded from the surrounding mainstream society. At the same time, there have been little Government initiatives to improve the conditions of the Tea Communities till recently.

The physical isolation of the Tea Communities over the years coupled with the fact that they are regarded as a special group that desires to live in isolation adhering to their culture, rituals and language have further isolated the community. Instead of interventions to change social behaviour, knowledge, attitude and practices to attain improvements in educations, health and quality of life parameters, the Tea Communities have been allowed to remain in isolation with the understanding the prevailing social behaviour, knowledge, attitude and practices of the Tea Communities are inherent attributes of the Tea Tribes and in effect a Fate accompli. The first major intervention in the Tea Communities has, however, been prompted by the massive gastrointestinal outbreaks with huge government support in the health sector with improvements in health, water and sanitation infrastructure; this is also leading to a paradigm shift to review the overall socio cultural canvass of the Tea Communities and decipher areas that might require interventions for improvement rather than assigning Community aspirations and attitudes as inherent and unchangeable attributes of the Tea Tribes.

The above discussion is necessitated by the fact that the Tea Communities as mentioned before constitutes 20% of the population of Assam and an Employment policy that do not address the specific needs of this community will be incomplete. Evidently, the interventions for the Tea Tribes need to be focussed, heavily monitored and adequately funded.

Hence it is suggested that the TTWD is strengthened with the following measures:

- a) Assured fund allocation to sustain programme implementation
- b) Field level community mobilisation programme (for behaviour change communication) to mobilise more and more Tea Community youths to seek employment outside the Tea Industry;
- c) Provide skill development training as per market demand & link the beneficiaries to the employment opportunities

- d) Post training monitoring to ensure that the trained beneficiaries are having sustained income
- e) Strengthening of the TTWD with reinforced Knowledge Management, expertise in Programme Implementation and manpower for regular hand holding at the ground level
- f) Tea as an industry has been always a strength for Assam. However plucking and manufacturing activities are seasonal (March to November). For the non working season, the excess workforce may be engaged judiciously for gainful employment.

Animal Husbandry and Veterinary Department: The Government has several programmes (ARIASP, TSP, SCSP, NPCBB, Fodder Development and 100% Assistance to State Poultry Farms) to support Poultry Farms and Livestock production in the state. The department has indicated that every township in the state has a ready market for poultry and livestock and the periphery of the township therefore offers huge potential for employment generation in the sector, both in the commercial and household sector. Moreover, to support the Poultry and Livestock industry the Government has trained Gopal Mitras for the privatisation of AI activities to render veterinary services in the inaccessible areas, thus creating indirect employment.

The potential for development of the Diary sector is even more pronounced. Data available for 2003-04 indicates that against a demand for 1095 million liters per annum, Assam produced about 795 million liters per annum thus leaving a gap of 300 million liters per annum. Several Government initiatives are being implemented to exploit this opportunity, for both self employment and large scale commercial production as follows:

- a) Milk Village scheme (State Plan): Under this scheme Grant-in-Aid is available for SC/ST beneficiaries to procure Cattle along with calf and other inputs like cattle insurance, cowshed, medicine, feed & fodder. In 2010-11, Rs. 50 Lakhs is available under Tribal Sub Plan and Rs. 100 Lakhs is available under Scheduled Caste Sub Plan.
- b) Assistance to the Entrepreneur for establishment of Commercial Diary Farming in each Block level – 30% of the total project cost (termed as margin cost) for a minimum 24 Milch Cattle (State Plan): This scheme is designed to support Entrepreneurs with 30% of the Total Project Cost and 100% Working Capital is supported by the Government. The Entrepreneur is expected to register a Diary Cooperative Society with several SHGs (Women's Groups) linked to the Diary business. By utilising Rs. 270 lakhs (as 30% of the margin cost against a total cost of Rs. 900 lakhs) 252 Commercial Diary Farming will be assisted under this programme.
- c) Assam Agricultural Competitiveness Project (AACP), (Externally Aided Project): Under this programme dispersed Diary farmers are assisted to form Diary Cooperative Societies with associated Self Help Groups (women's groups). The beneficiaries are provided with support on backward and forward linkages in their business and training to make them competitive and economically sustainable. Under the programme 350 Diary Cooperative Societies and 63 SHGs have been formed

- d) Rasthriya Krishi Vikas Yojana: With an aim to enhance milk production in the state with provision of milch cows, the GOI sanctioned Rs. 330 lakhs in 2008-09 to support 500 beneficiaries in 9 selected districts. Further in 2009-10, Rs. 500 lakhs has been allocated to reach 1000 beneficiaries in 21 districts.
- e) Venture Capital Fund: This is a shift from subsidy to credit linked diary schemes with huge success. Up to December 2007, Rs. 2.8 crores was sanctioned and released through Rural banks and another Rs. 4.5 crores through Commercial Banks.

Science and Technology Department: The ASTEC/AEDA has taken several initiatives to promote employment opportunities through collaborations with various national level agencies. There have been employment generation opportunities in leather goods and garments, mushroom cultivation, Instrument Development and Service Centre (IDSC) producing R&D products for educational institutions, Organic Cultivation and Semi Processing of Medicinal Plants, etc. The Assam Remote Sensing Application Centre (ARSAC) also organises training on Remote Sensing and GIS to respond to the growing demand for skilled professionals in these areas and encourage local entrepreneurs in the field of scanning digitisation for deriving thematic layers using satellite data.

The Government initiatives in mushroom cultivation, leather goods, instrumentation, bee keeping, bamboo crafts, candle making, Ramie Fibre based products, Medicinal Plants based products, Vermicomposting, Glazed pottery has produced employment for about 1000 persons between 2005 – 2009. The ARSAC has pointed out that there exists significant potential for employment in the areas of advanced surveying for preparation of Digital Land Record Systems locally. Also the ASTEC has set up a State Biotechnology Cell which would lead to huge biotechnology based employment opportunities.

The Assam Energy Development Agency (AEDA) implementing the Village Electrification programme has pointed out huge potential for skilled and semi skilled employment generation for maintenance of the Solar Lighting systems in the RVE villages. The Agency is also providing skill development training to rural youths for the improved Chulla programme. Given the importance of Renewable Energy for the years to come it is felt that significant employment will be generated in rural areas for installation and maintenance of the schemes.

Fishery Department: There is huge demand for fish locally and fishing is a natural activity for the rural and semi urban population in the state. However, sustained and viable fish farming leading to employment generation and sustained wage income demands scientific fish farming which has been addressed by the State Government through various schemes under the State Plan, RKVY, AACP, NFDB etc. In Assam the water bodies under ponds, tanks, derelict water bodies, ox bow lakes etc. is approximately 1.9 lakh hectares. Some of the State Government initiatives include establishing a State Fishery College at Raha for training of educated unemployed youths and providing them with tool kits for fish farming. Also, "Matsya Mitras" have been created to strengthen the fish farming extension services. Between 2004-05 and 2008-09, the fish farming sector has been able to create employment for about 32,700 fish farmers and developed 5760 ha of water under fisheries development. In addition nearly 600 SHGs (about 4000 beneficiaries) have been benefitted with associated activities.

Fish farming undoubtedly has huge potential in Assam and it needs to be systematically exploited with both small entrepreneurs and large scale commercial farming. The consumer market is readily available; hence supply side support will yield spontaneous results.

Handloom Textile & Sericulture Department: The Handloom and Textile sector in Assam has huge potential for employment generation given that the community has some basic skill and the local market has demand for the products. Currently, the sector employs nearly 25 lakhs people in the state, second only to the agricultural sector. The need of the hour is diversification of handloom products for creation of bigger markets. The bottleneck lies in the manner in which several Government initiatives are currently being implemented. They may be listed as follows:

- a) Most of the schemes/ packages are aimed to help the poor & rural people; trade related innovations thus becomes limited
- b) The rural weavers are focussed on production of traditional fabric and are not very much open to innovations and diversification of products

In this backdrop, economic growth and sustained income generation at higher levels can be assured only if competent and qualified designers/ entrepreneurs are given package assistance for diversification of handloom products. The package needs to comprise higher subsidy, easy loan at low interest, marketing assistance etc. Evidently, the entrepreneurs will be collecting the required handloom fabric from the rural areas thus benefitting the local weavers.

The Handloom, Textile and Sericulture Department already has remarkable infrastructure to support the sector. In the state there are 102 Handloom training Centres and 4 Handloom Training Institutes for higher level trainings. The most remarkable intervention in the sector has been initiated through the Assam Bikash Yojana for distribution of yarn to poor weavers. During the five year period (2004-05 and 2009-10) nearly 40 lakhs weavers have benefitted from the programme.

Employment created in the Handloom sector through different Schemes (2005-06 to 2009-10)

Under various Centrally sponsored and State Plan schemes there has been initiatives to support production of raw silk (Eri, Muga and Mulberry). The key steps taken for promotion of sericulture are:

1. Augmentation of Sericulture food plants, maintenance of plantation and promotion of commercial seed production for increase of quantum of rearing for production of cocoons
2. Popularising improved reeling/ spinning machines amongst NGOs/ SHGs/ Entrepreneurs to enhance yarn production

Through these initiatives the Department have been able to provide wage or self employment to about 5900 persons. Sericulture is promoted nation-wide as an agro based labour intensive and rural cottage industry providing gainful employment to the weaker and marginalised section of the rural community. It is a highly remunerative occupation requiring

very small capital investment. Raw silk production (Eri, Muga, Mulberry) is the most the most appropriate toll to provide gainful employment to the poorer sections as the net income may vary from Rs. 12,000 to Rs. 70,000 depending on the variety of the silk. If the farmers take up yarn silk production along with cocoon production, the return to investments will be even higher.

It is estimated that Sericulture can generate 11 mandays per KG of Mulberry raw silk production (in on-farm activities) throughout the year. It is also estimated that 250 mandays employment is generated while producing 1 Kg of Eri or Muga silk, which implies that one family in Vanya sector can get sustainable employment and livelihood if they produce just 1 Kg of Vanya silk. The Department has made an assessment that between 2000 to 3000 lakhs mandays are presently generated every year through production of cocoons and its conversion to raw silk. The Department has further estimated productivity of the sector has not reached its optimal levels. It has been pointed out that the production capacity of Muga Raw Silk with the existing plantation is 140 MT per year, but the present level of production is hardly 100 MT per year. If the entire plantation acreage could be used for Muga cocoon production, another 100 lakhs additional mandays could be generated every year.

Industries and Commerce Department: Evidently, industries and commerce has a significant role to play in creating employment through facilitating investments in the state in the manufacturing and trade related activities. The Government plays a facilitator's role through capital investment and making available infrastructure including electricity. Also, an investment in Transport and Communication facilitates investments in industries. The Department has also directly made capital investment and commissioned power units for electricity, paid interest against loan facilities availed and paid insurance factory insurance set up by entrepreneurs. The Department has also subsidised transportation of raw silk to facilitate growth of the silk industry.

But direct employment opportunity is available only through the PMEGP (Prime Minister's Employment Generation programme). Under the PMEGP loan is tagged with employment created by the beneficiary industry. Other schemes available through the department are as follows:

- a) Mukhya Mantri's Karmajyoti Achari,
- b) Training under Assam Bikas Yojana and
- c) Loan under Kalpataru Achari

The above programmes are primarily tools for self employment for prospective entrepreneurs. Different incentives are also available through the Industrial Policy of Assam & Government of India's Industrial Policy for the North East. Employments created through the Departmental schemes are given below:

Programmes	Employment generated in Numbers				
	2006-07	2007-08	2008-09	2009-10	Total
Prime Minister's Rojgar Yojana	5,930	5,581			11,511
Prime Minister's Employment Generation Programme			1,228	2,440	3,668
Assam Bikas Yojana (Skill Development Programme)			2,365	3,347	5,712

Apart from the above, during the last 4 years 7172 Small and Medium Industries have been set up in Assam through which 46,628 persons have been employed. The Department also conducts regular training and Trade Fair etc. to boost industrial growth in the state. Some of the areas where there are potential for future employment opportunities are given below:

- a) The Assam Gas Cracker project which is likely to be commissioned in 2012, will provide significant employment opportunities for local entrepreneurs in the downstream petrochemicals polymers, Plastic and allied sectors. The Gas Cracker project will open up employment opportunities directly to about 1000 persons apart from indirect employment opportunities for an estimated 100,000 persons
- b) Major Industrial Parks are being set up where employment opportunities will be generated. Other Sectoral clusters in the pipeline are, (1) Mega Food Park at Nathaldhuli: This will have a cluster of Food Processing units that will provide both skilled and unskilled employment, (2) Jute Park at Dhing – This will have a cluster of jute based industries, (3) Bamboo Park at Jagi Road, (4) Banana Park at Goalpara and (5) Textile Park at Sipajhar

Transport Department: Policies and initiatives taken up by the department helps employment generation in the Transport and Tourism sector both directly and indirectly. Needless to say, the private and informal transport sector is self sustained and experiencing a positive growth trajectory. The Government has also made some targeted interventions by way of introducing the "Tourist Cab – 2005" (a margin amount of Rs. 25,000 is given to the prospective beneficiary; 40 persons availed this facility in 2006-07). The Government will also be launching the Green Taxi to generate employment for educated unemployed youths. Besides, there are plans in the pipeline to establish Driving Training Schools, state wide, through Public Private Partnerships.

Inland Water Transport has huge potential in Assam, given the huge catchment areas of Brahmaputra and Barak. Possibilities of private partnership to open up passenger and cargo movements using the water ways has so far not been fully explored. Investments in infrastructure will widely open communication throughout Assam and also connect Assam with West Bengal, via Bangladesh.

The Inland Water Transport Department of the Government has 100 ferries (74 old and 24 new) and offers ferry services at different vicinities including commercial and cargo services. There are about 1,000 people working directly with the Department. However, the services available are grossly short of the demand. Apart, from linking the banks of the Brahmaputra, there are several riverine islands, including Majuli, which are thickly populated. Hence, apart from business interests and employment generation, the expansion of the Inland Water Transport network is warranted to serve public purposes.

Tourism Department: The “Tourism Policy of Assam-2008” has been introduced with a view to promote the tourism sector and creation of employment opportunities with greater involvement of the stakeholders. During the past 5 years, a large number of tourism infrastructure projects have been taken up for execution of which 41 have been completed. These have created both direct and indirect employment opportunities.

Under the “Chief Minister’s Self- Help Tourism Scheme” 18 groups (of interested educated youths) have taken financial assistance for tourism related business ventures. Under the “Assam Bikas Yojana” also substantial employment has been generated through schemes wherein educated unemployed youths have availed subsidy to operate tourist transport, dhaba, restaurant, travel agencies etc. The Employment generated through the Tourism Department are as below:

Name of the Scheme	Project Created	Average Direct Employment per Project	Average In-Direct Employment per Project	Total Employment generated
Infrastructure Project/ Unit	41	5	10	615
CM’s Self Help Tourism Scheme	18	6	10	288
Aassam Bikas Yojana	330	2.5	2.5	1650
Total	389			2553

The economic potential of the state has not been explored or exploited to its fullest potential. Though the Department has engaged itself in various promotional activities and introduced schemes to offer incentives to local youths to enter the tourism sector with commercial ventures, more targeted interventions are required. The State has to invest more on infrastructure in all major tourism spots. The State also has to take up aggressive campaigning to promote tourism in this area. Subsequently, scope has to be created for private sector investments in the tourism industry, which in turn will generate employment for the local population.

Environment and Forest Department: The Government of Assam adopted the policy of Joint Forest Management (JFM) wherein, the population having forest based livelihood can exploit the natural resources in a systematic manner, through conservation and protection of existing Forests and Wildlife Resources and regeneration leading to sustainable harvest of

forest produces. Eco development and dealing with the concerns & need of Forest dependent communities are also two different aspects of Forest Management.

Under the JFM programme, Joint Forest Management Committees (JFMCs) are formed with community members of the “Forest Fringe Villages”. The JFMCs develop micro plans to comprehensively address all the concerns of the Forest dependent Communities, including livelihood and natural resources conservation. Currently there are about 1000 JFMCs in the state which can be expanded to 3000, incorporating all Forest Fringe villages in the state. The World Bank Project, NaRMIL, a component of AACP has also been implemented through the JFMCS.

The total employment opportunities created in the last 5 years are as follows:

Year	Direct Employment in the Department	Indirect Wage Employment	
		Daily Wage (lakhs mandays)	Monthly Fixed Pay
2005-06	238	29.69	
2006-07	372	29.34	
2007-08	1391	49.38	
2008-09		34.23	1514
2009-10	291	11.71	

The Forest Department has significant scope for promoting Forest products and in the process generating employment. The Department has the following plans in the pipeline:

1. Enriching Forest Resources and Bio-diversity; funds are being generated externally and internally
2. Promotion of Forest based Eco-Tourism. Assam has huge potential in this aspect having several natural wildlife sanctuaries; Eco-Tourism will be essentially community based and therefore generate self employment through Hotel and Hospitality business and also communication related to tourism
3. Social Forestry and Non Timber Forest Produce are currently transferred as subjects of the PRIs (Panchayati Raj Institutions). In collaboration with the P&RDD, rural youths may be trained to produce forest based products
4. Assam in particular and the North East in general are rich in home-grown and wild bamboo varieties. Self employment through bamboo application has a promising future
5. Ayurveda, as an alternative medicine has substantial popularity in the society. Growing medicinal and ayurvedic plants is an encouraging economic activity in support of Ayurvedic treatment

Agriculture Department: About 75% of the population of the State is dependent on Agriculture & Horticulture sector for its livelihood. The cropping intensity in the State is 139% at present. The Agriculture Department has provided a number of inputs like Tractors, Power Tillers, Pump sets, quality seeds, fertilizers, lime, micronutrients, implements etc. under various schemes. All these efforts of the State have helped the farmers to increase their productivity & production. In the process, not only have the farmers increased their income through longer durations but also generate wage employment to the land less farmers. The production of rice in the State has gone up from 29.16 lakh tons in 2006-07 to 43.36 lakh tons in 2009-10.

Year	Rice production (Lakh/MT)	Increase over 2006-07 (Lakh/MT)
2006-07	29.16	-
2007-08	33.19	4.03
2008-09	40.70	11.54
2009-10	43.36	14.20
Total		29.77
Average of 3 years		9.93

The average increase of approximately 10.00 lakh tons per year over the last 3 years has added an average income of Rs. 1600.00 crores per year in the State during last three years. If one manday is treated as equivalent to Rs. 100.00, then the Department has added an average of 16 Crore mandays per year during last three years through self employment or wage employment.

Year	Approximate numbers of employment generated (Mandays)
2005-06	80,321
2006-07	102,396
2007-08	120,987
2008-09	145,440
2009-10	155,870
Total	605,014

Similarly, Horticulture has provided huge employment to the landless farmers directly and cultivators indirectly. The performance of Horticulture sector in the State during last few years has been very encouraging. The Directorate of Horticulture & FP is implementing the Centrally sponsored Scheme of Horticulture Mission for North East and Himalayan States

(HMNH). Besides, under the State Plan, schemes like Mushroom and Bee Cultivation are being encouraged to generate women's employment. The employment generated over the past 5 years through cultivation of horticultural crops under various area expansion programme are as follows:

The vegetable production in the State has gone up from 24.71 lakh MT in 2001-02 to 40.52 lakh MT in 2008-09 (Data of 2009-10 is not yet available). Similarly, there has been increase in production of fruits & spices. Increase of income per annum reveals that the sector has generated an average of 14.4 crore of mandays of employment per year during last three years. Under the Chief Minister's employment generation scheme commercial vegetable cultivation has been proposed engaging another 9000 farmers.

There is huge potential for generation of employment opportunities in Agriculture and Horticulture Sector. Increase in cropping intensity from 139% to 200% i.e. two or three crops per year instead of one will provide employment to 17 lakh farming families and a few more lakhs of landless labourers for the second season also. Therefore, there is huge scope of employment in this sector if sufficient additional support is provided to the farmers to improve cropping intensity and production. Intensive Horticulture, particularly, vegetable cultivation has tremendous potential in the State. This can not only generate huge employment directly as well as indirectly.

Conclusion: While reviewing the initiatives and activities of different Government Departments it becomes quite evident that there are huge resources and remarkable scope for development of enterprises and employment. However, there could be a need for collating the information in one platform and also developing a comprehensive understanding of the demand of the labour market. The Departmental inputs can thereafter be tailored to match the demand of the labour market.

Interdepartmental convergence and a mechanism to share information on opportunities need to be developed. This will ensure more effective and prompt use of resources directed towards employment generation which is inclusive in nature and has relevant social safety provisions in place.

Finally there may be a need to develop an inventory of all training & capacity building inputs (managed by different Departments) and also other employment generation provisions. The Department of Labour as the Nodal Agency may review different packages and find out possibilities of integration of some of the modules which have predominant commonalities. Further, the Department of Labour may also consider the possibility of improving the packages in terms of technical standards and in line with the profile of the beneficiaries and market demand.

Annexure 1

Under the rotation scheme, simple estimation formulas (double sampling) along with more complicated formulation have been illustrated below.

A few simple mathematical formulations of estimation procedure:

Model based approach

The model based approach is a model dependent method and provide more precise estimates in case of probabilistic sampling design. In this approach, linear regression estimation method is used to increase precision by using an auxiliary variable, x (number of person employed obtained from earlier Census or Government Employment records) which is highly correlated with the same information, Y measured at a different point of time. The main advantage of this approach is that once the sample is drawn, the probabilities of selection are irrelevant. It considers the assumption of the model and the use of a best estimator under the model as essential. Considering the relationship between Y and X is approximately linear, the proposed simple linear regression model is

$$y_{ij} = a + bx_{ij} + \xi_i \quad i = 1, 2, \dots, n_j \quad j = 1, 2 \dots k$$

Where y_i and x_i is the i th sample observation obtained from the j th population. We can estimate a and b from the sample by solving the normal equations.

Suppose a large sample of size m is drawn initially from the population of N units by using SRS. Let y_m and x_m be the sample means of Y and X . Next, we select another sample of size n using SRS again. This sample be of size n can be either a totally independent sample or it can be a subsample of the initial large sample of size m ($m > n$). The advantage with the later strategy is that the observations on the auxiliary variables would be already available. Let y_n and x_n be the sample means of Y and X from the second sample. Then the proposed regression type estimator is given by

$$Y^*_{mn} = y_n + b_{yx} (x_n - x_m),$$

where b_{yx} is the sample regression coefficient of Y on X based on the n units. This estimator is biased. But for large sample, it is almost unbiased. If the corresponding population regression coefficient $B_{yx} = S_{yx}/S_{xx}$ is known apriori, then the proposed estimator becomes

$$y_{mn} = y_n + B_{yx} (x_n - x_m), \text{ which is unbiased.}$$

The variance of y_{mn} is given by

$$V(y_{mn}) = (1/n - 1/m) S_{yy} (1 - \rho^2) + (1/m - 1/N) S_{yy}$$

which is smaller than $V(y_n) = (1/n - 1/N) S_{yy}$, if ρ , the population correlation coefficient, is high.

Model assisted approach

Model assisted approach is a method between design based approach and the model based approach. Here the underlying assumption is that model fits the population reasonably well, however, the population can not be generated by the model. The main purpose of the model is to estimate the regression coefficients for using in the regression model. The basic

properties (approximate un-biasedness, validity of the variance formula, etc.) are not dependent on whether the model holds or not. This procedure is called model-assisted, not model-dependent.

Here, in the first occasion, a initial large sample is of size n' as before. But in the second occasion, assuming that the population might have undergone some change, we would like to incorporate some new units in the sample which were not selected in the first occasion. Therefore, in the second occasion, the sample of size n is split into two parts, $n = m + u$, where m is a SRS subsample from the originally selected n' units, and u is a SRS subsample from the $(N - n')$ unselected units (also called matched and unmatched units). From the u units, we get an unbiased estimator

$$y_{1(u)} = \text{sample mean of } u \text{ units, with } V(y_{1(u)}) = (1/u - 1/N) S_{yy}$$

Besides, using the matched sample, we obtain another regression estimator as before $y_{2(m)} = y_m + b_{y(m)} (y_m - y_{n'})$ where y_m and $y_{n'}$ are sample means based on m and n' units respectively.

Here, $b_{y(m)}$ is the regression of the m units in the second occasion, on the corresponding units observed in the first occasion. Assuming m is sufficiently large, and that the population value S_{yy} remains unchanged over the first and the second occasion, we get

$$b_{y(m)} = B = \rho S_y^{(2)} / S_y^{(1)} = \rho$$

where, ρ is the one-occasion-lag correlation coefficient of Y .

=

$$V(y_{2(m)}) = (1/m - 1/n') S_{yy} (1 - \rho^2) + (1/n' - 1/N) S_{yy}$$

$$= S_{yy} (1 - \rho^2)/m + S_{yy} \rho^2/n', \text{ assuming } 1/N \text{ as negligible.}$$

Finally, the composite estimator is proposed as the weighted combination of the matched and unmatched estimators, the weights being inverse of their respective variances.

$$y_c = w_1 y_{1(u)} + w_2 y_{2(m)} \text{ where } w_1 = 1/ V(y_{1(u)}) \text{ and } w_2 = 1/ V(y_{2(m)})$$

$$V(y_c) = S_{yy} / [u + (1 - \rho^2)/m + \rho^2/n']$$

Rotation Group sampling:

Sample rotation is used in most periodic surveys. To describe various types of rotation, standardization of terms is needed. To this end, a *panel* is defined as the collection of all units in the sample, reporting for a given period. A period could be a week, a month, a quarter, or whatever. In some periodic surveys, there is a *fixed panel* that does not change with births and deaths of the units. The exclusive use of a fixed panel produces very efficient estimates of periodic change. Other business surveys employ rotating panels to reduce respondent burden.

The use of rotating panels can also lead to more efficient estimates of periodic changes. Often, however, the largest sampling units need to be included with certainty in a fixed

panel, surveyed every period, even when some sample rotation is desirable. By definition, only those units selected from the noncertainty portion of the population that are selected in a given period, constitute the rotating panel.

Types of rotation: In a *one-level rotating panel*, there may be an overlap in the (noncertainty) sampling units surveyed in the time period $t-1$ and t , but individual units when reporting for the time period t , report for that period only. The pattern of rotation of the sampling units is an important feature in this type of rotation. The collection of sampling units within a rotating panel that undergo a specific pattern of reporting, is referred to as a *rotation group*. The properties of the estimates used with one-level rotation may depend heavily on the pattern of rotation used. Rotating panels usually overlap across periods to obtain better estimates of period-to-period change. They can also be used to improve the estimates of the population totals. One level rotation is frequently used in selecting samples from an area frame.

In contrast to one-level rotation, suppose a unit reporting at time period t , reports for multiple periods. If a unit reports for two periods, say t and $t-1$, this is a *two-level rotating panel*. If a unit reports for three periods, say t , $t-1$ and $t-2$, this is a *three-level rotating panel*. To avoid collecting the same data again from the same units in a two-level rotating scheme, at least two distinct rotation panels are needed, - one for time period t and the other for period $t-1$. Likewise, in a three-level rotating scheme, at least three distinct rotation panels are needed.

In multilevel rotation, the panels are usually selected so that they do not overlap. This means that estimates derived from the panels are negatively correlated (because the population is finite). Nevertheless, if the population of the sampling units is large compared to the size of the panels, the estimates derived from the panels are approximately uncorrelated. By having nonoverlapping panels, the sample units only have to report every m periods, if there are m rotating panels.

Estimation procedure: An estimator for a population total in a particular period may be based exclusively on survey values from that period. It is possible, however, to decrease the variance of that estimator by employing information from outside the panel, given a one-level rotation sample with overlapping rotating panels or a multi-level sample with distinct rotating panels. Here we shall limit our discussion to a two-level rotation scheme.

Let Y_s be the population total one wishes to estimate for period s . The rotating panel reporting in period s reports for period s and retrospectively for the previous period $s-1$. Let Y'_s and Y'_{s-1} be the Horwitz-Thompson estimator of the period s for the total Y_s , and of the period $s-1$ for the total Y_{s-1} , obtained from the period s rotating panel. So, for any particular time period s , two estimators exist for total Y , the estimator Y'_s obtained from rotating panel reporting for the period s and the estimator Y''_s from the rotation panel reporting retrospectively in the period $s+1$. After T survey periods, ($s = t - T + 1$ to t), we have the following vector of observations:

$$Y_t = (Y'_t, Y''_{t-1}, Y'_{t-1}, Y''_{t-2}, Y'_{t-2}, \dots, Y''_{t-T+1}, Y'_{t-T+1}, Y''_{t-T})$$

The minimum variance unbiased estimator of Y_s has the form

$$Y_s^* = \sum_{k=0, T-1} (a_{s,k} Y'_{s-k} - b_{s,k} Y''_{s-k-1})$$

where $a_{s,k}$ and $b_{s,k}$ are coefficients which depends on the variance covariance matrix of Y_s . But computation in this way of estimation is prohibitively expensive.

One way of simplifying the estimation procedure is to have an *iterative composite estimator*

$$Y_s''' = Y'_s + b(Y_s''' - Y''_{s-1})$$

$$\text{Or } Y_s''' = Y'_s + b(Y_s''' - Y''_{s-1}) \cdot Y'_s / Y''_{s-1}$$

The first form is appropriate when the variance of Y'_s is roughly constant over time,. The second form is appropriate when the *relative* variance of Y'_s is roughly constant over time. This is particularly reasonable when the variable is subject to inflation or growth.

One drawback of two-level rotating scheme is, since each respondent in a rotating panel reports for current period and also for the previous period, there may be reporting bias, one influencing the other.

Annexure 2

Way Forward: An Action Plan

SECTORS	SUB SECTORS	ACTION SUGGESTED
Macro Economic Policy	Infrastructure development	Rail, Roads, Power, Inland Water Transport, Airports Central intervention will be pursued for implementation of 11 th planned programme for N. E. Region specially for Railways & Airports.
	Primary Sector (Agriculture)	To Undertake holistic Land reform program. Distribute cultivation right to the farmers. West Bengal model of land reforms may be studied for suitability in Assam's condition. Ceiling surplus land located in Tea Garden areas may be used not only for urbanisation but also be used in innovative ways for employment generation
		Extension programmes for technology improvement , conservation of water bodies, pisci-culture, horticultural crops at hajo and upper Assam, spices at Majuli, Karbi-Anglong, NC Hills, Aromatic and medicinal plant, bio-diesel, bamboo cultivation, floriculture, sericulture, dairy, poultry, piggery development, tissue culture labs/nurseries, Rural agro service centres, Greening the country through Agro Forestry, Energy Plantation for Biomass power Generation, Rural marketing network for agriculture produced
	Manufacturing and Tertiary sector	Tea as an industry has been always a strength for Assam. However plucking and manufacturing activity last for nine months (March to November). The remaining three months, a large section of labour-force remains unemployed. Small level sugar industries may be introduced for manufacturing of sugar and Khandsari. The Tea garden authorities will be encouraged for such activities during the lean period of the tea industries
		Neighbourhood Downstream industries of oil refineries will have to be encouraged by developing industrial estates with marketing networks

		Induction of appropriate technologies to improve the productivity in the unorganised sectors special emphasis on weaving, garment making, bell metal artefacts, ornamental wares and creating marketing channels
		Systematic approach will be initiated to encourage Micro level household industries on production of Endy (Eri) and golden silk and to encourage mechanised weaving to boost up the gender friendly rural employment
	Fiscal and Monetary Policies	Tax holidays, tax exemptions and differential duty rates for the invest proposals will create large numbers of direct and indirect employment.
		Increase Public expenditure through various innovative schemes on activities such as irrigation facilities, transport infrastructure, power and rural health & education.
		Mission “Bank account for all Adults” should be launched. There is also a need for creation of development finance facilities for self employment, small and micro enterprises
Trade Policy	Creation of Special Economic Zones (SEZs) for weaving, spinning of silk in Sualkuchi and pottery, bell-metal in Sarthebari and Hajo.	
Sector Policies	Agriculture	Surplus land in tea garden areas may be utilised for cash crop productions which will generate quality rural employment as well as generate government revenue. However systematic approach should be taken up involving the concerned Tea garden administration
		Extension programs to be evolved to facilitate diversification of agricultural products and shift from on-farm to off-farm activities. Creation of storage facility, scientific packaging industries, small scale processing and preserving industries (e.g. fruit juice, pickles etc.) are also warranted
		Regulations should be devised to strengthen farmers’ and producers’ organizations in order to be able to bargain for their rights as farmers. AADHAAR card will be issued to all farmers and growers
		Direct government intervention is needed for systematic marketing network that will link the

		consumer with the producer effectively and ensure higher price realization of their produce, without any involvement of middlemen
		A suitable mix of price and non-price incentives may be devised for the farmers to meet current cost of production with a reasonable profit
Manufacturing		Special fiscal support and incentive marketing facilities for textile products, beverages, food products, bamboo product and wood products.
		Medium and large size industrial estate will have to be built around four refineries to facilitate downstream industries
		Marketing network for Small and medium scale industries are to be built up
Construction		Implementation of various provisions of labour regulation, minimum wages, safety and welfare.
		A proper economic safety net is to be built up by the government in terms of group insurance etc.
Retail Trade		Implementation of National Policy for Hawkers, Street Vendors and small shopkeepers
Tourism		'Destination' and 'circuit' focused planning of infrastructure through public private partnership (PPP)
		Creation of training facilities through public private partnership (PPP).
		Invite investment for five star and five star deluxe hotels in Guwahati, Jorhat and Dibrugarh.
		Creation of budget hotels for domestic and low cost international tourism.
IT& ITES		Project the state as IT & ITES destination; aggressive promotional policies through provision of all IT related attributes/ facilities

		Invite domestic and foreign direct investment for building up call centers and BPOs.
		Provide direct and indirect fiscal incentive along with SEZ status.
		Promote e-governance.
		Create information kiosk in each village in collaboration with BSNL.
		Create computer training centers at Panchayat level with nodal training centre at district head quarter.
	Active Labour Market Policies	All Panchayat must provide the work projection, employment projection for NREGA schemes; this is an extremely tool for inclusive programming that has the potential to reach the rural population effectively. Moreover, all rural development schemes, especially those aimed towards poverty alleviation should be implemented in convergence so that the benefits are absorbed in unison and in the process the benefits are sustainable
		Innovative schemes are to be devised for urban poor taking into considering existing opportunities and connecting the workforce with labour demand
		The employment exchanges are to be made online, so that they can function in a transparent and interactive manner. The incumbents must be able to take interest in the Employment Exchange processes and have the necessary confidence on the system
		The scope of employment exchanges is to be broadened to address career counseling, handholding services, etc.
		Creation of study circle at every sub-division level. Knowledge management is a key skill for every job seeker. Moreover, it is extremely important for job seekers to be aware of the employment market and relevant opportunities available in the market
		Creation of interactive web portal with proper linkage, facilitating, regular interaction with the

		institutions and industry.
		Creation of monitoring and evolution cell. It will be extremely important to track changes and in the process evaluate the performance of the existing opportunities. Naturally, regular and authentic data will be required to track the policy implementation
		Demand and supply analysis in the labour market through labour budget analysis and periodic labour survey
		Labour budget analysis for all public and private investment may be made compulsory
		Special facilities to be established for women workers
		Workers both in the urban and rural sector must be able to ensure increase in income along with improvement in quality of life. Therefore, through different government welfare schemes, provisions should be made for (i) sanitation and drinking water, eating and child care facilities, (ii) payment of minimum wages wherever applicable, (iii) enforcement of safety standards and (iv) representation of women in collective bodies of workers
		Creation of safety net by promoting self-help group through micro financing. Each Panchayat should create fund for such micro financing. Also, a proper economic safety net is to be built up for construction worker, agricultural labourers etc. through group insurance etc.
Policies for Micro and Small Enterprises	Organisation of Industry and Workers	Lead Banks of the state should be requested to ensure compliance with RBI guidelines on access to credit by the MSEs.
		In collaboration with the lead banks Multi-purpose Swarozgar Credit Cards may be introduced to cover the entire non-farm sector along the lines of the Kisan Credit Cards.
		Innovative self employment schemes like multi-purpose service centres/job clubs may be formed. Two to five members can form a job club. An amount of 25% of the total project cost may be given as subsidy. The projects like Catering Unit, Agriculture, Bee Keeping, Sericulture,

		<p>Rubber Nursery, Embroidery, Cool Bar, Dairy Farm, Tailoring & Embroidery, Jewellery Making, Ceramic Products, Earth Moving service, Piggery, Computer Sales, information kiosks may initially be taken up for financing.</p>
		<p>Capacity building for District Industries Centers (DIC) to become the Counseling Centers, resource and convergence centers, and one-stop shops for micro and small enterprises through preparation of projects, skill development, periodic disaggregated data collection and dissemination of information</p>
		<p>Recognising the role of MSE associations in policy formulation, advocacy; capacity building of such association. This will also ensure workers write.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Skill development</p>	<p>Skill Development & Capacity Building</p>	<p>The focus on skill training and development will be on the informal or unorganised sector workforce. Appropriate programmes and schemes may be developed and introduced</p>
		<p>To encourage acquisition of formal skill training by socially disadvantaged groups (e.g. SCs/STs) special packages will be introduced to provide scholarships, hostel facilities and tool kits.</p>
		<p>A system of independent certification for candidates passing through skill training as well as trainers will be instituted with appropriate standards.</p>
		<p>Creation of model technical Institute. At least 10 ITIs 3 Engineering colleges of NIT standard, Medical colleges including Dental colleges through PPP model is warranted. Private investment in technical education must be encouraged</p>
		<p>Creation of new institutions and offering vocational education as an option at the high school level of Class 9. Special focus will be given to rural areas and to youth from disadvantaged social groups</p>

		Functional literacy programmes will be strengthened and extended.
		Skill training and development will be made an important component of public programmes like NREGA, NRHM, SSA, ICDS and Mid-Day Meal Programme.
Women Workers and their Special Concerns	Gender sensitive macro policies	Women employment has to be shifted from invisible to visible work, from low productive employment, especially in agriculture, to high productive employment
		Special measures to access credit and such other facilities for women entrepreneurs and home based workers
		Formal credit agencies as well as employment and development institutions will be guided, and if necessary mandated, to link with the SHGs to provide a range of services
		Sectors where women's participation is significant for example, in agriculture, food processing, fishing, plantations, forestry, horticulture, export intensive manufacturing, tourism and care services focused training and technology up gradation programs will be taken up
Vulnerable workers	Inclusive programming	Vulnerable people will be identified and will be treated at par with socially backward section of people. Exclusion is essentially adjudged with respect to exclusive social dynamics of every area/ state. Exclusion is not essentially created through social processes. Sometimes geographical exclusion as in case of Tea Garden workers of Assam or the inhabitants of the Char (riverine islands) areas are classical examples of geographical exclusion. It is very important to understand and address these excluded populations who are delinked from mainstream development of the state.

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