

NREGS and Child Well Being

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Abstract

There have been many evaluation studies on the impact of NREGS but there are hardly any systematic studies relating to impact of the scheme on children. This paper tries to fill this gap. There is a huge literature on awareness, implementation problems, impact on the livelihoods, women, migration, agricultural wages, marginalized sections etc. This paper makes use of some of the in-depth studies on various States of India. We have also undertaken a limited focus group discussion in Rajasthan on the implementation and impact of the scheme on women and children.

Specifically, the paper addresses the following issues

(a) The pathways in which NREGS affect households and in particular that lead to better outcomes for children

(b) Impact on children in terms of changes in child labour patterns – by reducing child labour as a coping strategy of poor households or by – inadvertently – encouraging child labour

(c) Changes in expenditure patterns of families based on additional income earned, leading towards greater expenditures on girl and boy children including education, health and nutrition.

(d) Impact on women's well-being, empowerment and intra-household decisions

(e) Availability of child care facilities at worksites, and coverage of 0-6 age group by these crèche facilities

Keywords:

NREGA, women's empowerment, child labour, livelihoods, nutrition, migration

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NREGS and Child Well Being¹

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1. Introduction

India has been experiencing a consistently high growth rate in the last few decades. In the last two decades, the country has done well in some indicators such as economic growth, exports, balance of payments, resilience to external shocks, service sector growth, significant accumulation of foreign exchange, Information technology (IT) and stock market, improvements in telecommunications etc. and is now considered as a major emerging economic power. The result has been a reduction in income poverty levels and improvements in several indicators of human development including food security, literacy, health and access to basic amenities. However, in spite of these positive developments, India is still among the countries with some of the lowest indicators of human development. Exclusion is taking place in terms of regions, social and marginal groups, women and children. Although we have constitutional commitment to equality and rise in the emphasis on equality of women, it had only a limited impact in reducing disparity and discrimination of women. There has been a failure in child well-being in several aspects including health, nutrition and quality education. The 11th Five Year Plan has advocated inclusive policies for reducing poverty and achieving equity. In this context, social protection programmes can play an important role in improving inclusive development.

By now it is recognized that presence of social protection can maintain social cohesion and can improve or prevent irreversible losses of human capital. Social protection programmes thus also contribute to promotion of human development. An important justification for public interventions in social protection programmes has been improvement in welfare of the poor and equity. Recent research has shown risk and vulnerability justification should be added since the poor do not have formal instruments for risk mitigation and coping. To improve or protect human capital, social protection measures range from labor market interventions, unemployment or old age insurance, targeted income support programmes to child specific schemes. They are necessary in order to reduce chronic poverty and to safeguard the poor from increasing risks or shocks. These programmes are particularly important for the well-being of women and children.

The importance of child well-being for India's development is well known. India has many social protection programmes (both universal and targeted) for social protection which protect people from 'cradle to grave'. The country has many child-sensitive social

¹ This paper was written for Institute for Human Development (IHD) and UNICEF

protection programmes such as Integrated Child Services (ICDS), mid-day meals etc. The National Rural Employment Guarantee Scheme (NREGS) can also have significant impact on the well being of children.

Public works programme is an important component of social protection policies. In India, the provision of employment has been extensively used as a tool of entitlement protection for many centuries. From the fourth Century BC when the ancient Indian political economist, Kautilya, wrote his *Arthashastra*, there has been emphasis on public relief works, particularly at times of famine. After independence in 1947, many schemes were sponsored by the central government, beginning with the Rural Manpower programme in 1960. However, the most important programme at the state level is the Maharashtra Employment Guarantee Scheme (EGS), introduced in 1972. At the national level, Jawahar Rojgar Yojana (JRY) and Employment Assurance Scheme (EAS) are the important programmes in rural areas. But, the most important programme now is the National Rural Employment Guarantee Scheme (NREGS).

The National Rural Employment Guarantee Act (NREGA) was notified in September, 2005. It is now called Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). The objective of the scheme is to enhance livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year to every household. The primary objective is employment creation. The auxiliary objective is regenerating natural resource base and creating productive assets. Third one which is process objective is to strengthen grass root democracy by infusing transparency and accountability in governance. First time, a rights based approach for employment throughout India is introduced. This is the largest ever public employment programme visualised in human history. If the government can not provide work, the workers who applied for job will get unemployment allowance. One of the important things in the programme is to have transparency and accountability. Gram Sabhas conduct social audits of all works taken up within Gram Panchayat. Social audit includes scrutinizing and verifying the authenticity of all records and procedures of the programme and expenditure. The social audit of all works in gram panchayat area is conducted by the Gram Sabha.

The Government has implemented the Act in the first phase in 200 districts of the country from Feb., 2006. In Phase II, additional 130 districts were included from April 2007 (total 330 districts). From April 2008, in phase III, NREGA is universalized and extended to all 596 rural districts in the country. The government has allocated nearly Rs.40,000 crores in the year 2010-11. NREGS has a potential to transform the well being of women and children. Although under implementation for approximately four years since the enactment of the legislation in 2005, NREGS has been subject to much scrutiny, and

assessment in terms of its effectiveness as a social protection intervention². These assessments have yielded mixed findings, in terms of the effectiveness of the programme's design and objectives as such, its impact on the socially disadvantaged, especially children and women, as well as its implementation problems and - unanticipated - side effects.

The objective of this paper is to examine the impact of NREGS on the well-being of children particularly on reduction in child labour, improvements in health, education, nutrition etc. It is well known that women's well-being and empowerment are crucial for the well-being of children. Therefore, this study also examines the impact of the scheme on women. Another important aspect of NREGS relates to rights perspective. **The rights approach on employment can also have positive impact on rights of the children.** As mentioned below, the rights approach puts pressure on the governments to deliver more effectively as compared to earlier public works programmes. Better working of NREGS can also improve rights of children. Well being of women also can be improved with increase in the effective functioning of NREGS.

There have been many evaluation studies on the impact of NREGS but there are hardly any systematic studies relating to impact of the scheme on children. This paper tries to fill this gap. Examination of social protection initiatives and their impact on child labour are central to the ongoing child well-being and equity studies being developed by SPPME in partnership with the Institute for Human Development, and this paper will contribute to the larger study being prepared on inclusive social protection.

The paper is mostly based on secondary data, review of reports, the studies already available in the literature, select discussions with researchers, monitoring bodies in civil society. There is a huge literature on awareness, implementation problems, impact on the livelihoods, women, migration, agricultural wages, marginalized sections etc. This paper makes use of some of the in-depth studies on various States of India.

We have also undertaken a limited focus group discussion in Rajasthan on the implementation and impact of the scheme on women and children.

Specifically, the paper addresses the following issues

(a) The pathways in which NREGS affect households and in particular that lead to better outcomes for children

² See Dreze and Oldiges (2007), Dreze and Khera (2009), Khera (2008)

(b) Impact on children in terms of changes in child labour patterns – by reducing child labour as a coping strategy of poor households or by – inadvertently – encouraging child labour

(c) Changes in expenditure patterns of families based on additional income earned, leading towards greater expenditures on girl and boy children including education, health and nutrition.

(d) Impact on women’s well-being, empowerment and intra-household decisions

(e) Availability of child care facilities at worksites, and coverage of 0-6 age group by these crèche facilities, and through linkages with SSA and ICDS to ensure that children of workers have adequate care.

The paper is organized as follows. Section 1 examines the pathways in which NREGS affect the well-being of children. Section 2 presents the evidence based on empirical studies in the literature relating to the impact of NREGS on child labour, health, education, nutrition of children and child care facilities at work sites. Last Section provides conclusions.

2. Pathways that Lead to Better Outcomes for Children due to NREGS

There are several pathways that lead to better outcomes in nutrition, health and education of children due to social protection programme like NREGS. One can group them into three heads (1) indirect effects of reduction in risks and vulnerabilities and increase in livelihoods and incomes of households (2) women’s well being and intra-household decisions (3) direct effects of child care facilities and linkages with SSA and ICDS

2.1. Reduction in Risks and Vulnerabilities and Rise in Incomes of Households

Social protection programmes like NREGS can reduce risks and vulnerabilities and increase incomes and reduce chronic poverty. They will have positive impact on child well-being.

The poor and poorest of the poor households are vulnerable to a range of risks affecting individuals, households or whole communities which can have a devastating affect on their livelihoods and well being. They have higher exposure to a variety of risks at individual or household level. Some of them are (a) health shocks: illness, injury, accidents, disability; (b) labour market risk: many work in informal sector and have high risk of unemployment and underemployment; (c)harvest risks, life cycle risks, social risk and special risks for vulnerable groups. In addition, they have community risks such as droughts, floods, cyclones, structural adjustment policies etc.

The vulnerabilities have short term and long term impacts on children. Decline in food consumption and expenditures on health would have impact on nutrition of children. Other effects are: reduction of expenditure on non-food items like health and education, family selling productive assets, children drop out of school, increased use of child labour, become indebted etc.

Apart from reduction in food consumption, shocks would reduce the purchasing power of the households. The loss in purchasing power would affect buying of other goods and services which are essential for health and nutrition of women and children such as water, sanitation, education, lighting, health care etc. The shocks would affect the food consumption of households which in turn reduces consumption of women and children. Also, the households may spend more on cheaper, high calorie staples and less on foods rich in protein and vitamins, such as meat, fish, dairy, fruit and vegetables, reducing the quality of their diet. This will have significant negative consequences for morbidity, mortality, cognitive abilities, and growth. The persistence of shocks could lead to irreversible damage to the human capital of the poor.

Most of the coping mechanisms followed by households are: borrowing, sale of assets, spending from savings, assistance from relatives and govt., expanded labour supply, child labour, bonded labour, reducing consumption, migration etc. In India, borrowing seems to be the leading one. However, excessive borrowing leads to disastrous consequences. It is known that farmers' suicides have been primarily due to indebtedness. Impact due to migration affected their children's education and health. Due to increase in food prices in Bangladesh, around 43% households in rural areas reduced their educational expenses while 9% of rural households have taken children out of school.

NREGS can protect the poor from the shocks and vulnerabilities. It can also protect the poor from costly forms of coping mechanisms due to shocks as mentioned above.

Apart from protecting the poor from shocks, NREGS can increase incomes of the participating households. The rise in incomes can reduce poverty and increase in expenditures on nutritious food and health and education of children.

The impact on poverty would have four effects on the children in poor households. These are: (a) nutrition status of pregnant and lactating women and of pre-school children; (b) the health status of women and children; (c) increase in child labour and withdrawal of children from school; (d) the distress sale of productive assets. All these have potential long term impact and will reduce the ability of individuals and households to reduce poverty and would have adverse consequences for the children in these households.

One of the coping mechanisms of the households due to poverty relates to decisions about children's activities and time. In some cases, children may be withdrawn from school to take up paid work activities. In some other cases, children will have less time to study and leisure because of involvement of paid or unpaid activities. In this context, the issue of women's time in care giving especially of young children is important. Women's decisions on time have a significant impact on choices women make on their own work and participation of children in work. There can be trade-offs on these choices. As shown in the empirical work later, women's work in NREGS can improve the incomes of the households and women empowerment which can improve child well being. On the other hand, working of women can reduce time for child care which in turn can have negative impact on children.

NREGS is an intervention aimed at achieving economic inclusion through guaranteed waged employment at minimum wage levels, is self-targeting, and therefore implicitly designed to reach the socially excluded, most vulnerable and economically weakest groups. Therefore, it is expected to reduce poverty. This can increase expenditures on children.

Migration: Another indicator of the impact of NREGS on child well being is reduction in migration. It is known that distress migration has adverse effects on child well being. Migration would have negative effects on health and education of the children. One also finds, exploitation of migrants in cities and other places. If the employment is available locally with same or higher wages, the negative effects of migration can be eliminated.

2.2. Women's Empowerment, Well-being and Intra-household Decisions

Studies have shown four dimensions of women's empowerment, viz., 'power from within', 'power to', 'power with' and 'power over' (Jones et al, 2007). 'Power within' refers to psychological power, and empowerment is the process whereby someone develops a sense of self-confidence and self-respect that was previously lacking. It is critical in terms of overcoming internalized oppressions. 'Power to' is the capacity to make decisions and take actions to change one's circumstances. This is typically linked to notions of human capital development stemming from access to economic resources, information, education and other services. 'Power with' focuses on collective action, and the ability to solve problems and claim citizenship rights through co-operation and networks. 'Power over', however, can be viewed as both negative and positive. It can be negative in the sense that it entails forcing others to do something against their will, but such power may be necessary to overcome unequal power structures and bring about more fundamental social, political and economic transformation. Ideally this fourfold framework should be seen as inter-connected and dynamic, and about both process and

outcomes. Given the traditional responsibility of women for nurturing and care, it is often assumed that advances in women's status will have a positive spillover impact on child well-being through access to greater power and resources in the private and public spaces (Jones et al, 2007).

A recent concise and comprehensive review on the linkages between women's empowerment and child well-being brought out clearly that there are four mechanisms for transmitting the effects of women's empowerment to child well-being³. They include maternal education, economic empowerment, intra-household decision-making power ('power to' dimension) and community level empowerment (power with and power over dimensions) (Jones et al.2007). Maternal education, a critical dimension of women's empowerment – is positively associated with better child education, health and nutrition outcomes. Women's economic empowerment, that is greater access for women to financial resources not only improves the status of women within the household but also leads to more investment in their children. As a result of greater economic resources, psychological confidence and/or knowledge, women's empowerment may translate into better outcomes for children because mothers are more likely to advocate the interest of their children in intra-household bargaining and to be taken seriously by their male partners. Greater individual and household level empowerment may spill over into the empowerment of women at the community level and a more active role in demanding or even providing better child-related services (Jones et al, 2007).

According to NREGA guidelines, at least 1/3rd of the beneficiaries shall be women who have registered and requested for work under the Scheme. In practice, this percentage can be more in the scheme. Also, women are supposed to obtain equal wages along with men. These features can lead to women's empowerment which in turn improves child well-being. NREGS can have impact on women through three inter-related processes and outcomes. These are: (a) income-consumption effects; (b) intra-household effects (decision-making role) and; (c) enhancement of choice and capability (Pankaj and Tankha, 2010). The latter impact can be explained at the large community level and through: "(1) process participation; (2) wage equality and its long term impacts on rural labour market conditions; and (3) changes in gender relations, if any, because of the above and other factors" (Pankaj and Tankha, 2010).

The relationship between nutrition and women's well-being explains the role of women in enhancing child development. Women's agency (health, education and empowerment) and intra-household issues are important determinants of undernutrition in South Asia in general and India in particular. Two of the three differences between South Asia and Sub-Saharan Africa relate to women: (a) Low birth weight is the single largest predictor of

³ Also see Rustagi (2003) on women empowerment

undernutrition; (b) women in South Asia tend to have lower status and less decision-making power than women in Sub-Saharan Africa. This limits women's ability to access the resources needed for their own and their children's health and nutrition, associated with low birth weight, as well as poor child feeding behaviors in the first twelve months of life.

The children's malnutrition is also determined by the time allocated for care giving by mothers. These decisions are overwhelmingly influenced by the status of women in the household and society. One important dimension of accessibility of food is intra-household disparity in consumption. It is widely believed that in India, food distribution in the household is not based on 'need'. The breadwinner gets sufficient food, the children get the next share, and women take the remains. In times of scarcity, the dietary intake of women and children are likely to be the most adversely affected. We do not find widespread discrimination for girls in distribution of food. NFHS data shows slightly higher malnutrition among girls as compared to boys. Generally there is not much difference. Amartya Sen and Sengupta studied the question of undernourishment in few villages of West Bengal. Based on weight-for-age indicator they found bias to boys over girls. Amartya Sen (2001) cautions about the interpretation of this causal process. The lower level of nourishment of girls may not relate directly to their food intake vis-à-vis boys. The differences may particularly arise from the neglect of health care of girls compared with what boys get.

Adequate nutrition during pregnancy and first six months of life are critical because of the impact on birth weight. Thus, the problems often start before, during and after pregnancy as malnourished mothers are more likely to produce low birth weight babies. Poor nutritional status at birth is perpetuated by inadequate breastfeeding and supplementary feeding habits. Subsequently in the first two years, they do not give sufficient quality food –particularly mothers with low education.

The regional experience in India shows that differences in health provisioning, improvements in child care, and health status of women explain malnutrition differences across states (Kumar, 2007). The high performing states in India have shown: (a) rise in women's nutrition status; (b) increase in the proportion of children under the age of three breastfed within one hour of birth (c) rise in the percentage of children with diarrhoea who received ORS; (d) experience of women empowerment in Tamil Nadu, Kerala and North Eastern States. To conclude, significant part of South Asian 'Enigma' as compared to Sub-Saharan Africa can be explained by women's agency given the income growth.

Impact on Child Labour

It is well recognised that child labour is one of the important vulnerable groups in Indian society. The country has probably the largest number of child labourers in the world. The Convention on the Rights of the Child recognizes that every child should have a right to education. In other words, many children in India are being deprived of this right. **Child labour is concentrated in agriculture in India.** Nearly two-thirds of child labour is in agriculture. From tending sheep or harvesting crops to handling machinery children in agriculture represent over two thirds of working children. These children work in crop and livestock production, helping supply some of the food and drink we consume, and the fibres and raw materials we use to make other products. Examples include cocoa/chocolate, coffee, tea, sugar, fruits and vegetables, along with other agricultural products like tobacco and cotton.

There are significant regional disparities in the incidence of child labour in India. Several supply and demand side factors determine the incidence of child labour. Poverty is considered as one of the determinants of the proportions of child labour. Poor people tend to send their children to work to augment their income. Therefore, poverty variable is one of the important variable for supplying child labour. Economic development is another variable which is supposed to reduce the child labour with better opportunities for adult labour and increasing education for the children. It is also possible that economic development may also increase child labour for the same reason of better opportunities. In other words demand for labour may increase with economic development. Here the wage rate becomes crucial. If wages are high for adults, there is a possibility of reduction in child labour. The related variable that reflects demand for opportunities is work participation rates. Another factor that is generally related to low fertility and in turn reduction in child labour is female literacy.

Regarding determinants, it is true that poverty is one of the main determinants of supply of child labour. The policy prescriptions for this are to have income generating programmes for parents of the working children and improve the overall condition of the adult labour. However, the economic dependence of the families is only a part of the explanation for the persistence of child labour. Across states, there is a very weak correlation between incidence of poverty and incidence of child labour. For example, poorer states like Bihar, Uttar Pradesh, Orissa have lower incidence of child labour. On the other hand states like Andhra Pradesh, Karnataka and Tamil Nadu have higher incidence. Some time utilization studies for the children suggest that most of the children who are not attending school are not doing much work either. Also, the direction of causation does not necessarily run from child labour to non-attendance. This can be other way round in the sense that drop out children take up productive work of their own choice or through parental pressure as a 'default occupation'.

NREGS can have impact on child labour through income effects and women's well being and empowerment. Since child labour is concentrated in agriculture, NREGS can have significant positive impact on reduction in child labour. The scheme increases incomes through higher wage rates, rise in agricultural wages, decline in migration etc. These positive effects can reduce child labour. In some places, child labour migrate to other places to work in cotton crop areas. Reduction in migration can reduce decline in child labour in cotton cultivation including seed preparation. NREGS can reduce risks and vulnerabilities due to shocks. The shocks can raise child labour due to withdrawal of children from school. Similarly, women's empowerment due to NREGS can reduce child labour. The positive impact due to intra-household decisions can raise participation of children in education.

On the other hand, rise in incomes and agricultural wages, increase in women's participation rates can also enhance participates rates for child labour. For example, rise in agricultural wages for adults, labour shortage during peak time can encourage child labour in agriculture. Women's participation in labour force can also increase child labour. Absence of care facilities also lead children working along with mothers. Piece rate system in NREGS can also lead to increase in incentives for family labour. It may be noted, however, child labour is not allowed under NREGS.

Direct Child Care Facilities

Apart from indirect effect on children, there are some direct impacts of NREGS on children. According to guidelines of NREGA, some facilities are supposed to be available at the worksite. These are safe drinking water, shade for children and periods of rest, first-aid box with adequate material for emergency treatment for minor injuries and other health hazards connected with the work. The Act states that "in case the number of children below the age of six years accompanying the women working at any site are five or more, provisions shall be made to depute one of such women workers to look after such children" (Schedule II, Para 28). Further, the person who is deputed to look after young children is entitled to the same minimum wage as other labourers.

It may be noted that availability of quality child care services is an important contributor to women's status. This can lead to enhancement of women's participation in work without adversely affecting the well being of children. Thus, Safe drinking water, shade for children and crèche facilities at the work sites will not only help well-being of children but also improvements in women's status as earners. Creche facilities can also help in reduction in child labour. Otherwise, older children may have to take care of the younger siblings by not attending school.

3. Evidence on the Impact of NREGS on Child Well Being

In this section, we present the evidence on the impact of NREGS on child well being based on various studies in the literature. There have been a number of studies on the impact of NREGS on household incomes and women empowerment and, child care facilities. In this review, among others, this paper draws from the following major studies on the impact of NREGS.

(1) *Survey by G.B. Pant Social Science Institute(GBPSSI), Allahabad, 2008.* A NREGA Survey 2008 was conducted in May-June 2008 by GBPSSI. It covered 10 districts spread over 6 North Indian States (Bihar, Chattisgarh, Jharkhand, Madhya Pradesh, Rajasthan and Utta Pradesh). The survey involved unannounced visits to 100 randomly selected worksites spread over the six States and interviews with a random sample of about 1000 workers employed at these worksites

(2) *Study on Women's Empowerment by the Institute for Human Development(IHD), 2009.* This study examines processes and impacts of NREGS on women's empowerment in four selected north Indian states namely, Bihar, Jharkhand, Rajasthan and Himachal Pradesh. This study was undertaken by Pankaj and Tankha (2009) of IHD and sponsored by UNIFEM. One district each was purposively selected from all the four states – Gaya (Bihar), Ranchi (Jharkhand), Dungarpur (Rajasthan), and Kangra (Himachal Pradesh). The survey was undertaken in the year 2008-09. The data have been collected through two semi-structured schedules: (a) beneficiary and worksite schedules. The beneficiary schedule was canvassed to 428 women workers. Twelve worksites were randomly selected and groups of women were interviewed.

(3) *A Report on Management of National Rural Employment Guarantee Scheme: Issues and Challenges (2009) by Chhabra et al published by Lal Bahadur Shastri Institute of Management.* This is a nationwide research study carried out in six states: Andhra Pradesh, Gujarat, Haryana, Madhya Pradesh, Orissa and Uttar Pradesh of the country involving participation of leading social science research institutes⁴. The study is based on primary as well as secondary data collected in six states. The districts were selected from the list of 200 districts identified for phase I of NREGS in these states. Four districts were selected in each of the five states and one district in Haryana. In all data was collected from 21 districts, 42 blocks and 108 villages.

(4) (a) *Evaluation of NREGS in Rajasthan by Joshi et al of the Institute for Development Studies, Jaipur (IDSJ), 2008.* The districts covered under the study are Dungarpur, Jhalawar, Banswara, Jalore and Karauli. A comprehensive schedule was administered to a sample of persons employed (with job card and employed). In 5 districts, the study covers 689 projects (5 per cent of completed projects with minimum of five projects). A sample of job cardholder households was drawn and approximately 5 persons per project

⁴ Social science institutes involved in the study are: Giri Institute of Development Studies, Lucknow, U.P.; Centre for Economic and Social Studies, Hyderabad, A.P., Madhya Pradesh Institute of Social Science and Research, Ujjain, M.P.; Gujarat Institute of Development Research, Ahmedabad, Gujarat and; Nabakrushna Choudhury Centre for Development Studies, Bhubanshwar, Orissa

were covered (total 3293 households) in 5 districts. Sample gives special consideration to social group (SC/ST) coverage and women participants.

(b) *Issues of governance and transparency in NREGS in Rajasthan and Madhya Pradesh undertaken by Surjit Singh of IDSJ, 2009.* It covers two districts in each state. These are : Barwani (NGO dominated) and Shivpuri (less influence of NGO) districts in Madhya Pradesh; Sirohi and Udaipur in Rajasthan. Two blocks were selected in each district. However, in Rajasthan an additional block which has greater influence of NGOs was selected. Thus, in all 10 blocks were covered. In these blocks, 56 panchayats were selected and 10 job card workers were covered in each panchayat. Thus, the study is based on information collected from 560 job card workers/households.

As mentioned earlier, there are very few studies on direct impact of NREGS on child well being. We first start with the evidence relating to the direct impact on children.

3.1 Impact on Child Well Being: Study based on ‘Young Lives’ Data

Young Lives is a long-term international research project investigating the changing nature of childhood poverty in four developing countries. Young Lives is tracking the development of 12,000 children in Ethiopia, India (Andhra Pradesh), Peru and Vietnam through quantitative and qualitative research over a 15-year period. Since 2002, the project has been following two groups of children: (a) 2000 children in each country who were aged between 6 months and 17 months in 2002; (b) 1000 children in each country aged between 7.5 years old and 8.5 years old in 2002.

This project tracks them for 15 years. Two surveys were done between 2002 and 2006. The studies on this project show that household and community characteristics are important factors that contribute to child poverty, particularly ethnicity, rural-urban divide (which affects to access to services), parent’s level of education and community level effects. There were four droughts during 2002-2006. They have adversely affected the children’s well being in drought affected households.

Using the ‘Young Lives’ project data, Uppal (2009) examines whether NREGS is acting as safety net for children. It studies the access to the NREGS for ‘Young Lives’ families and its impact on child outcomes in Andhra Pradesh. Four districts viz., Cuddapah, Karimnagar, Anantapur and Mahbubnagar were included in the phase I of NREGS. These districts were covered by ‘Young Lives’ project. Basically, this study specifically looks at ‘the access to and impact of the scheme in its first phase in Andhra Pradesh’.

This study attempts to study two aspects of NREGS functioning. First, it looks at the targeting of the scheme and the characteristics of those who are self selected. Second, it estimates the impact of on children in the participating households particularly on

nutrition as indicators of health outcomes and incidence of child labour⁵. The main findings of the study are as follows.

(a) Broadly self targeting strategy seems to be working. Those who are worse off and disadvantaged have participation in scheme.

(b) There seems to be positive correlation between programme participation and anthropometric scores as indicators of health outcomes although this does not remain robust across all the specifications

(c) On the other hand, the **study finds robust results on child labour**. The programme registration reduces the probability of a boy entering child labour by 13.4 per cent points. The programme seems to have a impact through the income transfer that it generates by reducing child labour for girls. The participation in the scheme is likely to reduce child labour by 8.9 per cent for girls⁶.

3.2. Child Care Facilities at NREGS Worksites

As mentioned above, child care and other facilities can increase well being of children. We look at the evidence on whether the NREGS worksites are having these facilities in different states of India.

GBPSSI (2009) study of six north Indian states shows that basic worksite facilities were missing in most cases. Table 1 indicates that these facilities are better in case of drinking water, first-aid kit and child care facility in Rajasthan as compared to other five North Indian states viz., Bihar, Chattisgarh, Jharkhand, M.P. and U.P. However, it is disquieting to note that only 17 per cent of sample worksites had child care facilities even in Rajasthan while in other states this percentage is zero.

Table 1. Worksite facilities in Rajasthan and Other States

Proportion (%) of Sample worksites that had		
	Rajasthan	Other States
Drinking water	95	52
Shade for periods of rest	37	45
First-aid kit	60	20
Child care facility	17	0

Source: Dreze and Khera (2009) based on GBPSSI study

These findings are corroborated by the studies on Rajasthan by IDS, Jaipur. Varsha et al (2008) show that the status of work-site facilities in Rajasthan is not found to be good in most cases. A large number of work-sites do not have crèche facilities. Women with

⁵ The study uses econometric techniques like probit models to examine the impact of NREGS on child health and child labour. For more details, see Uppal (2009)

⁶

young children are being discouraged to participate in the scheme due to unavailability of crèche facilities at the work-site.

Table 2 shows that the responses regarding first aid box with some routine medicines varies across districts with a high of 99 per cent in Jalore and a low of 80 percent in Karuali. The highest response regarding sheds came from Jalore (96%) and lowest in Banswara (37.4%). Creche facilities are not available in most of the districts. The response regarding child care facilities was less than 5 per cent in Karauli and Banswara, around 5 per cent in Jhalawar. It was between 30 and 40 per cent in Dungarpur and Jalore. The total response for crèche facilities was less than 20 per cent in the selected districts of Rajasthan. It shows that the facilities as per the NREGA are not available in many places. Cradle facilities were not found in any of the sites visited by the research team. Small children remain unattended due to lack of these facilities. Also, women are hesitant to bring their children to the sites because of non-availability of facilities at work sites. It also forces them to rethink about applying for work.

Table 2: Facilities at Worksites in Rajasthan Districts

Facilities	Karuali	Banswara	Dungar -pur	Jhalawar	Jalore	Total %	Total No.
First Aid Box	79.64	89.37	96.09	95.60	98.75	91.31	3007
Shed	52.30	37.39	86.40	58.07	96.25	60.83	2003
To keep Children	3.99	3.06	38.04	5.66	32.50	16.25	535

Source: Varsha et al (2008)

In one of the worksites, the Sarpanch and Sachiv mentioned that storing of tent and cradles was a major hassle therefore, they do not prefer them. In some panchayats, tents and cradles have been supplied recently. Few sarpanches also mentioned strange reasons for not providing these facilities. They do not prefer facilities because these are being misused by outsiders. It seems those villagers who are not working at the site also come and gossip and involve the workers, which leads to disruption in the work. They also claim that sometimes the outsiders also pass comments on women who are working there.

Singh's study (2009) on Rajasthan and Madhya Pradesh also reveal that crèche facilities are not provided at worksites. Two questions were canvassed to the workers. They are: Do you know that Child Care should be provided at the work site? Are child care facilities being provided at you worksite?

The responses are given respectively in Tables 3 and 4. Awareness is the highest in Sirohi with 69.2 percent followed by Abu Road block (47.5%) and Udaipur district (35.8%). However, in Barwani and Shivpuri awareness is very low. It is surprising to know that

only 8 per cent are aware about these facilities in the block dominated by NGOs in Udaipur (Table 3).

Table 3. Do you know that Child Care should be provided at the work site?

	Districts	Yes	No
Rajasthan	Sirohi	69.2	30.8
	Udaipur	35.8	64.2
Madhya Pradesh	Barwani	15	85
	Shivpuri	10	90
Rajasthan (NGO)	Sirohi	47.5	52.5
	Udaipur	7.5	92.5

Source: Singh (2009)

Table 4 Are child care facilities being provided at your work site?

	Districts	Yes	No
Rajasthan	Sirohi	57.5	42.5
	Udaipur	17.5	82.5
Madhya Pradesh	Barwani	12.5	87.5
	Shivpuri	9.2	90.8
Rajasthan (NGO)	Sirohi	50.0	50.0
	Udaipur	0.0	100.0

Source: Singh (2009)

Regarding provision of crèche facilities, 57.5 percent of respondents in Sirohi stated that child care facilities were being provided at the work site (Table 4). However, only 17.5 percent reported provisioning of child care facilities in Udaipur district. In Barwani and Shivpuri districts of Madhya Pradesh, a very low proportion of respondents stated availability of crèche facilities at the work site. Again it is surprising to note that in the NGO dominated block of Udaipur, 100 per cent respondents told that child care facilities were not available at the work sites.

3.3. Impact on Households

The positive impact on households due to NREGS can improve child well being. We look at the evidence in the participation of the poor, contribution to household income and to the village, usage of NREGS wages and migration.

Participation of the Poor, Vulnerable and Disadvantaged

As NREGS is a self targeted scheme, we are interested in assessing whether the programme is reaching the poor and vulnerable. Many field studies have shown that NREGA is reaching the poor and socially and economically backward sections like SC and ST population.

Dreze and Khera (2009) based on GBPSSI study showed 73 per cent of the sample households belong to SC/ST families in six states of North India (Table 5). The study also shows that 81 per cent of them live in a *kaccha* house, 71 per cent do not have electricity and 61 per cent are illiterates.

Table 5 NREGA Labourers: Rural India's Working Class

Proportion (%) of sample workers who	
Live in a <i>kaccha</i> House	81
Belonging to SC/ST families	73
Are illiterate	61
Have no electricity at home	72

Dreze and Khera (2009)

Ministry of Rural Development data also shows that the share of SC households has risen while that of ST households declined over time (Table 6)⁷. The decline in the share of SCs is exaggerated as the phase I and II have more ST dominated districts. The total share of SCs and STs is more than 50% in 2009-10 even after decline in the share of STs.

Table 6. Share of SCs and STs in Total Participant Households in NREGS (%)

Year	Share of SCs	Share of STs	Total of SCs and STS
2006-07	25.4	36.5	61.9
2007-08	27.4	29.3	56.7
2008-09	29.3	25.4	54.7
2009-10	30.5	20.7	51.2

Source: Ministry of Rural Development, Government of India

Contribution to Household Income

The contribution of NREGS wages to household income is one of the indicators of the importance of the scheme. Very few studies have estimated the shares of NREGS wages in total income households.

A study on Bihar and Jharkhand show that contribution of NREGS to total income is significant in Bihar as compared to Jharkhand (Pankaj, 2008)⁸. Tables 7 and 8 show that contribution of NREGS to total income was 8.4% in Bihar while it was only 2.4% in Jharkhand. The contribution was the highest for SCs, landless and marginal farmers in Bihar. It may be noted that the importance of the scheme for households could be much higher in the states like Rajasthan and Andhra Pradesh where the scheme's performance is much better.

⁷ On the share of SCs and STs, also see Ghosh (2008)

⁸ Also see Dreze and Bhatia (2006) on Jharkhand

Table 7: Contribution of NREGA to Total Income of the Household in Bihar 2007-08

Category	Total Income Rs.)	Income from NREGA (Rs.)	NREGA Income as % of the Total
Caste			
Upper Caste	23,718	780	3.29
OBC-I	25,570	1314	5.14
OBC-II	21,508	907	4.22
SC	16,894	1983	11.74
ST	19,810	544	2.74
Land			
Landless	18,178	1619	8.90
Marginal	23,253	1817	7.81
Small	38,103	885	2.31
Medium	-	-	-
Total	19,707	1649	8.37

Source: Pankaj (2008)

Table 8: Contribution of NREGA Income to the Total Income of Beneficiary Households in Jharkhand, 2007-08

Category	Total Annual Income of HH (Rs.)	Income from NREGA (Rs.)	NREGA Income as % of the Total %
Caste			
Upper Caste	33,706	91	0.27
OBC-I	25,853	400	1.55
OBC-II	22,475	531	2.36
SC	19,496	190	0.97
ST	22,989	900	3.91
Land Category			
Landless	20,465	183	0.89
Marginal	21,982	699	3.18
Small	37,080	750	2.02
Medium	37,393	518	1.39
Total	23,414	564	2.41

Source: Pankaj (2008)

Chhabra et al (2009) shows that average working days under five states was only around 11 days (Table 9). Among these five states, Andhra Pradesh is having the highest number at 20 days. As shown in Table 10, the contribution of NREGS to total income is only 4.3% in Gujarat (Table 10). However, the estimates for Madhya Pradesh show that if we take income from NREGS as share of total wage income, it is substantial at 18.6%, 25.8% and 16.6% respectively in kharif, rabi and summer seasons (Table 11).

Table 9. Working Days under NREGS for Participants (State-wise)

	Andhra Pradesh	Gujarat	Madhya Pradesh	Orissa	Uttar Pradesh	Total (mean)
Working days under NREGS	19.8	8.7	12.4	4.4	8.6	10.8

Source: Chhabra et al (2009) based on Field surveys

Table 10. Share of NREGS Income to Total Income (%) in Gujarat

	Sabarkanta	Banaskanta	Narmada	Valsad	Total
Share of NREGS income	3.7	5.2	3.5	5.0	4.3

Source: Chhabra et al(2009) based on Field surveys

Table 11. Share of NREGS in Total Wage Income in Madhya Pradesh

	Kharif Season	Rabi Season	Summer Season
Share of NREGS income	18.6	25.8	16.6

Source: Chhabra et al (2009)based on Field surveys

Usage of NREGS wages for different Consumption purposes

What is the evidence on the use of NREGS wages? Dreze and Khera (2009) based on GBPSSI study indicates that wages earned through NREGS had helped the workers in financing their food and health requirements. Around 69 per cent of the sample workers told that they spent on food while 47 per cent of the workers spent on illness (Table 12). The study also shows that 38 per cent of the workers mentioned that it helped in sending children to school. They also bought school books and uniforms from the NREGS earnings.

Table 12. A Lifeline for the Rural Poor

Proportion (%) of sample workers who stated that	
NREGA is 'very important' for them	71
NREGA has helped them to avoid hunger	69
NREGA helped them to avoid migration	57
NREGA helped their family to cope with illness	47
NREGA helped them to avoid demeaning or hazardous occupations	35

Dreze and Khera (2009)

Chhabra et al (2009) provides perceptions about the role of NREGS in six states. It is important because it tends to capture both its importance in terms of actual impact and its potential role. As shown in Table 13, more than 50 per cent and 54 per cent of the participating households reported respectively that NREGS was very important for the family and brought significant change in life. These percentages are more than 90 per

cent for Gujarat and in the case of Haryana more than 90 per cent reported that it brought significant change in life.

Around 46 per cent of households reported that NREGS helped in avoiding going hungry and avoided migration while 36 to 37 per cent mentioned that it helped in sending children to school and helped to cope with someone's illness. In Haryana and Orissa, large majority reported that NREGS income helped to avoid hunger, migration, sending children to school and coping with illness. In the case of Gujarat, NREGS income has not helped in redressing these issues. Surprisingly, these percentages are lower for Andhra Pradesh where NREGS is reasonably working well.

Table 13. Perceptions of Participants on NREGS Role: Six States 2007-08

	Proportion of Households Reported NREGS as						
	Andhra Pradesh	Madhya Pradesh	Gujarat	Haryana	Orissa	Uttar Pradesh	Total
A very important for the family	30.8	55.6	98.1	57.5	34.5	27.8	50.8
Some what important	59.0	19.1	91.6	13.8	54.1	72.2	51.6
Brought significant change in life	44.9	43.1	90.9	93.8	27.8	24.7	54.2
To avoid going hungry	19.3	45.6	2.2	85.0	84.7	41.9	46.4
Avoided migration	24.3	48.1	20.6	90.0	62.8	30.9	46.1
To send children to school	13.5	40.3	3.4	90.0	40.3	30.6	36.4
Helped to cope with someone's illness	26.3	29.4	17.2	100.0	50.0	--	37.1
Helped repay our debts	21.8	38.4	10.0	100.0	46.6	26.6	40.6
Helped to give up work we did not want to do	23.0	36.3	37.5	78.8	44.4	12.8	38.8
Helped to create useful assets in the village	75.6	44.7	98.4	100.0	98.4	16.3	72.3
Helped to raise market wage	94.0	42.8	65.3	100.0	52.4	33.1	64.6
Resulted in scarcity of labour in peak season	86.0	38.8	18.4	98.8	16.3	24.7	47.1
Resulted in productivity of labour	49.3	40.3	1.6	77.5	10.6	15.6	32.5

Source: Chhabra et al (2009) based on Field surveys

Table 14 provides perceptions of social groups on the role of NREGS. Not surprisingly, the percentages reported for SCs, STs and OBCs are higher than Other Castes (OCs) in

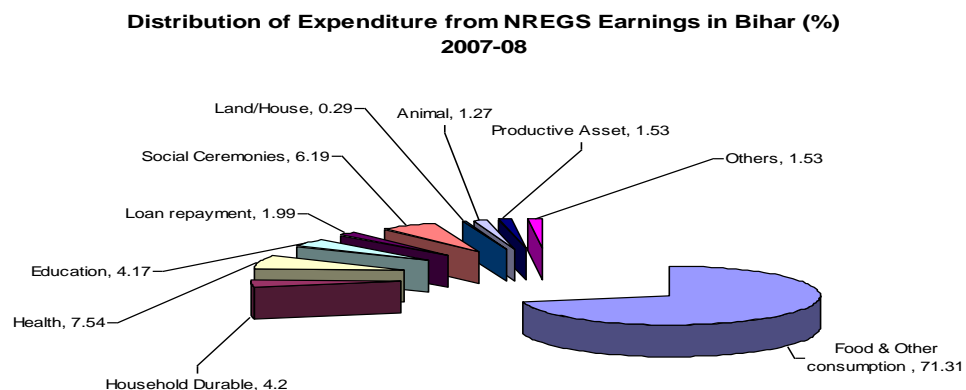
avoiding hunger, migration, sending children to school and helping to cope with illness. Around 45 to 50 per cent of the households among SCs, STs and OBCs reported that it helped in avoiding hunger and migration.

Table 14 Perceptions of Participants on NREGS Role: Social Groups in Six States 2007-08

	Proportion of households reported NREGS as			
	SC	ST	OBC	OC
A very important for the family	44.9	51.2	50.6	42.0
Some what important	40.3	32.1	42.4	31.3
Brought significant change in life	57.4	55.6	56.7	30.0
To avoid going hungry	48.4	46.1	49.5	30.1
Avoided migration	45.7	52.8	45.8	32.6
To send children to school	37.8	34.1	36.2	21.5
Helped to cope with someone's illness	38.0	34.9	38.5	23.1
Helped repay our debts	40.5	46.1	41.7	24.5
Helped to give up work we did not want to do	39.0	38.9	33.3	40.7
Helped to create useful assets in the village	67.9	62.7	72.4	47.9
Helped to raise market wage	67.1	56.9	66.4	56.2
Resulted in scarcity of labour in peak season	50.0	41.6	48.3	29.5
Resulted in productivity of labour	28.5	24.5	35.6	24.4

Source: Chhabra et al (2009)based on Field surveys

The study by Pankaj (2009) shows that 71% of the earnings were spent on food & other consumption, 7.5% on health and 4.2% on education in Bihar (fig.1). It shows substantial amounts of the earnings are spent on items such as food, health and education which are useful for child well being.

Fig 1. Usage of NREGS Earnings in Bihar

Source: Pankaj (2008)

Varsha et al (2008) on Rajasthan also show that NREGS earnings were useful for food, health and education (Table 15). Between 90 percent (Banswara) to 98.7 percent (Dungarpur) have used the wages for daily consumption. Health is also another important item in their expenditures. The response on health is a high as 70 percent in Jalore and a low of 16 percent in Banswara. Child education is also important and wages have been spent on children's education. Thus, education is a very positive impact of NREGA's cash flow into households. There are of course wide inter-district variations (Table 15). In three districts viz., Karauli, Dungarpur and Jalore, the response on education varies from 23% to 31%. The percentages on education were very low in Banswara and Jhalawar.

Table 15: Expenditure of the Wages

Items of Consumption	Karauli	Banswara	Dungarpur	Jhalawar	Jalore	Total %	No.
Daily Consumption	97.80	90.27	98.67	90.99	91.25	94.41	3109
Domestic Purchase	4.99	18.56	37.60	28.30	45.00	25.05	825
Health	30.34	15.95	69.51	21.59	70.00	38.57	1270
Child Education	23.35	5.50	31.47	6.50	28.75	17.80	586
Repayment of Debt	0.20	0.81	3.02	1.68	5.00	1.70	56
Festivals	6.19	3.51	52.36	13.21	41.25	22.93	755
Social Ceremonies	0.40	5.95	0.27	2.52	1.25	2.55	84
Purchase/Repair of Land/house	5.39	0.09	1.69			1.43	47
Purchase of Animals	0.80	0.18	4.89	0.21	1.25	1.91	63
Purchase & Maintenance of Prod Assets		0.99	0.36	0.21		0.49	16
Others	0.20	5.05	0.09	1.68		2.00	66

Source: Varsha et al (2008)

Box 1 shows that the earnings were quite useful for the family of Haju Devi of Dungarpur in buying proper clothes and food for her children.

Box 1 Consumption from Earnings in Dungarpur

Haju Devi of Dungarpur says that because of the earnings from NREGA today we are able to buy proper clothes and food for our children. Whereas, earlier very often we used to eat without any vegetables. Today we do not have to take petty loans for daily household expenditures. As earlier when my husband used to go out of village to work, I had to very often dependent on petty loans for daily expenditures. But since last two years she has not taken any loan. Haju Devi had earned Rs.5951 for hundred days of work in 2006-07. In 2007-08 she earned Rs.6154. She now has given up her earlier work of collection of firewood from the forest for selling in the nearby town. Now she prefers to work under the scheme as she feels she is able to earn more than what she used to by selling firewood.

Source: Varsha et al (2008)

Singh's study (2009) on Rajasthan and M.P. indicates majority of the respondents felt the money earned through NREGA was a big help to the family. As shown in Table 16, 75 per cent of the respondents of Sirohi district affirmed it compared to 93.3 percent in Udaipur. However, these proportions are lower in two NGO presence blocks of Sirohi and Udaipur where percentages were around 70 per cent. Around 85% to 95% of the workers in Madhya Pradesh responded that earnings were a big help to them.

Table 16. Was the money (from the payment) a big help to your family (%)?

	Districts	Yes	No
Rajasthan	Sirohi	75	25
	Udaipur	93.3	6.7
Madhya Pradesh	Barwani	86.7	13.3
	Shivpuri	95	5
Rajasthan (NGO)	Sirohi	70	30
	Udaipur	72.5	27.5

Where did the money go? As Table 17 shows, a major share of these wages went for home expenditure. The proportions vary from a low of 57.5 percent in NGO dominated block in Sirohi and a high of 81.7 percent in Shivpuri. Second, most important expense has been use of wages in agriculture activities and this is more than one-tenth in Barwani, and NGO dominated blocks of Rajasthan. Thus, that NREGA has helped marginal and small farmers invest in small land plots they have to supplement household incomes. Some households have used the money earned on illness, repayment of old debt, and marriages/deaths. A significant proportion of respondents also mentioned that money has been of no help in some blocks.

Table 17. How did it help (%)?

	Districts	Home expenditure	Illness	Repayment of debt	Social function (Marriage/Death)	Agriculture	Others
Rajasthan	Sirohi	62.5	5	0	2.5	4.2	0.8

	Udaipur	72.5	8.3	4.2	3.3	0.8	4.2
Madhya Pradesh	Barwani	66.7	5	1.7	0.8	12.5	0
	Shivpuri	81.7	5	0	2.5	5.8	0
Rajasthan (NGO)	Sirohi	57.5	0	0	0	12.5	0
	Udaipur	73.3	6.7	0	3.3	13.3	0

Source: Singh (2009)

Contribution to Village Economy

Apart from its contribution to households, NREGS is also useful to the community and village economy. Dreze and Khera (2009) reveals that 92% of the sample workers felt that the NREGA work was useful and 83% felt that NREGA has led to creation of useful assets (Table 18). The Survey team also felt that useful assets are being created in 87% of the worksites.

Table 18 Playing with mud?

Proportion (%) of sample workers who feel that	
NREGA has led to the creation of useful assets in their village	83
The work they were doing on NREGA was useful	92
Proportion (%) of sample worksites where the survey team felt that*	
The asset being created or repaired was useful	87 (32)
The work being done was useful	81 (29)

*In brackets, 'very useful'

Source: Dreze and Khera (2009)

Varsha et al (2008) on Rajasthan shows that there have been significant changes in the villages due to NREGS (Table 19). Significant proportion of respondents indicated that employment, road connectivity and water table improved in the villages. Some respondents also mentioned improvement in economic situation, soil erosion, drinking water for animals and reduction in untouchability.

Table 19: Changes in the Village Due to NREGA

Improvement	Karauli	Banswara	Dungarpur	Jhalawar	Jalore	Total %	No.
Employment	54.38	28.48	36.37	40.55	58.23	37.48	1216
Connectivity	12.50	23.69	6.68	9.98	12.66	13.96	453
Water Table	20.21	14.74	17.06	17.41	21.52	16.89	548
Economic Situation	1.67	5.15	12.64	11.04	1.27	7.95	258
Soil Erosion	1.46	11.12	8.12	4.88	5.06	7.61	247
Drinking Water for Animals	8.96	5.61	9.03	15.07	1.27	8.54	277
Decline in Migration	0.42	0.45	9.03	0.64		3.39	110
Untouchability Reduced	0.21		0.27			0.12	4
Grazing Land Development	0.21	1.08	0.18			0.46	15
Less Encroachment		0.90		0.21		0.34	11
Village Development		0.09	0.09	0.21		0.09	3

Others		8.68	0.54		3.14	102
Total	100	100	100	100	100	100
No.	480	1106	1108	471	79	3244

Source: Varsha et al (2008)

Reduction in Migration

Another impact of NREGS on child well being relates to reduction in migration. Pankaj's study (2009) on Bihar reveals that there has been a decline in migration since the advent of the NREGA (Table 20). About 35 per cent of the beneficiary households consisted of migrants in 2006, but this figure came down to 23 per cent in 2008, indicating a decline of about 12 percentage points in two years, which is not insignificant. Reduction in migration is quite high for OBC-I and OBC-II categories. Similarly, migration reduction is high for landless as compared to marginal and small farmers.

Table 20: Reduction in Migration of Beneficiaries

<i>Caste</i>	<i>2006</i>	<i>2008</i>
OBC-I	55.56	31.43
OBC-II	45.83	17.65
SC	25.37	19.15
ST	30.00	n.a.
Land Category		
Landless	32.74	19.23
Marginal	40.82	33.33
Small	33.33	33.33
Total	34.73	22.55

Source: Pankaj (2008)

Varsha et al study (2008) indicates that those who were migrating out for certain reasons earlier are now able to earn in the village itself. For women who were not migrating with their husbands because of household responsibilities work is now available in the village itself. The study shows that found that in all the districts out migration has been a major survival strategy. After NREGA's intervention, the migration in these districts has certainly decreased but not completely stopped. On being questioned about the impact of NREGA the respondent's first answer is that it has decreased migration as "*ghar baithey rozgar mil jata haey*" (you can get employment at door step). In Jhalawar it came out that most of the villagers used to migrate with families to neighbouring states like Madhya Pradesh for work. But once the activities under NREGA started, women stay back and work in this scheme.

Table 21 indicates that though with NREGA migration of many households had declined, still migration is taking place. Only 11 per cent of the family reported that someone from the family has migrated to neighbouring states, districts and better of agricultural regions of the district. Some are staying in big cities like Jaipur, Ahmedabad, Mumbai, Surat etc.

These migrant households are from Jalore (22.5%), Dungarpur (16%) and Banswara (12.61%). At the time of survey, the migrant household member has been away from a 10 days to 2920 days. This involves both seasonal and long term migration outside the village.

Table 21: Whether Family Member Migrated in Search of Employment

Items	Karauli	Banswara	Dungarpur	Jhalawar	Jalore	Total %	No.
Yes	5.59	12.61	16.00	2.52	22.50	11.48	378
No	94.41	87.39	84.00	97.48	77.50	88.52	2915
Total	100	100	100	100	100	100	3293

3.4. NREGS and Impact on Women

It is known that empowerment of women lead to well being of children. According to the guidelines of NREGS, 30 per cent of work is reserved for women. The Ministry of Rural Development data shows that the share of women in NREGS has increased significantly from around 41 per cent in 2006-07 to 49 per cent in 2009-10. Thus, almost half of the NREGS participants now are women. It shows the importance of the programme to women.

Table 22. Share of Women in Total Participant Households in NREGS (%)

Year	Share of Women
2006-07	40.7
2007-08	42.5
2008-09	47.9
2009-10	48.7

Source: Ministry of Rural Development, Government of India

Chhabra et al (2009) based on field studies reveal that in the states of Gujarat and Andhra Pradesh, the shares of women far exceeds the targeted employment for women at 30 per cent (Table 23). On the other hand, participation of women is very low in Haryana (7.5%), Uttar Pradesh (9.4%) and Madhya Pradesh (13.1%). Dreze and Khera (2009) show that women empowerment is quite high due to NREGS. Around 79 per cent of women collect their own wages and nearly 70 per cent keep their own wages.

Table 23 Shares of Male and Female in Total Participation in NREGS

Gender	Andhra Pradesh	Gujarat	Haryana	Madhya Pradesh	Orissa	Uttar Pradesh
Female	52.0	57.6	7.5	13.1	39.3	9.4
Male	48.0	42.4	92.5	86.8	60.7	90.6

Source: Chhabra et al (2009) based on Field surveys

Table 24. A Job of One's Own

Proportion (%) of female sample workers who	
Collect their own wages	79
Keep their own wages	68

Earned any cash income (other than NREGA wages) during the last three months	30
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Source: Dreze and Khera (2009)

NREGS also broke purdah restrictions of women in Rajasthan villages. Varsha et al (2008) study reveals that women of higher castes like Brahmins and Rajput who never used to go out to work have started working at the construction sites. In most cases, it was found that it was the decision of women themselves to go for work. Box 2 provides a case study of Pramila Devi of Rajasthan state. It shows the empowerment of women due to NREGS.

One negative phenomenon on child labour is that women often mark their attendance but leave their 14-16 year old daughters at the worksite and proceed with household chores (Varsha et al, 2008). This is also brought out by CESS study (2009). The study in two districts of Andhra Pradesh shows how participation of women in NREGS can lead to situations wherein education of school going children is interrupted so that they may look after younger siblings when the mother goes to work.

Box 2

Pramila Devi, 40 years old belonging to Brahmin caste lives in Barbodani Panchayat. Her husband works at a tea stall in Mumbai. She along with her two daughters and a son lives in the village and were totally dependent on her husband's income. Her family too like other families in the neighbourhood got the job cards made thinking that one does not know when these cards could be of same use as the ration cards. She very innocently said "sab banwa rahey they toh hum naey bhi ban walia".

She further said that one day a group of women in the neighbourhood who also belong to her caste, discussed that at the worksites it is largely women who are working, why don't we also do some work and earn money. As it is, once the household work finishes we are free and just gossiping. Pramila Devi with the consensus of the women in the group met the Mate who happened to be from her caste also. The Mate immediately asked them to come for work and "that's how we went to work". Initially we were not only shy but a bit hesitant also. But we told our selves that we are working at a public site and not for any individual household. What gave us more confidence was the fact that Rajput women too were working at the site.

Pramila did 79 days of work and when her husband had come visiting the village he did another 21 days of work. Pramila initially did not have her bank account. She has opened an account in the Mahila Mini Bank. She now on her own operates the account. She said "earlier I used to feel shy and could not talk to strangers and officers but now I am more confident." She gets from bank as much money as she needs for household expenditure. She is able to save some money also.

Pramila said, "it is because of this extra income that we are able to today eat green vegetables for both meals and can also purchase fruits". She further adds "dono samey

chai paani bana kar pitaey hai". Her daily routine has changed. She gets up early and finishes the household job in time to go for work.

What she likes the most about work is the fact that when they leave for work they call out for each other and go in a group. At the worksite also they maintain friendly relations with the other women irrespective of the castes. They do not maintain any discrimination and all women drink water from the same source.

Between 2006- 08 she earned about Rs.12000 from the scheme. She happily says that apart from spending on household expenses and education of her children, she was able to save some money.

Source: Varsha et al (2008)

Surjit's study (2009) provides reasons for women taking more interest in NREGA. The answer was largely that now there are greater opportunities to work and that too within the village. 77.5 percent respondents in Sirohi 66.7 percent in Udaipur mentioned that getting more opportunity for work is the major reason for interest in NREGS (Table 25). However, this percentage was at 44.2 percent in Barwani and much higher in Shivpuri at 63.3 percent. Among the two blocks with NGO presence, 70 to 80 percent indicated that there are more opportunities for women to work because of NREGS.

Table 25. Different Reasons for Women Taking More Interest in NREGA

States	Districts	Getting more opportunity for work	Easy work than others	Safety	Help in household consumption	Using free time	Others
Rajasthan	Sirohi	77.5	22.5	18.3	18.3	6.7	6.7
	Udaipur	66.7	12.5	5.0	16.7	9.2	30.8
Madhya Pradesh	Barwani	44.2	2.5	0.8	5.8	0.0	5.8
	Shivpuri	63.3	11.7	6.7	7.5	2.5	7.5
Rajasthan (NGO)	Sirohi	80.0	12.5	5.0	2.5	0.0	12.5
	Udaipur	70.0	7.5	5.0	10.0	2.5	5.0

Source: Surjit (2009)

The same study presents reasons for higher role and importance of women due to NREGS. These are: (a) It is safe to work in their- own village (b) it is easy to get work in their- own village, i.e. within 5 km. of radius; (c) husband's income is not sufficient for their family budget; (d) it is difficult to leave their children at home and go to work; (e) they are using their own time; (f) working in the town is uncomfortable for them. The benefits to women according to the study are: (1) they are supporting their husbands to handle the family budget; (2) self-confidence has improved among the women; (3) they are getting some pocket money; (4) they got the knowledge about the working process in banks and post offices.

Pankaj and Tankha (2010) presents an analysis of empowerment effects of the NREGS on women workers based on a study in four states of Bihar, Jharkhand, Rajasthan and Himachal Pradesh. The study shows that the share of NREGS income in total earnings of women workers' households was around 18 per cent for all the four states together (Table 26). The share ranges from 13 per cent in Gaya to 27 per cent in Dungarpur.

Table 26. Share of NREGS in Total Earnings for Women Worker's Households : 2008-09

	Dungarpur	Gaya	Kangra	Ranchi	Total
Share of NREGS in Total Income (%)	26.95	12.86	17.90	16.19	18.46

Pankaj and Tankha (2010)

Women's contribution to household income through NREGS is also substantial at 14 per cent for all the four states together (Table 27). This share again ranges from 8 per cent in Gaya to 21 per cent in Dungarpur.

Table 27. Women's Contribution to Household's income through NREGS

Districts	Average Income of hhs. From NREGS (Rs.)	Women's income from NREGS as % of total NREGS income of hhs.	Share of women's NREGS in the total annual income of hhs (%)
Dungarpur	7855	78.79	21.23
Gaya	2755	61.47	7.90
Kangra	7399	82.12	14.70
Ranchi	4394	67.38	10.91
Total	5459	76.64	14.14

Pankaj and Tankha (2010)

Regarding collection of wages, 98 per cent of women collect their wages themselves in Dungarpur while 60 per cent collect on their own in Kangra (Table 28). In the cases of Gaya and Ranchi, the percentage was less than 40 per cent. In other words, male household members collect wages of more than 60 per cent women workers in Bihar and Jharkhand districts.

Table 28. Who Collects Wages (%)

Districts	Women themselves	Male household members	Sometimes Male household members
Dungarpur	97.5	2.5	0.0
Gaya	33.3	66.7	0.0
Kangra	60.0	9.1	30.9
Ranchi	38.6	61.4	0.0
Total	68.2	23.2	8.6

Pankaj and Tankha (2010)

Women's own income to meet personal needs has increased significantly in Dungarpur and Kangra while it marginally declined in Ranchi (Table 29). If we take all the four states together, the percentage rose from 44 per cent in pre-NREGS to 71 per cent in post-NREGS.

Table 29: Women's Own Income to meet Personal Needs: pre and post-NREGS (%)

Districts	Pre-NREGS income to meet personal needs	Post-NREGS own income to meet personal needs
Dungarpur	32.0	70.9
Gaya	59.1	74.5
Kangra	19.8	74.6
Ranchi	63.3	62.4
Total	43.9	70.5

Pankaj and Tankha (2010)

As mentioned by Pankaj and Tankha (2010), NREGS has broadened choices for rural women in two ways: (a) it has opened a new avenue of paid employment and ; (b) it has broadened their choices and capabilities. It increases the choices for women by reducing dependence on other family members⁹. Table 30 shows that 58 per cent of the women workers joined NREGS out of their own choice. Only in the cases of Gaya and Ranchi, large percentage of men decided about their joining of NRES.

Table 30: Intra-household decisions to participate in NREGS

Districts	Dungarpur	Gaya	Kangra	Ranchi	All
Self (women worker)	75.7	37.3	78.3	42.2	57.9
Head of the Household	20.4	59.1	20.8	49.5	37.9
Other family members	3.9	3.6	0.9	7.3	4.0
Others	0.0	0.0	0.0	0.9	0.2

Pankaj and Tankha (2010)

In the post-NREGS, more women now meet and interact with government officials. Around 97% in Kangra and 77% in Dungarpur interact with officials while these percentages were very low in Gaya and Ranchi. Similarly the percentages in Dungarpur and Kangra were high in the cases of women attending gram sabha and women speaking in gram sabha.

Table 31: Women workers participation in the Gram Sabha (%)

Districts	Women attending gram sabha	Women speaking in gram sabha	Woman interacting with officials
Dungarpur	55.3	78.9	76.7
Gaya	13.6	13.3	5.5
Kangra	88.7	85.1	97.2
Ranchi	25.7	53.6	10.3
Total	45.3	73.2	46.5

Pankaj and Tankha (2010)

One of the pathways why NREGS is becoming quite a strong women's scheme could be the migration of men. It is possible that women are working as back up income for the family while men migrate out. One can argue that empowerment effects could emerge regardless of the work in NREGS. It may be noted, however, that NREGS many secondary effects which increase the empowerment of women. For example, rise in agricultural wages due to NREGS can be one of empowerment effects due to the scheme.

⁹ Also see Kelkar (2009) and Sudarshan (2009) on the empowerment of women due to NREGS

NREGS can also reduce the drudgery of women through multiplier effects in the village economy. Hirway (2009) goes beyond multiplier effects and says that impact on women much more if we take into account SNA (System of National Accounts) and non-SNA work of women as shown below.

Impact on Health Status in the Village: “The NREGS works that reduce unpaid SNA and non-SNA work of women and the poor is likely to improve the health status of the village population:

- Regular availability of clean potable drinking water is likely to protect the population from water borne diseases and improve the general health of the population.
- Construction of drainage will improve the cleanliness in the village, and thereby reduce the chances of occurrence of diseases through undisposed waste water.
- Construction of toilets will also improve the level of cleanliness in the village and also improve public health status.
- Reduction in unpaid drudgery of women will reduce their time stress and provide them more time to relax or to work.
- Construction of child care center will improve general health of children, who will receive nutritious food and clean environment. It will help their healthy physical and intellectual development” (p.26, Hirway, 2009).

Thus, the kind of NREGS works proposed here will improve the health status of the population and will reduce their private expenditure on health. Ill health is one of the major risks that lead to increase in poverty, the improved health will go a long way in reducing vulnerability and poverty of people.

Impact on Education Status in the Village: Hirway’s study (2009) also indicates that it will have positive impact on education status. It is known that many children in school going age are frequently engaged in collection of fodder, fuel wood, water and animal grazing. Assuring water supply at the door step, regeneration of common lands for fuel and fodder as well as child care centers will reduce unpaid work of children. Children can attend the school regularly if this drudgery is reduced. Particularly, it will benefit the girl children, who stay back at home either to take care of younger siblings or to help in collection of water, fodder etc and other household work. Also, construction of pre school rooms will ensure healthy intellectual development of pre school children in the village (Hirway, 2009).

3.5. Focus Group Discussion in Rajasthan

This sub-section provides focus group discussion (FGD) on the impact of NREGS on livelihoods and children in Chaksu block near Jaipur of Rajasthan. . Paul of the Centre for Community Economics and Development Consultants Society (CECOEDECON) and, Surjit Singh and Gopal Singh Rathod of IDS, Jaipur organized the FGD.

The interaction was mainly with the members of *Kisan Seva Samiti* (KSS) (Farmers Welfare Federation), members of the Village Development Council and Self-Help Groups promoted by CECOEDECON. The KSS is a federation of farmers at the block level. Roughly 20 members were present at the session. The discussion was mainly on implementation, organization and impact on livelihoods and children due to NREGS. The members are very organized in their discussions. They told first positives and then discussed the negatives of NREGS. The focus group discussion is summarized as follows.

Positives

- Led to empowerment of women and social equity.
- Opening bank account also led to empowerment.
- Has impact on education: Due to wages of NREGS, local traders are giving loans on school dress, books etc. It also led to reduction in dropout rates. The participants said that NREGS workers were spending 30 to 35 per cent of the wages on educating children.
- Villagers are getting food items also from the traders on loan due to NREGS
- The villagers told that there was 50 per cent reduction in migration due to NREGS. They also mentioned that it has reduced child labour in Dungarpur district as the migration to cotton cultivation in Gujarat declined.
- Social interaction among women improved.
- They are aware of the right to work and given them *ijjat* (dignity)
- Agricultural wages in the villages have increased
- Immunization for children has improved

Negatives

The negatives are mostly on organization and implementation of the scheme.

- There are work measurement problems. Around 80 per cent of the work is not properly measured as engineers do not go to work sites
- Due to measurement problems, workers are not getting minimum wages of Rs.100. Many workers are getting around Rs.65 per person.
- If there are problems, engineer's salary should be cut.
- Delay in payment of wages. Sometimes it is taking four months to deliver wages
- They do not want to open in co-operative banks as it leads to delays. According to them, account should be opened in commercial banks.
- Quality of assets is mixed.
- There are no crèche facilities at work sites
- Youth should be given training programmes (e.g. pumpset repairing, motor cycle repairing) under NREGS

- Link with agricultural development should be based on catchment basis rather than working on SC/ST fields. Because, farm field bunding can not be done in few farms as it depends on catchment
- Corruption is rampant under NREGS. If they want, Block Development Officer (BDO) and Pradhan can control it.

They conclude that the experience of NREGS is a mixed one. It is working effectively in some places and not working in some other places. Corruption can be controlled if villagers are active and social audit is done. Similarly, some panchayats are working effectively while others are not working.

4. Conclusions

NREGS is expected to help reduce chronic poverty, risks and vulnerabilities of households particularly the poor. It also seems to have positive significant impact on child well being. This will have long term benefits for children in terms of reducing child labour, malnutrition, ill-health and improve education. In this respect, the rights approach followed for NREGS will also help in protecting child rights.

The objective of this paper is to examine the impact of NREGS on the well-being of children. It is well known that women's well-being and empowerment are crucial for the well-being of children. Therefore, this study also examines the impact of the scheme on women. First, it examines the pathways in which NREGS affect the well-being of children. Next, it presents the evidence based on empirical studies in the literature relating to the impact of NREGS on households, empowerment and well being of women, child labour, health, education, nutrition of children and child care facilities at work sites.

Summary and conclusions of the paper are summarized as follows.

(1) *Impact on Child Well Being. Study based on 'Young Lives' data sets:* This study on Andhra Pradesh shows that there is a positive correlation between programme participation and anthropometric scores as indicators of health outcomes although the results are not robust. On the other hand, the study finds robust results on child labour. It reduces child labour for boys by 13.4 per cent and for girls by 8.9 per cent.

(2) The worksite facilities are missing in many cases. Although drinking water and first aid are provided, *crèche facilities are not available*. As a result, women with small children hesitate to participate in the scheme. This is one of the gaps in the functioning of NREGS and it affects adversely child well being.

(3) *Impact on Households*: We looked at the evidence in the participation of the poor, contribution to household income and to the village, usage of NREGS and migration

(a) Since it is a self targeted programme, one expects poor to participate in it. National level official data shows that the share of SCs and STs together was around 51% in 2009-10. Many field studies have also shown that NREGA is reaching the poor and socially and economically backward sections like SC and ST population.

(b) Field surveys show the contribution of NREGA to total income is less than 10% in the studied states. The shares were 2.4% in Jharkhand, 4.3% in Gujarat and 8.4% in Bihar. However, the share of NREGS income in total wage income in Madhya Pradesh was 19% in kharif season and 26% in rabi season.

(c) The income from NREGS made very significant contribution to children's well-being such as reducing hunger, improving health and education. For example, a survey in six North Indian states (Bihar, Chattisgarh, Jharkhand, M.P., Rajasthan and U.P.) shows that around 69 per cent of the sample workers told that it helped them to avoid hunger, while it helped to cope with illness for 47 per cent. Around 38 per cent of the workers mentioned that it helped in sending children to school.

(d) There are, however, significant inter-state and inter-district variations in the use of NREGS income on food, health and education. The percentages are high for Rajasthan, Haryana and , Himachal Pradesh. In Orissa, M.P. and U.P., around 30 to 40 per cent mentioned that it helped in coping with illness and improvement in education. In the case of Gujarat, NREGS income has not helped in redressing these issues. Surprisingly these percentages are lower for Andhra Pradesh where NREGS is reasonably working well.

(e) It also improved assets to village economy. Significant proportion of respondents indicated that it improved employment, connectivity, water table, drinking water, reduction in soil erosion etc. Village development indirectly helped in improving child well being.

(f) Various field studies indicated that NREGS helped in reducing migration. It helped in improving nutrition, education and health of children. The scheme also helped in reduction child labour. For example, focus group discussion in Rajasthan revealed that child labour going to cotton cultivation to Gujarat from Dungarpur in Rajasthan declined by around 50 per cent.

(g) Based on field surveys, NCEUS (2009) identifies several positive externalities due to NREGS. "They include reduction in distress out-migration, improved food security with

wages being channeled into incurring expenses on food, health, education and repaying of loans, employment with dignity, greater economic empowerment of women workers, and sustainable asset creation” (p.219, NCEUS, 2009).

(4) Impact on empowerment and well-being of women:

(a) One of the successes of the NREGS is that the participation of women in the scheme is higher than the stipulated reservation of 33%. The share of women in the programme increased from 41% in 2006-07 to 49% in 2009-10. Thus, almost half of the NREGS participants now are women. However, there are significant inter-regional disparities in the participation of women. Field studies have shown that the statutory requirement of 33 per cent participation is not met in Haryana (8%), M.P. (13%), U.P. (9%), Chattisgarh (25%), Bihar (13%) and Jharkhand (18%)

(b) Empowerment of women certainly improved due to NREGS. Field surveys reveal that the share of NREGS income in total earnings of women workers’ was around 18% for four states (Rajasthan, Bihar, Jharkhand and Himachal Pradesh) together. Majority of women collect their own wages. NREGS has broadened the choices and capabilities of NREGS women. Their income from NREGS helped in improving education, health and nutrition of women.

(c) One negative phenomenon on child labour is that women often mark their attendance but leave their 14-16 year old daughters at the worksite and proceed with household chores. The study in two districts of Andhra Pradesh show how participation of women in NREGS can lead to situations wherein education of school going children is interrupted so that they may look after younger siblings when the mother goes to work.

(c) NREGS can reduce the drudgery of women due to village development and help in raising child well being. The NREGS works can improve health status of village population and education status in the village. Regular availability of clean potable drinking water, construction of drainage, construction of toilets, reduction in unpaid drudgery of women, construction of child care centres can help in improving in nutrition and health of children. Assuring water supply at the door step, regeneration of common lands for fuel and fodder and availability of child care centres can reduce unpaid work of children. They can attend the school regularly if this drudgery is reduced.

To conclude, the evidence on NREGS impact on child well-being is mixed. The positive impacts on household incomes, empowerment and well being of women have helped in improving nutrition, health and education of children and reduction in child labour. Around two-thirds of child labour is in agriculture. Related to the issue of children in agriculture especially girls is the gender aspect of recognizing women as producers and

farmers and its links to household food security. Strengthening extension training curriculum on gender and child protection issues in agriculture can help in reducing child labour.

NREGS is the most important rights based social protection programme in India. There are significant regional variations in the working of NREGS. It is working much better in Rajasthan, Andhra Pradesh and Himachal Pradesh. On the other hand, it is not working well in states like Bihar, Jharkhand and Uttar Pradesh. The programme has demonstrated varying degrees of success across the country. The achievements are still short of potential. This potential can be harnessed in order to improve the right to employment which in turn can enhance the rights of the children.

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