

Scope of Agriculture Water Management Under Mahatma Gandhi National Rural Employment Guarantee Scheme [MGNREGS] – A Sample Study

- Government of India [G.O. I] in its attempt to provide livelihood security to rural population introduced National Rural Employment Guarantee Scheme in the year 2006 supported by National Rural Employment Guarantee Act, 2005 aiming at providing minimum of 100 days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual work. After receiving the job card the person / persons may apply to Gram Panchayat for employment. Within 15 days of receipt of application the employment must be provided or else the applicant is entitled for unemployment allowance, the financial burden of which is required to be borne by the State Government.
- For the present study four districts have been selected viz. Mandla, Jhabua for assessing the scope of individual irrigation structures and Khandwa and Balaghat for indicating the scope of community irrigation structures to be constructed out of MGNREGS funds.

Assessment of MGNREGS – Individual Household Structures

- For the analysis of individual household structures, sample of 155 households was identified from two development blocks viz. Mandla and Jhabua districts peculiar for predominance of tribal population. The identified blocks for Mandla is Bijadandi and Ghugri while for Jhabua it is Petlwad and Thandla.
- During Kharif, the operated area irrigated to total operated area, before the construction of individual irrigation structure was 12.51 percent which increased to 51.78 percent after the construction of individual irrigation structures.
- Available irrigation facilities had led to significant increase in cropping intensity in sample farms. On an average the cropping intensity increased by about 27 percentage points from 134.20 percent before irrigation to 161.03 percent currently after the availability of irrigation facilities.
- In Kharif season the proportion of area allocated to paddy had gone up by about 9 percentage points while there had been a marginal decline in area cultivated under cotton crop. During Rabi the proportionate area allocated to wheat increased only marginally by less than 2 percent while under gram the area increased substantially by 12 percent.
- Concerning impact over livestock activities the number of milch animals [cow and buffalo] with the sample farmers had increased by 33 percent.
- Regarding raising of ground water level, out of total of 155 households, 55 percent of them said that ground water level had increased while 45 percent households gave a negative reply.
- Regarding income, it was seen during the course of survey that due to availability of irrigation facilities the income from crop production had increased between 36 to 47 percent.
- Regarding utilization of increased income, the additional income earned by farmers was mainly spent on improving household consumption level followed by repairing / building a pucca house. Investing in improving further farm water availability appeared to be the least preferred choice of sample farmers.

Assessment of MGNREGS – Community Structures

- Two districts – Khandwa and Balaghat have been identified. In Khandwa two development blocks viz. Chhegaon and Pandhana have been selected. Seven villages from Chhegaon block and three villages from Pandhana block have been taken – up for detailed study. Similarly in Balaghat two development blocks viz. Beihar and Paraswada have been taken – up. Seven villages from Beihar and eight villages from Paraswada have been identified. Thus in all 25 villages have been selected for detailed analysis.
- In all the sample villages there is preponderance of marginal, small and semi medium holdings which vouchsafe the fact of spending on construction of community water harvesting structures from MGNREGS funds.

- Out of total of 25 sample beneficiaries / groups, 23 such units [92 percent to total] indicated about enhancement in irrigated area which increased to an average of 48 hectares for all the 25 sample villages covered under districts Khandwa and Balaghat.
- Regarding crop intensity, 22 sample beneficiaries / groups [88 percent to total] intimated about enhancement of crop intensity while only 3 beneficiaries / groups reacted in a negative way.
- In sample villages only 12 beneficiaries / groups [48.0 percent to total] confirmed about the change in cropping pattern while remaining 13 sample beneficiaries / groups [52.0 percent] denied any change in cropping pattern.
- Regarding increase in on farm and off farm employment, 21 beneficiaries / groups [84 percent to total] gave positive reply while only 4 such groups [16.0 percent] denied enhancement in employment.
- Concerning diversification of farming activities towards livestock rearing, fisheries etc. only 5 number of beneficiaries / groups [20 percent to total] assented for such diversification while 80 percent beneficiaries / groups denied any kind of diversification from farming activities.
- Before water availability the migration from all the sample villages used to be 72.4 percent to total population during slack agriculture season which substantially decreased to 27.6 percent after the availability of irrigation facilities.

Way Forward – Individual Structures

- Regarding identification of beneficiaries, there is general complaint about their unilateral selection mostly by grass – root level officials of Revenue or Rural Development Department. At times such selections are biased. It is, therefore, suggested that list of beneficiaries must be finalized by the Gram Sabha in their regular meetings. The General Administration Committee of Gram Panchayat must take responsibility of getting the list prepared in proper manner.
- Most of the prospective beneficiaries are not aware of the value of such structures, their longevity, water carrying capacity etc. It is, therefore suggested that proper awareness camps must be arranged, electronic and print media must be widely used for highlighting the value of such water harvesting structures.

Way Forward – Community Structures

- At places the community water harvesting structures could not be used because of absence of pump sets with the cultivators that hindered possibility of lifting water. Normally marginal or small farmers have such problems for whom such community structures are made. The solution lies in arrangement of institutional finance for purchase of pump sets. However, from other schemes the pump sets may be given to poor farmers free of cost for which some kind of convergence between MGNREGS and other schemes is required.
- It has been felt necessary during the course of survey that there should be continuous water management effort for equitable distribution of water from community structures. Gram Panchayats should assume this responsibility through their respective General Administration Committees.
- During the course of survey, it was observed that crop diversification particularly towards horticulture crops could not take place because cultivators were not conversant with the new crop nor they want to deviate from the traditional crops about which their knowledge is substantial. However, for crop diversification the Agriculture Department must participate in a big way to provide training about growing of new crops.