

ATLMRI DISCUSSION PAPER

Jobless growth to inclusive growth: Employability as an alternative planning strategy

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Abstract:

What explains the contrary existence of government not able to provide jobs for the people, and the growing sectors not finding suitable manpower. In this paper, through the case study of the state of Karnataka, we argue that employability as a planning strategy this paradoxical situation could be mitigated. Employment is a state of being occupied for carrying out a task for reward. Fundamentally, the employment represents supply of labour in response to the demand for labour from an employer. Employability is person's capability to adapt his or her human capital endowment to changes in technology, business environment and institutions by preparing himself or herself to participate in new labour market through learning or training. Quiet importantly, generating employability is relatively more inclusive in nature, by creating flexible learning institutions/systems with no entry barrier with cooperative initiatives by state and market.

The jobless growth (the growing sectors not able to generate employment) will show an artificial increase in agricultural labourers. It is because, rural job market will serve as 'labour sinks' in the context of underemployment. As a matter of fact, the issue of educated unemployment is higher in rural areas. The challenge is to generate a strategy of inclusive growth. The paper argues that inclusive growth could be attained through creation of employable work force, whereby basic education is seen as a starting point for the life-long learning and skill up-gradation. In this paper, through empirical examination of the NSS data pertaining to the state of Karnataka, we show that the dichotomy between symmetric and asymmetric distribution of educational level at disaggregate unit, such as district, points to the need for rethinking about appropriate regional employability strategies, addressing access issues for the regions having high degree of asymmetry in the distribution of human capital, while deepening of human capital by broadening education system for regions with high degree of symmetry of human capital.

Introduction

For decades, lack of employment opportunities and underemployment of educated masses have been important issues in Indian labour market. Interestingly, during contemporary times the tide is reversed and industry is not finding 'employable work force'. The term has also gained currency in the Indian policy circles with politicians and

functionaries in the industry airing similar views.¹ Thus, the new analytical category of employability has become an important aspect to be studied and clarified. This paper examines the concept of employability and applications of the same in the state of Karnataka. We argue that for an inclusive strategy of growth and development, employability as a concept assumes central significance.

Employment data in India has provided paradoxical results. Recently concluded 61st round of NSS survey (2004-05) showed that while jobs are growing at a faster rate than the population, unemployment is also growing, since previously unemployed persons from the categories of women and elderly, are looking for job opportunities now. Based on ASI (Annual Survey of Industries) data, pertaining to manufacturing sector, it has also been pointed out (Bhalotra, 1998; Ahluwalia, 2001) that since Indian labour laws do not permit a flexible environment, there is the phenomenon of jobless growth (i.e, fewer number of jobs created despite of higher economic growth), as firms are adopting less labour intensive strategies. An important question is what strategies may be useful to give access to jobs for its aspiring population in the context of emerging economic growth. In this paper, we argue that employability, as dialogical process between work and learning, has the potential to provide an alternative strategy.

The paper is organized in three sections. In the first section, the concept of employability is elucidated through extensive literature review and its applications in the context of flexible labour market. Second section empirically shows the gap of employment opportunities and the stock of employable persons in the state of Karnataka. Finally, third section makes the key argument of how employability could be used as an inclusive growth strategy.

¹ Refer to Prime Minister Manmohan Singh's speech to Confederation of Indian Industry's annual meet dated 24 May 2007 and subsequent discussions. In the speech the Prime Minister provided a ten point social charter for corporate sector, and spelt out generating employable work force as a strategy for inclusive growth.

Section I

Employability: Concept and applications

A pragmatic, widely prevalent too, approach to explain economic growth is to trace its causes back to factors of production, such as capital and labour, assuming other variables remain same and pooled as exogenous factors.² Quite interestingly, taking cues from empirical evidence (World Development Report, 1998/99) the aggregate, representing the exogenous factors, became most important source of growth, defying the conventional logic of growth explained by labour and capital. Realizing the significance of exogenous factors, which include technology, organizational design and learning, traditional concepts under went major changes. In response to this, relatively complex concepts such as human capital, integrating a variety of factors including capital, labour, and education gained scholastic visibility³. However, human capital theories paid little attention to the demand side aspects of the labour market. Moreover, human capital theories were not responsive to the product changes, technological changes in the production process, and labour organization in the production. Further, it is doubtful whether the human capital, though a new concept integrating capital and labour, provided useful cues on the exogenous variables such as technology and organization. In fact, the treatment of technology and organization as exogenous factors, pooled as an aggregate residual, evoked new investigations absorbing fast paced technical changes and its effect on production process.⁴

Ideally, there should have been increased integration between institutions involved in supply of labour, including training/education systems, labour legislation, and demand side of labour, i.e., business sector. It seems, globally, there is a mismatch between supply of employable labour and demand for it (McKinsey Quarterly, 2005). Further, corollary to this demand-supply mismatch, the gap between learning through

² This notion is known as neo-classical perspective.

³ Human capital is measured by modern firms like Infosys (see *Infosys Annual Report*, 2005-06, p 143).

⁴ One such exploration is Romer's (1990) endogenous theory of economic growth. In his paper, he finds that the economic growth is too integrated for decomposing. Realizing this, he treated knowledge, being the source of technological change, as an endogenous variable. Another important pursuit towards unbundling the residual is Cowan et al's (2000) view of interactive process of knowledge, activity and its impact on growth.

educational system and employers' expectation from employees widened.⁵ Therefore, to understand the concept of employability, the labour market context that necessitated this needs to be understood, which is done in the first section of the paper. Second section of the paper defines the concept of employability by tracing its taxonomy. We also examine the relevance of decent work principle for employability in this context. In the third section the operationalisation of the concept through various indicators is carried out. The fourth section examines whether the current practices of employability in India is in congruence with its concept.

Employment-unemployment dichotomy was an invention in the 19th century to distinguish the deserving and undeserving poor in the context of wide spread poverty during the industrialization in Europe (Strath, 2000).⁶ In this framework, the systemic problems were the focus of intervention rather than the individual. The deprivation experienced by the elderly and disabled persons ('deserving poor'), unable to participate in the labour market, could be addressed by charity and social protection measures. But, state had to introduce the measures towards full employment, by absorbing able-bodied persons ('undeserving poor') unable to find work. With the wider propagation of welfare state, a policy consensus around this was formed in Europe in 1950s and 60s. This policy consensus drastically changed due to inflation and sprawling unemployment in 1970s. Thus, rather than cyclical reasons, structural reasons were attributed as the cause of unemployment.⁷ With the economic liberalization and receding nature of welfare state the emphasis began to be focused less on systemic issues and more on individual responsibility. Thus, the categories were recast from *employment/unemployment* to the individual specific *employable/unemployable*.

What theory forms the basis of employability? At the outset it could be said that the linkage between human capital theories and economic performance lies at the core of the employability discourse in a framework of 'price for quality' principle in the labour

⁵ In a global survey it was pointed out that largest number of executives (43%) felt quality of labour was the major source of risk in the supply chain management (McKinsey Quarterly, 2006a).

⁶ However, this employment-unemployment dichotomy was far from realistic in the countries where informal economy was rampant since under-employment was more critical and wide-spread issue there.

⁷ Here cyclical aspects causing unemployment stem from business cycles especially phases like recession. While, structural reasons arise from systems' inability to reduce excess supply of labour.

market (Lefresne, 1999). Interestingly, labour organization underwent crucial changes, especially since 1980s due to advancement in information and communication technology (ICT). Lindbeck and Snower (1996) point out the wider change of organizational forms, from Tayloristic based on division of labour to holistic organizations. Put differently, the focus shifted from specialization to versatility.⁸ With wider changes in organizational form, moving towards flatter organizations and more complementary processes with the help of ICT, the nature of work shifted from monotony to initiation and interaction. A recent observation (Morello, 2005) indicates the need for employees with ability to transform from the role as a specialist to versatile, to conduct business suiting to clients from diverse background (verticals as known in IT circles).⁹

An operational definition of being employed means having a job, and employable means having the qualities to maintain employment, progress in work place and able to be employed in different work place. From the point of view of the individual, employability skills are the career capital that a person needs to get a job and acquire job specific skills, while on the job. From the point of view of the employers, employability skills are the generic skills, attitudes and behaviours that they require in all their employees (Bloom and Kitagawa 1999 quoted in Datta *et al* 2006). More operational elements of this definition are discussed in the next section. At the operational level there is a trade-off between access-ability (gaining job through minimum technical skills) and performance-ability (holding on to job despite the demands in the labour market changing due to macro economic and product changes) (Philpott, 1999), which will affect the policies on employability.

⁸ The reason for transition, according to these authors, is explained by five factors: a) organizational form becoming more flatter, b) flexible production through multi-tasking, c) greater flow of information within firms using information technology and individualized treatment of employees and customers, d) broader product line offered by firms and more emphasis on product quality, and e) breakdown of occupational boundaries.

⁹ The Gartner report (Morello [2005] : Figure 7) proposes an employment model suiting to versatility, known as 'deployee' model.

Indicators of employability

While considering which measures are useful to understand whether a person is employable, it is insightful to reflect back on Figure one. Lifelong learning through acquiring new skills improves the employability. Despite of different concepts, there is a general agreement that three types of qualities are important while assessing the employability performance. These are:¹⁰

- 1) Key technical and academic skills specific to the job: Often, an employer is able to test these skill sets before taking the person to job, and to great extent academic curriculum prepares the students to gain them. These skills include (though not exhaustive) reading, language, and numeric capacity, listening, written communication, oral presentation, global awareness, critical analysis, creativity and self-management. Though this could vary depending on the nature of assignment, the basic parameters remain unchanged. For instance, a skill of ‘oral presentation’ for an unskilled labourer in a manufacturing unit would be reporting clearly to the coworkers and superiors, the same skill for a middle level manager would be assessed in the form of refined nature of a boardroom presentation to a CEO.
- 2) Process skills: Unlike the key technical skills, which are demonstrated at the time of interview or intake into the employment, process skills need to be demonstrated on the work. These are problem solving capacity, decision making, planning and delegating, ethical sensitivity, understanding business and its commercial interests, ability to work with persons from different regional, cultural and religion backgrounds, prioritizing, team work, and negotiating. It is much more complex to measure these process skills since many of them could be incident-dependent at the work place. At the same time a good number of them stem from the general reasoning capacity and exposure to work place. Thus, rather than schooling and curriculum, it is the work experience which matters to develop them.

¹⁰ This list is synthesized based on our extensive literature review on employability. Some of the key works are: Lees (2002), Harvey (2001), Little (2001), Mason et al (2003).

- 3) Personal qualities: As it has been pointed out in the previous section, valuing personal qualities of the labourer in addition to the ability to carry out the task is one of the key addition of the employability. An employer looks for the qualities of self-confidence, self-control, self-esteem, social skills, honesty, integrity, adaptability, flexibility, willingness to learn, emotional intelligence, stress tolerance, punctuality, efficiency and reflectiveness. These qualities are very much embedded with the personality type and shaped through life-experiences.

Though different authors have classified these indicators variously, the distinction between core and soft skills is prevalent in all of them. The later two categories are soft skills. The way these skills are learned from different experiences could be more advantageous than the possession of a worker's technical skills. Therefore, it is to be emphasized that an employer with employability focus is looking for an individual with potentials to be realized (Martin, 1997), rather than suitable skill sets.

What organizational and societal approaches are capable of creating an environment of employability? Primarily, on the job training to encourage lifelong learning is the key criteria for an employability-focused work environment. These could be through formalizing training manuals, apprenticeship schemes, providing upskilling/multiskilling training, incentives for undertaking new tasks, public relations training for connecting employees with wider networks in the world of work, training around product knowledge and change, training in multiple modes of dealing with clients, team building exercises within the organization, assisting employees in their career path, feed back with the purpose of encouraging reflective learning through actions of worker etc. The way organization is structured could also contribute to employability. For example, hierarchical control of a work place may create 'good worker', but delegation and encouragement would create 'employable individuals' (Garsten and Jacobsson, 2004). In the next section we will examine various practices at government and firm levels which are aimed at enhancing employability.

Limits of employability discourse

The employability focus dominated by demand side interest could also reflect the tendency of employers to shirk the training responsibility and to gain tailor-made candidates ready to perform from day one.¹¹ This is substantial reductionism of the concept of employability to skills. Skill, particularly soft skills with an emphasis on communication skills, is not context or class-neutral, and tends to be vested with educated, professional urban middle class (Krishna and Brihmadേശam, 2006; Upadhya, 2007). This trend is regressive, and practices and policies those promote life-long learning has taken a back seat. The clear reason for the proliferation of engineering colleges in India in recent times is the demand for them in IT industry. However, studying the pattern of recruitment in the IT industry, it has been pointed out that:

“graduate engineers are overqualified for the work they do, but the companies recruit them primarily because, in addition to professional training, the best students in the best engineering colleges acquire analytical skills and learn to solve problems for themselves, whereas students in other colleges do not. But if college graduates in history, for instance, could analyse and solve problems equally well, the companies would recruit historians and they would be just as good at software engineering ” (Fuller and Narasimhan, 2006: 259).

Therefore, skill creation does not necessarily ensure employable work force, rather a person becomes employable by acquiring the skills of learning how to learn in a dynamic work environment. As Atkins (1999) has pointed out, that *transfer* of learning and skills is a more critical issue than gaining skills and knowledge itself.

There is a tendency to group together a number of soft-skills (problem solving, initiative, self-awareness, personal values etc) under the label of ‘employability skills’, and to present it as necessary skill set (though not sufficient) for prospering at work place irrespective of the technical skills specific to the job. The curriculum in the formal education set up does not explicitly impart these skills, but is expected of every pupil to gain them informally. Finding solutions to the employability gap by organizing workshop

¹¹ The issue of professional graduates as unemployable is not specific to India. A global survey with human resource experts found that on an average only 13% of fresh professional graduates were employable. Finance and accounting graduates did better with 19% of them found to be employable, and the rest – engineers (17%), life science researcher (14%), analyst (15%) and generalists (10%) – were about the level of Indian professionals (McKinsey Quarterly, 2005).

or training for imparting such employability skills is a typical example of added on approach, rather than integrating with the educational content. An integrative approach would critically examine the curriculum and courses (both content and the pedagogy) and re-design them with an aim to help them to 'learn how to learn'.

As it has been shown in the table one, employability is not just about adding human capital through skill addition. In other words, employability policy is not merely addressing individuals as target groups. Rather, a series of issues in the labour market such as systemic problems to access jobs and to hold on to jobs come under the spectrum of employability. It is in this context, we examine the systemic factors that affect employability.

In the next section we will examine the case of the state of Karnataka by empirically looking at the scope for an employability-based policy option.

Section II

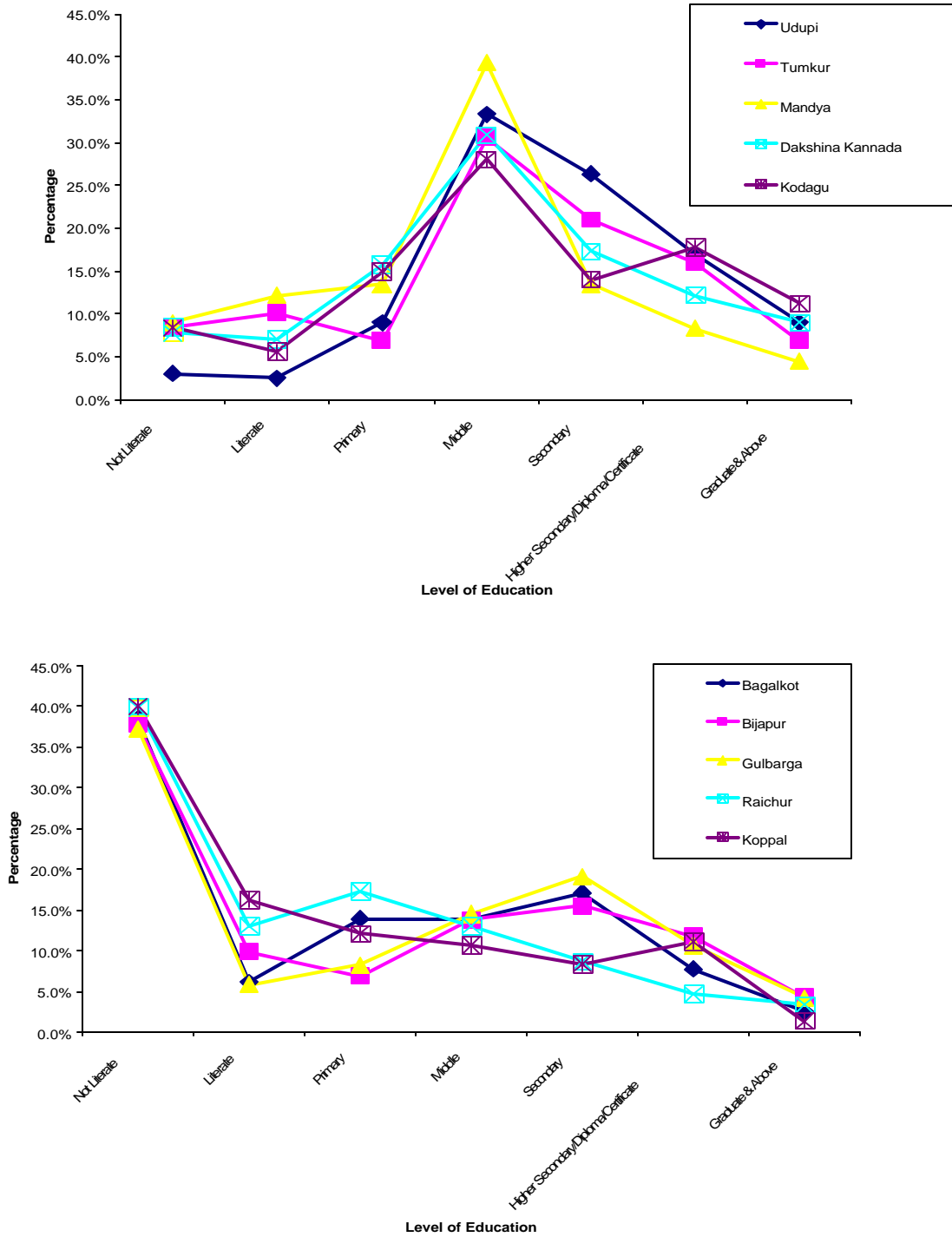
Karnataka: Mismatch of employment opportunities and employability?

In this section we take the case of Karnataka state, and examine the education and skill related variables with special reference to the youth, coming under the age group of 15-35. For this purpose, we use *Unemployment and Employment survey of NSSO (2004-05)*. The analysis, based on district level data, covers basic aspects of labour supply, including distribution of age, level of education, technical education, and vocational education. After assessing the supply of labour, we examine the distribution of occupation, representing the demand side.

An examination of the distribution of age reveals, on an average, two third of the sample is under the age group of 15-60 while one third constitutes dependents, coming under the group of 0-14 and Above 60 (Table 1, Appendix). The percentage of non dependents varies from 59% to 73%, districts Gulbarga and Hassan are positioned at bottom and top, respectively. Similarly, same districts have lowest and highest proportion of the age category 15-35, 35.3 % and 41.8 %, respectively. Given two third of population belong to non dependent category, forming the base for returns from

manpower or demographic dividend, we seek if this two third is a source of such an advantage. If this two third have human capital that make them employable, then the conclusion will explain why the two third can be the source of demographic dividend. Other wise, the argument that two third as the source of advantage has weak reasoning. Interestingly, what appears from the data on level education does not seem to support the argument of demographic dividend (Table 2, Appendix). In fact, slightly above one fifth of youth, on an average, are illiterates. Further, percentage of illiterates varies from 3% to 40%, the lowest in Udupi district and the highest Koppal district. A closer look at inter district distribution of education level, for the age group 15-35 unravels the contrast between high illiteracy districts and low illiteracy district. For analytical convenience, we set 0-10 % as the criterion for identifying high illiteracy districts, and 30-40% as the criterion for low illiteracy districts, choosing Koppal, Bagalkot, Bijapur, Gulbarga, and Raichur as high illiteracy districts and Udupi, Dakshina Kannada, Tumkur, Mandya, and Kodagu as low illiteracy districts (Figure 1 & Table 1).

Figure 1: Percentage Distribution of Level of General Education in the age group of 15-35 (Contrast between low youth illiteracy and high youth illiteracy districts)



Source of Data: Table 1

Table 1: Percentage Distribution of Educational Level (Karnataka State): Comparing Select Districts

	HDI (2001)*	Not Literate	Literate	Primary	Middle	Secondary	Higher Secondary /Diploma	Graduate & Above	Total
Age group (15-35)									
Bagalkot	0.591	38.5%	6.1%	13.9%	13.9%	17.1%	7.8%	2.5%	100%
Bijapur	0.589	37.8%	9.9%	6.9%	13.8%	15.5%	11.8%	4.3%	100%
Gulbarga	0.564	37.3%	5.8%	8.3%	14.5%	19.2%	10.7%	4.2%	100%
Raichur	0.547	39.8%	13.0%	17.4%	13.0%	8.7%	4.7%	3.3%	100%
Koppal	0.582	40.0%	16.3%	12.1%	10.7%	8.4%	11.2%	1.4%	100%
Udupi	0.714	3.0%	2.5%	9.0%	33.3%	26.4%	16.9%	9.0%	100%
Tumkur	0.630	8.5%	10.1%	6.9%	30.6%	21.0%	16.0%	6.9%	100%
Mandya	0.609	8.9%	12.1%	13.4%	39.3%	13.4%	8.3%	4.5%	100%
Dakshina Kannada	0.722	7.8%	7.1%	15.8%	30.9%	17.3%	12.2%	9.0%	100%
Kodagu	0.697	8.4%	5.6%	15.0%	28.0%	14.0%	17.8%	11.2%	100%
Age Group (15-60)									
Bagalkot	0.591	48.7%	6.1%	11.6%	11.3%	13.9%	5.8%	2.6%	100%
Bijapur	0.589	46.8%	10.0%	6.9%	11.6%	11.6%	9.4%	3.7%	100%
Gulbarga	0.564	47.0%	6.3%	7.5%	11.8%	13.8%	8.8%	4.8%	100%
Raichur	0.547	48.6%	14.4%	15.8%	8.4%	6.0%	3.9%	2.9%	100%
Koppal	0.582	47.7%	13.6%	10.3%	8.1%	7.3%	9.5%	3.5%	100%
Udupi	0.714	11.7%	7.5%	14.0%	26.5%	17.4%	12.5%	10.4%	100%
Tumkur	0.630	25.0%	9.5%	7.0%	22.7%	16.5%	11.5%	7.7%	100%
Mandya	0.609	21.5%	11.3%	13.4%	32.0%	11.1%	6.5%	4.2%	100%
Dakshina Kannada	0.722	15.3%	9.0%	17.2%	24.4%	14.4%	9.9%	9.7%	100%
Kodagu	0.697	16.1%	8.0%	16.6%	19.6%	10.6%	16.6%	12.6%	100%
Age Group (All)									
Bagalkot	0.591	51.6%	10.8%	14.2%	9.2%	8.9%	3.6%	1.7%	100%
Bijapur	0.589	52.2%	15.1%	8.1%	8.9%	7.4%	6.0%	2.4%	100%
Gulbarga	0.564	47.2%	15.7%	10.7%	10.0%	8.2%	5.3%	2.8%	100%
Raichur	0.547	46.0%	20.1%	19.1%	5.8%	4.0%	3.1%	1.8%	100%
Koppal	0.582	44.6%	21.1%	12.3%	8.2%	4.8%	6.4%	2.7%	100%
Udupi	0.714	19.4%	12.1%	15.8%	23.4%	12.8%	9.2%	7.3%	100%
Tumkur	0.630	30.4%	14.6%	10.1%	18.9%	12.0%	8.1%	5.8%	100%
Mandya	0.609	24.1%	21.2%	14.2%	24.9%	8.1%	4.5%	2.9%	100%
Dakshina Kannada	0.722	21.9%	15.4%	17.0%	21.1%	10.6%	6.9%	7.2%	100%
Kodagu	0.697	19.5%	15.1%	19.5%	17.4%	8.4%	11.1%	9.1%	100%

Source: Computed by authors from NSS 61st Round Data

* Karnataka Human Development Report (2005)

Figure 1 provides contrast between high literacy districts and low illiteracy districts, showing different distribution for these two categories. While, the low illiteracy districts show approximately an inverted U distribution of level of education, indicating relatively more symmetry, the high illiteracy districts have steeply declining distributions, resembling power laws like the Pareto distribution. It is important to note that the degree of contrast remains more or less same when we compare these categories against Human Development Index, high illiteracy implying low human development and low illiteracy corresponding to high human development (Table 1). The steep declining curve, representing the distribution of education level, reflects backwardness of the region, deeply enmeshed in structural asymmetries. Quite importantly, the dichotomy between asymmetric and symmetric distribution of education level calls for appropriate employability strategies catering to asymmetry and symmetry. For the districts with asymmetric distribution, enhancing human capital through easier access can have vital impact, eventually transforming asymmetry to more symmetry¹². On the other hand, obviously, districts with symmetry needs not just access to education, but deepening the quality of human capital, especially by broadening the base of tertiary education imparting soft skills and technology related skills. It is interesting to note that the above dichotomy is not only prevalent in 15-35 but also in broader age groups, 15-60 and all ages.¹³

However, in the case of technical education, no such dichotomy exists; rather the percentage of youth with no technical education is homogenous across districts (Table 3, Appendix). Moving to vocational training, lesser homogenous than the distribution of technical education, taking the case of Udupi and Koppal representing districts with low youth illiteracy and high youth illiteracy, respectively, there is an obvious contrast between these districts, the former with 17 % with vocational training while the latter with just 4% (Table 4, Appendix). This contrast is quite evident in the distribution of field of training. In Koppal district, driving and mechanic forms two third of field of

¹² For instance, initiatives such as literacy campaigns with lifelong learning opportunities and open schools with easier access.

¹³ It is worth investigating combination of labour movement such as from regions with asymmetric distribution to symmetric one, asymmetric to symmetric, asymmetric to asymmetric, and symmetric to symmetric.

training while the same field of training forms just one fourth in Udupi district, where nearly two third of youth with vocational training get training in computer related vocations (Table 5, Appendix) . However, the contrast in field of training is not adequately represented in the distribution of occupations. Quite interestingly, Udupi and Koppal, with striking contrast in human capital including general education and vocational training, have more or less same proportion of primary sector related occupation ¹⁴(Table 6, Appendix).

Section III Towards Inclusive Growth

The *Economic Survey 2006-07* as well as *Eleventh Plan* are highly vocal about the need for inclusive growth strategy in India. The key employment proposal to achieve this aim suggested in these documents is moving from capital-intensive enterprises to labour-intensive enterprises. In the context of Indian labour force working in the informal sector, such a strategy may only be affecting the already well-off eight per cent of people in the organized work force. Besides, the option of using technology is an important profit making strategy in the context of increasing global competition, and changing demands of products and services. Therefore, moving away from capital-intensive enterprises would have significant impact on the economic growth itself. This lack of economic growth will have cyclic effects on employment generation itself. It is important to note that growing sectors of economy reports lack of employable work force. Therefore, it is plausible that generating preparedness among workers to be deployed in growing sectors by making themselves employable is an alternative strategy. In this context, it is important to examine whether an appropriate policy strategy to train persons with suitable skills could be a strategy towards inclusive growth in India.

In the previous section based on the district-wise data from Karnataka, we have seen that the possibility of inclusiveness systematically differs between districts depending on the human capital profile of those districts, especially considering the dichotomy existing between symmetric and asymmetric human capital distributions. Sequel to this, what appears is a strategic approach, which is evolutionary nature, is

¹⁴ An important reason is that higher level of human capital may induce labourers to migrate.

required to transform the asymmetric to symmetric, and then enhancing the quality of labour.

Employment generation creates boundaries between academia and work place, since learning is not essential to employment (Davies, 2000). On the other hand, employability generation loosens the boundaries of academia and industry inducing an interest in workers to practice life-long education. Workers in employment, without learning, could be in effect, bottle-necks: a) for growth and b) for the entry of creative work force into job.

- **Bottle-neck for growth:** This is because, they earn their livelihood without creative contribution (of course, mechanical contribution exists; but as we have seen in the modern work place, the demands of job require more tacit knowledge and therefore creative application of knowledge). Therefore, employment generation as a strategy has important implication for the growth of industry.
- **Bottle-neck for the entry of creative labour force:** Employment is a mechanism of livelihood in a static labour market. In a dynamic labour market, employment security has to be earned by making oneself employable in the changing labour market conditions.

It has been shown that gaining employment is largely due to social networking, due to labour market information asymmetry (Fuller & Narasimhan, 2006). Therefore, lifelong employment gained through social network of the individual, than the skills pertinent to the job, creates a redundant worker in a position. Social networking capacity (especially connectedness of employers and job seekers) is higher among well-off strata of the society. They would also be capable hanging on to the jobs through same networking abilities. Employment as a strategy also promotes exclusionary structures such as reservation of jobs for certain sections.¹⁵

Employability as a policy option is powerful to challenge the concept of life-long employment by institutionalizing a skill-based competition in the labour market. The challenge is not *who* gets job, rather *which skill* is appreciated for the job. In our

¹⁵ Though affirmative action is the purpose of such policies, such targeting mechanisms creates long-term lock-ins (Korpi & Palme, 1998).

empirical analysis, we have seen that most of the jobs are carried out without appropriate skills in the state of Karnataka. It is likely that lack of skill contributes to low payment, and poor livelihood. Therefore, adopting a skill-based education system by loosening the boundary of academia and work place is an effective strategy for inclusive growth.

Conclusion

Jobless growth is a reality in India's recent development story. Policy changes in the demand side of the labour market alone (such as moving away from capital intensive methods) for the purpose of inclusive growth will generate greater mismatches in the labour market. Recognizing that, Indian education system has not created employable labour force, is an important milestone. Quite strikingly, the pattern emerging in this paper, the dichotomy between symmetric and asymmetric distribution of educational level at disaggregate unit, such as district, points to the need for rethinking about appropriate regional employability strategies, addressing access issues for the regions having high degree of asymmetry in the distribution of human capital, while deepening of human capital by broadening education system for regions with high degree of symmetry of human capital.

Addressing the regional disparity is an important leap towards inclusive growth. As the data on occupations in the districts show, what is more critical is establishing some mechanisms to bridge the gap between the world of learning and world of work, for which life-long learning has yet to be policy strategy.

Employability promotion as a strategy could sound like a backward approach, since it aims to create employable persons for the opportunities of employment. However, the necessity of employability promotion comes since the notion of employment it self has undergone important changes. In the dynamic market employment is more close to entrepreneurship, rather than a position gained for life-long livelihood. In this sense, a worker's knowledge, skills, personal traits including attitude becomes critical at work place to move between the continuum of employability-employment-entrepreneurship.

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Appendix

Table 1: Distribution of Age (Karnataka State)

	Age Interval				Total
	0-14	15-35	35-60	Above 60	
Belgaum	30.6%	39.4%	24.0%	6.0%	100.0%
Bagalkot	32.9%	38.9%	23.9%	4.3%	100.0%
Bijapur	32.6%	38.6%	23.7%	5.1%	100.0%
Gulbarga	36.5%	35.3%	23.7%	4.6%	100.0%
Bidar	30.5%	37.6%	25.7%	6.1%	100.0%
Raichur	33.5%	38.8%	24.3%	3.5%	100.0%
Koppal	29.8%	38.2%	27.4%	4.6%	100.0%
Gadag	30.1%	40.5%	22.1%	7.3%	100.0%
Dharward	27.9%	38.2%	26.6%	7.2%	100.0%
Uttara Kannada	26.1%	41.4%	28.3%	4.2%	100.0%
Haveri	26.3%	41.5%	25.3%	7.0%	100.0%
Ballary	32.3%	38.4%	25.2%	4.1%	100.0%
Chitradurga	27.2%	38.2%	29.1%	5.4%	100.0%
Davangere	27.2%	41.5%	26.6%	4.8%	100.0%
Shimoga	24.8%	40.5%	28.0%	6.7%	100.0%
Udupi	21.0%	35.7%	32.7%	10.7%	100.0%
Chikmagalur	26.8%	36.0%	28.7%	8.6%	100.0%
Tumkur	24.7%	37.6%	30.8%	6.8%	100.0%
Kolar	29.7%	37.7%	27.6%	5.1%	100.0%
Bangalore	26.8%	43.8%	24.5%	4.9%	100.0%
Bangalore (Rural)	29.1%	40.2%	25.2%	5.5%	100.0%
Mandya	25.7%	41.5%	27.7%	5.0%	100.0%
Hassan	20.5%	41.8%	31.2%	6.5%	100.0%
Dakshina Kannada	24.2%	41.4%	25.8%	8.6%	100.0%
Kodagu	25.8%	35.9%	30.9%	7.4%	100.0%
Mysore	29.2%	38.2%	27.4%	5.2%	100.0%
Chamarajanagar	26.2%	39.6%	28.7%	5.5%	100.0%
Total	28.4%	39.5%	26.4%	5.7%	100.0%

Source: Computed by authors from NSS 61st Round Data

Table 2: Level of Education in the age group of 15-35 (Karnataka State)

	Not Literate	Literate	Primary	Middle	Secondary	Higher Secondary/Diploma	Graduate & Above	Total
Belgaum	24.3%	4.2%	11.0%	21.4%	24.5%	9.9%	4.7%	100.0%
Bagalkot	38.5%	6.1%	13.9%	13.9%	17.1%	7.8%	2.7%	100.0%
Bijapur	37.8%	9.9%	6.9%	13.8%	15.5%	11.8%	4.3%	100.0%
Gulbarga	37.3%	5.8%	8.3%	14.5%	19.2%	10.7%	4.2%	100.0%
Bidar	25.1%	5.5%	12.0%	19.6%	20.3%	10.7%	6.9%	100.0%
Raichur	39.8%	13.0%	17.4%	13.0%	8.7%	4.7%	3.3%	100.0%
Koppal	40.0%	16.3%	12.1%	10.7%	8.4%	11.2%	1.4%	100.0%
Gadag	24.4%	6.4%	9.6%	17.3%	28.2%	9.0%	5.1%	100.0%
Dharward	17.5%	7.1%	12.1%	18.1%	25.7%	10.5%	9.0%	100.0%
Uttara Kannada	14.9%	9.4%	17.0%	27.7%	15.3%	8.1%	7.7%	100.0%
Haveri	25.9%	8.2%	11.9%	14.8%	21.0%	13.2%	4.9%	100.0%
Ballary	33.1%	11.4%	14.8%	16.1%	10.8%	9.0%	4.8%	100.0%
Chitradurga	23.1%	13.8%	12.3%	13.4%	20.5%	11.2%	5.6%	100.0%
Davangere	24.3%	20.4%	7.7%	16.0%	19.5%	9.6%	2.6%	100.0%
Shimoga	12.7%	10.8%	14.6%	28.0%	16.2%	13.4%	4.1%	100.0%
Udupi	3.0%	2.5%	9.0%	33.3%	26.4%	16.9%	9.0%	100.0%
Chikmagalur	11.6%	14.0%	11.0%	26.2%	20.9%	9.9%	6.4%	100.0%
Tumkur	8.5%	10.1%	6.9%	30.6%	21.0%	16.0%	6.9%	100.0%
Kolar	27.6%	3.6%	8.6%	28.8%	18.7%	9.8%	2.9%	100.0%
Bangalore	12.6%	5.4%	11.5%	25.2%	20.4%	13.2%	11.7%	100.0%
Bangalore (Rural)	11.9%	13.4%	20.7%	32.2%	15.7%	3.8%	2.3%	100.0%
Mandya	8.9%	12.1%	13.4%	39.3%	13.4%	8.3%	4.5%	100.0%
Hassan	12.2%	4.7%	7.8%	36.3%	20.0%	10.8%	8.1%	100.0%
Dakshina Kannada	7.8%	7.1%	15.8%	30.9%	17.3%	12.2%	9.0%	100.0%
Kodagu	8.4%	5.6%	15.0%	28.0%	14.0%	17.8%	11.2%	100.0%
Mysore	15.5%	8.4%	11.2%	29.2%	15.7%	11.9%	8.1%	100.0%
Chamarajanagar	21.5%	10.3%	11.8%	30.8%	10.8%	11.3%	3.6%	100.0%
Total	21.0%	8.4%	11.8%	23.3%	18.3%	10.9%	6.2%	100.0%

Source: Computed by authors from NSS 61st Round Data

Table 3: Technical Education in the age group of 15-35 (Karnataka State)

	No Technical Education	Technical Degree	Diploma (UG)	Diploma (PG)	Total
Belgaum	96.6%	0.2%	2.7%	0.6%	100.0%
Bagalkot	98.1%		1.9%	0.0%	100.0%
Bijapur	95.4%		4.6%	0.0%	100.0%
Gulbarga	96.2%	0.2%	2.2%	1.4%	100.0%
Bidar	98.6%		0.7%	0.7%	100.0%
Raichur	98.7%		1.3%	0.0%	100.0%
Koppal	98.1%		1.9%	0.0%	100.0%
Gadag	98.1%		1.3%	0.6%	100.0%
Dharward	96.3%		3.1%	0.6%	100.0%
Uttara Kannada	94.9%		3.4%	1.7%	100.0%
Haveri	96.7%		3.3%	0.0%	100.0%
Ballary	97.6%		0.8%	1.6%	100.0%
Chitradurga	98.5%		1.5%	0.0%	100.0%
Davangere	100.0%		0.0%	0.0%	100.0%
Shimoga	96.5%		3.5%	0.0%	100.0%
Udupi	94.5%	0.5%	4.5%	0.5%	100.0%
Chikmagalur	94.8%	0.6%	2.9%	1.7%	100.0%
Tumkur	97.1%	0.8%	2.1%	0.0%	100.0%
Kolar	97.6%	0.2%	2.2%	0.0%	100.0%
Bangalore	92.3%	2.5%	3.8%	1.4%	100.0%
Bangalore (Rural)	95.8%	0.8%	3.4%	0.0%	100.0%
Mandya	98.4%		1.6%	0.0%	100.0%
Hassan	98.6%		0.7%	0.7%	100.0%
Dakshina Kannada	96.4%		3.6%	0.0%	100.0%
Kodagu	95.3%		3.7%	0.9%	100.0%
Mysore	93.7%	0.3%	4.6%	1.5%	100.0%
Chamarajanagar	97.4%	0.5%	2.1%	0.0%	100.0%
Total	96.3%	0.5%	2.6%	0.6%	100.0%

Source: Computed by authors from NSS 61st Round Data

Table 4: Vocational Education in the age group of 15-35 (Karnataka State)

District	Vocational Education					Total
	Receiving Vocational Training	Received vocational Training Formal	Received no formal training (hereditary)	Received no formal training (Others)	Did not Receive Vocational Training	
Belgaum	0.5%	2.3%	2.6%	3.9%	90.7%	100.0%
Bagalkot	0.4%	0.7%	0.4%	1.1%	97.5%	100.0%
Bijapur	0.9%	0.9%		3.9%	94.3%	100.0%
Gulbarga	0.6%	1.2%		2.3%	95.9%	100.0%
Bidar	0.5%	0.5%		0.5%	98.6%	100.0%
Raichur			2.9%		97.1%	100.0%
Koppal	0.6%	1.3%	1.3%	0.6%	96.2%	100.0%
Gadag	0.8%	0.8%			98.3%	100.0%
Dharward	1.9%	0.4%	0.8%		97.0%	100.0%
Uttara Kannada	1.1%	1.7%	1.1%	1.7%	94.5%	100.0%
Haveri	1.8%	1.2%		1.2%	95.9%	100.0%
Ballary	0.4%	0.4%	1.8%	1.4%	96.1%	100.0%
Chitradurga		0.5%			99.5%	100.0%
Davangere				0.8%	99.2%	100.0%
Shimoga	1.2%	3.3%	1.2%	1.2%	92.9%	100.0%
Udupi	0.7%	4.8%	6.2%	6.2%	82.2%	100.0%
Chikmagalur	3.4%	0.8%			95.8%	100.0%
Tumkur	1.2%	4.3%	2.7%	3.5%	88.4%	100.0%
Kolar	3.9%	3.6%	2.9%	0.4%	89.2%	100.0%
Bangalore	2.0%	2.9%	2.1%	6.7%	86.4%	100.0%
Bangalore (Rural)	0.5%				99.5%	100.0%
Mandya	0.8%		0.4%	1.3%	97.5%	100.0%
Hassan	3.2%	0.9%			95.9%	100.0%
Dakshina Kannada	1.6%	4.5%	3.9%	6.1%	83.8%	100.0%
Kodagu	3.9%	7.9%	1.3%	2.6%	84.2%	100.0%
Mysore	1.7%	2.4%	1.7%	2.1%	92.0%	100.0%
Chamarajanagar	0.7%	3.0%		1.5%	94.8%	100.0%
	1.3%	1.9%	1.4%	2.4%	93.0%	100.0%

Source: Computed by authors from NSS 61st Round Data

Table 5: Vocational Education-Field of Training in the age group of 15-35 (Karnataka State)

District	Field of Training														Total			
	Mechanical Engineering Trade	Electrical & Electronics Engineering Trade	Computer Trade	Civil Engineering & Building Construction Trade	Textile related work	Artisan/Craftsman/Handicraft/Cottage based Production	Creative arts/artists	Non crop based agriculture & other activity	Health & Paramedical activities	Office & Business Related work	Driving & Motor Mechanic	Beautician, Hairdressing & related work	Photography & Related	Work related to Child care		Media	Others	
Belgaum	9.1%		27.3%		9.1%			27.3%						18.2%		9.1%	100.0%	
Bagalkot								33.3%									66.7%	100.0%
Bijapur		25.0%				25.0%					50.0%							100.0%
Gulbarga		50.0%			16.7%												33.3%	100.0%
Bidar	50.0%	50.0%																100.0%
Koppal		33.3%									66.7%							100.0%
Gadag		100.0%																100.0%
Dharward	33.3%		16.7%		33.3%						16.7%							100.0%
Uttara Kannada			80.0%			20.0%												100.0%
Haveri		40.0%				20.0%												100.0%
Ballary			50.0%								50.0%							100.0%
Chitradurga												100.0%						100.0%
Shimoga	27.3%				9.1%			9.1%									54.5%	100.0%
Udupi			62.5%	12.5%							25.0%							100.0%
Chikmagalur		20.0%	20.0%		40.0%						20.0%							100.0%
Tumkur	14.3%	35.7%	21.4%		7.1%						14.3%							100.0%
Kolar	28.6%	23.8%	4.8%				4.8%	9.5%	4.8%	19.0%							4.8%	100.0%
Bangalore	11.4%	25.0%	18.2%	6.8%	6.8%			11.4%		9.1%					2.3%	9.1%		100.0%
Bangalore (Rural)																	100.0%	100.0%
Mandya	50.0%																50.0%	100.0%
Hassan		11.1%	11.1%	22.2%	11.1%			11.1%	11.1%	11.1%			11.1%					100.0%
Dakshina Kannada	10.5%	10.5%	26.3%				5.3%	15.8%		26.3%	5.3%							100.0%
Kodagu		22.2%	33.3%		33.3%				11.1%									100.0%
Mysore					8.3%			8.3%	16.7%	16.7%							50.0%	100.0%
Chamarajanagar			20.0%		40.0%												40.0%	100.0%
	11.0%	17.6%	17.6%	2.9%	8.6%	1.4%	1.0%	1.0%	8.1%	2.4%	11.9%	1.0%	0.5%	1.0%	0.5%	13.8%		100.0%

Source: Computed by Authors from NSS 61st Round

Table 6: Distribution of Occupation
(Karnataka State)

	Occupation							Total
	Professional, Technical Related work	Administrative & Executive Work	Clerical and Related Work	Sales Workers	Service Workers	Agriculture & allied activities	Operators & Labourers	
Belgaum	6.9%	8.8%	5.4%	10.0%	4.6%	36.9%	27.3%	100.0%
Bagalkot	4.4%	6.0%	4.4%	13.2%	5.5%	40.7%	25.8%	100.0%
Bijapur	12.2%	6.1%	3.4%	14.2%	5.4%	37.8%	20.9%	100.0%
Gulbarga	8.8%	8.0%	3.4%	12.2%	11.1%	33.6%	22.9%	100.0%
Bidar	9.8%	5.6%	4.2%	15.4%	6.3%	42.0%	16.8%	100.0%
Raichur	8.1%	0.7%	2.0%	13.4%	13.4%	48.3%	14.1%	100.0%
Koppal	5.0%	7.6%	5.0%	10.9%	5.0%	42.9%	23.5%	100.0%
Gadag	2.9%	4.3%	8.6%	8.6%	7.1%	42.9%	25.7%	100.0%
Dharward	5.5%	8.2%	10.4%	11.5%	12.0%	27.9%	24.6%	100.0%
Uttara Kannada	10.5%	3.5%	5.3%	10.5%	12.3%	38.6%	19.3%	100.0%
Haveri	6.9%	0.9%	8.6%	15.5%	5.2%	38.8%	24.1%	100.0%
Ballary	5.6%	4.6%	7.1%	14.3%	6.6%	38.3%	23.5%	100.0%
Chitradurga	5.8%	1.9%	5.8%	17.4%	5.8%	46.5%	16.8%	100.0%
Davangere	5.3%	4.1%	5.9%	18.9%	7.7%	39.6%	18.3%	100.0%
Shimoga	10.0%	7.6%	5.3%	11.8%	11.2%	31.2%	22.9%	100.0%
Udupi	12.2%	8.7%	4.3%	5.2%	3.5%	39.1%	27.0%	100.0%
Chikmagalur	1.8%	10.6%	11.5%	11.5%	14.2%	31.9%	18.6%	100.0%
Tumkur	8.3%	3.5%	5.2%	8.3%	10.4%	43.5%	20.9%	100.0%
Kolar	3.9%	5.2%	3.5%	6.1%	10.4%	42.6%	28.3%	100.0%
Bangalore	8.1%	14.3%	7.6%	11.5%	11.5%	5.1%	41.8%	100.0%
Bangalore (Rural)	1.4%	6.9%	4.1%	6.2%	4.1%	51.0%	26.2%	100.0%
Mandya	4.4%	10.0%	3.1%	10.0%	3.1%	46.9%	22.5%	100.0%
Hassan	9.3%	6.6%	6.0%	9.3%	7.9%	52.3%	8.6%	100.0%
Dakshina Kannada	6.0%	12.1%	6.0%	3.3%	3.8%	32.4%	36.3%	100.0%
Kodagu	5.2%	13.0%	6.5%	1.3%	9.1%	39.0%	26.0%	100.0%
Mysore	8.6%	11.8%	5.9%	10.0%	6.8%	33.2%	23.6%	100.0%
Chamarajanagar	8.8%	7.0%	5.3%	11.4%	9.6%	43.0%	14.9%	100.0%
	7.1%	7.7%	5.7%	11.0%	8.3%	35.0%	25.2%	100.0%

Source: Computed by Authors from NSS 61st Round

ATLMRI (The Adecco-TISS Labour Market Research Initiative) is a research and policy advocacy programme that aims to analyse and understand growth trajectories in the Indian economy and the character of labour force. We visualize providing pivotal linkage between the government, industries, education and training providers, and prospective employees.

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