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Abstract

The paper discusses how gaps in both the data on migration and the understanding of the role of migration in livelihood strategies and economic growth in India, have led to inaccurate policy prescriptions and a lack of political commitment to improving the living and working conditions of migrants. Field evidence from major migrant employing sectors is synthesised to show that circular migration is the dominant form of economic mobility for the poor; especially the lower castes and tribes. The authors argue that the human costs of migration are high due to faulty implementation of protective legislation and loopholes in the law and not due to migration per se. The paper discusses child labour in specific migration streams in detail stressing that this issue needs to be addressed in parallel. It also highlights the non-economic drivers and outcomes of migration that need to be considered when understanding its impacts. The authors calculate that there are roughly 100 million circular migrants in India contributing 10% to the national GDP. New vulnerabilities created by the economic recession are discussed. Detailed analysis of village resurveys in Madhya Pradesh and Andhra Pradesh are also presented and these show conclusively that migration is an important route out of poverty.

Keywords: India; circular migration; caste; tribe; child labour; human development.

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1. Background and Introduction

Migration in India is not new and historical accounts show that people have moved in search of work, in response to environmental shocks and stresses, to escape religious persecution and political conflict. However improved communications, transport networks, conflicts over natural resources and new economic opportunities have created unprecedented levels of mobility. But as we discuss in following sections, the increase in mobility is not fully captured in larger surveys often leading to erroneous conclusions about mobility levels in India.

Although significant in recent years, growth has been unequal in India (Balisacan and Ducanes 2005), characterised by industry in developed states such as Gujarat, Maharashtra and Punjab drawing labour from agriculturally backward and poor regions such as eastern Uttar Pradesh, Bihar, southern Madhya Pradesh, western Orissa and southern Rajasthan. High productivity agricultural areas ("green revolution areas") continue to be important destinations, but rural-urban migration is the fastest growing type of migration as more migrants choose to work in better paying non-farm occupations in urban areas and industrial zones. Delhi and the states of Gujarat and Maharashtra are top destinations for inter-state migrant labour. Labour mobility has grown and will probably continue to grow once the economy recovers from the current crisis.

Migrant labour makes enormous contributions to the Indian economy through major sectors such as construction, textiles, small industries, brick-making, stone quarries, mines, fish and prawn processing and hospitality services. But migrants remain on the periphery of society, with few citizen rights and no political voice in shaping decisions that impact their lives (Kabeer 2005). Unlike countries in Southeast Asia and East Asia, the bulk of the migrant workforce in India has little or no education (Srivastava 2003). In fact migrants are poorly endowed all-round: they come from poor families where access to physical, financial and human capital is limited and where prospects for improving living standards are constrained by their inferior social and political status. Historically disadvantaged communities such as the Scheduled Castes, Scheduled Tribes¹ and Other Backward Castes are heavily represented in migration. Poor migrants are

¹ These groups accounted for more than 250 million people in India in 2001 (167 million SCs, 86 millions STs and other minorities). Official statistics show that SCs and STs are more deprived than other social groups. At the all India level, poverty among STs was about two times higher than non SC/STs, the poverty gap ratio being 2.10 and 1.7 times higher among SCs compared to non SC/ST groups. But there were variations across states. The disparity

absorbed in informal sector jobs, much maligned for being insecure, poorly paid and unproductive but offering the only option for labourers to improve their capabilities.

2. Structure of the paper

The paper begins with a brief critique of official statistics, discussing their major shortcomings. This is followed by detailed accounts of the different sectors and subsectors employing migrant workers with case studies showing how migrants are recruited and the conditions in which they work and live. This is followed by an assessment of the magnitude of migration and the contribution of migrant labour to the Indian economy. The third part of the paper focuses on the human development impacts of internal migration using secondary as well as primary data collected from Andhra Pradesh and Madhya Pradesh in 2001/2, 2003/4 and 2006/7. The analysis addresses questions related to poverty reduction and political participation. The paper ends with policy recommendations to provide more support to migrants, reform policy and improve data.

3. Official estimates of migration

The two main sources of data on migration are the National Census and the National Sample Survey (NSS) and most estimates of migration are based on these.

The total population of India at the last Census was over a billion. According to the National Census for 2001 30% of the population or 307 million were migrants. Of these, nearly a third had migrated during the previous decade. It is topical to note at the outset that both the National Census and the National Sample Survey (NSS) use definitions of migration that are not employment related. These are change in birthplace and change in last usual place of residence. Secondly they give only the main reason for migration and thus miss secondary reasons which are often work related particularly in the case of women, third they count migrant stocks and not flows which are actually more important for policy and finally, they seriously underestimate

between SCs and nonSC/ST groups was particularly high in Punjab, Haryana, and Rajasthan with poverty disparity ratios of 5.31, 3.98, and 3.72 respectively. Thus, poverty among the SCs was about five times higher in Punjab, about four times higher in Haryana, and about two and half times higher in Rajasthan than the rest of the nonSC/ST population (Thorat and Mahamallik 2005).

categories of work that employ migrant workers. The findings of the Census and NSS on migration must be viewed against this backdrop.

Other patterns revealed by the census were:

- There were 65.4 million female migrants and 32.8 million male migrants. However a majority (42.4 million) of female migrants had not migrated for work and had cited marriage as the main reason for the change in residence. Among males the most important reason for migration was 'Work/Employment' given b y 12.3 million male migrants.
- Rural to rural migration still dominated and accounted for 53.3 million; Rural to urban migration: 20.5 million Urban to rural migration: 6.2 million and Urban to urban migration: 14.3 million.
- Interstate migration has grown by 53.6%. The total number of interstate migrants was 42.3 million. Uttar Pradesh (-2.6 million) and Bihar (-1.7 million) were the two states with the largest net outmigration.

The 55th round of NSS of 1999-00 was the first to cover short-duration migration defined as: "persons staying away from usual place of residence for 60 days or more for employment or better employment or in search of employment". It estimates that roughly 1% of the Indian population or 10 million people migrated temporarily (NSSO 2001). But this is also a gross underestimate because the data do not properly count part-time occupations and short term migrations. The true figure probably lies at around 100 million as we argue later.

In sum, there are six major shortcomings of official data:

• They tend to underestimate short term movements and thus underestimate or miss altogether, seasonal and circular migration which, according to recent village studies account for the bulk of migratory movements for work.

- Women's migration is not adequately captured because the surveys ask for only one reason for migration to be stated. This is usually stated as marriage and the secondary reason i.e. finding work at the destination may not be mentioned.
- They do not capture migration streams that are illegal or border on illegality i.e. trafficking for work and various forms of child labour. The census of India reported 12.66 million working children but estimates by agencies working against child labour such as The Global March and the International Center on Child Labor and Education (ICCLE) calculate that there are roughly 25-30 million child workers in India (ITUC 2007) and Human Rights Watch says that more than 100 million could be working because so many are out of education. Smaller studies and NGO assessments (some of which are reviewed later) show that child migrants form a large part of the workforce in several major sectors such as construction, brick-kilns, small industries, domestic work and farm work.
- They do not count properly rural-rural circulatory migrants who work on commercial farms and plantations or rural-urban migrants who migrate for a few months at a time to work in very small industries.
- They do not capture adequately the movement of scheduled caste and scheduled tribe people mainly because these groups are engaged in short term migration and this is not measured properly in the surveys for the reasons stated above. There are numerous case studies which show high mobility levels among these groups.
- They mis-represent the relationship between poverty and migration. While village studies show high levels of migration amongst the poor (not the poorest), official statistics show that migration is higher among better off groups because they cover mainly permanent migration which has a higher representation of people from more affluent and better educated backgrounds.

Much of the quantitative evidence in the Indian literature on migration is drawn from these datasets and so inevitably exhibits a number of shortcomings. For example Dubey et al (2006) argue on the basis of their analysis of the 1999-2000 round of the NSS that individuals from scheduled castes and scheduled tribes and those with little or no education are less likely to migrate to urban areas. Kundu and Sarangi (2007) compare migrant and non-migrant populations

to argue that the probability of being poor among migrants (both urban-urban and rural-urban including seasonal migrants) is lower than among non-migrants.

4. Major Migrant Employing Sectors

The Magnitude and Economic Contribution of Migration and the Characteristics of Migration Streams in these Sectors

A search through published and grey literature on migration shows that there is large number of studies which portray a very different picture of migration. They show that circular migration is the main form of mobility for work and that such migration is higher among the poor and especially SCs and STs. They also show higher rates of migration among women and children.

All three sectors of the Indian economy namely agriculture, industry and services employ very large numbers of migrant workers. Field evidence shows that the major subsectors using migrant labour are textiles, construction, stone quarries and mines, brick-kilns, small scale industry (diamond cutting, leather accessories etc), crop transplanting and harvesting, sugarcane cutting, plantations, rickshaw pulling, food processing including fish and prawn processing, salt panning, domestic work, security services, sex work, small hotels and roadside restaurants/tea shops and street vending. We piece together available information on the numbers of workers involved and their contribution to the economy. There are gaps in the information and we have not been able to cover all sectors but we can convey the significance of migration to India's economy. Some of the sectors are strongly associated with specific migration streams (e.g. migration from western Orissa for brick kiln work in Andhra Pradesh and migration from Bihar for agricultural work in Punjab) which have differing recruitment and remuneration patterns and varying impacts on human development. A small number are discussed here to provide insights into the recruitment practices of companies and agents and how they circumvent the legal system to extract cheap labour in return for few obligations to migrant labourers and their families. The earnings and human development impacts of these migration streams are discussed wherever evidence has been available. These accounts also show that distinctions between migration, trafficking, bonded labour and child labour are often difficult to make because of the widespread use of child labour in agriculture, industry and services and the poor working conditions of migrants. The

next part pulls together all the available evidence to analyse the implications of migration for human development and how policy distortions and implementation failures can be addressed.

5. Industry

5.1 Construction

The construction industry provides direct employment to at least 30 million workers in India (Chen 2007) but recent expansions (before the economic crisis) had resulted in a higher number: trade Unions estimate that there were roughly 40 million migrant construction workers in India in 2008 (Sarde 2008). Although numbers will have gone down with the recent economic crisis there will nevertheless be a continuation of urban construction which will attract migrant workers. There is anecdotal evidence that some categories of returnee migrants from the Gulf have been absorbed in construction². Construction attracts both skilled workers (masons, carpenters) and unskilled workers and although there is some scope for upward mobility, poorer and lower caste/tribe migrants tend to remain in low-paid unskilled jobs. This is because of discrimination against them and being excluded from opportunities to gain skills. Women work mainly as unskilled workers.

Migration for construction work has brought economic gains and freedom for many but has also brought incredible hardship and personal risk. Many analysts have concluded that it is coping at best and does not result in any long term accumulation for the poor (Reddy 1990, Srivastava 2003, Sundari 2005). However the situation has changed in some locations recently as migrants have acquired more confidence and knowledge of the labour market and have begun to negotiate jobs by themselves without depending on agents and contractors. This has led to faster improvements in living standards (for Madhya Pradesh see Deshingkar et al 2008).

As the discussion below shows, the failure to properly implement labour laws has resulted in heavy costs of such migration especially because of the deterioration in living conditions, the inability to educate children and access health or subsidised food schemes. Two major streams of

² Andhra absorbs many Gulf returnees in construction sector, Thaindian News, August 24th, 2008. Available at http://www.thaindian.com/newsportal/uncategorized/andhra-absorbs-many-gulf-returnees-in-construction-sector_10087940.html

migration involving construction workers are discussed below; one involving tribals from southern Madhya Pradesh and the other involving scheduled caste workers from a drought-prone district in the southern state of Andhra Pradesh.

Tribal areas of southern Madhya Pradesh

Tribal and forested areas of Madhya Pradesh have been identified among the 15 pockets of chronic poverty in India (Shah 2007). Migration is an important livelihood activity and research by Mosse et al (1997) in the tribal districts of southern Madhya Pradesh covered under the DFID funded Western India Rainfed Farming Project revealed that 65 per cent of households included migrants who worked mainly in the construction sector. The incidence of migration was clearly growing in the area as a few years later another study in the same area found that in many villages up to three-quarters of the population were absent between November and June (Virgo et al, 2003).

Madhya Pradesh has ranked among the least developed states in India. It has the largest population of Scheduled Tribes of all states and a high proportion of Scheduled Castes. Landlessness, nominal and unproductive landholdings and the inability to invest in farming continue to characterize the tribal population of the state. Migration has long been a livelihood strategy for tribals from the southern districts. Many migrate to the neighbouring states of Maharashtra and Gujarat.

Until about 2005 the recruitment of migrant construction workers from this area was largely done by agents locally known as mukkaddams. Mukkaddams provide the labourers a cash advance to help the family left behind in the absence of the migrant. The advance is also used by the migrant to purchase essentials for the journey. The advances are repaid through migrant wages and the length of time that this takes depends on the payment that the migrant receives at the destination. The mukkaddam recruits migrants in groups who stay together at the destination. Mukkaddams take care of other needs as well including small health expenses, travel expenses, shelter and communication with the family in the village. Mukkaddams are almost never registered with the government although they are required to do so under the Inter-state Migrant Workmen Act (ISMWA) of 1979. The Act makes it mandatory for contractors to register

themselves and their workers and provide them with decent accommodation, crèche facilities, access to health care and minimum wages. Activists and researchers of labour laws³ say that it is extremely difficult to prosecute agents from one state in another state. They feel that that the ISMWA in its current form is non-implementable.

Migrants work long hours in harsh conditions; injuries are common and there is inadequate medical assistance or compensation (Mosse et al 2002). Water, fuel, sanitation and security are major problems. A study by DISHA, an NGO in Gujarat found that over half the migrants slept in the open and the rest had very perfunctory accommodation. They face harassment, abuse, theft, forcible eviction or the demolition of their dwellings by urban authorities or police. The sexual exploitation of women by masons, contractors, the police and others is routine but unreported by women for fear of the consequences (loss of employment, violence). Children are even more vulnerable to such abuse. Although unions have taken up the cause of such migrants, many do not register with unions because of their continuously changing work destinations.

Mahbubnagar in Andhra Pradesh

The poor, drought prone district of Mahbubnagar in the Telangana region of Andhra Pradesh is well known all over India for its construction workers. Andhra Pradesh (AP) is the poorest southern State in India and ranks lowest among south Indian States on human development indicators as well as growth and per capita income. The origins of rural labour migration for manual work in Andhra Pradesh can be traced back to the pre-Independence era. Rural labourers were mobilized for executing major public works in both rural and urban areas such as irrigation projects and public buildings.

Migration has been an important way of coping with drought in Mahabubnagar which has huge tracts of unirrigated land with only a single cropping season (Deb et al 2002). The Village Level Studies (VLS) conducted by ICRISAT (International Crop Research Institute for Semi-Arid Tropics) over the last three decades in two villages of Mahbubnagar district in Andhra Pradesh

³ Pers.comm. Vipul Pandya of Disha in Ahmedabad; Ashok Khandelwal, legal expert on labour laws and Action Aid staff in Hyderabad.

show that both seasonal and permanent migration have increased during the reference period (Deb et al 2002). A majority of construction workers from this district are SCs (Samal 2006).

The situation here is similar to that found in southern MP: workers are recruited by contractors and agents (mestries) who are hired by construction companies to find labourers. The companies pay the agent and not the workers and underpayment of workers is common. In early 2008, a group of workers interviewed by Deshingkar during the course of research for the DFID funded Andhra Pradesh Rural Livelihoods Project, showed that they were receiving the equivalent of Rs 1200 per month in cash and food even though the mestris were being given Rs 150 per worker per day (Rs 4500 per month). Mestris recruit workers against an advance of Rs 20-25000 and this lump sum is used to repay older debts. Underpayment traps the workers in a continuous cycle of debt. There is a strong power relationship between the worker and the agent: Olsen and Ramanamurthy (2000) show the variety of insidious ways in which migrant construction workers are exploited by mestries ranging from trapping them in bonded labour by paying less than subsistence level, extracting overtime and child labour and using caste based and patriarchal modes of oppression to maintain exploitative labour relations. The workers are aware of the exploitation but do not migrate independently because they do not have the information to find work regularly and the risks are too great. And sadly, workers believe that the mestries will help them during times of difficulty because of the feudal history of the region and their faith in patron-client relationships.

Living conditions at construction sites are appalling and mestris provide only the most basic shelter. Drinking water and sanitation are not easily accessible and girls and children left are highly vulnerable to disease, injuries and sexual abuse. Harassment by the police, urban authorities and contractors is common. Additionally migrants do not have access to propoor schemes such as subsidised food, health care and schooling and must pay for everything themselves. Here too unionisation of workers has been difficult and violation of labour laws is widespread with the result that migrants are underpaid and excluded from urban services.

These are not isolated examples and similar conditions have been noted elsewhere in the construction industry in India. One study of 800 migrants in urban areas of Tamil Nadu notes ``Among the mothers who take their child to the workplace, 62 per cent have breastfed their children with supervisors shouting at them"⁴. On the whole, construction workers do not have access to social security⁵, compensation for injuries, access to drinking water or healthcare. India has the world's highest accident rate among construction workers - a recent ILO study shows that 165 out of every 1000 workers are injured on the job (quoted in Sarde 2008).

5.2 Brick kilns

Closely linked to the construction industry is the brick kiln industry which also employs large numbers of low caste and tribal circular migrants. There are 50,000 brick kilns all over India, employing, on an average, 100 workers⁶ (ILO 2005). Brick-kiln workers often migrate with their wives and children and if women are counted as well, the number of brick kiln workers in India is at least 10 million. Recruiting is done through an agent who gives the family in the village a wage advance of Rs 15-20,000. This is a substantial lump sum and is wrongly perceived by the workers and their families as a cheap loan because there is not interest. The money has to be paid back through work and the wages paid are well below the legal minimum effectively making the arrangement a kind of debt-bondage. The entire family comprising the husband, wife and children live on the site and work as one unit for the full season. The overall situation is exploitative as everything necessary to manage daily needs is sold by the employers and agents (at higher rates than the market) on credit and subsequently deducted from actual wages. Each couple earns between Rs 70-130 a day and many are cheated out of their full payment. They spend heavily on country liquor and usually come home with a saving of not more than Rs.1000-2000 at the end of the season. Some are perpetually in debt and migrate again the following year so that they can get a lump sum to repay outstanding debts.

This kind of migration appears to be the domain of the poorest migrants. Two streams of brick kiln workers are discussed here: the migration of tribals from Western Orrisa and the migration of musahars in Bihar. While both involve inter-state migrants they differ in the level of representation that they have received from supportive civil society organisations.

⁴ The study was conducted by TN-Forces (Tamil Nadu Forum for Creche and Childcare Services); the quote is from an interview with a Ms Bhuvaneshwari a TN-Forces staff member involved in the study, published in The Hindu 'Migrant woman labourers facing economic disparity' 30 April 2002.

⁵ The newly passed Social Security for Unorganised Sector Workers bill may provide some benefits but how effective the implementation will be remains to be seen.

⁶ This figure includes only those male workers who are on the muster rolls of the employers

Migration from Western Orissa

Western Orissa has long been a major source area for migrants because of its highly unequal land distribution, high levels of poverty among landless and marginal farmers and low levels of human capital, industrialisation, urbanisation and diversification into non-farm occupations combined with poor governance. It suffers from multiple social, political and economic disadvantages leaving the poor with few local options for making a living.

ActionAid estimates that nearly 200,000 people migrate from Western Orissa to brick kilns surrounding major cities of Andhra Pradesh (ActionAid, 2005). Research conducted under the DFID-funded Western Orissa Rural Livelihoods Project (WORLP) in Nuapada and Bolangir shows a dominance of STs and SCs in migration streams from these poor districts (Panda 2005). The poorest and the richest as well as the upper castes did not migrate seasonally. In Bolangir more than 90% migrants were going to work in brick-kilns in Andhra Pradesh. The WORLP research also shows that although migration rates among females are lower than males, significant numbers of females do migrate (39% of the migrants in Khariar block were female). There were also many migrating children: male children (below 14 years) constituted 14.89% of the total number of migrants and female children (below 14 years) constituted 13.47% of the total migrating individuals in the sample.

Workers are usually recruited by an agent or contractor known as a Sardar or Khatadars. This is the notorious "Dadan" system attracted attention for being highly exploitative and led to the formulation of the Inter-State Migrant Workmen Act. At the time of recruitment Sardars give the worker an advance and promise a wage which is to be adjusted against the advance at the end of every month. But this promise is rarely kept. Brick kiln workers are usually paid Rs 175-200 for 1,000 bricks made. They work for 12 to 15 hours, sometimes 18 hours a day to make more money. Wages are settled at the end of the brick-making season and it is common for the workers to be cheated because they are illiterate.

Children are an essential part of the workforce hired by contractors for brick work. A recent unpublished study of 300 brick kilns around Hyderabad showed that as many as 35% of the total

migrants were children, of which 22% were of elementary school age. According to Sristi child labour is much a part of the brick making process that if a family does not have a child, a child from another family is hired (Sristi 2008). These child labourers are extremely vulnerable and become part of unwritten, exploitative, contracts with labour contractors. Hardly 10% of the migrants are registered with the labour department. Often, contractors take migrants in the middle of the night to escape detection. Many migrating children eventually drop out of school. A recent unpublished study of 300 brick kilns around Hyderabad revealed that as many as 35% of the total migrants were children, of which 22% were of elementary school age (Panigrahi 2006). Although migrants are allowed to send their children to schools in other states, there are often language barriers and schools may not be available near work sites. The working conditions of brick kiln workers have been widely condemned. Brick kiln work has many of the characteristics of bonded labour – restricted freedom, hiring workers against advances, long working hours, underpayment and physical and verbal abuse of the workers by contractors and employers.

Two NGOs - Vikalpa and Lok Drishti together with Action Aid have worked to free labourers from bondage and provide education for their children. But the strong links between political interests and contractors make it difficult to improve the conditions of employment of kiln workers. A number of large labour contractors who supply tribal workers to brick-kilns in Andhra Pradesh also have close links with government officials. There are strong vested interests in keeping the workforce pliable and poor so that cheap labour continues to be available for brick making. The experience of NGOs working with cross-border migrants has shown that it is difficult for any contractor to be prosecuted in another state and there have been very few cases to date (personal communication Umi Daniel, Action Aid). There is also a view that the Orissa government is reluctant to take any action because it would be like admitting that there are so many poor seasonal migrants in bondage. Not only would this show that the Orissa government has been ineffective in controlling migration but it would also call into question the resource allocations received by the state from the Centre based on population (personal communication Umi Daniel, Action Aid).

Migration from Bihar

A large number of people belonging to the musahar caste migrate from Bihar to brick kilns in Uttar Pradesh and West Bengal where they stay for 7-8 months in a year. The musahar (literal translation is rat-eaters), are classified as a scheduled caste and they have remained largely on the periphery of society⁷. They are usually found in the least paid and most degrading jobs with the worst terms of employment. Apart from brick kiln work, large numbers of musahar work in crop harvesting, which is also one of the least well paid occupations. Recruiting for brick kiln work is done through an agent who gives their families a wage advance similar to the practice seen in Orissa.

The striking difference between the brick-kiln migrants here and the migrants in Orissa is that there is no one to fight on behalf of the musahar for better working conditions and wages. While Orissa has NGOs which have given the issue national and international publicity, the musahar are less visible. Although there are NGOs in Bihar working on issues that touch the lives of migrants such as HIV/AIDS there do not appear to be any initiatives for providing schooling for their children.

Thus brick kiln workers continue to work without any form of social protection or social security and the overall benefit for the migrant is being able to eat regularly. However in the absence of education and health systems that cater to migrants, the costs have remained very high.

5.3 Textile Industry

The textile industry in India (including the garment industry) is the largest foreign exchange earner among all other industrial sectors and provides direct employment to around 35 million people⁸. A large proportion of these workers are migrants, judging from micro-studies (Unni and Bali 2006) but it is difficult to put a precise figure on the numbers. The textile industry is extremely complex in its structure, with handlooms and home-based production at one end of the spectrum, to capital intensive, large mills at the other. Small, privately owned power looms now dominate the industry. Yarn production is still in large mills but 78 per cent of the cloth

⁷ Mukul 1999.Everyday Life of Musahars in North Bihar *EPW* Special Articles December 4, 1999

⁸ Estimates of textile workers from Ministry of Textiles http://texmin.nic.in/msy_20010621.htm

production occurs in smaller power looms and handlooms. According to labour statistics published by the Labour Bureau 31% of the workers in the manmade textile industry were migrants.

The conditions of textile workers are described by in a study of Bhiwandi, the largest power loom site in Maharashtra "A visit to Bhiwandi reminds one of scenes usually associated with the beginning of the Industrial Revolution: thousands of persons sleeping in or next to numberless ramshackle sheds in which the deafening sound of the looms is heard 24 hours a day, with no ventilation, proper light, children doing tedious work for long hours, and dust and dirt everywhere. The exact number of power looms is unknown, as is the specification of their production, the ownership of looms, the quantity of work done on behalf of the mills." (Ramaswamy and Davala 2008).

The garment industry is a sub-sector of the textile industry and also generates many jobs for migrant workers. India's readymade garment exports increased significantly as a share of total exports (12% or Rs 254,780 million in 2001-2). There were 1,001,000 garment workers in 2004 (Mezzadri 2008)

While the number of workers in formal employment is going down due to fewer registered factories, the numbers in small and unregistered units is growing and employers often choose to employ migrants because they are easily controlled (Ghosh 2001). In order to evade stringent labour laws, larger factories have now split their operations into groups of 11-15 workers who work on the same premises. If any worker divulges information during labour inspections he or she is given no further work from the next day (Unni and Bali 2006).

The Garment Industry in Delhi

A case study of the Delhi garment industry which accounts for 35-40 per cent of the value of the country's total garment exports estimated that there are 3,000-4,000 production units where poor, first generation industrial workers are hired by contractors known as thekedars from rural areas. Migrant workers are preferred because they do not pose the threat of unionization. The workers stay in the city for the production cycle and then return to their villages (Mezzardi 2008).

Garment units employ large numbers of women migrants. The work is characterized by long hours, and a lack of health and welfare benefits, minimum wages, and job security. Work-related illnesses and disorders include: headaches and stress-related fatigue, back problems, disturbances of the menstrual cycle, repetitive strain injury, loss of weight, respiratory problems, kidney and bladder infections from retaining urine for long periods of time, and sinus problems and allergies from the dust and materials used.

Embroidery work is now big business for traders and exporters in the garment sector. Many of the workers are Muslim boys and young men from Bihar who work in small units in villages outside Delhi. Workers are paid piece rates and are almost completely invisible in the global supply chain. Interviews and group discussions with migrants in sending areas of Bihar show that these jobs are regarded as well paid and have helped many families to accumulate assets and repay debts (Deshingkar et al 2006).

Silk Industry

Sericulture is a labour-intensive industry and employs roughly 6 million people in different stages of production including rearing silk worms, reeling thread, twisting, dyeing, weaving, printing and finishing (Ministry of Textiles) in all its phases, namely, cultivation of silkworm food plants, silkworm rearing, silk reeling, and other post-cocoon processes such as twisting, dyeing, weaving, printing and finishing. It provides employment to approximately 6 million persons, most of them being small and marginal farmers, or tiny & household industry mainly in the hand reeling and hand weaving sections. Mulberry silk is produced extensively in the states of Karnataka, West Bengal and Jammu and Kashmir. About 85 per cent of the country's production is contributed by the Karnataka⁹. Silk thread making and sari folding have now become notorious for employing large numbers of children (see box).

Box 1 Child Labour In The Silk Industry

The prevalence of child labour in the silk industry was exposed after a Human Rights Watch Report in 2003. HRW says "Boiling cocoons, hauling baskets of mulberry leaves, and

⁹ From a note on the Sericulture industry in India and its potential. Available at http://www.krishiworld.com/html/seri_ind1.html

embroidering saris, children are working at every stage of the silk industry. Conservatively, more than 350,000 children are producing silk thread and helping to weave saris. The children work twelve or more hours a day, six and a half or seven days a week, under conditions of physical and verbal abuse. Starting as young as age five, they earn from nothing at all to around Rs. 400 (U.S.\$8.33) a month, some or all of which is deducted against loans ranging from around Rs. 1,000 to 10,000 (U.S.\$21 to \$208)."

Source: Human Rights Watch (2003)

Migration from Eastern Orissa to Gujarat

Surat is one of the main destinations for migrants from eastern Orissa. Many go to work in the textile industry and the diamond cutting and polishing industry. A study by Jagori, an NGO in Delhi put the number of Oriya power loom workers in Surat at roughly 100,000 in 2001 (Jagori, 2001). However later informal estimates are higher and increasing: A Times of India report (Times of India 18 May 2003) mentions 500,000 Oriya workers in Surat; Narasimham (2004) estimated that there were roughly 800,000 Oriya labourers in Gujarat of which 80 per cent work in the power loom and diamond polishing businesses (see under small industries below) in and around Surat and the others are spread across the state, working in various factories including plastics, textiles, salt manufacturing, pharmaceuticals, brick manufacturing, and fertilisers. Increases in migrants from Orissa have been widely attributed to the super cyclone of 1999, severe drought of 2000 and unprecedented floods after that. The most recent informal estimates suggest that there are around 900,000 Oriya migrant workers in Surat of whom 600,000 are from Ganjam district alone (UNDP 2007).

There has also been a shift in the caste composition of migrants: earlier studies (e.g. Nayak 1993, Sahoo 1993) note that a majority of migrants belonged to the other castes (i.e. upper castes) and a much smaller proportion belonged to the scheduled castes and tribes. Furthermore earlier studies noted that most migrants belonged to the small and marginal farmer category. However towards the end of the last decade migration streams had a high proportion of SCs (Samal 1998).

By all accounts working and living conditions of textile workers are dismal. Workers are not named on factory books and employers do not provide them with anything other than their wages. Most of them aim to maximise their savings so that they can send money home and spend very little at the destination. Living quarters are shared and crowed with only the most basic facilities. Since many migrants to industrial zones are single men, problems associated with the separation from family such as visiting brothels and alcoholism are common. Oriya migrants to Surat have been named in AIDS control projects as a highly vulnerable group. Although more educated and better connected than the tribal migrant from western Orissa, migrants from eastern Orissa are vulnerable in different ways. Sahoo (1993) documents the numerous ways in which workers are deprived of their legal rights in the factories of Surat: they are not registered under their real names; they are not issued with ID cards; they remain casual workers without a permanent contract even if they have worked there for more than 10 years; they work in shifts of 12 hours with 30 minute breaks. If other workers are absent they may have to work without a break for 24 hours and they are given only one (unpaid) holiday every week.

5.4 Other Small Industries In The Informal Sector

Small industry is a broad term used to describe the millions of manufacturing units in the informal sector which make (among other things), shoes, bags, steel utensil, vehicle parts, plastic goods, glassware and electrical items. Until the early 1990s, large manufacturing units in the organised sector attracted intrastate migrant workers. But the pattern has changed now and small, unregulated and often completely illegal manufacturing units have become the new destination for interstate migrants from poorer states to the more developed areas around the capital city and western India.

Leather Industry

The Indian leather industry with an economic value of around US \$ 2 billion employs roughly two million people (CUTS International 2008). One of the major centres of the leather accessories industry is in Dharavi, Mumbai (the largest slum in Asia). The industry now attracts large numbers of migrants from Bihar and UP although only a few years ago a majority were from poorer parts of Maharashtra (Pais 2006).

Parts of the leather industry also employ large numbers of children. For example, the footwear industry in India which ranks second in global production after China employs children in the

ages between 10 and 15 in assembling shoes. The industry is concentrated in Tamil Nadu, Mumbai, Uttar Pradesh, Punjab and Delhi. 80 percent of the children work for contractors at "home" i.e. small units which can evade the law. The rooms are cramped, poorly lit and poorly ventilated. Many suffer from respiratory problems, lung diseases and skin infections through constant exposure to glue and fumes. They are also exposed to risk of nasal cancer, neurotoxicity and adverse physical factors (Tiwari 2005).

Yet this kind of work is perceived as a good work opportunity because it is well-paid compared to work at home. Interviews with migrants and key informants in rural Bihar indicate that those families who have migrants in such occupations regard themselves as fortunate and acquire the jobs through social networks. In Barhi village in Bihar for example, there is migration to many different kinds of industry in different parts of the country.

Box 2 Migration for Industrial Employment from Rural Bihar

Barhi is a large and remote village in Madhubani district populated by Yadavs (BCs), Muslims and SCs with 470 households. Hardly anyone is educated beyond high school and local employment opportunities are limited. Migration rates are very high among the BCs and SCs and most BCs and Muslims are working in industries in Mumbai, Delhi, Gurgaon, Surat, Ahmedabad, Kolkata, Arunachal Pradesh, Trivandrum, Kathmandu and Nepal. Earnings vary but are usually "good". In the mattress industries of Gurgaon for example they earn Rs 1500-2000 a month and manage to get 10 days of overtime work in a month (there is competition for scarce overtime work) taking their earnings upto Rs 2500. In bag making and shoe industries in Delhi and Mumbai they earn Rs 3000-3500 if they work 12 hours a day.

In an autorickshaw workshop in Delhi workers are paid Rs 2000 per month (of which some proportion is cut for the Provident Fund each month). The attraction of this job is that they get PF payments even if they work for a few months. In wires and coil industries in Delhi workers are paid Rs 2500-3000 per month (Rs 9/hr for overtime). Most of these industries have shifts of 8 hours but workers try to work overtime as often as possible. Many also work as welding machine operators and earn Rs 4000-5000 per month. Others who work as their helpers earn Rs 2500-3000 per month.

Barhi village is typical of Madhubani district where migration rates are extremely high. Migration from Madhubani has been increasing steadily over the last 10 years because of poor yields in farming and reduced job opportunities locally with the closure of several large industries¹⁰. According to key informants about 70% of the households are engaged in migration each with 1-4 male members working outside. Roughly 60-75% of SC households have migrants and 40% of OBC households have migrants.

Source: adapted from Deshingkar et al (2006)

Migration to industries has resulted in rapid improvements in living standards and contributed to improved well being through improvements in assets and agriculture (see next section on Human development impacts). But on the down side, those working in Mumbai reported a constant threat of being bullied by local hooligans and the police. None of the women left behind in the village had heard of AIDS and they never used any contraceptives which made them especially vulnerable to infections brought back by migrating husbands.

5.5 Mines and Quarries

By one estimate there are around 3 million people working in artisanal and small mines in India (Lahiri-Dutt 2006) which are mainly illegal. Other estimates are higher: a Rajasthan-based NGO, the Mines and Labour Protection Campaign, estimates that there are two million workers in the M&Q sector in the state (quoted in Lahiri-Dutt 2006). There are additionally 4-5 million quarry workers in Maharashtra according to Santulan, an NGO working on education (quoted in AIF 2006). This is in contrast to the formal mining industry in India which employs just 560,000 people and this number is coming down.

Mica Industry

A case study of the mica mining and processing industry in Andhra Pradesh by the People's Union for Civil Liberties (PUCL) shows widespread under-reporting of both production and employment in order to escape royalty payments to the government. Mica production in India is concentrated in Bihar, Andhra Pradesh and Rajasthan. Mica mine owners do not report casual

¹⁰ Anand Kumar Jha, Samadhan, Madhubani, Ram Pramod Yadav (Master Trainer, Swayamsiddha Project-Samadhan), Madhubani, Dr. Yogendra Thakur, Director, Society for Rural Development, Madhubani

and temporary workers on the rolls and do not show them in their statutory returns to the Director General of Mines safety (Subrahmanyam 1985). Mica processing units are operated by the mica owners, the dealers who work as middlemen between the mine owner and the exporters. All these agencies besides recruiting their own workers also outsource to home splitters. A common malpractice is to employ workers on a temporary basis even though the mine is under continuous operation. In Andhra Pradesh, such workers are listed in a 'B' register. These 'B' registers are the muster rolls for workers who have been working for more than three months. To avoid the statutory requirements of changing the status of a temporary labourer into a permanent labourer after three months, the names of the workers along with the names of their parents are altered. In this way the mine owner avoids paying the minimum wages, provident fund, bonus and other benefits.

Migrant workers are preferred because they are not unionised and are employed by the contractor so do not create disputes. They also tend to work harder under the direct supervision of the contractor and they do not have to be paid bonuses, provident fund payments etc. The mine owners approach contractors (sirdars) whenever they need more workers. The contractor recruits a group of 30-30 workers and pays a small advance to each worker, at their native village on signature of a promissory note in which they specify their assets (cattle or small land holdings) as collateral. The workers stay in dormitories at the site. The mine management pays the daily wages of these workers to the contractor who makes a profit because he pays the workers much less than he receives.

Working in mines and quarries is dangerous and outside regulatory regimes. There are no safety standards, medical care or protective clothing. The methods and machines used are primitive and injuries are common. When workers take time off work due to injuries they have to pay for their own food, fuel, water and medical expenses (Sarde 2008). A study on the health of mining and quarry workers by Tiwari et al (2007) published in the Indian Journal of Occupational and Environmental Medicine found that the prevalence of TB among stone crushers was 10.7% which was higher than the average while among slate pencil workers it was as high as 22.5%.

In India, the value of mineral production has more than tripled since the sector was 'liberalised', from about Rs 250,000 million in 1993-94 to more than Rs 840,000 million in 2005-06, an astounding growth rate of 10.7%. But according to CSE the contribution of mining to the

nation's GDP has stagnated at 2.2-2.5% for more than a decade now because it contributes very little to the exchequer through taxes and royalties (CSE 2007).

6. Agriculture

Peak season operations in agriculture continue to be performed by migrant labour. For example there were more than 819,000 migrant workers, mainly from Uttar Pradesh and Bihar, in rural Punjab in 2007 accounting for 23% of the workforce engaged in agriculture sector activities (Singh, Singh and Ghuman 2007). Although most find work for only 50 days in a year in agriculture they migrate in the hope of finding casual work in urban areas after the peak seasons of wheat harvesting, paddy sowing and paddy harvesting are over. Many are absorbed by small industries. Similarly paddy transplanting and harvesting in the Bardhmann region of West Bengal attracts around 500,000 migrant workers every season (Rogaly et al 2001, 2002).

In addition to these there are migration streams which involve the poorest migrants such as sugarcane cutting and child workers such as cottonseed work which we discuss below.

6.1 Sugarcane Cutting In Western India

Maharashtra, Gujarat and Karnataka are the leading producers of sugar in India. The Maharashtra sugar industry alone produces nearly 40 percent of India's sugar. According to official statistics issued by the Maharashtra State Sugar Cooperative Federation, there are 1.6 million sugarcane farmers growing the crop on 0.7 million hectares of land, producing 60 million tonnes of sugarcane. There are 172 sugar factories in the State providing employment, directly or indirectly, to 15 million people.

The industry employs more than a million cane-cutters who are almost always SC, ST and OBC migrants with little or no land from the poor, arid districts of the Marathwada region. The cutting cycle lasts for six months from November to April/May. Cane cutters usually migrate in families and are recruited by a contractor against an advance payment. The contractor provides very basic accommodation without proper sanitation. Access to fuel and drinking water are difficult and this increases the work burden on women. While the earnings from such work are good compared to work in the village, the working and living conditions are so poor that they have been named as

one of the most exploited labour groups in India by researchers such as Jan Breman who famously said that even dogs are better off (Breman 1990).

But the most serious cost of such migration is that children who accompany their parents miss school and eventually drop out altogether. A study¹¹ in six districts in Western Maharashtra by the Centre for Development Research and Documentation in 2003 found that roughly 200,000 children migrate with their parents and half of them are in the age group of 6 - 14. According to Janarth, an NGO working on education for migrant workers' another 200,000 migrate from the Khandesh region in Maharashtra to sugar factories in Surat in Gujarat and 100,000 migrant workers come into Belgaum in Karnataka each year (all quoted in AIF 2006).

6.2 Cottonseed farms

Cottonseed production relies heavily on migrant child workers. It is concentrated in five states namely Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Tamilnadu. These five states account for more than 95% of the area under cottonseed production in the country. In 2003-04, nearly 55,000 acres were under cottonseed production in the country, out of which Gujarat accounted for 26,000 acres, Andhra Pradesh 14,000 acres and Karnataka 4,000 acres. Andhra Pradesh was the largest cottonseed producing state in the country until recently but Gujarat surpassed its production (Venkateswarlu 2004). Venkateswarlu estimates that roughly 286,000 workers were employed in cottonseed farms in Gujarat in 2003-04. Of these around 91,000 were children in the age group of 8 to 14 years. His calculations for Karnataka show that nearly 26,800 child labourers (7-14 years) were employed in cotton seed farms in Gujarat are tribals from southern Rajasthan (Katiyar 2005).

Estimates of the numbers of children working in cottonseed farms vary. According to UNICEF cotton plantations in AP employ 200,000 children below the age of 14. The vast majority are girls, as they are preferred over boys. The Environmental Justice Foundation puts the number at around 100,000. Children working in cottonseed farms are recruited by agents who pay their parents an advance. The children pay off this money by working long days from July to February. The children work 13 hours a day for around Rs 30 which is less than 50 pence per

¹¹ 6406 households were selected randomly from 25 sugar factories

day¹². On average 10 to 12 girls work per acre and are mostly drawn from the traditionally oppressed and marginalised communities whose families are heavily indebted and have pledged their child's labour to pay off the debt. Even if parents do not want to exploit their children, they are often compelled to do it because of desperate poverty and debt. Living and working conditions are basic and many children drop out of school. A UNICEF case study found that 60 per cent of the children working in cottonseed fields have dropped out of school and 29 per cent have never attended school. As about half of them began working before the age of 11, literacy levels are very low¹³.

6.3 Food Processing

There were 7.85 million workers directly employed in the food Processing Industry including Sea Food and Marine Products factories¹⁴ in 2001-02, and this number was expected to grow to 8.6 million persons in 2006-07 (Ministry of Labour 2008, NCAER). The size of the food processing industry has been estimated at over USD 70 billion by the Ministry of Food Processing, contributing 6-7% of the GDP¹⁵. Fish and cashew nut processing employ large numbers of migrant women (ICSF/SIFFS/NFF 2004). The cashew processing industry alone employs around 2 million people across India. (Action Aid 2008b) Many of these workers are migrant women who earn as little as Rs 25 (50 cents) a day, less than half of the minimum wage.

Work in fish processing involves standing in damp and cold conditions for 14-16 hours a day without any protective equipment such as warm clothing, tall boots or gloves (Misra 2008). Skin problems and fatigue are common and separation from families causes stress and depression. The women live within the factory premises in quarters that have been described as inhuman and marked by congestion, poor ventilation and inadequate sanitation. Women who raise their voice against the facilities provided are sent back home. In 1997 around 250 women were sent back to

¹² http://www.ejfoundation.org/page330.html

¹³ http://www.unicef.org/india/child_protection_1739.htm

¹⁴ Canning and Preservation of Fruits and Vegetables (Industry code 202), Processing, Canning and Preservation of fish, etc. (Industry code 203), Production of Common salt (Industry code 208), Manufacture of Cocoa Products, Confectionery (Except Sweet Meat) (Industry code 209), Malted Food, Grinding and Processing of Spices, Papads, Appalams, Sago and Sago Products etc (Industry code 219).

¹⁵ Cited in Denmark Indian Food Processing Sector– Technology and Market Trends. http://foedevarer.di.dk/NR/rdonlyres/8FCD16B9-0966-4A20-9242-

DBA6F8D17DE2/0/TechnologyandMarketTrends.pdf

Kerala and Tamil Nadu and this subdued others from asking the factory management for better conditions and pay.

When the earnings of workers in food processing are viewed against the revenue generated it becomes obvious how much migrants are contributing to the economy and how little they are receiving in return. While the monthly earnings for fish processing workers would be around Rs 3000, the total GDP from fisheries was Rs 300,000 million in 2008.

7. Services

Although the latest figures for the Indian economy show that the service sector now contributes more than 60% to the GDP, it is likely that workers and the economic contribution of certain categories of services are not counted properly. These include domestic services, certain kinds of transport services such as rickshaw pulling, security services and sex work. All are discussed briefly below.

7.1 Domestic Work

With the rise of the middle class in India¹⁶, domestic work has emerged as an important new occupation for migrant women and girls. Some 20 million people (mainly women and girls) migrate for domestic work to Mumbai, Delhi and other large cities from the eastern states of Bihar, Orissa, Chhattisgarh, Jharkhand, Assam and Mizoram (Social Alert quoted in SCF 2005). Roughly 20% of these workers are under the age of 14. A study of domestic workers in Delhi (Neetha 2004) shows that although domestic work has brought higher incomes to many women and their families it is still far from decent work being characterised by long working hours, low wages and hardly any social security. The study covered 465 women in part-time domestic work living in three settlements in Delhi. Most were employed through placement agencies. Often 15-20 girls were forced to stay in a small room without proper washing and toilet facilities. The agencies took up to half of the migrant's salary and savings were therefore meagre.

¹⁶ According to the National Council for Applied Economic Research, 13 per cent of India's population will have an annual income of £2,439-£12,500 by 2009-10, compared with only 3 per cent in 1995-96

NGOs working in sending areas of Bihar such as Gaya district say that the numbers of child migrants for domestic work has increased in the last five years because poor families have had no other choices for supporting their children. The children are in the age group of 13-18 and belong to musahar and manjhee castes (SC and BC). Roughly 500 children (girls and boys) had migrated in 2006 through middlemen. There have been cases of sexual exploitation and physical abuse and according to a key informant from an NGO knows as AVS, 10-20% of the children have experienced serious difficulties. Some have come back with diseases (one 14 year old boy came back with HIV/AIDS). Their earnings are used by their families to buy essentials and repay debts.

Domestic workers are more vulnerable than other kinds of workers because they are not officially classified as workers at all and are therefore not covered by laws that apply to workers. However a few civil society organisations have campaigned on behalf of domestic workers and have succeeded in obtaining state government orders related to working hours, minimum wages and weekly days.

7.2 Rickshaw Pulling

There are roughly eight million cycle rickshaw pullers in India according to the Centre for Rural Development (CRD)¹⁷ which runs self-employment projects for rickshaw pullers in several states. Cycle rickshaws have remained an important mode of transport in old town/city centres with narrow streets all over India. There are still at least 100,000 rickshaws operating in Delhi (Kurosaki et al 2007). Most rickshaw pullers in Delhi originate in Uttar Pradesh and Bihar and belong predominantly to the scheduled castes, tribes and other backward castes with little or no education. A pilot sample survey of 80 rickshaw pullers in Delhi indicates that rickshaw pulling may help migrants and their families break out of poverty. More than 40% of the migrants reported that they had been unemployed in their villages while the others were engaged in very small scale cultivation or other activities like agricultural and non-agricultural casual labour and their economic status before rickshaw pulling was "almost desperate".

Rickshaw pullers do not migrate in groups under an agent like construction or brick-kiln workers. They migrate on their own through social networks. If work is available regularly their

¹⁷ http://www.crdev.org/rb.asp

earnings and remittances can be good. Kurosaki et al estimate that out of a monthly income of Rs.2,400-3,300, a rickshaw puller was able to spare Rs.900-1,800 for his family back home after meeting his expenses on food and lodging and these levels of income and remittance were enough to put both the migrant and his family in the village above the poverty line (which was Rs.24200 per household per annum for Delhi) especially if the income of other family members was taken into account. Although Kurosaki and his team did not explore the impacts of this additional income on the family, other qualitative studies have found that the money is used for a variety of purposes including leasing in land, improving the family house, marriage expenses, health and children's education (Deshingkar et al's 2006 study of migration from Bihar).

However rickshaw pullers have few rights and entitlements in the urban destinations where they ply their trade. While organisations such as CRD have made some difference, the majority continue to sleep in the open and have to rely on private providers for meeting basic health and food needs. They are highly vulnerable to government "cleanup" drives where rickshaw pullers have been asked to move out to reduce urban congestion, as occurred in Delhi a couple of years ago.

7.3 Restaurants, "Dhabas" And Tea Shops

Nearly all urban centres are dotted with thousands of small, illegal restaurants, dhabas (roadside eateries) and tea shops and these mostly run on migrant labour. Child labour is high in this subsector and is driven by poverty, typically employing children from extremely poor scheduled caste families.

Although there has been a ban on child labour in such establishments, this is completely ineffective in practice and restaurant and dhaba owners openly employ children. The parents of the children are aware that working at such a young age compromises their prospects for the future, but they have little choice.

Child migration from Purnia, Madhubani and Sitamarhi districts in Bihar to towns in Uttar Pradesh and Bihar for work in "dhabas" has been on the increase over the last 10 years (Deshingkar et al 2006). These are mainly children from SC families and they migrate for 8-9 months a year. They are paid Rs.500-1500 a month with food. Often the payment is given directly to the parents as an advance and the child repays the debt.

This appears to be one of the least visible and least supported migration streams and this is perhaps why there are so many child workers in it. There do not appear to be many (or even any) NGOs working specifically with this category of service providers. They remain unprotected and vulnerable to exploitation at the hands of agents and employers. Working hours are long and the boys often have to sleep on the premises without proper bath and toilet facilities. Verbal and physical abuse is the norm. Yet for the families, the extra cash can make a huge difference.

7.4 Sex Work

Sex work is a rapidly growing business as recent research in small towns in Andhra Pradesh and Karnataka shows (Deshpande 2008; Rao 2008). A significant proportion of sex workers are seasonal migrants and commuters. In the town of Tenali in coastal Andhra Pradesh for example, many sex workers migrate or commute from nearby villages. They are managed by a pimp or "madam" who takes half of their earnings and protects them from the police. With increasing pressure from the police, sex workers have become home-based or roadside based rather than operating through brothels. Notwithstanding these pressures, the number of sex workers is on the rise, because "people have more disposable income, poor women are looking for ways of earning money and it is easy for poor and illiterate women to get into the trade" says a local NGO. There are no formal estimates of sex workers but a widely circulated figure among HIV control agencies and NGOs is 2 million for the whole of India (Sarde 2008; Asia Times 20 April 2004).

Research on migrant sex workers by the Population Council in India shows that increasing numbers of poor and illiterate women are drawn into sex work because the returns are greater in this occupation than almost any other that they can enter. A study of Andhra Pradesh showed that contrary to popular perceptions, a majority of sex workers were not trafficked into the trade (only 1-5% had been trafficked), but had begun working in the trade because of poverty and debt (Population Council 2008). This poor economic situation was often the result of being left destitute by the death of the parents or husband, after divorce/separation, or the husband having a chronic debilitating sickness. A large proportion of the sex workers interviewed in the AP case

study had cell phones and bank accounts which have allowed them to become independent of exploitative touts. NGOs are playing a key role in sensitising sex workers about health risks. But they remain vulnerable on account of being ostracised by society and government alike. Discussions with slum dwellers in small towns Maharashtra and Karnataka showed that slums with a high population of sex workers were the most neglected by urban service providers (Deshpande 2008).

8. The Economic Contribution of Migrant Labour

Field evidence and micro studies confirm that poor migrant labour is now the most preferred labour by agriculturalists, industrialists and service providers for operations that do not require sophisticated skills. Migrant workers provide the ultimate flexible workforce to employers who can hire and fire them without any obligations whatsoever and extract cheap labour for very little payment.

Adding up the numbers in the sectors reviewed above we estimate that there are around 100 million circular migrants in India today. These workers have played a huge role in sustaining and building India's economy but their contribution remains unrecognised because of the lack of data.

The economic contribution of migrants is a hotly debated issue at the moment especially in the context of international migration to the EU. While some analysts contend that migrants pose a net drain on resources and threaten local employment (see for example publications of Migration Watch UK) others argue that they do not compete for the same jobs and provide cheap labour that boosts economic growth. The same arguments apply to internal migrants and the evidence suggests that circular migration in particular has win-win outcomes for sending and receiving areas. The discussion is hampered by the lack of data and serious under-reporting in illegal and informal sector units. Nevertheless, we make an attempt here.

8.5 Methodology

We have already identified the sectors that employ large numbers of migrant labour. We first provide a brief overview of the sector contributions to GDP followed by numbers of workers in each sector (as shown in official statistics). We then compute the economic contribution of migrant workers using the number of migrants as estimated by us and the value added per worker (VAPW) obtained from the National Sample Surveys.

The GDP contributions of different sectors since 1999-00 at constant prices is provided in the table below.

1999-	2000-	2001-	2002-	2003-	2004-	2005-	2006-	NI	
00	01	02	03	04	05	06	07	С	
								Co	
								de	
44651	44540	47324	43896	48267	48244	51101	53023	1	agriculture,forestry
5	3	9	6	6	6	3	6		& fishing
25414	26732	29307	31322	34474	37115	40620	44067	6	trade,hotels and
3	6	5	1	3	5	3	7		restaurants
26411	28457	29180	31168	33236	36111	39355	44077	3	manufacturing
3	1	3	5	3	5	7	0		
26670	27923	29071	30215	31851	34034	36488	39002	9	community, social
7	9	5	3	4	2	3	0		
23355	24304	26073	28155	29725	32308	35994	41003	8	financing,insurance
0	8	7	0	0	0	2	0		,real estate &
									business services
13337	14832	16077	18347	21162	24469	28053	32720	7	transport,storage&
1	4	2	1	7	3	5	7		comm
10200	10836	11269	12165	13622	15821	18425	20633	5	construction
7	2	2	0	4	7	5	8		
44526	45439	46228	48423	50735	54745	57309	60737	4	elect.gas & water
									supply
41594	42589	43335	47168	48626	52591	55150	58294	2	mining &
									quarrying
17865	18643	19726	20482	22227	23883	26128	28643	10	gross GDP at factor
25	00	06	87	58	84	47	09		cost

 Table 1 GDP by Economic Activity (in ten million Rupees, descending order)

Source: Adapted from Statement 10 National Accounts 2008

Figures on the numbers of workers in different segments of the industry are available through the National Sample Survey Organisation (NSSO) surveys and the Annual Survey of Industries. The National Sample Survey conducts surveys on Employment and Unemployment which include informal workers in both the informal/unorganised sector¹⁸ and the formal sector and are therefore most relevant to our analysis here. Organised enterprises in the public (government) sector, private corporate sector and co-operatives, manufacturing units registered under the Indian Factories Act, 1948 or the Bidi and Cigar Workers Act, 1966 are covered by the Annual Survey of Industries.

The latest data available are from the 61st Round 2004-5 of the National Sample Survey (Table 2). Data from this round indicate that the number of informal workers was more than 422 million in 2004-5, up from 361.7 million 1999-00 or an increase of **61 million in five years**. To put it into perspective, this number is more than the population of several European countries. Given that these data are already four years old it is possible that at least another 50 million have been added to the informal workforce since the last enumeration.

Of the 422 million informal workers in 2004-5, 393 million were informal workers in the informal sector¹⁹ and 29 million were informal workers in the formal sector. This latter category is the one that would include migrant workers working for large construction firms, manufacturing companies and export houses low down in the value chain.

¹⁸ The definition of informal worker used by the surveys is presented in appendix x.

The Unorganised Sector comprises: Own Account Manufacturing Enterprises (OAME) - manufacturing enterprise operating with no hired worker employed on a regular basis; - Non-Directory Manufacturing Establishments (NDME) - units employing less than 6 workers including household workers and - Directory Manufacturing Establishments (DME) - units employing 6 or more workers with at least one hired worker but not registered under the Factory Act.

¹⁹ The term 'informal sector' has been used for the first time in the Indian National Sample Survey (NSS) in its 55th Round (1999-2000). In this survey, *informal enterprises* were defined as the units or enterprises (other than those covered under the Annual Survey of Industries) having type of ownership as either proprietary or partnership. The partnership could be within the same household or from different households. The definition adopted in the survey is broadly consistent with that recommended by the Fifteenth ICLS. Thus the informal sector, as defined in the NSS 55th Round, is really a sub-set of the so-called unorganised sector as described in the official statistics or in the NAS.

Sector/Worker	Total employment (millions)							
	Informal Workers	Formal Workers	Total					
	1999-00							
Informal sector	341.3 (99.6)	1.4 (0.4)	342.6 (100.00)					
Formal sector	20.5 (37.8)	33.7 (62.2)	54.1 (100.00)					
Total	361.7 (91.2)	35.0 (8.8)	396.8 (100.00)					
	2004-5							
Informal sector	393.5 (99.6)	1.4 (0.4)	394.9 (100.0)					
Formal sector	29.1 (46.6)	33.4 (53.4)	62.6 (100.00)					
Total	422.6 (92.4)	34.9 (7.6)	457.5 (100.00)					

Table 2 Sector And Type Of Employment, All Workers 1999-00 & 2004-5

Note Figures in brackets are percentages.

Source: NSS Rounds 55 (1999-00) and 61 (2004-5) Employment and Unemployment Survey.

Comparisons between the 55th 1999-2000 and 61st 2004-05 rounds show a faster pace of informalization of the workforce in some industries (Table 3). In rural areas these were other community, social and personal service activities, real estate, renting and business activities, transport, storage and communications and construction. In urban areas, on the other hand, construction showed the maximum increase. Comparisons show an increase among female workers in construction and financial intermediation.

A sector-wise breakdown shows that the proportion of informal sector workers is highest in both rural and urban areas in wholesale and retail trade and repairs as well as hotels and restaurants (Table 3). As expected, manufacture, transport and construction also have a predominantly informal labour force, especially in rural areas. Mining and quarrying shows most of the informal workers to be in the rural sector where smaller privately owned mines are located. Overall, the data show that there are more informal workers in rural areas than urban and among rural informal workers more women than men, a fact that has been noted by analysts in explaining the greater vulnerability of women in the workforce.
Table 3 Proportion (per 1000) of informal sector (proprietary and partnership) workersaccording to usual status (ps+ss) within each industry group/ tabulation category during2004-05

categories	rural			urban		
	male	female	person	male	female	person
C Mining and Quarrying	719	798	736	247	430	257
D Manufacturing	859	916	881	779	904	810
E Electricity, Gas and water supply	87	112	88	94	11	88
F: Construction	800	718	791	870	887	872
G Wholesale and retail trades; repair of motor vehicles, motor cycles and personal and household goods	937	957	939	952	922	949
H. Hotels and restaurants	940	933	939	941	964	945
I Transport, storage and communications	830	671	826	736	483	728
J Financial intermediation	284	486	302	288	178	270
K Real estate, renting and business activities	869	785	864	776	643	761
M: Education	267	285	274	323	412	366
N Health and social work	601	364	520	544	423	495
O Other community, social and personal service activities	853	932	870	814	896	834
all	792	864	816	739	654	722

Source: NSS 61^{st} Round (2004-5) Report No. 519 (61/10/7) Informal Sector and Conditions of Employment in India 2004-05 (Part – I)

However some categories of workers that are critical to our discussion here, namely individuals working as housemaids, cooks, gardeners, ayahs (child minders), watchmen and other service providers are not adequately covered by the unorganized sector surveys. This could be due to the difficulties in classifying the activities of casual labourers and certain other categories of persons as enterprises. Also, it has been noted by experts on informal employment that street-based occupations and seasonal occupations are underestimated by the NSS (Unni 2006) and these two categories again are dominated by migrant workers.

An idea of the difficulties in counting informal workers can be gained by comparing the results of the 55th round data collected through the household survey method and unorganized enterprise survey methods (Table 4). The NSSO conducted an integrated survey of households and informal enterprises in its 55th round during July 1999 to June 2000. The subjects covered were household consumer expenditure, employment-unemployment and non-agricultural enterprises in the informal sector. For the first time the 55th Round aimed to estimate the number of workers in the informal sector through two different approaches, one based on the household approach and the other based on the enterprise approach.

In the household approach, through the schedule on employment-unemployment, details about enterprises where the household members of the sample households had been working were collected. In the enterprise approach, the sampling units were the informal non-agricultural enterprises in manufacturing; construction; trading and repair services; hotels and restaurants; transport, storage and communications; financial intermediation; real estate, renting and business activities; education, health and social work; and other community, social and personal service activities (excluding domestic services). Table 4 below shows a comparison of the number of workers at all-India level for different activities as per the alternative approaches. It may be seen that estimates based on the two approaches are broadly comparable except in case of Construction, Transport, storage and communication; and Other community, social and personal services, for which estimates based on household approach are much higher. (e.g. the categories of individual service providers mentioned earlier).

Table 4 Estimates of Number of Workers based on Enterprise Survey Approach (Schedule2.0) and Household Survey Approach (Schedule 10)

Activity		Estimated number of	of workers ('000)
-	Sch. 2.0	Sch. 10	Difference
1. Manufacturing	29661	30465	804
2. Construction	2669	10987	8317
3. Trading & repair	28403	28244	-159
services			
4. Hotels & restaurants	4291	3566	-725
5. Transport, storage and	5226	8677	3451
communications			
6. Financial	333	421	88
intermediation			
7. Real estate, renting and	1528	1767	239
business services			
8. Education	1739	2077	338
9. Health and social work	1203	1029	174
10. Other community,	4729	6623	1894
social and personal			
services			
All activities	79783	93856	14073

Note: Estimates based on Schedule 10 give total number of usual status workers considering both principal and subsidiary status.

The estimates of value added per worker (VAPW) are taken from the enterprise surveys conducted by the NSSO and again suffer the shortcoming of not covering all the occupations that we are interested in. The value added per worker of the units in a particular industry group is estimated as the ratio of gross value added to the total employment in all the units of the particular industry group. As can be seen from table 5 there are wide differences in the VAPW

depending on the type of enterprise with figures in unorganised enterprise typically much lower than organised enterprise. Given that the majority of migrant workers are typically employed in the lowest end jobs which almost always informal, we will take the lowest figures under each category. Table 5 shows value added per worker for all major sectors included in the NIC 1998 classification for which VAPW are available in Sundaram (2008).

Table 5 Employment, Net Value Added and Labour Productions in the Organised and the Unorganised Segments of Non-Agriculture byBroad Industry Divisions: All-India, 1999-2000-2004-05. Work Force (000)

			WorkersNet Value-Added (Rs. Crores)				Rs. Crores)	NVA Per Worker (Rs.)			
S.No.	Ind. Division	Total	Organised	Unorganised	Total	Organised	Unorganised	Total	Organised	Unorganised	
	(NIC 1998)										
1	Mining&Quarrying	1883	650	1233	32975	30208	2767	175119	464738	22441	
2	Manufacturing	44260	9903	34357	206126	128653	77473	46572	129913	22549	
3	Electricity, Gas&Water	1054	975	79	24204	23546	658	229639	241497	83291	
4	Construction	17747	1680	16607	99312	40691	58621	55960	242208	35299	
5	Trade, Hotels & Restaurants	41453	1305	40148	248196	38822	209374	59874	297487	52151	
6	Transport,Communication & Storage	14848	3312	11536	105793	46249	59544	71251	139641	51616	
7	FIREBS	4925	1977	2948	137516	110002	27514	279220	556409	93331	
8	Social,Community and Personal Services	33727	16343	17384	246738	189843	56845	73157	116162	32700	
9	Total Non-Agriculture	159897	36145	123752	1100860	608014	492846	68848	168215	39825	
				Pane	l B: 2004-0	05					
Work	Force (000)				Net	Value-Adde	d (Rs. Crores)	NVA Per Worker (Rs.)			
Sr.	Ind. Division	Total	Organised	Unorganised	Total	Organised	Unorganised	Total	Organise	d Unorganised	
No.	(NIC 1998)										

1	Mining&Quarrying	2548	996	1552	42324	38982	3342	166107	391386	21534
		(6.24)	(8.91)	(4.71)	(5.12)	(5.23)	(3.85)	(-1.05)	(-3.38)	(-0.82)
2	Manufacturing	55900	12,304	43,596	277237	181617	95620	49595	147608	21933
		(4.78)	(4.44)	(4.88)	(6.11)	(7.14)	(4.30)	(1.27)	(2.59)	(-0.55)
3	Electricity, Gas&Water	1211	1152	59	28727	27363	1364	237217	237526	231186
		(2.82)	(3.39)	(-5.67)	(3.49)	(3.05)	(15.70)	(0.65)	(-0.33)	(22.65)
4	Construction	25998	1437	24561	150510	56533	93977	57893	393410	38263
		(7.94)	(-3.08)	(8.14)	(8.67)	(6.80)	(9.90)	(0.68)	(10.19)	(1.63)
5	Trade, Hotels &	49593	967	48626	365739	59768	305971	73748	618077	62923
	Restaurants	(3.65)	(-5.82)	(3.91)	(8.06)	(9.01)	(7.88)	(4.26)	(15.75)	(3.83)
6	Transport,Communication	18587	3458	15129	202097	84580	117517	108730	244592	77677
	& Storage	(4.59)	(0.87)	(5.57)	(13.82)	(12.83)	(14.57)	(8.82)	(11.86)	(8.52)
7	FIREBS	7780	3021	4759	213974	165144	48830	275031	546473	102627
		(9.58)	(8.86)	(10.04)	(9.24)	(8.47)	(12.16)	(-0.30)	(-0.36)	(1.91)
8	Social,Community and	37619	18194	19425	316853	229140	87713	84227	125943	45155
	Personal Services	(2.21)	(2.17)	(2.25)	(5.13)	(3.83)	(9.06)	(2.86)	(1.63)	(6.67)
9	Total Non-Agriculture	199236	41529	157707	1597461	843127	754334	80179	203021	47831
		(4.50)	(2.82)	(4.97)	(7.73)	(6.76)	(8.89)	(3.09)	(3.83)	(3.73)

Source: Sundaram (2008)

Finally we compute our estimates of the contribution of migrant workers using our own figures on migrant workers in each sector and the VAPW from the NSS and other sources such as the World Development Indicators. A lacuna in this computation is that we do not have estimates for all sectors and can therefore provide an estimate based only on the major sectors that we have covered earlier in the report.

Sector	Number of Migrants	Value Added per	Total Contribution
		Worker in the	to the Economy
		Unorganised Sector	(millions)
Agriculture	At least 10,000,000	\$ 385.73 (World	253057.50
	Migrant farm workers	Development	
	1000,000 cane cutters	Indicators Database)	
	500,000 cottonseed	= Rs 18745	
	workers 2,000,000		
	cashew processors		
Ind. Division (NIC 1998)			
Mining&Quarrying	6,000,000	21534	129204.00
Manufacturing	35,000,000 textile	21933	767655.00
	workers		
Electricity, Gas&Water		231186	
Construction	40,000,000	38263	1530520.00
Trade, Hotels &	10,000,000 street	62923	629230.00
Restaurants	vendors		
Transport,Communication	8,000,000 rickshaw	77677	621416.00
& Storage	pullers		
FIREBS		102627	
		(1.91)	
Social,Community and	20,000,000 domestic	45155	903100.00
Personal Services	workers	(6.67)	
Total			4834182

Table 6 The Economic Contribution Of Migrant Workers By Sector

The contribution of migrant workers to the Indian economy is at least Rs 4834182 Million (\$ **99,479 million**). The total value of India's GDP was Rs 47,131,480 million which means that **migrant labourers contribute 10% of the GDP**.

Although there are some very robust informal estimates of the numbers of workers in particular sectors it has not been possible to get such information for all sectors that employ migrant workers. Further exhaustive research is required to calculate precisely which parts of the economy of the economy employ undocumented migrants and child labour so that it can be worked out where the contributions are being made and where government and the private sector have responsibility to improve conditions and pay.

9. Impact of the Economic Recession

Available data at the aggregate level for 2007-8 show that the contribution of the three major subsectors was: Services (62.9%) followed by Industry (19.4%) and Agriculture (17.8%) (RBI 2008). Data from the National Accounts for 2008 on growth in different sectors shows that trade, hotels, transport and communication registered the fastest growth followed by construction and manufacturing (Table 7) as explained in the following paragraph. Estimates of Gross Domestic Product (GDP) for the second quarter (July-September) Q2 of 2008-09, at constant (1999-2000) prices are prepared by the Central Statistical Organisation (CSO), Ministry of Statistics and Programme Implementation. Quarterly GDP at factor cost at constant (1999-2000) prices for Q2 of 2008-09 was estimated at Rs. 7,71,4510 million, as against Rs. 7,16,9820 million in Q2 of 2007-08, showing a growth rate of 7.6 per cent over the corresponding quarter of previous year. The top two economic activities in terms of growth in Q2 of 2008-09 over Q2 of 2007-08 were, 'trade, hotels, transport and communication' showing an increase of 10.8 per cent, 'construction' with an increase of 9.7 percent and 'manufacturing' at 5 per cent. The growth rate in 'agriculture, forestry & fishing' was estimated at only 2.7 per cent in this period (National Accounts Quarterly Estimates of GDP for the second Quarter (July08-Sept08)).

Table 7 Quarterly Estimates Of GDP At Factor Cost In Q2 (July-September) OF 2008-09 (At1999-2000 Prices)

		Percentage change over previous year								
Industry	2006	i-07	2007-08		2008-09		2007-08		2008-09	
	Q1	Q 2	Q1	Q2	Q1	Q2	Q1	Q 2	Q 1	Q 2
 agriculture, forestry and fishing 	122,660	98,606	128,042	103,199	131,831	106,007	4.4	4.7	3.0	2.7
2. mining and quarrying	13,852	12,916	14,084	13,621	14,760	14,151	1.7	5.5	4.8	3.9
3. manufacturing	103,009	106,853	114,269	116,685	120,705	122,474	10.9	9.2	5.6	5.0
 electricity, gas and water supply 	14,942	14,961	16,121	15,990	16,537	16,566	7.9	6.9	2.6	3.6
5. construction	48,967	48,745	52,720	54,478	58,715	59,751	7.7	11.8	11.4	9.7
trade, hotels, transport and communication	172,481	178,064	195,068	197,727	216,956	219,083	13.1	11.0	11.2	10.8
financing, ins., real est. and business services	97,331	99,526	109,559	111,833	119,738	122,077	12.6	12.4	9.3	9.2
community, social and personal services	90,404	96,043	95,086	103,451	103,114	111,343	5.2	7.7	8.4	7.6
GDP at factor cost	663,645	655,713	724,949	716,982	782,355	771,451	9.2	9.3	7.9	7.6

Source National Accounts 2008

However the economy is showing signs of being affected by the economic downturn and some migrant employing sectors have been badly hit.

9.1 Employment Outlook

According the Manpower Employment Outlook Survey conducted by Manpower Inc. (2009), employers in India reported the second strongest hiring intentions globally, with a Net Employment Outlook²⁰ of 19%. However the study notes that this Outlook represents a considerable decrease of 24 percentage points quarter-over-quarter and 27 percentage points year-over-year. Mining and Construction continued to be strong for employment despite jobs becoming scarcer during the first quarter of 2009. Employers in the Mining & Construction sector for the third consecutive quarter reported the most optimistic hiring intentions with a Net Employment Outlook of 23%, but the Outlook shows a steep decline in employer hiring confidence of 31 and 30 percentage points

²⁰ The Net Employment Outlook is derived by taking the percentage of employers anticipating total employment to increase and subtracting from this the percentage expecting to see a decrease in employment at their location over the next quarter.

quarter-over-quarter and year-over-year, respectively. Wholesale & Retail trade employers reported the least optimistic hiring intentions with a Net Employment Outlook of 11%.

9.2 Job losses

The actual change in employment in the last quarter of 2008 October-December, 2008 was monitored by The Labour Bureau (2009) in a study in on the impact of the economic downturn on employment. The sample was drawn from Mining and Construction, Textiles, Metals, Gems & Jewellery, Automobiles, Transport, IT and Business Processing Outsourcing (BPO) units. These had contributed more than 60% to the GDP in the year 2007-08. The results of the survey show that the most affected sectors were Gems & Jewellery, Transport and Automobiles where employment declined by 8.58 %, 4.03%, and 2.42 % respectively during the period Oct-Dec, 2008. In Textile sector, 0.91 per cent of the workers lost their jobs.

The report notes that data on the construction industry could not be collected due to non-compliance with the Labour Bureau's request for details on contract workers and other aspects of employment.

Industries	Direct	Contract	Total	
Mining	-0.06	-0.81	-0.33	
Textiles	-1.11	4.6	-0.91	
Metals	-1.04	-4.53	-1.91	
Gems &Jewellery	-9.27	-3.86	-8.58	
Automobile	-0.77	-12.37	-2.42	
Transport	1.96	-9.93	-4.03	
IT/BPO	.51	1.6	0.55	
Overall	-0.63	-3.88	-1.01	

Table 8 Industry wise change in Employment of Direct²¹ and Contract workers

Source: Labour Bureau (2009)

 $^{^{21}}$ It is not clear what "Direct" workers refers to – this category could include home based workers as well as workers with formal contracts.

9.3 Industry-Watchers' estimates

Industry estimates and informal estimates by observers provide an indication of changes occurring in particular sectors. Export oriented units were the worst hit and among these the more labour intensive sectors such as textiles, leather, gems and jewellery and marine products.

The Confederation of the Indian Textile Industry reports that 700000 people have already lost their jobs, and the total could reach one million this fiscal year²². The retrenchments seen currently are described as 'the tip of the ice berg'. A majority of the layoffs are targeted at daily labourers who make up 25-35% of the work force, and 35 million out of the total workers in the Indian Textile Industry.

The gems and jewellery industry had laid off about 100,000 workers by December 2008. The diamond industry is worth 50 billion dollars and employs more than 700,000 workers from various parts of the country. Over 1.3 million people and their families depend on the industry²³.

What is clear is that migrant labourers have been among the first to lose their jobs. The economic crisis has therefore highlighted a new dimension of vulnerability and this needs to be recognised at the policy level when formulating relief packages.

10. Human Development Impacts of Migration

The preceding section shows that migration has both positive and negative impacts on human development. On the positive side it brings in cash which may or may not result in an improvement in living standards. It can also result in the learning of new skills and an improvement in social status. On the negative side migration carries the risk of injury, exposure to life threatening diseases, loneliness and increased work burdens for women left behind. The overall outcome of migration depends on how these positives and negatives add up – for the better connected and better educated, migration can result in rapid accumulation of assets and a faster escape from poverty compared to those who belong to historically oppressed communities where underpayment and exploitation are worst.

²² T&C Industry the Engine of Growth for Employment, Exports and Economy as a whole combined presentation for the media by AEPC, CITI, SRTEPC, TEXPROCIL, 12 January 2009

²³ Recession robs the sheen off from diamond industry in Surat, Asian News International October 21, 2008

In the villages in MP and other parts of western India studied by David Mosse and colleagues, for instance, migration for construction work was generating more than 86% of the cash income for migrating households in the mid 1990s (Mosse et al 1997). The gross annual earnings from migration were about Rs 8,000 per family but few broke out of poverty due to a combination of outstanding debts, the uncertainty of finding work, high costs at the destination and underpayment.

Another study in southern MP also found that migration earnings were an important source of income: Narain et al (2005) studied 550 households in 60 villages in Jhabua district in 2000/1 it was seen that households in the three poorest quartiles earned 65-70% of their total wage income from seasonal migration. In contrast, households in the top quartile earned the largest share of total labour income (63%) from regular jobs in the private or public sector and only about 30% from off-village labour.

On the whole migration among poor tribals in southern MP may be helping the households to maintain their standard of living rather than breaking away from poverty: qualitative data collected by Shah and Sah (2004) from 212 households in a village in Bhadwani district in southern MP shows that migration helped landless households to maintain their standard of living over a decade. The researchers assessed the change in well-being rank over ten years and found that 180 households had retained their original well-being status (including those that were already poor), 7% experienced an improvement, and the remaining 38% deteriorated in status. The analysis suggested that (a) improvement was generally associated with access to irrigation through private sources or obtaining a salaried job; (b) deterioration was largely due to division of landholdings and, at times, due to indebtedness and (c) some households, especially the landless, could retain their well-being status in the better-off or medium categories due to migration.

Another aspect of the impacts of migration is that many families with migrants in southern MP continue to remain in debt because there has been an increase in borrowing and spending for social purposes (see box below).

Box 3 Social Spending Of Migration Earnings

In Jhabua district in addition to financing essential needs when household food supplies run out five to six after the harvest, migration money is financing two important social customs known as 'Notra' and 'Bhagoriya'. This district has a large population of Bhil and Bhilala tribals where the average landholding is about one acre per household and the average household size is five to six persons. Notra refers to a system of community contribution among the Bhils. A household in need borrows from another in cash or kind. The borrowing is marked by a feast for family, neighbours and friends. Repayments are made with "interest" i.e. the amount or quantity returned is greater than that borrowed. Records of contributions received are meticulously maintained. Receiving notra from a family and not repaying them during the notra organised by them, constitutes a serious violation of village rules. The Panchayat is called in to decide on the punishment to be meted out to the erring family. The expenses of the feast and repayments require heavy spending and it has been mentioned that migration money is the reason for this escalation. Spending lavishly during the notra creemony raises the social status of the family and much importance is placed on this custom in Bhil society. Bhagoriya is another custom wherein boys choose a girl to marry and pay a bride price to the girl's family. The young couple then migrate to repay moneylenders or relatives from whom the money was borrowed.

In contrast to these migrants are the workers in small industries who also work without any formal protection but earn better. Discussions with NGOs in several parts of Bihar in 2006 (Deshingkar et al 2006) showed the different livelihood enhancing ways in which migration money is used. In Muzzaffarpur district in Bihar for example where several families send circular migrants to Mumbai about 10% of the households have leased in small plots of land using migration earnings (discussions with staff from NIRDESH an NGO working in the area). Another 5% have used remittances to buy livestock, repair or upgrade their houses and set up small businesses. In Jai Nagar block, Madhubani district about 15% migrants have used remittances for leasing in land according to staff of the Swayamsiddha Project. Focus group discussions with migrants and NGO staff in Sitamarhi district show that many people are leasing in land. According to the group, remittances were used previously for loan repayment and consumption. But as the families became wealthier they started investing in farming, share cropping and leasing land. They estimate that more than 50% migrants have acquired some land in the last 7-8 years. In Gaya district migration money is being used to lease in land for growing vegetables.

Studies of industrial workers from rural UP by UNDP-TAHA (2007) have found mixed impacts. In one study of 310 families from Jaunpur, UP, women said that their economic situation had improved but most continued to work locally because of the uncertainty of receiving remittances. Participants in focus group discussions with male migrants spoke of a shift towards a 'better life' in terms of better access to food, clothing and education. 86% of the women interviewed reported

better access to schooling for their children, 84% reported an improvement in food intake and 51% reported better access to healthcare. Other positive impacts identified were an improved ability to spend on health, the ability to repay debts and renovate or build a house. While 50% earned less than Rs 3000 a month, 40% earned more (probably skilled workers). This was a substantial amount of money in 2007 as it predated the sudden increase in global prices that occurred in mid 2008. The inflow of cash adds to the family status as it reduces the need to borrow money in times of need. Post migration, 11% of the families were able to buy mobile phones and other gadgets.

Migration is thus highly differentiated: at one extreme are the poorest such as the tribals from southern MP, western Orissa and the musahar from Bihar for whom migration is no more than a coping strategy providing at best subsistence and the money for repaying debts; while for better educated and better connected migrants, it provides additional income which can be used to fund agriculture, education, housing and social functions which lead to economic and social gains.

10.1Migration as an Exit Choice

Recent studies in Bihar document that migrants belonging to historically disadvantaged groups such as the scheduled castes and tribes frequently said that working outside the village had given them the opportunity to work with dignity and freedom²⁴. Bihari migrants said that caste hierarchies in rural society were rigid and humiliating. One worker from Purnia district said that the wives of farmers who employed them for crop harvesting in Bihar would always address them rudely and give them food in a very insulting manner. He said that in Punjab the farmers wives treated them with more respect. NGOs working in Parbhani district in Maharashtra feel that migration has given dalits and women an opportunity to escape caste divisions and atrocities²⁵. Shah's research on migration to brick-kilns from Jharkhand shows that migration gives young men and women the opportunity to pursue amorous relationships away from social restrictions in the village (Shah 2009).

Migraton has also led to a shift in social and power relations in the Bundelkhand region of Madhya Pradesh. Dr M.M. Rehman of the V.V.Giri National Labour Institute who has been studying the area for several years notes "there has been a shift in power because of migration and education. Now youth work outside and they wear jeans and carry cell phones". Migration has clearly led to

²⁴ Interviews conducted by Sushil Kumar published in Deshingkar et al (2006).

²⁵ Personal Communication Ganpat Bhise, Pratigya, Parbhani, Maharashtra.

lower dependencies on the village elite and an accompanying shift in power relations. The poor can now work and live without having to observe humiliating obsequiousness to their employers.

10.2Who Accumulates And Who Copes?

Whether or not saving and accumulation occurs as a result of migration depends on the mode of recruitment, skill and wage levels, the ability to access remunerative work which in turn depends on social networks, education and assets, location, caste and gender. In general those who migrate through middlemen earn and save less than those who have good contacts and migrate independently. Such migrants are usually poor, uneducated and unskilled. Personal business acumen, entrepreneurial skills and confidence also matter a great deal. For example research on seasonal migration conducted under the Andhra Pradesh Rural Livelihoods Project by Samal (2006) in two villages in Mahabubnagar district and two villages in Ananthapur found that most households did not save much but some did accumulate wealth and one of the major factors leading to the accumulation of assets was the repetition of migration to the same destination. Long-term migration to places like Mumbai, Hyderabad and Bangalore enabled migrant households to accumulate because of the relatively higher wages and absence of middlemen. Migrants were predominantly from the lower social strata of SCs, STs and BCs (95 per cent). They were mainly illiterate, landless labourers and marginal farmers.

The WORLP surveys (Panda 2005) found that skilled workers did particularly well in getting remunerative work in brick-kilns and construction sites. While this did not mean that migration was viewed as the ideal form of employment, it was certainly seen as better paid and more secure than employment in the village.

10.3Debt And Migration

In some cases migration reduces the need to borrow. In a village in southern MP studied by Llewellyn, migration to brick kilns has reduced borrowing from moneylenders, and reduced bonded labour. Migrant work appeals to villagers because it presents the chance to earn more money or a larger in-kind payment than they could earn in the village. Llewellyn states "In a shock situation, people who previously would have had no choice but to submit to a year's bonded labour for Rs.5000 can now weigh the option of soliciting an advance from a contractor and migrating instead."

But the relationship between debt and migration is not straightforward. While some analysts have concluded that migration increases debt levels because of higher expenditures during transit and at the destination, others have argued that migration improves the creditworthiness of households and they are able to borrow more because of that (Ghate, 2006).

10.4Exclusion From Government Services

All migrants are excluded from government schemes to varying degrees. Entitlements to services are based on residence and the "ration card" is a key document to access subsidised food under the public food distribution system (PDS) and various other schemes. To obtain a ration card one must first prove one's poverty status and obtain a below the poverty line (BPL) certificate. Other schemes for specific communities such as SCs and BCs require a caste certificate. Corruption and mistargeting in the allocation of certificates has been well documented and as a rule those who are more influential in the village and able to spend on bribes are able to get the necessary documents faster.

Two programming examples – namely education and access to subsidised food - offer particularly interesting insights into the opportunities and pitfalls of introducing social protection for migrant workers. Here we draw on case studies of schemes that have aimed to provide subsidised food and / or schooling to migrants in four Indian states (Orissa, Maharashtra, Rajasthan and Andhra Pradesh).

10.5Education

Children who migrate on their own or migrate with their parents miss school. There are no official estimates of the numbers of migrating children out of school but 6 million is now a widely accepted figure for India (AIF 2006). The inability to educate children perpetuates poverty beyond the present generation into the next one and the government of India recognises the need to reach migrating children, at least through legislation. The underlying assumption is that educating the children of poor workers will interrupt the intergenerational transmission of poverty.

The scheme for universal primary education, the Sarva Shiksha Abhiyan (SSA) and the Education Guarantee Scheme and Alternative and Innovative Education (EGS & AIE) programme promise a number of facilities to make education more accessible to mobile children. These include mobile schools, examinations on demand; bridge courses, residential camps and drop-in centres for street and slum children. The goals of the SSA are shown in Box 1. Within these programmes, three experiments are reviewed across very different state contexts in terms of the political milieu.

Box 4 Goals of the Sarva Shiksha Abhiyan (SSA)

- All children in the 6–14 age group in school/EGS centre/bridge course by 2003
- All children in the 6–14 age group complete five years of primary education by 2007
- All children in the 6–14 age group complete eight years of schooling by 2010
- Focus on elementary education of satisfactory quality with emphasis on education for life
- Bridging of all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010
- Universal retention by 2010

10.6Schools for sugarcane workers' children ("sakharshala") in Maharashtra

At study²⁶ in six districts in Western Maharashtra by the Centre for Development Research and Documentation in 2003 found that roughly 200,000 children migrate with their parents and half of them are in the age group of 6 - 14. In Maharashtra the SSA is implemented through the Mahatma Phule Sikshan Hami Yojna (MPSHY) which became operational in 2002. A government order makes it mandatory for sugar mills in the state to provide education to migrant worker's children through the MPSHY.

Janarth, an NGO based in Aurangabad in Maharashtra, set up the first schools for migrant workers' children (sakharshalas) in 2002-2003 at two sugar factories. These schools together had a capacity for teaching 600 children. Janarth now runs 126 sakharshalas covering 15,000 children. Other NGOs in the state have also begun to run sakharshalas. Although the number of sakharshalas is growing steadily, progress is slow. Research by Janarth has identified several reasons for this including:

a) It is difficult to prove how many migrant children there are in order, make a case for addressing the problems that they face. A majority of the migrants at sugar factories are seasonal migrants and these are not counted properly by official surveys such as the

²⁶ 6406 households were selected randomly from 25 sugar factories

National Census and National Sample Survey. As a result they are not recognised by Government.

- b) Children are critical to household livelihoods forcing their parents to make difficult choices about sending them to school. Children often work in the field, making bundles of sugar cane tops which are sold as fodder for about two rupees each. Older children work with their parents or help with chores and looking after younger siblings. The children are effectively working in one way or another from the age of six and sending them to school involves an opportunity cost for the parents. Sugarcane cutters are among the poorest labouring groups in the country (famously described by Jan Breman as being worse off than dogs because of their harsh living and working conditions)
- c) Lack of economic, social or political incentives for factory officials to implement the scheme because there are no immediate gains for them. Successful schools have come up only in locations where NGOs have lobbied government officials and sugar mills.
- d) Social exclusion of migrant children who belong to the Scheduled Castes or Scheduled Tribes. Teachers and other students discriminate against children from poor backgrounds and this may take the form of verbal and physical abuse
- e) Insufficient resources for effective implementation. The MPSHY pays for a teacher's salary (Rs1500 a month) only when the sakharshalas are running, and for educational materials (Rs 40 per child) and miscellaneous expenses (Rs. 1000 per centre). This is based on the assumption that other essentials will be provided by existing government education schemes. However, given the problem identified in a) above, provision of resources through government education schemes is not necessarily made and so the meagre resources under MPSHY are insufficient to run a school properly
- f) The linkages between schools at sugarcane factories and village schools were weak or nonexistent. Janarth found that few children went to school when they returned to their villages. The migration season coincides with the second trimester of the school and the children return to face final exams at the school (if the school lets them sit for the exams) which they often fail even though the sakharshalas follow the government curriculum. They then lose interest if they have to repeat the same class. It was not possible for the Janarth to follow up their education in the village.
- g) There were different groups of children at the factory each year. Continuity in teaching would be possible only if all sites had a similar school and this has not happened yet.
- h) Only a few other NGOs have also started similar schools and the total capacity of Sakharshalas is still relatively small.

Schools, hostels and bridge courses for Oriya brick kiln workers' children in Andhra Pradesh.

In 2004-2005, two NGOs - Vikalpa and Lok Drishti - started running 16 hostels in the high outmigration districts of Bolangir and Nuapada. Migrating parents had the option of leaving their children behind in the hostels where they would continue with their schooling. By 2005-2006, schools had been established in 60 villages covering 1,700children. Vikalpa also established bridge courses (courses meant to help children to catch up with missed school lessons) in sending villages for returning migrant children.

At the same time, Action Aid and local NGOs such as Sristi to set up schools at brick kilns in Andhra Pradesh for children migrating with their parents. There are currently three areas under this programme (Rangareddy, Timmaipalli and Medak) covering more than 2700 children. Oriya speaking teachers are recruited to teach the children in the Oriya language, and Oriya text books are arranged for these site schools. Classes are either run in temporary structures at brick kilns or in nearby government schools. The running of the schools has been possible

Like the sugar plantations and factories of Maharashtra, taking children away from work in the brick kilns was a challenge and creating awareness among officials and employers involved constant lobbying and advocacy. The situation was complicated further by the strong relationships between political interests and contractors which made it difficult to improve the conditions of employment and educate the children of kiln workers. A number of large labour contractors who supply tribal workers to brick-kilns in Andhra Pradesh also hold important official positions in government. There are strong vested interests in keeping the workforce pliable and poor so that cheap labour continues to be available for brick making. The experience of NGOs working with cross-border migrants has shown that it is difficult for any contractor to be prosecuted in another state and there have been very few cases to date. In such a context educating the children of tribal migrant workers has required continuous monitoring. The continuation of these efforts depends on securing political commitment and resources.

Overall, the education case studies from Andhra Pradesh and Maharashtra show that simply passing a law or government order has not been enough to ensure that migrant children are educated. A number of other prerequisites need to be in place and a few NGOs have been making efforts to create these conditions so that the SSA and other programmes can be more effectively utilised. The case studies illustrate the importance of civil society and local government working together to achieve the goals set out in national enabling legislation; they also show how changing political priorities and cross-border issues can interfere with the upscaling and sustainability of such efforts.

10.7Food

In India foodgrains are allocated to the States by the Food Ministry under the Targeted Public Distribution System (TPDS) on the basis of state poverty levels and on the directions of other Ministries for welfare schemes (Rural Development and Human Resource Development). The foodgrains are provided to BPL (below the official poverty line) households through more than 400,000 Fair Price Shops covering 160 million families. The scale of this welfare programme makes it the largest distribution network of its type in the world, at least on paper (Saxena 2007). A Planning Evaluation Organisation study in 2005 found that about 58 per cent of the subsidized foodgrain did not reach the intended beneficiaries because of identification errors, nontransparent operation and corrupt practices in the implementation of TPDS. There are errors of wrong inclusion and of "ghost" cards and non-BPL households being included (Saxena 2007). Performance is geographically uneven with "backward" states such as Bihar and Jharkhand showing very poor results.

10.8Temporary Ration Cards for Intra-State Migrants In Nashik City, Maharastra.

Nashik city is an important religious and industrial hub and attracts a large number of seasonal migrants. It had a population of 1.1 million according to the 2001 census. Seasonal migrants to Nashik are predominantly tribal and come from poorer parts of the state (districts of Marathwada and Vidarbha), and also other states (Andhra Pradesh, Bihar, Gujarat, Karnataka, Madhya Pradesh and Uttar Pradesh) (Borhade 2006). These migrants typically seek work in the city for 8–10 months of the year, between October and June. They usually go back to their villages during the monsoon and festive seasons.

Migrant workers stand at labour recruitment points or "nakas" waiting for prospective employers. However, whether or not they find work, seasonal migrants are typically unable to access PDS at their work destinations because PDS cards are not portable. Whilst Maharashtra was one of the first states to pass a Government Resolution (GR) in 2000 allowing seasonal migrants to obtain temporary ration cards after surrendering their ration cards in the village, the resolution was not implemented and it took years of lobbying by NGOs in Nashik city, before cards were actually issued.

In 2004 Disha Foundation began working at four nakas, covering roughly 350 migrant households. A third of the migrant workers found at the nakas were single men and the rest were families. A majority of the migrants were illiterate. Men usually work as manual construction labourers while women are employed as domestic workers, head-loaders or agricultural labourers. Most of these migrants did not have PDS cards and were not aware of the government resolutions and their rights to a temporary card. They faced acute food shortages when they didn't get work and often had to resort to begging.

The existence of the Government Resolution was discovered by Disha Foundation during the course of its own research. It then brought this to the notice of the relevant authorities who themselves were unaware of its existence and provisions. This is not untypical in a country where there are numerous laws and resolutions and only those with high political value are implemented properly. Disha Foundation met officials repeatedly and explained the provisions under the GR and the responsibility of the authorities to them. Following consultations with representatives of the Public Distribution System and the Ration Department, and three on-site visits by the authorities, an order was issued to provide seasonal migrants with temporary ration cards for four months (extendable to 12 months) against their existing ration cards. Seasonal migrants must have the cards cancelled by the ration department when they return to their villages and these can be renewed when they return. Progress has been slow: thus far a mere 25 cards have been issued to the families that Disha Foundation is working with. Possible explanations for this are a lack of clear directions from superiors that the implementation of the scheme must be expedited; low political value of the scheme because migrants are not voters and therefore the bureaucracy does not have to be accountable to them.

10.9Poor Implementation Of Labour Laws

The discussion of employment in different sectors showed that labour laws are not adhered to and flouting them is the norm. Minimum wage and equal remuneration laws are not implemented properly and neither is the Inter-State Migrant Workmen Act. The case studies also showed that child labour is rampant although the Constitution of India states that no child below the age of 14 years shall work in any factory or mine or engage in any other hazardous employment (Article 24).

The Child Labour (Prohibition and Regulation) Act, 1986 prohibits the employment of children below the age of 14 years in 13 occupations and 57 processes that are hazardous to their lives and health. The Factories Act, 1948, prohibits the employment of children below the age of 14 years in factories. A new law was enacted in 2006 which bans domestic work and restaurant and hotel work by children under the age of 14. However, enforcement of these laws is weak and employers are rarely punished.

One of the reasons for the continuing neglect of these violations is that official inspection system is seriously under-resourced (personal communication labour department officials in Karnataka who cannot be named). The underlying problem is a lack of political commitment and pressure from politically influential industrialists and farmers to maintain the status quo.

11. Findings from AP and MP

This section draws on the analysis of three surveys conducted in 2001-2, 2003-4 and 2006-7 under the DFID funded Livelihood Options Project (LOP) and follow up studies in twelve villages (6 each) in Andhra Pradesh and Madhya Pradesh. Data were collected from twelve villages in Madhya Pradesh and Andhra Pradesh (6 each) in 2001/2, 2003/4 and 2006/7. Both quantitative and qualitative data were collected as it was felt that relying on questionnaire surveys alone would not provide a complete understanding of migration. Three contrasting districts were chosen for study in each state. In each district two villages were selected, one relatively well connected in terms of road connectivity and proximity to market and urban centres and the other relatively remote. It was hoped that studying such contrasting villages would provide insights on the importance of connectivity, rural urban links and market links in livelihood diversification^{27.} Village selection was done in consultation with the district administration, academics, NGOs and other key informants.

Each round involved more than one survey. The 2001/2 round began with a census covering all the households in all six villages (4,647 households in AP and 1,297 households in MP). The census collected data on basic household characteristics on the household structure, education, age, gender, occupations, asset ownership and whether or not the household had a migrant. This was followed by two seasonal surveys in the kharif and rabi seasons where data on household income and expenditure for that season and debt levels were collected. Each seasonal survey covered a smaller

²⁷ The data were originally collected for a DFID funded project on understanding livelihood diversification strategies in Madhya Pradesh and Andhra Pradesh.

stratified sample of 40-80 households (depending on the size of the village). Stratification was done by land holding and caste. The primary purpose of the 2001/2 round was to collect data on livelihood diversification and data on migration were minimal.

The next round in 2003/4 was undertaken with the specific purpose of collecting more detailed data on patterns of migration, livestock keeping and land ownership and leasing. The last round was undertaken in 2006/7 collecting detailed data on patterns of migration and income from non-migration sources. While the 2003 resurvey covered all 6 villages as before, the last round covered only 5 because the richest villages, namely KA in Andhra Pradesh and PR in Madhya Pradesh, had very low migration rates. The sample sizes differ between the seasonal surveys for rabi and kharif in 2001/2 and the 2003/4 and 2006/7 surveys, because the latter two rounds covered only households with at least one person working outside the village. However they were drawn from the same population and can be identified with a unique household number.

During each round, key informant interviews and Focus Group discussions were conducted at the same time as the questionnaire survey. Key informants included migrant labourers, their family members, Sarpanch (head of local government), members of the Gram Panchayat (local government), village and Mandal level government officials, labour recruiting agents (mestris), District level officials, donor funded livelihood projects, the police and NGOs. Focus group discussions were held with women and men in each village and each hamlet within the villages.

Migration rates in MP have been consistently higher than AP. The census from the first survey (2001/2) showed that more than half the households in four out of six study villages in Madhya Pradesh had at least one person who was a temporary migrant. The proportion was as high as 75 per cent in the most remote and hilly tribal village (PT) with infertile soils. Data for the next round consisted of 108 migrants and commuters; and drawn from a sample of 302 households shows that the proportion of households with at least one person working outside the village was 36% in 2003/4. This included circular migrants, commuters and permanent migrants. The last round included only five villages and comparing the situation in these five villages in 2003/4 and 2006/7 it is seen that the proportion of households with at least one person outside the village had increased to 52% by 2006/7 from 42% in 2003/4.

Household level data do not provide a complete picture of mobility. Data for individuals show that while the number of households with migrants and commuters had increased from 106 to 136

between the last two rounds, the total number of individuals had increased from 169 in 2003/4 to 232 in 2006/7.

11.1Commuting Is On the Rise

There has been more than a doubling in the proportion of commuters in Andhra Pradesh between the last two surveys. This dramatic change can be explained by the growing road network, improved communications, and rapid rate of urbanisation in Andhra Pradesh especially the growth of small towns. Data on the year of first migration and commuting (not shown in a table) corroborates the view that mobility has sharply increased over the last five years or so. The findings show that for 55.4% of commuters the year of first commuting/migration falls between 2000 and 2006 and for 40.3% of commuters the first year of commuting/migration fell between 2003 and 2006.

Commuting was undertaken for work of all kinds – in the formal sector as well as informal skilled and unskilled work, farm and non-farm work. Although the absolute number of commuters increased, their relative proportion fell because of a greater increase in the number of circular migrants. A significant proportion of commuters were travelling to nearby towns. Permanent migration rates were lower than other kinds of mobility and there were just two cases in 2006/7. The explanation lies in the fact that MP is comparatively backward with a very poor road network (it is said that this was one of the reasons for the defeat of the previous government) and has relatively lower levels of urbanization. Commuting is therefore difficult and people tend to migrate on a short-term basis to large cities within the state and outside.

11.2Migration highest among Scheduled Castes and Tribes

The distribution of mobile workers by caste categories in AP and MP in 2006/7 reveals that circular migration is the most important option for the Scheduled Tribes. There are hardly any permanent migrants among the STs probably because of their poorer levels of skills/education and also lack of social networks at the destination. SCs in AP are marginally ahead of the STs in this respect but they commute for low paid agriculture labour work. The distribution of the mobility streams among the OBCs, shows a more balanced spread indicating their intermediate level in the rural hierarchy. In line with the broad state level trend in AP, the largest proportion of mobile workers among the upper castes is permanent migrants.

Logistic regression analysis was carried out for commuters and, circular migrants and permanent migrants with 2001/2 and 2003/4 data (ref). In AP belonging to a well connected village in a prosperous region increased the likelihood of commuting and belonging to a remote village in a poor region decreased it²⁸. In MP, significant predictors are land holding, stock of livestock, caste and gender of commuters. Other predictors are not statistically significant. The probability of commuting was seen to decrease significantly with the increase in land and livestock holding. Households having an additional acre of land per adult member have about 90% less probability of commuting than households with an average level of holding. Women's probability of commuting was more than four times higher than males.

12. Human Development Impacts

Income data were available for both 2001/2 and 2006/7 for only 155 households with mobile earners (commuters, seasonal and permanent migrants) from 5 villages; the sample distribution by village is reported in Table 9. These households were drawn from 300 households surveyed in 2001/2. While all the households were migrating households in 2006/7, this was not the case in previous rounds where some were non-migrants.

 Table 9. Distribution of Migrant Households In Sample Villages, 06/07 Survey, Andhra

 Pradesh, India

Villages	Frequency	Percent
OP	24	15.5
VP	31	20.0
КО	33	21.3
GU	38	24.5
MD	29	18.7
Total	155	100.0

²⁸ Permanent migration was almost absent in MP.

12.3 Migration and poverty status in AP

Head count income poverty was calculated using poverty lines of Rs 3100.68 per person per annum for 2001/2, and Rs 4028.65 per person per annum for 2006/7. These poverty lines were computed using GDP deflators and the Andhra Pradesh rural poverty line of Rs 292.95 per person per month for $2004/5^{29}$.

Households were first classified as poor and non-poor based on the poverty line for both 2001/2 and 2006/7. It was possible to trace the poverty status of the same households over a period of five years and those who remained poor in both periods were classified as chronically poor. Those who were poor in one of the periods i.e. 2001/2 or 2006/7 were regarded as vulnerable. Those who were non-poor in both periods were classified as stable. Poverty was proportionately higher among the schedule tribes, marginal farmers and located proportionally more in poorly-connected villages (Akter et al. 2008).

Comparing the two rounds of 2001/2 and 2006/7 and by tracing the situation of the same households (using household ID) it was seen that the proportion of households with migrants in the category of poor had gone down from 45% to 29% (table 10).

Using poverty transition matrices (see table 10) we calculate that the average mobility out of 100 households is 41; upward mobility is more than double the downward mobility. This is represented in Figure 1. Upward mobility means movement from poor to non-poor and downward mobility is the opposite. In this period the crude probability of becoming poor given that a person was non-poor is 23% and the probability of escaping poverty given that a person was poor is 64%. It appeared from the quintile based analysis that over this period 36.2% moved upward and 34.1% downward; consistent with the developing country situation where immobility ranges from 30% to 40% over a five year period (Baulch and McCulloch 1998, Baulch and Hoddinot 2000). Furthermore the analysis shows that upward movement is the highest (45.2%) among the most experienced migrants (those who were already migrants in 2001/2 are taken here as the most experienced migrants). This indicates positive contribution of migration towards poverty reduction. More experienced people may be more resilient and are capable of using opportunities to move upward. Although upward movement is the highest in the experienced cohort, the poverty head

²⁹ The official poverty line for 2004/5 was updated based on the 61st round of National Sample Survey Organisation (NSSO) conducted in 2004/5 using the Expert Group Method (GOI 2007). According to this method the estimates of poverty are made by the Planning Commission from the large sample survey data on household consumer expenditure conducted by the NSSO. According to head count method the poor are the number of households which have per capita income below the poverty line, otherwise the households are non-poor.

count is still the highest (37.1%) in this group. This may be due to the fact that less poor households entered migration and commuting streams in later rounds as they became more attractive with rising wages and other factors.



Figure 1 Poverty transition categories, Andhra Pradesh, India

	Poor'06/07		Non-poor	:'06/07	Total	
	No	%	No	%	No	%
All Household						
Poor'01/02	25	16.1	44	28.4	69	44.5
Non-poor'01/02	20	12.9	66	42.6	86	55.5
Total	45	29.0	110	71.0	155	100.0
Long term migrants						
Poor'01/02	11	17.7	28	45.2	39	62.9
Non-poor'01/02	12	19.4	11	17.7	23	37.1
Total	23	37.1	39	62.9	62	100.0
Started migration in 03/04						
Poor 2001/02	6	11.1	23	42.6	29	53.7
Non-poor'01/02	9	16.7	16	29.6	25	46.3
Total	15	27.8	39	72.2	54	100.0
New migrants'06/07				1		
Poor'01/02	3	7.7	15	38.5	18	46.2
Non-poor'01/02	4	10.3	17	43.6	21	53.8
Total	7	17.9	32	82.1	39	100.0

 Table 10 Poor/Non-Poor Transition Matrix by migration/commuter* category, Andhra

 Pradesh, India

* includes commuter, seasonal and permanent migration.

Pearson Chi-Square = 3.129, DF=1, Asymp. Sig. (2-sided) = 0.077 for 'All Households', Pearson Chi-Square = 3.562, DF=1, Asymp. Sig. (2-sided) = 0.059 for 'Long term migrants', Pearson Chi-Square = 1.569, DF=1, Asymp. Sig. (2-sided) = 0.210 for 'Started migration in 03/04' and the test is not applicable for 'New migrants'06/07' because 2 cells have counts less than 5.

Data source: Livelihood options study surveys: rounds 2001-2 and 2006-7.

The results show that the first more experienced group started to earn more from migration by 2006/7; the income share from migration was 14% in 2001/2 and that increased to 60% in 2006/7 (Table 11). This group had the lowest per capita income in 2001/2 and other better off households

entered migration later. The other groups which were relatively richer were earning more than 50% of the income from other sources than migration/commuting.

Category	N	Migrat	ion	Per cap	Per capita income in 01/2			Per capita income in 06/7		
		income	e %	(06/7 prices)						
		01/2	06/7	Mean	Median	Std	Mean	Median	Std	
						Dev			Dev	
Long term	62	14.1	60.3	7035	4464	6698	7452	4642	6927	
migrants										
Started migration	54	-	48.2	8417	4054	16685	8172	4200	17058	
in 03/04										
New	39	-	46.2	9418	3193	21162	10998	7929	13609	
migrants'06/07										
All Household	155	3.14	52.5	8110	4077	14965	8603	5383	12823	

Table 11 Impact of migration/commuting on household income, Andhra Pradesh, India

12.4Political Participation

Questions related to political participation were included in the rabi 2002 questionnaire in Andhra Pradesh³⁰. A total of 360 households from 6 villages were interviewed to assess participation in socio-political/administrative forums and voting. Data were collected on a number of dimensions of political participation including attending meetings, raising issues, voting, campaigning and communicating with officials.

³⁰ The data were collected for a component on political participation under the Livelihood Options Project

Political activities in 2001/2	% said yes	% of non-migrant	% of Migrants/
		saying yes	commuters saying yes
Attend Gram Sabha (GS)	65.6	66.5	63.2
Speak at GS	21.4	23.2	17.0
Raise issues at GS	61.1	60.2	63.2
Attend district meeting	3.6	3.5	3.8
Attend Mandal meeting	5.8	4.7	8.5
Attend watershed /forest committee meeting (WFM)	6.1	6.3	5.7
Vote Gram Panchayat	85.0	86.2	82.1
Campaign GP election	22.2	22.0	22.6
Vote Mandal election	95.6	95.7	95.3
Campaign Mandal election	15.8	15.0	17.9
Vote Zilla Parishad	74.4	72.8	78.3
Campaign Zilla Parishad	6.1	4.3	10.4
Vote Assembly	68.1	65.4	74.5
Campaign Assembly	5.8	4.7	8.5
Vote Lok Sabha	66.9	65.7	69.8
Met MDO Official	22.8	23.2	21.7
Met MRO Official	23.9	22.0	28.3
Met VAO/VS/RI	41.1	37.8	49.1
Collective protest	5.0	5.9	2.8
Total households	360	254	106

Table 12 Distribution of politically active households in 2001/2 in migration and commuting

The data clearly show that participation in voting was the highest among various political activities with the highest levels of participation (96%) in Mandal elections followed by village council (Gram Panchayat or GP) elections (85%), District Council (Zilla Parishad) elections (74%), State Assembly elections (68%) and parliamentary elections (Lok Sabha) at 67% (Table 12). This may be due to the fact that campaigning for district, mandal and village elections was greater than national elections and/or because voters perceived those elections as more important for their welfare. Households with migrants participated in elections in similar proportions because family members

voted while the migrants were away. One would expect migrants to be less able to participate in elections but it is not possible to comment on this because political participation data was not collected for individuals. The proportion of households with migrant/commuters who participated in Zilla Parishad, Assembly and Lok Sabha elections was higher, possibly because of their greater levels of awareness (due to contact with the outside world) of the importance of higher level elections.

The data also show that those who migrate are slightly less able to participate in the Gram Sabha (village assembly) which is the key forum for microplanning and discussing issues that have a direct bearing on the lives of the poor such as welfare schemes and microfinance initiatives: 66% of the respondents said that they attended the Gram Sabha; the proportion from migrating households was 63% while the proportion from non-migrationg households was 67%; 21% said they spoke at the GS, the proportion was 17% from migrants group. However the differences were not statistically significant; also, proportionately more migrants raised issues at the GS, although here too the difference was negligible.

Less than half (41%) of all respondents said that they had met the Village Accounts Officer (VAO) showing how inaccessible the VAO is despite being the key signatory for essential documents needed by village residents for accessing government schemes (caste certificate, below poverty line certificate, widow certificate etc). Here, the proportionate participation of migrants was 49% which was higher than non-migrants possibly because they were able to assert greater pressure on the VAO due to their superior confidence, reduced subservience to traditional masters, and knowledge of political processes. Even fewer people (24%) met the Mandal Revenue Officer (MRO) also a key person for accessing government schemes, probably on account of the distance and cost involved in travelling to the Mandal Office. The proportion of migrants among those who met the MRO was 28%, also higher than non-migrant category possibly because they had more money to spend on transport and more confidence in dealing with officials due to their exposure to the outside world. Roughly 23% of the respondents said that they met the Mandal Development Officer (MDO) another important official for accessing government schemes, and here the proportion from migrants and non-migrants categories was nearly the same. While campaigning in GP elections attracted 22% of the respondents, and equal proportions from migrants and non-migrants, campaigning in other elections involved fewer people but migrants made up a much higher proportion of the campaigners. About 50% of the campaigners in the Zilla Parishad elections and 43% in the State Assembly elections were migrants (the proportion of migrants in the sample was

29%). Qualitative cross checking reveals that this was because of the timing of the campaigning which occurred when migrants were back in the village.

A striking figure is that only 6% of the respondents said that they attended watershed or forest committee meetings and the proportion was nearly the same for migrants and non-migrants. The reason for this low figure is that not all the villages had watershed and forestry projects and perhaps also because attending them was not perceived as important by them or they could not attend them due to other time commitments. Mandal and district meetings were poorly attended by villagers in general but the proportion of migrants among the attendees was slightly higher. However the actual numbers of migrants in these last two categories were too small to draw any definite conclusions. Qualitative data for the same period show that different groups of migrants had different levels of participation in political processes in the village through the gram sabha. The vaddis who are a caste of diggers and stone crushers (BC) from Chittoor district, have become very influential politically in their village. Digging work has brought them much wealth which can be seen from their new multi-storeyed houses in the village and generous donations to the temple. On the other hand communities which have remained poor in the village despite migration and entire families migrating have been less represented during GP meetings.

Thus the analysis shows that where political access is restricted, it is more or less equally restricted to both migrants and non-migrants and where access is greater, it is more or less equally accessed by both migrants and non-migrants. Although migrants did seem to do better at accessing certain processes and personnel, the differences were not significant. Multivariate analysis presented below, provides more insights into political participation.

12.5Multivariate Analysis: Political Participation

This section is based on logistic regression analysis that considers different bivariate participation activities (yes or no) such as speaking and raising issues in the Gram Sabha, voting in elections (two variables – one representing voting in local government elections and the other is voting in state assembly elections), meeting officials etc. as dependent variables and a set of household characteristic and social factors as independent variables.

Political participation is assumed to be associated with household characteristics such as age and education, social status, caste and gender, connectedness of the village (remote or well-connected)

and information sources. In the Indian rural context social status is often determined by access to land, more ownership means better status and better political access. Age and education may increase political awareness and this would result in more political participation. Social factors like gender and caste may also be related to political access; women and historically disadvantaged groups such as lower castes and tribes would be expected to participate less in the political process. Families with migrants or commuters may have better access to information and hence participate more in political activities, conversely, adult members may be away due to migration/ commuting and so may not be able to take part in political activities. Three of the 6 villages studied were well connected to urban centres and those who live in the well connected villages are expected to be better informed and more politically active. These variables are defined in the first column of Tables 13&14. Logistic regression analysis was chosen because the dependent variable is a binary choice of participation and thus restricted to 0 and 1. Another candidate could be probit, but exponents of logit coefficients are odds (ratios of success to failure; here ratios of politically active to non-active) that are easier to interpret. The goodness of fit of all models is statistically significant shown by Wald chi square statistics. The results, in general, show that households with more land, with a younger head of household, more family education, more adult male members, and migrants are more politically active.

Table 13 reports the relationship between speaking and raising issues in the Gram Sabha. The significant variables that are mostly associated with speaking at the GS are migration and village connectedness. Households with migrants/commuters had less than half the probability of speaking at the GS than the non-migrant household. It is not clear whether this was because they were not able to attend the meeting due to their absence or whether they were prevented by others from speaking at the GS on account of being regarded as part-time residents with livelihood sources outside the village or, whether they were not interested in the GS process themselves.

Participation in the GS is lowest in the prosperous coastal villages of KO and KA. This data was collected when the Telugu Desam Party (TDP) was in power before the Congress government took over in 2004. It was a time when the Gram Sabha was widely perceived as a powerless forum, in which panchayat leaders would simply confirm decisions already taken by the sarpanch and other GP leaders (Johnson, Deshingkar and Start 2002). However the GS was used to select beneficiaries for the well funded Janmabhoomi and Food for Work programmes. The MDO was consistently involved in GS meeting during that time. It has been argued that TDP's populist policies such as the Janmabhoomi programme and village level institutions created by line departments such as the

Water Users Associations, Forest Management Committees and Self Help Groups became powerful at the expense of decentralised government (Manor 2002, Reddy 2002, Mathew 2001). The TDP's electoral success depended on the support of the Backward Castes (BCs), SC and BC women and landless labourers (Moooij 2002, Suri 2002). These village institutions were particularly powerful in coastal areas and this may explain the reason for low levels of participation in the Gram Sabha.

Regarding raising of issues at the Gram Sabha, the number of adult males in the household and gender of the head of the household along with village connectedness are significant determinants. The probability of participation in this activity is 43% higher for the households having an extra adult male member in the family indicating male dominance in this activity, However the participation of female heads of households was very high indicating that they were able to participate and raise issues in an otherwise male-dominated forum, also probably because of the Janmabhoomi programme and women's self help groups. All houses in the village MD participated in this activity. VP, KO and KA appear to have the lowest probability of participating. Family education appears to play some role in speaking and raising issues but not significant at 5%.

Variables	Coef.	Odds	Robust Std. Err.	Z	P> z
		ratio			
Speak at Gram Shava (GS)					
Land own (acres)	0.025	1.025	0.014	1.730	0.084
Age of household head (years)	-0.008	0.992	0.013	-0.640	0.523
Head education (years)	0.025	1.026	0.048	0.530	0.596
Av education of 6 plus members	0.140	1.150	0.074	1.880	0.060
Gender (head is female)	0.557	1.745	0.634	0.880	0.380
Member in migration/commuting	-0.906	0.404	0.372	-2.440	0.015
Adult male 18 plus	0.142	1.152	0.190	0.750	0.455
Adult female 18 plus	-0.097	0.907	0.267	-0.360	0.716
Schedule tribe*	1.239	3.451	0.991	1.250	0.211
Schedule caste	1.046	2.845	0.560	1.870	0.062
Backward caste	0.455	1.577	0.418	1.090	0.276

 Table 13 Logistic regression analysis showing relationship between speaking/raising issues at

 GS and associated factors, Andhra Pradesh, 2001/2

Village dummy (VP=1)*	0.496	1.642	0.486	1.020	0.308
Village dummy (KO=1)	-4.213	0.015	1.043	-4.040	0.000
Village dummy (KA=1)	-3.451	0.032	0.850	-4.060	0.000
Village dummy (GU=1)	-0.900	0.407	0.497	-1.810	0.070
Village dummy (MD=1)	-0.717	0.488	0.640	-1.120	0.263
Constant	-1.181		1.034	-1.140	0.253
No. of obs = 359 , Wald chi2(16) = 6	6.90, Prob >	\cdot chi2 = 0.	00, Pseudo R2 =	= 0.27	
Raise issues at GS					
Land own (acres)	0.078	1.081	0.047	1.640	0.101
Age of household head (years)	-0.017	0.983	0.009	-1.860	0.062
Head education (years)	-0.019	0.981	0.037	-0.520	0.603
Av education of 6 plus members	0.044	1.045	0.052	0.840	0.403
Gender (head is female)	1.086	2.963	0.462	2.350	0.019
Member in migration/commuting	-0.058	0.944	0.263	-0.220	0.825
Adult male 18 plus	0.358	1.431	0.170	2.110	0.035
Adult female 18 plus	-0.211	0.810	0.190	-1.110	0.266
Schedule tribe	-0.066	0.936	0.697	-0.090	0.925
Schedule caste	0.487	1.627	0.372	1.310	0.191
Backward caste	-0.194	0.824	0.296	-0.650	0.513
Village dummy (VP=1)	-1.063	0.345	0.401	-2.650	0.008
Village dummy (KO=1)	-1.073	0.342	0.402	-2.670	0.008
Village dummy (KA=1)	-0.945	0.389	0.452	-2.090	0.037
Village dummy (GU=1)	-0.602	0.548	0.404	-1.490	0.137
Constant	1.353		0.608	2.220	0.026

* Other caste is the base and the base village is OP in Tables P1, P2 and P3.

Table 14 Logistic regression analysis showing relationship between voting elections and associated factors, Andhra Pradesh, 2001/2

Variables	Coef.	Odds	Robust Std. Err.	Z	P> z					
		ratio								
Vote Gram Panchayat										
Land own (acres)	0.008	1.008	0.048	0.160	0.876					
Age of household head (years)	-0.005	0.995	0.015	-0.360	0.722					
Head education (years)	0.077	1.081	0.060	1.290	0.197					
Av education of 6 plus members	0.031	1.032	0.087	0.360	0.718					
Gender (head is female)	0.518	1.679	0.650	0.800	0.425					
Member in migration/commuting	-0.728	0.483	0.468	-1.550	0.120					
Adult male 18 plus	0.503	1.654	0.297	1.690	0.090					
Adult female 18 plus	0.050	1.051	0.395	0.130	0.900					
Schedule tribe	-0.502	0.605	0.810	-0.620	0.536					
Schedule caste	0.699	2.011	0.569	1.230	0.219					
Backward caste	0.520	1.682	0.529	0.980	0.325					
Village dummy (VP=1)	-1.052	0.349	1.176	-0.890	0.371					
Village dummy (KO=1)	-3.684	0.025	1.077	-3.420	0.001					
Village dummy (KA=1)	0.566	1.762	1.519	0.370	0.709					
Village dummy (GU=1)	-0.417	0.659	1.214	-0.340	0.731					
Village dummy (MD=1)	0.716	2.046	1.615	0.440	0.657					
Constant	2.332		1.362	1.710	0.087					
No. of obs = 359, Wald chi2(16) = 74.90, Prob > chi2 = 0.00, Pseudo R2 = 0.38										
Vote Assembly										
Land own (acres)	-0.028	0.973	0.018	-1.490	0.136					
Age of household head (years)	0.007	1.007	0.014	0.530	0.596					
Head education (years)	0.091	1.095	0.051	1.790	0.073					
Av education of 6 plus members	-0.027	0.973	0.078	-0.350	0.729					
Gender (head is female)	-1.062	0.346	0.655	-1.620	0.105					
Member in migration/commuting	0.502	1.652	0.401	1.250	0.211					
Adult male 18 plus	-0.425	0.654	0.239	-1.780	0.075					
Adult female 18 plus	0.688	1.990	0.292	2.350	0.019					
Schedule tribe	0.036	1.037	0.736	0.050	0.961					
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Schedule caste	0.608	1.836	0.493	1.230	0.217					
Backward caste	0.393	1.482	0.445	0.880	0.377					
Village dummy (VP=1)	0.277	1.319	0.804	0.340	0.731					
Village dummy (KO=1)	-4.167	0.016	0.703	-5.930	0.000					
Village dummy (KA=1)	-2.471	0.084	0.682	-3.620	0.000					
Village dummy (GU=1)	1.477	4.379	0.944	1.570	0.118					
Village dummy (MD=1)	1.566	4.788	1.375	1.140	0.255					
Constant	1.056		1.075	0.980	0.326					
No. of obs = 359, Wald chi2(16) = 121.98, Prob > chi2 = 0.00, Pseudo R2 = 0.50										

Table 14 exhibits the relationship of voting with the same variables. The probability of voting in the GP election is significantly lower in the coastal village of KO, other factors are not significant at the 5% level, although signs of the coefficients are similar to that obtained in the previous table. For example, the probability increases with education but decreases with migration/commuting. Being an adult male member increases the probability of voting. Regarding the National Assembly election, the probability of voting was the lowest again in the coastal villages KO and KA, probably for the reasons stated above.

Table 15 reveals the relationship of meeting MDO and MRO officials with the same independent variables. Land ownership, caste status and village connectedness play a significant role in meeting MDO officials. Lower castes appear to have more access to the MDO and MRO than higher castes and this is most certainly due to the fact that these officials were travelling to villages at the time for the Janmabhoomi programme meetings during which they would receive applications from people for assistance and also disburse pensions and other benefits. Roughly 61% of the respondents met the MROs for a ration card and 58% met MDOs regarding general development schemes. Under normal circumstances such interaction with Mandal officials would be difficult for poor people because of the transport costs involved. It is not clear how such interactions have fared since the Janmabhoomi programme ended (with the change in government).

While education appears to influence political participation the results are not statistically significant except for meeting MROs. Village connectedness and social factors are the most important determinants of political participation across all political activities.

Variables	Coef.	Odds	Robust Std. Err.	Z	P> z
		ratio			
Met MDO Official					
Land own (acres)	0.051	1.052	0.023	2.170	0.030
Age of household head (years)	-0.002	0.998	0.012	-0.160	0.876
Head education (years)	-0.013	0.987	0.046	-0.290	0.775
Av education of 6 plus members	0.035	1.036	0.070	0.500	0.617
Gender (head is female)	0.165	1.179	0.567	0.290	0.771
Member in migration/commuting	-0.157	0.855	0.357	-0.440	0.660
Adult male 18 plus	0.316	1.372	0.174	1.820	0.069
Adult female 18 plus	0.017	1.017	0.232	0.070	0.941
Schedule tribe	1.472	4.359	0.740	1.990	0.047
Schedule caste	0.463	1.589	0.458	1.010	0.312
Backward caste	0.448	1.566	0.381	1.180	0.240
Village dummy (VP=1)	-0.252	0.777	0.442	-0.570	0.568
Village dummy (KO=1)	-2.216	0.109	0.501	-4.420	0.000
Village dummy (KA=1)	-2.799	0.061	0.633	-4.420	0.000
Village dummy (GU=1)	-1.462	0.232	0.434	-3.370	0.001
Village dummy (MD=1)	-2.750	0.064	0.770	-3.570	0.000
Constant	-0.942		0.819	-1.150	0.250
No. of obs = 359, Wald chi2(16) =	59.46, Prol	p > chi2 = 0	.00, Pseudo $R2 = 0$.	19	
Met MRO Official					
Land own (acres)	0.090	1.095	0.040	2.250	0.024
Age of household head (years)	-0.006	0.994	0.011	-0.530	0.595
Head education (years)	-0.053	0.948	0.045	-1.180	0.238
Av education of 6 plus members	0.160	1.174	0.067	2.380	0.017
Gender (head is female)	0.759	2.136	0.510	1.490	0.137
Member in migration/commuting	0.201	1.223	0.314	0.640	0.522
Adult male 18 plus	-0.133	0.875	0.181	-0.740	0.462

 Table 15 Logistic regression analysis showing relationship between meeting officials and associated factors, Andhra Pradesh, 2001/2

Adult female 18 plus	0.095	1.099	0.229	0.410	0.680					
Schedule tribe	1.983	7.263	0.745	2.660	0.008					
Schedule caste	1.209	3.352	0.487	2.480	0.013					
Backward caste	0.511	1.667	0.409	1.250	0.211					
Village dummy (VP=1)	-0.385	0.681	0.474	-0.810	0.417					
Village dummy (KO=1)	-1.130	0.323	0.453	-2.500	0.013					
Village dummy (KA=1)	-2.787	0.062	0.622	-4.480	0.000					
Village dummy (GU=1)	-1.403	0.246	0.486	-2.890	0.004					
Village dummy (MD=1)	-1.380	0.252	0.614	-2.250	0.025					
Constant	-1.241		0.882	-1.410	0.160					
No. of obs = 359, Wald $chi2(16) = 50.83$, Prob > $chi2 = 0.00$, Pseudo R2 = 0.14										

12.6 Migration and Poverty Status In MP

In MP income data were available for 128 households with mobile earners (Table 16). These households were drawn from 302 households surveyed in 2001/2.

Table 16 Distribution of sample villages, 06/07 survey, Madhya Pradesh, India

Villages	Frequency	Percent
LJ	47	36.7
GG	24	18.8
PT	23	18.0
SM	17	13.3
MB	17	13.3
Total	128	100.0

Head count income poverty in the MP sample was measured using poverty lines of Rs 3434.30 per person per annum for 2001/2, and Rs 4462.25 per person per annum for 2006/7. These figures are based on the Madhya Pradesh rural poverty line of Rs 324.48 per person per month for 2004/5 was being deflated/inflated by GDP deflators to arrive at the values for the reference years. Of the 128 households which had at least one migrant/commuter in 06/07 in the Madhya Pradesh study villages, 76 of them had migration/commuting income in 2001/2. Migration route reduced head count income poverty from about 81% to 59% in this period of approximately 5 years beginning

01/02. Average mobility out of 100 households is 32; upward mobility is more than five times the downward mobility (Figure 2). Upward mobility means movement from poor to non-poor and downward mobility is the opposite. In this period the crude probability of becoming poor given that a person was non-poor is 25% and the probability of escaping poverty given that a person was poor is 34%.

Table 17 presents a transition matrix by experience based migration category; those who were already migrants in 01/02 are more experienced. The analysis shows that unlike Andhra Pradesh, proportionately more households were escaping poverty using the migration/commuting route.

Transition categories 4. Non-poor 3. Non-poor 2001/02, 2001/02, Non-poor Poor 2006/7, 2006/7, vulnerable stable 5% 14% 1. Chronic 2. Poor poor, Poor 2001/02, 2001/02, Non-poor Poor 2006/7 2006/7, 54% vulnerahle

Figure 2 Poverty transition categories in Madhya Pradesh

	Poor'06/07		Non-po	oor'06/07	Total	
	No	%	No	%	No	%
All Household						
Poor'01/02	69	27.3	35	53.9	104	81.3
Non-poor'01/02	6	14.1	18	4.7	24	18.8
Total	75	41.4	53	58.6	128	100.0

 Table 17 Poor/Non-Poor Transition Matrix by migration/commuter* category, Madhya

 Pradesh, India

* includes commuter, seasonal and permanent migration.

Pearson Chi-Square = 3.129, DF=1, Asymp. Sig. (2-sided) = 0.077 for 'All Households', Pearson Chi-Square = 8.920, DF=1, Asymp. Sig. (2-sided) = 0.003 for 'Long term migrants', and the test is not applicable for two other groups such as 'Started migration in 03/04' and 'New migrants'06/07' because 2 cells in each group have counts less than 5.

Data source: Livelihood options study surveys: rounds 2001-2 and 2006-7.

Table 18 shows that in MP the income pattern is different. Unlike AP, migration experience reduced dependency on migration income in 06/07 in MP; the income share from migration was 45% in 01/02 that decreased to 35% in 06/07 for the group identified with migrants in 01/02. Those who were early entrants into the migration route were less poor possibly because they were extremely poor when they started to migrate. Households having migrants in MP are much poorer than those in AP and their income inequality was also lower compared to AP.

On average, per capita income increased by Rs 2041, nearly double the per capita income in 2001/2 (which means that per capita annual income growth was around 14%). This growth in income is much higher than the national average.

Category	N	Migrat	tion	Per capi	ta income	in 01/2	Per capi	Per capita income in 06/7		
		income	e %	(06/7 pri	ces)					
		01/2	06/7	Mean	Median	Std	Mean	Median	Std	
						Dev			Dev	
Long term migrants	76	44.9	34.7	3238	1937	3647	5339	4125	4475	
Started migration in 03/04	19	-	45.7	1894	1377	1268	5405	3417	4089	
New migrants'06/07	33	-	31.9	2638	1824	2687	3694	3620	3380	
All Household	128	27.9	36.1	2884	1813	3184	4925	3860	4196	

Table 18 Impact of migration/commuting on household income, Madhya Pradesh, India

The analysis of income and poverty shows different results in the two states. In AP, relatively poorer households were migrants and commuters in 2001/2 and the income share was only 14% from work outside the village. But in MP the income share was much higher at 45%. While the households that were migrating and commuting in AP in 2001/2 and also in 2006/7 managed to improve their incomes, the households that were migrants or commuters in 2001/2 derived a lower proportion of their income through these activities in 2006/7 (down from 45% to 35%). While migrants were better off than non-migrants in MP in 2001/2, the opposite was seen in AP were non-migrants were better off.

The 2006/7 survey showed that migrating/commuting households increased considerably in both States, from 29% to 54% in AP and from 32% to 52% in MP. We are unable to compare their income in 2006/7, because non-migrants were not included in this latter survey. However in the case of those who were migrating/commuting in 2006/7, their poverty situation improved considerably in the study areas in both States; as mentioned earlier, the poverty incidence declined from 45% to 29% in AP and from as high as 81% to 41% in MP. This surely indicates that the migration route is enabling households to become better off.

12.7 Migration, Health and Education

Measurement of the impact of migration on human development indicators such as health, education, consumption, income (in general, welfare) is difficult. McKenzie and Sasin (2007) identified three sets of challenges that researchers face on analysing the impact of migration. The first set relates to data and definition used, the second set relates to endogeniety/selectivity/omitted variable problems; decisions on migration, expenditure allocation, education and health care choices are usually made simultaneously. Many variables that explain migration also determine expenditure choices making it difficult to establish causality. The third set relates to indirect socio-economic effects (extra burden to members living in the origin, transferring knowledge/information, exchange of ideas/culture, emotional stress on children etc.).

Our panel data has the advantage of having detailed information on skill specific jobs, migrants' income and qualitative multiple responses on the purpose of spending migration income but lacks quantitative indicators on health and education variables and income for non-migrant households. In this situation, we decided to carry out informative cross-tabulation based on the data available in the panel.

Regarding health and education, permanent and seasonal/circular migrants were asked to prioritise their use of income from migration; one person was permitted to indicate four most important purposes. The first choice identified health and education less important than consumption, paying off debts and investment. In MP health/education and investment/savings were being valued nearly equally (Deshingkar et al. 2008, Pramod et al. 2008). However, health was listed as the second most important use followed by paying off debt and consumption. There are differences in opinion between caste categories. In MP upper castes (the general caste category) placed most importance to health/education, whilst in AP scheduled caste category listed it as most important.

When the multiple choices of the migrants on the purpose of spending migration income were given equal weight without considering any ranking, health/education appeared as an important use of migration income next to consumption, in both AP and MP (Table 19 and Table 20).

Table 19 Distribution of the responses on purpose of spending or planning to spend migrationincome, Andhra Pradesh, India

	2003/04			2006/07		
Use of migration income	Count	% of	% of	Count	% of	% of
		Responses	Cases		Responses	Cases
Consumption	96	46.6	99.9	135	35.2	99.3
Education and health	52	25.2	54.8	99	25.8	72.8
Investment and savings	20	9.7	21.1	86	22.4	63.2
Paying off debt	38	18.4	40.0	64	16.7	47.1
Total responses	206	100.0	215.8	384	100.0	282.4

Data source: Livelihood options study surveys: rounds 2003-4 and 2006-7.

Table 20 Distribution of the responses on purpose of spending or planning to spend migration
income, Madhya Pradesh, India

	2003/04			2006/07		
Use of migration income	Count	% of	% of	Count	% of	% of
		Responses	Cases		Responses	Cases
Consumption	163	43.8	97.0	146	40.2	100.0
Education and health	79	21.2	47.0	99	27.3	67.8
Investment and savings	60	16.1	35.7	49	13.5	33.6
Paying off debt	70	18.8	41.7	69	19.0	47.3
Total responses	372	100.0	221.4	363	100.0	248.7

Data source: Livelihood options study surveys: rounds 2003-4 and 2006-7.

When the data are viewed by migration type (tables 21&22) it is seen that between 7.7 and 9.1% of the migration income was spent on health across all categories. But the spending on education showed variation with long term migrants (i.e. those who were already migrants in 2001) spending proportionately more. This could be due to their improved economic situation which was allowing

them to send their children to school. This is confirmed through case studies and interviews. However interestingly, the most recent migrants show higher spending on education than those who started to migrate around 2003/4. The reasons for this are not clear as qualitative research did not show any such pattern.

 Table 21 Percentage expenses of temporary/circular migrants on Health and Education at the destination, Andhra Pradesh, 06/07, India

Category	N	Migration income	% spent on	% spent on
			health	education
Long term migrants	56	18687	7.3	9.5
Started migration in 03/04	18	18957	9.1	1.6
New migrants'06/07	9	18336	8.1	4.1
All Household	83	18708	7.7	7.2

 Table 22 Percentage expenses of temporary/circular migrants on Health and Education at the destination, Madhya Pradesh, 06/07, India

Category	N	Migration income	% spent on	% spent on
			health	education
Long term migrants	116	4768	9.9	0
Started migration in 03/04	23	9287	19.8	0.2
New migrants'06/07	36	4424	12.3	0
All Household	175	5291	11.7	0

In MP average incomes from migration were lower but proportionate spending on health was higher. Qualitative research shows that this was due to the poor state of public health services in tribal areas where spending on private practitioners was high. In sharp contrast to AP, spending on education was almost nil in MP.

This points to the fact that positive health impacts in terms of spending on health are felt with the little bit of extra cash that migration brings in but the impacts on education are felt only after a certain threshold of income has been crossed.

Case histories and focus group discussions in all the villages studied did show a range of positive impacts such as having more disposable income to spend on health, clothes, food, education and status-raising events such as marriages. But the qualitative research also showed that migration has heavy costs and risks.

However as the discussion in Part II showed these costs are mainly due to faulty implementation of labour laws and poorly designed propoor schemes which are based on rigid residence criteria. Removing these distortions in the labour market and the policy regime should become top priority for India.

13. Conclusion

Sector reviews and case studies show that migrant labourers live and work in extremely difficult and dangerous conditions. They are on the margins of society both economically and socially and face unnecessary high costs and risks because of non-recognition at the policy level and faulty implementation of labour laws. Both secondary and primary data show that migration is an important route out of poverty. But the impacts of migration on poverty reduction and the contribution that migrants make to the economy are under-recognised. Our estimates show that migrants contribute around 10% to the National GDP.

Nearly all sectors employ migrant workers (including children) through a complex system of contractors and agents who are well-positioned to exploit illiterate and poor workers. Where workers have become more experienced and confident the hold of market intermediaries has weakened but in the absence of effective employment exchanges for the poor, agents and contractors provide vital information and job opportunities to people who would otherwise be unemployed in villages.

The lack of data and the laxity in implementing labour laws indicate an underlying lack of political commitment to improving the lives of migrant workers (adults and children). India seems to be struggling with being told by the ILO and labour unions on the one hand that labour laws need to be made more stringent but being told at the same time by neo-liberal economists that existing labour laws are too rigid and are stifling productivity. However there has to be a level beyond which

human rights violations will not be tolerated and India needs to take a stronger position on protecting migrant workers.

The immediate need is to change the policy level discourse on migration by reviewing key documents and policies and moving away from theory and language which portrays migration as bad and something that must be stopped. Other Asian countries have recognised the need to support migrant workers and reduce their vulnerability by improving their access to education, housing and health programmes. India needs to take similar steps urgently.

Without such recognition and action large parts of the population will continue to be excluded and this will compromise India's prospects for poverty reduction and reaching the Millenium Development Goals.

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Appendix 1

Productio	Jobs by status in employment											
n units by type	Own-a worl		Employers		Contrib- uting family workers	Employees		Members of producers' cooperatives				
	Informal	Formal	Informal	Formal	Informal	Informal	Formal	Informal	Formal			
Formal sector enterprises					1	2						
Informal sector enterprises (a)	3		4		5	б	7	8				
Household s ^(b)	9					10						

Conceptual Framework: Informal Employment

- (a) As defined by the Fifteenth International Conference of Labour Statisticians (excluding households employing paid domestic workers).
- (b) Households producing goods exclusively for their own final use and households employing paid domestic workers.

Note: Cells shaded in dark grey refer to jobs, which, by definition, do not exist in the type of production unit in question. Cells shaded in light grey refer to formal jobs. Un-shaded cells represent the various types of informal jobs.

Informal employment:	Cells 1 to 6 and 8 to 10.
Employment in the informal sector:	Cells 3 to 8.
Informal employment outside the informal sector:	Cells 1,2, 9 and 10.