

CHAPTER II

Literature Review

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is the largest anti poverty programme in the world. Though it has evolved out of the Food for Work Programmes and has been modelled on the legally binding Employment Guarantee Scheme (EGS) of the State of Maharashtra, this scheme is envisaged to be much more than a public works programme. It envisages to ameliorate the condition of distress migration in rural areas to provide income so as to alleviate poverty and also to strengthen the livelihood resource base of the poor in the rural areas which mainly relates to the ecology and sustainable development of the villages.

The sections below bring out the impact of MGNREGA on various aspects of the lives of the poor in rural areas, such as the extent to which implementation of MGNREGA has been able to provide relief from distress, to raise awareness levels, to achieve women empowerment, to ameliorate the problems of Tribal population, the impact on Natural Resource Base due to creation of productive assets and the impact on incomes in Rural areas.

2.1 Meeting the Demand

A large number of studies have revealed that the scheme has been able to provide immediate relief to people as the marginal income from it has helped them to avoid hunger,(Dreze and Khera 2009). The evidence from the nearly hundred work sites that they visited during a field survey in six north Indian States in 2008, revealed that the demand for work was clearly not

being met. Though 98% of the workers were ready to work for the maximum number of 100 days, only 13% secured 100 days of work. From Chhattisgarh, Bihar, Uttar Pradesh and Jharkhand, the workers who could work for 100 days a year constituted merely, 1%, 2%, 3%, and 7% respectively. The survey found that awareness levels were too low among the poor.

Dutta, Murgai, Ravallion and Van de Walle (2012) examined the secondary data provided by the National Sample Survey (NSS) 2009-10. It emerged that the self targeting mechanism of the scheme was successful in reaching the poor and the weaker sections. While it was estimated that 45% of the total rural households in the country wanted work, only 56% of these households got work under the scheme implying that 44% of these households suffered administrative rationing. Contrary to the premise that the scheme would have large participation from poorer States, the States like Bihar and Uttar Pradesh, had very low participation rates that were explained on grounds of rationing, social norms relating to women and the feudal structure constricting the weaker sections.

Liu and Barrett (2012), analysed the NSS data and also found similar results in their study. They found that self targeting normally helps the SC/ST/poorest, but the administrative rationing is favourably biased towards the middle class. The net effect was found to be pro poor. Interstate variations on participation was seen to be very heterogeneous with some performing very well and some performing very poor.

Kareemulla, Reddy, Rao, Kumar and Venkateswarlu (2009), in their field study in a rain fed district of Andhra Pradesh found considerable impact

of the scheme. The MGNREGA scheme savings were used by the workers to buy food and spend money on education and health. The workers also used the savings to get an electricity connection, construct a toilet in the house, get drinking water in the premises, bought assets like fan, television and bicycle. According to the authors though the scheme provides opportunity for 100 days of wage guarantee, the actual average employment is only for 25 days per household which needs to be bridged at least in the districts facing distress.

The linear regression results in the study showed that the dependency of household on NREGS works is related positively to a set of independent variables: family size, landholding, and wages from other sources. It also indicates that among the scheme participants, persons with relatively larger landholding size bank more on NREGS as a source of wages. It also revealed that migration for work was seen as a positive aspect and it reflected favourably on the family as it brought higher wages. Therefore this aspect of magnitude of migration from the village has no influence significantly on the number of persons participating in the NREGS works.

Ahuja, Tyagi, Chauhan, Chaudhary and Ram (2011), conducted a comparative study of the impact of MGNREGA on rural households in the agriculturally advanced and backward regions of Haryana. They inferred from their Logit model, that, inter alia, the participation in MGNREGA is less probable if a family had large farm size, more number of livestock, out migrate for employment and have outstanding loans.

The results from the above two regressions show apparently conflicting results on the variable of farm sizes and that of the out migration but these are micro studies reflecting the socio economic and agro climatic peculiarities of the local places.

2.2 Awareness

Connected with the issue of unmet demand is the low awareness of the poor in the rural areas. Ravallion, Van de Walle, Dutta and Murgai (2013), tested information constraints on India's largest anti poverty program with two rounds of data in 150 villages spread across rural Bihar which had low participation. A Randomised Control Trial (RCT) for information campaign was conducted. The information campaign consisted of repeated screening of a high-quality and entertaining fictional movie, which aims to inform people of their rights under the Act, screened at public places to ensure attendance. The campaign enhanced public awareness about the Act, but this did not translate into significantly higher employment demand. The researchers found that the knowledge on one's rights is not the same thing as being empowered to demand those rights. The solutions lie in addressing the constraints imposed by the feudal structure in the rural areas of the country but no detailed micro study of the constraints in relation to MGNREGA is seen. Dreze and Sen (2013p208-09) mention that in Bihar and Jharkhand, as recently as in 2004-05, 80% of central food grain allocations were estimated to be diverted. With such magnitude of diversions the issue is more of empowerment, grievance redress, and deterrent action against erring officials.

2.3 Women Empowerment

Almost all studies on the MGNREGA have examined the objectives related to generation of income for women. Dreze and Khera(2009), have brought out the special value of MGNREGA for women from the testimonies of the women workers. Without this scheme, said a woman, she would have migrated with her four year old child. Widows and single women preferred to do NREGA work closer to their home, as they perceive it to be safer and less exploitative.

While studies have commonly shown that women's participation is more than the mandated one-third of the village population, some regression studies brought out crucial insights. Liu and Barrett (2012) in their regression study of the 66th NSS data (interviews with 59,129 Households from 35 states) have seen that MGNREGA does not fare well in terms of reaching poor female headed households.

Carswell and De Neve (2013), drew evidence from two villages in Tamil Nadu, to show that NREGA has benefitted women workers through local availability of work throughout the year, labour norms that are not stiff and gender equality in wages. The study made illuminating insights and gave an account of a particular good practice in Tamil Nadu, the lack of which had discouraged, divorced, widowed and other single women, in Karnataka, Andhra Pradesh and Uttar Pradesh. The difficulty reported in these three states was the requirement for men and women to work in tandem and in pairs in MGNREGA work. However in Tamil Nadu, in the study villages, the work is done by men and women in their own groups on segregated lines.

These single women were over represented in the study villages. The researchers also mention that the earlier stiff Schedule of Rates in Tamil Nadu discouraged women and the turnaround was caused in 2010 when the norms were relaxed. Carswell mentions Jeyaraman's (2011) study of Thanjavur reporting a ten fold increase in the number of people seeking work and also reporting that women both of dalit and non dalit backgrounds with little education being the main beneficiaries.

A crucial insight of Carswell's work is a reasoned account on the participation levels of women at different stages of life. The women in their 20's are saddled with domestic responsibilities and are also not so strong and therefore their participation in MGNREGA is significant. The Women as they grow into their 30's grow stronger and are also less burdened on the domestic front. This allows them to explore work for higher market wages. Women, later, in their 40's, 50's, 60's, prefer MGNREGA work, but while for the women in 40's it is a supplementary income, for the older women it is the main source of income. This insight coupled with the finding regarding the impact of giving work on segregated lines is at once crucial for policy making.

Khera and Nayak (2009) visited 98 worksites spread over 10 sample districts and interacted with 1060 randomly chosen workers. Around 32% were women and 79% of them women avoided hunger because of NREGA earnings. The earnings from MGNREGA provide crucial help to single, widowed and divorced women. MGNREGA helped around 27% of women in the sample to avoid hazardous work and also helped 35 % of women in the sample who viewed the non MGNREGA work with contractors as harassment.

In the sample only 8% felt harassed during the MGNREGA work . The researchers mention about Jagruti Adivasi Dalit Sanghatan in Pati block of Baldwani district of MP as having energized the participation of people in the Gram Sabha so as to proactively create the shelf of works. Why have the good practices remained isolated and what are the barriers for its replication in other parts of the country should ideally constitute the subject of every micro study.

Vij, Jatav, Barua and Bhattarai (2017), in their study in Andhra Pradesh and Telangana identified social norms and strenuous nature of work as the major barrier to women's participation in the scheme. The researchers found that the scheme was bringing a lot of women into employment, but the participation from the poorest and poor classes (bottom two quintiles which also are in BPL category) had lower participation than the third and the fourth quintiles (APL category). The middle class bias of the scheme raises the question of the relevance of the scheme to the landless poor, who indeed are the most vulnerable. Kudumbashree in Kerala has helped generate awareness and enthusiasm for women participation. Studies evaluating the possibilities for such vibrant SHG movements in other states are not common.

2.4 Tribal Areas

Chakraborty (2014), in his study area in the West Bengal has found that the Scheduled Tribe(ST) population has registered lesser person days even in districts like Bankura, Birbhum etc where there is significant population of Tribals.

Buddha and Maiorano (2014), in their study of Tribal areas of erstwhile AP (based on secondary data) state that the ST population is desperately in need of safety net because a considerable proportion of ST s are below poverty line(61% of STs in erstwhile AP were below poverty line as per 2001 census). The authors made two clear recommendations. First, MGNREGA implementation in tribal areas has now been placed under ITDAs but the personnel concerned were not transferred to ITDA. The authors mention that ITDAs comprise of considerable number of ST personnel and as they are sensitive to ST problems, the MGNREGA implementation would be best handled by this agency. Second, the administrative expenditure in tribal areas was 1.25% as against the 10% total administrative expenditure for the whole state. Clearly there is a reason to raise the expenditure in these areas. The village assistant finds it impossible to manage travel expenses within the transport allowance given to him as he has to visit the scattered habitations covering large distances, and so is the case of social audit teams who meet in the block headquarters rather than in the Panchayat area.

Jacob (2008), in his study of Villipuram district reported that the tribal population living in Kalarayan Hills, used to migrate for six months a year before MGNREGA. Migration for this tribal population, entailed, taking a loan from the contractor on an interest, social costs of leaving the children in the village, exposure to illness, sexual exploitation of women and also the uncertainties at the migrated destination.

MGNREGA has provided relief to these tribal people that they reportedly wish that they have more number of days under MGNREGA.

Safety net to tribal populations of certain areas need to be a lot wider than just 100 days of labour.

Another issue is the aspect of road connectivity under the convergence of MGNREGA and PMGSY. The condition of roads in tribal areas today is poor and it is common knowledge that the road connectivity would usher multiple benefits however it is a conundrum as to why there is not enough demand in tribal areas. Is it because of out migration on opportunistic lines and if so what marginal benefits accrue to the tribals and what social costs do they entail. Not many studies are in this area.

Could funds for tribal areas be transferred from one area that has spent less to an other area that requires more. With MIS in place, transfer could be effected in real time, if such a provision existed.

2.5 Perceptions on Asset Productivity

A lot of studies on assets created under the scheme have based their conclusions on the perceptions of the beneficiaries and a few of these have also considered all sections of the village including the large land holders.

In the first phase of MGNREGA, the focus was more on the provision of work to the poor but in the present decade the focus shifted to building rural assets in a convergence mode among different programmes and departments. A lot of studies have brought out the non seriousness associated with building assets with some calling that these works as 'playing with mud'. Dreze and Sen (2013) have taken a view that the criticism against the MGNREGA assets is valid but is over stretched. They have seen a need

for more studies on this subject. Contrary to this view is the view held by Bhagwati and Panagariya (2013), that the assets built are not durable in general and therefore MGNREGA constitutes an avoidable costly transfer of resources to the poor. Direct benefit transfer is therefore in their view a more effective mode of transfer.

There are sixteen categories of works as per operational guidelines of MGNREGA and the main classification of assets is between community assets like the renovation of common water tank and individual assets like an open dug well. Another classification is based on the nature of work and accordingly we have water related works, agriculture related works, livestock related works, fisheries related works, rural drinking water related works, rural sanitation related works etc, Water related works constitute the predominant asset. Open dug well and farm ponds are the main water storage structures while water conservation works include bunding, gully plugging and de-silting tanks and canals.

Impact of works such as agriculture related works like SWM, livestock related works like cattle urine storage, rural drinking water related works like soak pits and recharge pits, on soil fertility and also on aquifer recharge are limited.

Kulkarni, Ranaware, Narayanan and Das (2015), in their study in rural Maharashtra had surveyed 4100 works and 4881 workers spread across 20 sample districts of Maharashtra. The sample districts represented 66% of works during the period 2010-13, in Maharashtra and represented the area that registered prolific works. This is therefore not a reflection of the scheme

in the state but an evaluation of the usefulness of the assets built. While three- fourths of the sample are small and marginal farmers, one fourth consisted of the large and medium farmers. The percentage of SC, ST, OBC, in the sample are seven, six and twenty four percent respectively. The study reported that ninety percent of people viewed the assets as useful however only eight percent viewed these assets as excellent. Be that as it may, the fact that there is a large majority of higher caste population and also the fact that 25% of the beneficiaries are medium and large farmers, do not lead to perceptions of equity. Whether the better off are crowding out the poor has not been evaluated.

Malik and Sharma (2012), collected primary data from a sample of 155 beneficiary households from two districts of MP during 2010-11. They find that 2/3rd of total funds were spent on water related works and the most important of these works has been the provision of irrigation facilities on farms of individual farmers from Scheduled Caste/ Scheduled Tribes and also those from the small and marginal farmer group. For evaluating the quality of assets, engineering norms were not evaluated but the beneficiaries subjectively evaluated the usefulness and its comparison with a similar non MGNREGA water structure. About ninety percent of the sample expressed the asset usefulness and about eighty percent found it comparable to a non MGNREGA asset.

The researchers note that out of the beneficiaries who have not found it useful, around eighty six percent had found it so because of want of electricity. Clearly drawing water by using motive power is not in accordance

with MGNREGA because of its potential adverse affects on the water table and its sustainable use. It may be pertinent to mention that these water works are part of the highly evaluated Kapil Dhara scheme of the State of MP.

Carswell and De Neve (2014) in their field study in the two villages of Tamil Nadu had found that the assets like the clearing of canals and ponds had only some short term effects and none of the roads add any lasting value.

Kareemulla, Reddy, Rao, Kumar and Venkateswarlu(2009), in the field study in six villages of a rain fed district of AP, reported that 76% of the works were perceived to be useful. They found that 25% of the farm ponds were being utilized because without paving the surface the farm pond cannot stop the percolation of water and it turns out to be only a recharge pit.

Mishra (2011), in his study spread across 396 villages in 3 districts of Madhya Pradesh has assessed the effectiveness of assets in these 3 districts. Around 58% of the sample agreed that the assets built on individual land are required. As regards the community assets these were evaluated on a five point scale ranging from excellent at one end to very poor at the other and 88% stated that it would be difficult to create the assets without MGNREGA. The researcher also evaluated the impact of assets on water conservation and agricultural productivity. Around 78% perceived that MGNREGA had moderate to significant increase in agricultural productivity. About 39% reported change in cropping pattern.

2.6 Asset Impact on Natural Resources Productivity

Certain studies have not focused on the perceptions of the beneficiaries but attempted to assess the difference it made to the various parameters relating to the soil fertility and water availability in the village resource base. The focus was to see how the resource base has been strengthened.

Chakraborty and Das (2014), have conducted field investigations in two villages in West Bengal, one village having a low lying alluvial landform and the other having an undulating lateritic land form. They focussed on micro level inspections of land form situation and also on the water related structures and took observations and measurements at three different stages. First the pre MGNREGA stage; the second is the pre monsoon stage in Apr 2012 and third is the post monsoon stage in Nov 2012. The study evaluated the efficiency of water works in the context of land forms and from it emerged the mismatch between the programme design and the unique features of that catchment area. For instance the water conservation tanks in the lateritic zone required to have had more depth (3.05-3.7m) as against the depth required in low level alluvial land form(2-2.5m) because of the higher percolation rate in the lateritic zone. However there were disproportionate number of such tanks dug without any outcome. High evaporation and high percolation rate in dry areas make the farm pond less useful as another study has also evidenced (Kareemulla, et al, 2009) . The researchers make a sound case for building efficient rural assets by customising the scheme to local features of catchment area and other local concerns and effecting minimal

scientific interventions such as a bed lining to reduce percolation in a water conservation structure, to achieve effective Rate of Return (RoR).

Esteves, et al (2013), conducted their empirical study on the environmental and socioeconomic benefits generated by MGNREGA in four selected districts of Andhra Pradesh, Karnataka, Madhya Pradesh and Rajasthan. The impact of MGNREGA was assessed by comparing the status of natural resources, crop yields, water availability, and vulnerability during the post-MGNREGA implementation year 2011-12 with the pre-MGNREGA period of 2006-07.

The indicators for assessing vulnerabilities were related to natural resources and livelihood and these were: groundwater depth, cropping intensity, irrigation intensity, net area irrigated, number of days of availability of irrigation water, area under food grain production, crop yields, livestock population, soil organic carbon, and soil erosion, the number of individuals migrating, wage rates, the percentage change in the number of days of employment, the net area irrigated, livestock population, and cropping intensity. Evidently many of the indicators are closely associated.

On many of the indicators the impact on an average was positive but there were areas which did not show much impact.

What stands out in this exercise is that many aspects such as soil fertility and soil erosion have been estimated. The ground water levels for pre MGNREGA have been used as base line and this info from Central Water Board was substantiated with the individual survey.

Evaluating the aforesaid indicators gives us the appropriate feedback into our policy and its implementation and offers us a chance to effect feedback corrections.

2.7 Open Dug Wells

Open dug well has been the most studied MGNREGA asset. This is an asset whose rate of return is relatively straight forward. Mishra(2011), in his study spread across 396 villages in 3 districts of Madhya Pradesh has assessed the effectiveness of assets in 3 districts, however this study does not contain the travails that the poor face in getting a well dug under MGNREGA. Two studies are commonly quoted in the context of open dug well.

Gupta, Kumar and Aggarwal (2012), have made an informal evaluation of NREGA Wells in Purio Gram Panchayat of Ratu block of Ranchi district. The eleven sample wells belonged to small and marginal farmers and the average cost worked out to 2 lakh and the RoR based on productivity gains seemed to hover around 4% by a liberal estimate. The 4% RoR may by itself not be worthy of a risky enterprise but there is a more discouraging side to the story that is too sordid to overlook. Four out of the eleven in the sample, paid bribes up to Rs 20000, which is roughly ten percent of the asset cost. Seven out of the eleven in the sample, borrowed money and an identical number, made Out of Pocket expenditure because of delay in payments to the workers, which necessitated the beneficiary to make temporary payments to the fellow workers. Two out of the eleven in the sample, consider it a mistake and one of these had to mortgage 2 acres of land and in the other case the

well collapsed leading to an added expenditure of Rs 1,20,000. The average return is a number that hides a lot of unhappy and distressing stories which have been vividly brought out by an other team of researchers.

Bhaskar and Yadav (2015), had undertaken a very detailed and arduous survey of Jharkhand villages, some of which face left wing extremism, and attempted an economic evaluation of MGNREGA wells in Jharkhand.

As a back drop to the study, it has been mentioned that, in 2010, the Govt of Jharkhand ordered the construction of 50 irrigation wells in each Panchayat under NREGA. By November 2013, nearly 1,15,000 wells were sanctioned for construction. According to Government data, 80 per cent of these wells had been completed by then and work was ongoing on another 15 per cent. This study attempted to verify the truth in these claims. Physical visits to 926 NREGA wells across six randomly selected districts in Jharkhand revealed that nearly 60 per cent of the sanctioned NREGA wells were actually complete. The completion rate rose to 70 per cent if the wells completed till the ground level (that is, without a parapet) were included. The work highlighted a number of case studies of beneficiaries, reflecting the flaws and rent seeking behavior of the lower administrative staff. The study also brings out the achievement of the scheme in a number of cases with some farmers reporting a rise of income by ten times. In the case of the wells that remain incomplete, three fourth remain so because of payment delays. The incompleteness due to technical reasons is merely one fifth.

From a reading of the work, the dominant impression is both, that of the relevance of MGNREGA assets for livelihood and also that of the incomplete wells pushing poor farmers into indebtedness and misery in the State of Jharkhand.

2.8 Labour Market Impact and Wage Rise

While assets are envisaged to increase the productivity of natural resources, the greater goal of MGNREGA is to raise the income levels of the poor and the marginalised. Studies on wages have shown that MGNREGA has had an impact on the rising rural and agricultural wages. Some studies have linked the raise, to farm mechanisation. However Dreze(Sammeksha-2) had viewed these as inconclusive. Bhagwati and Panagariya (2013) have found credence in reports that suggest that MGNREGA has altered the casual wage relationships and believe that future studies would provide corroborative evidence.

Nagaraj, Bantilan, Pandey and Roy (2016), conducted ICRISAT village level studies of six semi arid villages(longitudinal data of 40 years available) each in AP and Telangana. The study using descriptive statistics has seen a rising trend in both farm and nonfarm wages. In Telangana villages the farm wages rose from 2001 to 2012 at 4.8% per annum for a male worker and at 9.8% for female worker. Evidently the gender wage gap has declined.

The real wages in both farm and non farm works have gone up by 3 times, while MGNREGA wage has increased by only half of this. Though the non farm and farm wages have been moving up after MGNREGA, there are

several factors that could have hiked the wages such as, literacy, urbanisation, minimum agricultural wage act and spurt in construction jobs.

The shortage of labour is impacting the cropping pattern and we see different interventions evolving. The study has seen that a high labour intensive crop like paddy has now less area under cultivation but the productivity in the study areas has increased because of farm mechanisation. This is not the case with an other labour intensive crop like cotton. It is because some of the operations like harvesting of 'kapas' is not amenable for mechanisation.

Therefore it seems there is much to evolve in terms of customised machines for different operations involved with different crops and also of land aggregation in the form of cooperatives.

Carswell and De Neve (2014), have seen evidence supporting the view that agricultural wages have risen considerably during 2008-2011, but have not attempted to argue that MGNREGA has alone caused this enhancement. In the study village, Mannapalayam, in Tamil Nadu, men and women who got Rs 200 and Rs 100 in the year 2008 received Rs 250-300 and Rs 130-150 respectively in the year 2011 . An important insight that the study provides is about women wage work. Historically women's range of farm work was limited and that curtailed her wage potential and negotiation capacity. But now with MGNREGA where she is offered minimum wage with relatively easy labour the farm wages of women had to go up more steeply than that of men and evidently had the potential to lessen the gender gap. The choice of work

available with women has also increased and this has placed bargaining power in her hands.

Verma and Shah (2011), mention that IWMI had worked with 50 IRMA Masters students in exploring the interactions between MGNREGA and rural labour markets. The field studies were done in 2009-2010 and covered several states that include Gujarat, Rajasthan, Bihar, and Kerala.

The researchers generally found different interactions of MGNREGA and local labour markets.

- Indifferent : where market wage was much higher than MGNREGA wage
- Insignificant : where the MGNREGA work is so low as to cause any affect on the labour market
- Potentially significant: MGNREGA wages higher than local wages but discouraged by administrative indifference such as delayed payments.
- Significant : States like Rajasthan, AP and Kerala, where MGNREGA has significant presence in labour markets.

The researchers have mentioned that the crucial point is whether MGNREGA work adds to the labour supply or substitutes it. An other pertinent point is about labour market segmentation . While old, disabled and weak preferred MGNREGA the able bodied sought market wage work. The study however does not enquire into factors that have stunted MGNREGA in the potentially significant states like Bihar and Jharkhand.

Dr. Kalarani Rengasamy and B. Sasi Kumar (2011), in their analysis of the statewise performance of MGNREGA have inferred impact on farm wages and farm mechanization, based on secondary data. The authors see a trend of rising wages and attribute it to the pressure created by rising MGNREGA minimum wage rate. The authors interpret the rise in demand for agricultural equipment like tractors harvest combines and threshers (as reported by manufacturing companies) and also the rise in agriculture non crop credit off take, to imply a rise in farm mechanization.

The authors surmise that this pressure on farm mechanization could lead to enlargement of land holdings though the authors did not explore the possibility of cooperative farm market.

While the macro studies have given us the trends and generalizations the micro studies have actually provided us with rich insights that have contributed to a more nuanced understanding of the scheme. Micro level studies that study a village holistically in a socio economic and ecological perspective could contribute to a meaningful policy feedback. The critical goal of MGNREGA is livelihood security through creation of sustainable rural infrastructure.

Joydeep, Ghosh (2015), using a static multisectoral model to estimate the economy wide effects of MGNREGA has observed that the highest increase in welfare has been observed where MGNREGA transfers were accompanied by increase in agricultural productivity as a result of creation of productive assets.

Therefore the synergies of different assets must be evaluated. Synergies in terms of how the agriculture related works like SWM, livestock related works like cattle urine storage and water related works like de-silting, have improved the soil fertility and how water conservation works and rural drinking water works(soak pits and recharge pits) have affected the aquifer health and how have all such works affected the agricultural productivity and wages could be the moot points of any micro level enquiry.