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## **FACTORS AFFECTING LINKAGE BETWEEN AGRICULTURE NREGS AND AGRICULTURE**

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### **ABSTRACT**

In 2006, India embarked on an ambitious attempt to fight rural poverty. The National Rural Employment Guarantee Act of 2005 created a justifiable right to work for all households in rural India through the National Rural Employment Guarantee Scheme, which was renamed as the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in 2009. Over the last six years, the scheme has delivered the largest employment programme in human history, which is unlike any other in its scale, architecture and thrust. The enactment and implementation of a right-based MGNREGA has undoubtedly marked a paradigm shift from the existing wage employment programmes. The present paper analyzes the progress of MGNREGA. The study is based on secondary data collected from journals, articles, books and internet.

MGNREGA is a right based approach for citizen of India. It gives right to work for livelihood. It has both positive and negative impacts in agriculture. Recently government has announced that NREGA should link with agriculture that is need of hours. It is necessary to regularised NREGA for better and efficient use of it in agriculture. The Government of India is considering to link to link NREGS to agriculture. Due to bright light effects of urban areas, new generation is not interested to work in agriculture as they seems it is labourious and low status job. It indicates labour shortage in agriculture in the future. Mechanization is an alternate of labour but it has some limitations such as high cost of machineries, small landholdings, and high cost of maintenance during offseason. With agriculture becoming a losing proposition because of the escalation in the costs of cultivation and depressed market prices, a number of farmers in Andhra Pradesh have declared a crop holiday this khariff. Therefore, linking NREGS with agriculture may yield fruitful results. Certain factors affect the linking of agriculture with NREGS. These need to be take care before linking the agriculture with MGNREGS. Hence, the present paper aims at highlighting the factors which affect the linking of the MGNREGA with the agriculture. The study is based on the secondary data collected from the books, journals, articles and internet.

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### **Factors affecting linking agriculture with NREGS**

Rural Indian women are extensively involved in agricultural activities. The nature and extent of their involvement differs with the variations in agro-production systems. The mode of female participation in agricultural production varies with the landowning status of farm households. Their roles range from managers to landless labourers. In over all farm production, women's average contribution is estimated at 55% to 66% of the total labour with percentages, much higher in certain regions. In the Indian Himalayas a pair of bullocks works 1064 hours, a man 1212 hours and a woman 3485 hours in a year on a once hectare farm, a figure that illustrates women's significant contribution to agricultural production. But



the participation of the women in MGNREGS is only around 47 per cent. Therefore, there is a need to encourage more number of women to register under NREGS.

The agricultural Census data clearly bear out the fact that Indian agriculture is dominated by small and marginal farms, which are basically subsistence farmers. They provide mainly for self-consumption. However, some of these farmers have to sell their produce immediately after harvest at low prices and buy the same products later at high prices. About 78 percent of operational holdings in the country are marginal and small, having less than 2 hectares. About 13 percent holdings have 2 to 4 hectares and 7.1 per cent have 4 to 10 hectares of land. The relatively large holdings above 10 hectares number only about 1.6 percent of the total operational holdings. However, these 1.6 per cent of the large holdings occupy about 17.3 per cent of the total area, while 78 percent of holdings which are less than 2 hectares, operate only about 32.4 percent of the total area. This speaks of inequality in the distribution of operational holdings. Also there is inequality of income between agricultural and non-agricultural workers, which is evident from the fact that percentage share of agriculture in current total GDP is only 24.2, while the percentage share of agricultural work force to total work force comes to about 60 percent. When, NREGS is linked with the agriculture in respect of the small and marginal farmers, the cost of cultivation will be substantially reduced for these farmers and consequently, this will lead to reducing the income inequalities and reducing the poverty.

The proportion of agricultural labour households owning land is as high as 50 percent in Rajasthan and Madhya Pradesh, 60 in Orissa and Uttar Pradesh and over 70 in Chattisgarh and Jharkhand. The NREG Act was amended in 2008, and the scope of eligible categories of workers on whose land NREGS works can be taken up has been expanded to include small and marginal farmer mall and marginal farmers account for about 80 percent of all landholdings, and operate about 40 percent of all cultivated land, which means of the 142 million hectares of land under cultivation in the country, about 57 million hectares are under sm all and marginal farmers. If at least half of small and marginal farmers participate in the job scheme, the n about 28 million hectares of private lands of the poor peasantry is likely to come under NREGS. Most of these small and marginal farmers rely heavily on wage-employment often due to lack of capacity to in vest and improve their own lands. The NREGS works on these lands, which have been starving for investment, is likely to improve productivity, and enable small and marginal farmers gradually to move towards full time farming. The available evidence



does show that substantial proportion of participants in NREGS do have land.

A study in a few Rajasthan villages showed that 46 percent of participants in the job scheme were from those self-employed in agriculture. In Rajasthan, it transpires, that the proportion of participation of those with some land is much higher than those without land. In fact, the share of those with land participating in NREGS is much higher than the share of the landed in the population of the villages studied. However, the available information also suggests that there is variation in the participation of the landed with the variation in agro-climatic conditions. For instance, a study of five districts with different agro-economic conditions in Tamil Nadu shows that in highly irrigated deltaic region of Thanjavur district, 93 percent of participants in NREGS are landless, whereas in drought-prone Cuddalore district 35 percent have land. And in Thanjavur no one with two acres or more participates in the Scheme, whereas in Cuddalore farmers with four to ten acres also participate. Agro-climatic differences are also reflected in the beneficial effects that NREGS could have on farming community.

As per opinions, the 100 days work of MGNREGA has reduced the total number of days that farmers would usually dedicate to their paddy fields. Though the statistics and margins are not available, it is widely perceived that agricultural produce of Meghalaya has reduced over the years due to the central scheme. The reason being, farmers are getting paid well for comparatively lesser work and the sense of security of getting wages irrespective of the amount of work done. Apparently, most households fail to complete 100 man days work. Also, in most cases, the work progress is very slow wherein some workers do not work at all while some work only for 1-2 hours.

MGNREGA stipulates that works must be targeted towards a set of specific rural development activities such as water conservation and harvesting, afforestation, rural connectivity, flood control and protection such as construction and repair of embankments, digging of new tanks/ponds, percolation tanks and construction of small check dams are also given importance, besides land leveling and tree plantation.

As per the Planning Commission statistics, agriculture employment growth rate of 0.40 per cent during 1993 - 94 to 2004 - 05 and that of rural non - agriculture employment growth rate of 3.52 during the same period indicates that the rural areas did not provide adequate opportunities for the



population. Hence a scheme like MGNREGS has a great potential to fill this gap. When it is linked with the agriculture, man days under the NREGS will be increased.

Many critics feel that MGNREGA is focusing on the employment and not on the production; and the scheme merely redistributes the proceeds of a limited production. The scheme no doubt inflates workforce demand but, without corresponding increase in production of useful asset, leads to inflation. However, land development, desilting, renovation of old ponds or tanks and dug-out farm-ponds are mainly being carried out under MGNREGS to bring the fallow land into cultivation and improve the agriculture productivity.

According to National Sample Survey, agricultural labour households constitute nearly 32.2 percent of the total rural households. The self-employed in agriculture account for 32.7 per cent of the total rural households. In fact, the proportion of agricultural labour households increased from 30.3 per cent in 1993-94 to 32.2 percent in 1999-2000. While that of cultivating (self-employed) households declined from 37.8 percent in 1993-94 to 32.7 per cent in 1999-2000. The proportion of female-headed households increased from 9.7 per cent in 1993-94 to 10.4 percent in 1999-2000. Nearly 62.6 per cent of the rural households belonged to less than Rs. 470 monthly per capita expenditure class. Nearly 4.6 percent rural households reported that none in the family was having any work, 27.7 per cent reported that only one male member was, usually working, while 27.8 households indicated that one male and one female member were usually employed. Of the female households 22.8 percent reported that none of their person was usually employed and 39.6 percent mentioned that only one female member was usually working. The NSSO data further revealed that 7.2 percent of the rural households did not possess any land and 51 percent households possessed less than 0.4 hectare. About 19.1 percent household possessed between 0.41 and 1 hectare and 11.5 percent between 1.01 and 2 hectare. Only 11.2 percent possessed land above 2 hectare. Thus by and large Indian farming is dominated by small and marginal farmers. In fact, the proportion of rural households not possessing any land or which possessed less than 0.4 hectare land was quite high in the states of Bihar, Goa, Maharashtra, Sikkim and Tamilnadu. Also the proportion of agriculture labour households was quite high in some of these states. It was 38 percent in Bihar, 41.7 percent in Maharashtra and Karnataka and 45.2 percent in Tamilnadu. Another important source of data is Census of India (2001), according to which there are nearly 127 million cultivators, 107.5 million



agricultural labourers and 6 million other farm workers engaged in livestock, forestry and plantations. Of the total agricultural labourers, 38.0 per cent were female and 61.9 percent male workers. Also among livestock, forestry and plantation workers, 78.3 percent were male workers and 21.7 percent were female workers. The proportion of these workers, who are registered, under NREGS didn't match. Hence, special efforts should be made to register these workers under NREGS.

With the improvement in irrigation, land development, regeneration of natural resource base and large-scale investment directly into the village economy, the impact of MGNREGA on agricultural productivity needs closer scrutiny. Districts and villages which have performed better in the MGNREGA implementation and used funds efficiently seem to demonstrate a visible growth in agricultural productivity. A study of 640 households in four districts of Rajasthan and Madhya Pradesh by an independent researcher analysed the annual growth rate of agricultural productivity of non-irrigated land in 67 sample villages for 2006–09. In three districts, the average annual growth rate of agricultural productivity was positive and ranged from 1 per cent to 12 per cent across villages. This growth was directly attributed to the water-related works and structures taken up under MGNREGA since the monsoon in the years of reference was below normal. Significantly the growth in these areas was higher than the national average agricultural growth rate of 1.6 per cent for 2008–09. The impact was seen to be higher in places where watershed development works had been executed in the past.

There are also reports that labour shortage is sought to be met by mechanization. Farmers in the Gangetic belt of U.P. are reported to have resorted to mechanized harvesting of the wheat crop in many villages. The use of combined harvesters for paddy harvesting in Puducherry is also attributed to labour shortage resulting from the implementation of the NREGS. Mechanisation of sugarcane harvesting in Maharashtra, and provision of heavy subsidies to harvesting machines beginning with this year are also shown as a consequence of NREGS. In Andhra Pradesh, Tamil Nadu and Karnataka mechanization of paddy transplantation is promoted by providing subsidies on the machines. Even in West Bengal there was resort to mechanization to be at rising labour costs. An interesting report on the significant rise in the tractor market in India in recent years cites shortage of agricultural labour as one of the explanations. There is a danger that these reports could be read as if the NREGS is responsible for mechanization of Indian agriculture. It is a fact that introduction of combined harvesters, sugarcane harvesting machines and paddy transplanters have long preceded



NREGS. Hence, this aspect of mechanization needs to be considered seriously.

The introduction of NREGS increased the demand for labour in rural areas and resulted in an increase in agricultural wages as well. The rise in female agricultural wages, which were at a much lower level, was much steeper than the rate of increase in male wages. Even though India has the second largest man power in the world, all sectors of the economy have been affected by the scarcity of labour, the impact being felt more in the agricultural sector. Labourers constitute a vital input in agricultural production, but they are migrating to different parts of the country for earning a better livelihood, adding to the existing imbalance between labour demand and supply of labourers.

Faced with farm labour shortage following the introduction of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), mega plans for mechanisation in the 12th Five-Year Plan are proposed. With the successful implementation of the MGNREGS and other anti-poverty programmes, there is now pressure on the availability of farm labour. If the MGNREGS was linked to agriculture, then it could be a combination of both machine and human work.

Impact of MGNREGA on rural labour markets is far from straightforward and has several dimensions that need careful consideration. For instance, the programme has increased rural labour participation rates by drawing into the workforce many who were not active workers, and making attractive and convenient work opportunities easily accessible. But it is also argued that the Scheme has created labour shortages by removing a block of labour supply from the residual labour market. People who are already participating in the rural labour market may seek MGNREGA work if wages and employment conditions are better than their current employment.

The impact of MGNREGA on agriculture labour has been the subject of considerable debate among researchers. It is hypothesised that government hiring of unemployed labourers would affect labour supply across peak and lean agricultural seasons directly through its effect on wages and indirectly through its effect on agricultural output. Data suggests that the MGNREGA has had a positive impact on labour force participation in public works or that participation in public works has increased following the implementation of MGNREGA. A study comparing 4 the MGNREGA districts and non-MGNREGA districts, found that the probability of a casual



worker being engaged in public works increased by 2.5 percentage points more in MGNREGA districts compared to non-MGNREGA districts. Another research confirmed the analysis— comparing 2007–08 and 2004–05, it was seen that the fraction of days spent in public works employment increased by 1.2 percentage points during the dry season in the programmes' districts. 6 A large part of this can be attributed to the female labour force participation directly in the Scheme (see Chapter 2). However, it is difficult to suggest that this casual labour in MGNREGA is actually labour from the agriculture sector. The National Sample Survey Organisation (NSSO) data indicates that this decline is also with regard to the agriculture labour force. According to the Survey, the decline in agriculture labour, as a share of total economic activity, at the national level, is since 2004, that is the trend precedes MGNREGA. Some studies, however, have found a change in the composition of the labour force that participates in MGNREGA, implying a more direct impact of the Scheme on the labour market. The results of a longitudinal study of over 1064 rural households<sup>15</sup> from 200 villages of Medak district, Andhra Pradesh over two years, showed that in the initial years, MGNREGA predominantly attracted non- agricultural labour (78 per cent). This was because participation in the programme was concentrated in the dry summer months when agricultural labour work was scarce. Over time, however, the programme was seen to be attracting households that would have participated in agricultural labour (55 per cent). This suggests broader labour market distortions where MGNREGA is not just viewed as an employment assurance during slack agricultural seasons but as an alternative to agricultural labour work

Research claims that the positive effect of the Scheme on agricultural productivity may be offset by a diversion of labour away from the agricultural sector into the Scheme. 32 As pointed out by a study in Kerala, the diversion of labour from rice fields may actually result in a decline in agricultural productivity. To limit distortion of the labour market during agricultural season, and ensure that employment opportunities are additive instead of substitutive, some districts schedule MGNREGA activities during the non-agricultural peak season. The Gram Panchayats (GPs) prepare calendars, based on the advice of the Gram Sabha (GS), 35 that demarcate exclusive times of the year for MGNREGA work and for agricultural work. In the Elapully GP in Kerala a calendar was prepared setting aside six months for MGNREGA and six months for agriculture work. The Dholpur and Rajsamand districts in Rajasthan, scheduled MGNREGA work during the summer when demand for agricultural labour was low such that MGNREGA work was additive and it expanded the labour market. Similar



results were reported from Bikaner (Rajasthan); Idukki and Trivandrum (Kerala); West Sikkim District (Sikkim); and Chittoor (Andhra Pradesh). The solution of limiting MGNREGA work days may also not be optimal in the case the GPs have surplus labour that could not find employment even during the peak agriculture seasons (and MGNREGA absorbs this labour) or in the case of labour (debt- bondage, tied labour, etc.) that prefers the choice of MGNREGA work over work on private farms as pointed in the paragraph under Providing Reservation Wage for Labourers above. When it is linked with the agriculture, separate MGNREGA calendars should be prepared.

As agricultural work cannot be pre-poned or post-poned and all the agricultural work in a season starts at the same time for each farmer. To be able to perform uninterrupted farming, the needy farmer should have assured agricultural labour supply on demand at a subsidised labour cost. In this situation, the MGNREGA labour is the best alternative to overcome labour shortage in agriculture. We have found that labourers don't prefer agricultural work in the fields/farms of the land owners. They either work under MGNREGA or migrate to urban areas. Labourers prefer MGNREGA work because of wage rate, timely payment, relaxation in work and short durations of work. Sometimes, farmers feel helpless and blame government policies. MGNREGA is beneficial for the poor on one side and on the other side it creates problems in agriculture for the large and medium farmers. Thus, government should implement this development schemes in a balanced way. Therefore, MGNREGA labour should be regularised and the Panchayati Raj Institution should be authorised to distribute labour to the needy farmers on demand supply-Demand Gap of Agricultural Labour.

### **Policy implications**

The participation of women in the NREGS is only 47 per cent. As the contribution of the women to the Indian agriculture sector is about 50 per cent. Hence, it is suggested that the rural women should be encouraged to register under the NREGS.

About 78 percent of operational holdings in the country are marginal and small, having less than 2 hectares. Therefore, linking NREGS with agriculture in respect of these farmers only would help to reduce the poverty levels and would solve the problems like shortage of NREGS labour, etc. Further, significant percentage of the workers working under the NREGS are either small or marginal farmers. In sum, MGNREGA be linked with agriculture in respect of small and marginal farmers' landholdings.



When, NREGS is linked with the agriculture in respect of the small and marginal farmers, the cost of cultivation will be substantially reduced for these farmers and consequently, this will lead to reducing the income inequalities and reducing the poverty. The farmers in one area be encouraged to form as the Self-help Groups. The concept of ‘Self-help Groups’ be applied wherein a Group Leader monitors the whole activity of the group. The activity of the group here be carrying of the agricultural activities with the help of the NREGA workers.

Sufficient administrative manpower should be appointed at the Panchayats to look after the proper implementation of the NREGS. The man days required for agriculture be given as additional employment days besides 100 days of guaranteed employment days. When NREGS is linked with the agriculture, separate MGNREGA work calendars should be prepared in consultation with the farmers.

### **Cooperative Farming as Strategies to Overcome Labour Shortage in Agriculture:**

Linking NREGS with agriculture is more feasible under Co-operative Farming because the relationships among the farmers are mutual and they share a good understanding. They can make groups of farmers by themselves in the village. A recent example is the success of self-help groups which are working in the rural areas.

The Co-operative Movement was introduced in India by the Government as a method by which the farmers could overcome their burden of debt and keep themselves away from the clutches of the money-lenders. The Co-operative Credit Societies Act, 1904 was passed by the Government of India and rural credit societies were formed “Cooperative farming usually refers to a cooperative enterprise where a number of farmer-members pool their land, capital, equipment, and labour, and share in the returns on the basis of their labour input”. Co-operative sector in India is world’s largest society. The Cooperative Planning Committee envisaged four types of co-operative farming societies: co-operative better farming, co-operative tenant farming, co-operative joint farming, and co-operative collective farming. In the Co-operative better farming, members retain their individual land holdings but agree to follow a plan of cultivation laid down by the society. Such a society is organized to introduce, improved methods of farming. Farmers join together for meeting some specific common process of cultivation or for joint purchase and distribution of improved seeds,



fertilizers and agricultural implements. It may also undertake the provision of credit, marketing, landdevelopment, irrigation, joint ploughing or joint harvesting, joint use of machinery or joint arrangement for watch and ward. Each member cultivates his own land and takes his profit or bears his loss. Co-operative farming means bringing together all the land resources of the farmers and performing cultivation in an organised and united way. In this system landless labour can include an agreement of share of products or payments or become owners of land by tilling the land. In this system land owners would get share according to the share of landholding and the labour who were working will get the wage. Co-operative farming is mutual and collective work as a society.

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