

Foreword

The importance of concurrent evaluation of any development programme cannot be over emphasized. In the quest for making implementation of rural development programmes result oriented, the Ministry of Rural Development have been emphasizing on evaluating the impact of the schemes at the grass root level. Besides providing the much needed policy support to the ongoing programmes, the insights of such studies are of immense help for better formulation of development programmes attempting to achieve the gigantic task of reducing rural poverty significantly.

It is in this background that the Ministry of Rural Development decided to conduct concurrent evaluation of the Million Wells Scheme (MWS) which was considered to be very popular. MWS was introduced as a sub-scheme of the Jowahar Rozagar Yojana (JRY) in 1988-89 to create gainful employment, apart from providing wells for irrigation to small and marginal farmers belonging to SCs /STs. From 1995-96, MWS was being implemented as an independent scheme till 31st March 1999. The scheme has been subsumed under the new self employment programme, namely the Swarnjayanti Gram Swarozagar Yojana (SGSY) with effect from 1.4.1999.

The main objectives of the Concurrent Evaluation Study taken up for the first time during 1998-99, inter-alia, included :

- a) Assessment of implementation and policy environment of the programme.
- b) Assessment of the selection and the impact on the socio economic development of the beneficiaries / households.

An Expert Group under the chairmanship of Prof. Suresh Tendulkar of Delhi School of Economics tendered technical advice for finalizing the schedules developed by the Monitoring Division of the Ministry. The field survey for the study was conducted by forty five independent professional Agencies and `covered all the States and UTs where this scheme was being implemented.

The State level Reports have already been published for all the 24 States. The survey could not be taken up in the State of Punjab due to not implementation of MWS. The Union Territory of Pondicherry was excluded from the survey as the number of beneficiaries was very few there. This all India Report is based on the State Reports and also the analysis of data in respect of 24 States and three UTs, covering 33092 individual beneficiaries and 11681 group beneficiaries.

I hope that the conclusions and recommendations of the present Study would be very useful for planners, policy makers, Programme Administrators, People's representatives, Social Scientist, Researchers, Academicians and all other concerned with the Rural Development Programmes. I would like to place on record by appreciation of the efforts put in by the CMDR for bringing out the All India Report under the able supervision of Professor P. R. Panchamukhi. I equally appreciate the efforts of the officers in the Monitoring Division of the Ministry of Rural Development, particularly Shri C. R. K. Naik, Director, Shri Atul Kumar Gupta, Deputy Director and Shri, R. P. Rathi, Assistant Director in guiding and extending all support to the field Agencies for conducting the survey work.

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Chapter I

EXECUTIVE SUMMARY

(Areas of concern and Positive Points)

The Concurrent Evaluation of Million Wells Scheme (MWS) has been carried out for the first time in Goa in 1998-99 after ten years of its implementation in the State i.e. 1988-89. This Evaluation Study is sponsored by the Ministry of Rural Areas and Employment, Government of India. The main objectives of the study are; to assess the process of implementation of the scheme, the political and administrative set up under which the scheme is operated and the impact of the scheme on the beneficiary households. The Concurrent Evaluation of MWS has been undertaken in all the States in the country and Goa is one among them.

MWS was introduced as a sub-scheme of JRY in 1988-89. The dual purpose of including it in JRY was to create gainful employment apart from providing open wells for irrigation to small and marginal farmers belonging to scheduled castes and tribes. In Goa there was increase in the number of beneficiaries only when the coverage was extended to non SC/ST beneficiaries in the year 1993-94. The problem in Goa is the limited population of SCs/STs particularly in the rural areas (South Goa) and the proportion of SC/ST cultivators in the rural areas.

The study covered the entire state of Goa covering the two districts, North Goa and South Goa and 8 blocks of the State. A four stage sampling design at District , Block, Village Panchayat and Beneficiary level is adopted for the study. The sampling design and methodology followed in the evaluation of MWS in Goa is in accordance with the design formulated for the country as a whole by the sponsoring agency i.e., the Ministry of Rural Areas and Employment, GOI. But the proposed circular systematic sampling procedure in the selection of beneficiaries and, the selection of two blocks per district could not be followed due to limited number of beneficiaries in the State. All the beneficiaries whose details were available either in the office of the Rural Development Agency (RDA) or the blocks were covered in the study. Hence, the number of blocks

covered was more than two in each district. And the total number of beneficiary households surveyed was 147 with a shortage of 53 in South Goa as per the sampling frame.

The survey results show that the scheme has helped the farmers who have taken MWS assistance. **Since there is scope for extending the coverage of the programme in the State, the scheme should continue to be implemented no matter whatever is the name of the new programme.** Some of the favourable points that have helped in the progress of the scheme as noticed from our study, are briefly presented below. :

A. Positive Points:

1. Once the work is sanctioned there is no delay in disbursement of the 1st installment of the sanctioned amount, particularly the payment towards the purchase of materials to suppliers. Both in North Goa and South Goa the average time lag in disbursement of sanctioned amount is less than a week.
2. In both the districts more than 85% of the wells were constructed under the supervision of the beneficiaries.
3. All the wells, except one in North Goa have been constructed in the holdings of the beneficiary.
4. In North Goa 86% of the wells have water availability throughout the year though in South Goa only 50% of the wells have water availability during the year.
5. Average land under irrigation has increased by 0.18 hectares in North Goa and 0.11 hectares in South Goa after introduction of MWS. For the State as a whole land under irrigation has increased by 26%.
6. If we consider income also the impact seems to be encouraging. There is improvement in the income of nearly 69% beneficiary families in the State. In North Goa the income of 72% beneficiary families has increased while there is increase in the income of 62% families in South Goa. In North Goa 61% of the

- families earned more than Rs.2000/- and in South Goa 38% of the families earned more than Rs.2000/- in terms of increased value of crop production.
7. Per acre yield of rice which is the main crop, increased by 1.5 qtl in North Goa and 1 qtl. in South Goa.
 8. MWS has helped farmers to take up other crops like sugarcane and raise plantation crops.
 9. Expenditure on maintenance of wells in both the districts is zero.
 10. Beneficiaries have expressed happiness over the introduction of the scheme. Even if they have received half of the construction amount they are satisfied because the burden of construction is reduced to such an extent. Moreover, farmers need not have to repay the assistance and they are getting the assistance without any efforts viz. visiting the offices several times for sanction, submission of bills etc. All the work is done by Sarpanch.
 11. Investigators have opined that all (99.3%) the beneficiaries in the State except one in South Goa have been selected as per the guidelines of the Ministry.

A. Areas of Concern:

The success of the scheme may be said to be nearly 60% in Goa. There are certain factors that have come in the way of progress of the scheme and need to be corrected. Major areas of concern that need attention are pointed below.

1. The progress/ success of a scheme would depend on the lessons that are learnt from the experiences of the past. But in Goa we do not get the earlier details of the implementation of the scheme viz, the list of beneficiaries so far assisted, total amount given to each beneficiary, the number of wells incomplete, reasons for noncompletion, number of failed wells etc. There is no proper explanation for the lack of coverage of the scheme in South Goa district.
2. Measures do not seem to have been taken by RDA, Block Development Office (BDO) and Village Panchayats (VPs) to initiate farmers to take the benefit of MWS for increasing irrigation capacity. RDA Officials say that farmers are not coming forward to take assistance. But there is no evidence of

the effort made by any of these agencies to find out the reasons for such a lack of interest on the part of small and marginal farmers.

3. As far as the selection process is concerned, all the beneficiaries (100%) have said that they are selected by VP. But it is more of an one man show by the Sarpanch in VP. All these years i.e., upto 1999, the gramsabhas and Panchayat meetings were not regularly held.
4. In the sanctioning, monitoring and implementation, though three agencies are involved, there is prominence of two persons viz, the Sarpanch and Engineer. Sarpanch brings the proposals to RDA (now to BDO). Engineer of RDA (now of BDO) inspects site and certifies and then RDA sanctions the work. Well is constructed under the supervision of Sarpanch. Completion of the well is certified by Engineer and final payment is sanctioned by RDA. With mainly two persons involved in the scheme there would be scope for corruption. Beneficiaries may not pay any amount as bribe directly. But, the public money may be misutilised by submitting false labour payment bills. Proper co-ordination of RDA, BDO and VP and the involvement of Gram Sabha which was lacking all these years is very much essential.
5. As per the statements made by the beneficiaries on their annual income, only 10% of the families are above poverty line. But if we calculate the crop production and crop income it is found that nearly 50% of the families have an annual income above Rs.11000. It appears that even those who are above poverty line are assisted under MWS. Beneficiaries have understated their family income. It is necessary to check that only those families which are listed under Below Poverty Line (BPL) are assisted under MWS. Selection of beneficiaries needs to be done on proper guidelines.
6. On an average, only 55% (first installment-49%+lumpsum -16%) of the beneficiaries have received either some part or the entire part of the total amount. And of those who have received first installment (i.e. nearly 49% both the districts) all have not received the subsequent installments.
7. With regard to sanctioning of the work it is found that, though the first installment amount is sanctioned within one week of the sanctioning of the

work, there is too much delay in sanctioning the work itself. After inspection of site and after passing from BDO the work is sanctioned. There is no time frame for sanctioning of the work. In South Goa majority of cases have been sanctioned with 1 to 3 months and in North Goa 40% have been sanctioned within one month. But 34% have been sanctioned after a long period of 6 months.

8. For 26% of the families, there is no change in the income even after implementation of MWS. For some, income even decreased. The reduction in the crop income is for 5% of the beneficiary families in the State. The impact has been lower in South Goa. We can say that totally for 31% of the families the increase in the income is zero or negative.
9. More than 80% of the beneficiaries have opined that the amount sanctioned per well is not sufficient.
10. While in South Goa, the average expenditure on well is Rs.28000, in North Goa it is Rs. 40000 (32% higher). It is necessary to find out the reasons for these differences.
11. The internal administration of RDA which is the main agencies to implement centrally sponsored schemes is not encouraging. Inefficiency is felt in appointment of staff, flow of resources and monitoring of the agency.

We may conclude to say that MWS has benefited the small and marginal farmers in the state. But we cannot say whether they have taken the maximum benefit from the scheme because many beneficiaries have said that there is still scope for increasing the irrigation capacity in their fields. It is felt that the state has not made efficient use of central assistance under MWS. Our study also showed that farmers are not fully aware of the details of the scheme. This has given rise to the risk of corruption and misutilisation of funds allocated to the schemes. All the blocks and needy farmers have not been covered under the scheme. Wells are constructed by Sarpanchs who is the main contractor. His involvement is more like an individual contractor than a village or Panchayat representative. There is need for a proper planning and allocation of resources

and more so the monitoring of the implementation.

Financial assistance to farmers for open wells in Goa must be continued as it will not only help farmers to increase their earnings but also contributes to the stock of food and other agricultural products in the state through increased irrigation capacity.

From the evaluation study it is felt that there is need for district planning with regard to implementation of different rural development programmes. Necessary steps should be taken to : i) Co-ordinate RDA, BDO and Village Panchayats ii) Identify potential beneficiaries through enrolment or village survey. iii) Allocate block-wise works based on number of potential beneficiaries and, iv) Select beneficiaries from the identified list through Gram sabha. The present first come first served method and sanctioning on request from MLAs and ministers is a biased method and will not benefit the poorest.

On the whole, MWS seems to have generated mixed effects on the economic conditions of the farmers. It is true that while majority of the farmers appear to have realized advantages from the scheme, there are many areas where much needs to be desired. With improvements in respect of release of funds, identification of location of wells and close monitoring of the utilization of wells by the needy and deserving, MWS may prove to be a social welfare innovation with tremendous economic implications.

Chapter II

INTRODUCTION

Million Wells Scheme (MWS) was introduced in the country in the year 1988-89 as a sub scheme of National Rural Employment Programme (NREP) and Rural Landless Employment Programme (RLEGP). In the same year when, NREP and RLEGP were merged and Jawahar Rojgar Yojana(JRY) was launched, MWS continued to be implemented as a sub scheme of JRY. From January ,1996, MWS was made an independent scheme. But with the introduction of Swarna Jayanti Swa Rojgar Yojana (SJSRY) in April,1999 MWS along with other four schemes have been merged into a single programme.

The main objective of the MWS scheme was to provide open irrigation wells free of cost in the fields of small and marginal farmers belonging to SCs/STs and freed bonded labourers. The coverage was extended to non SC/ST poor, small and marginal farmers in the year 1993-94 to a limited extent of 33%. MWS funds were allocated among the districts by the State Governments on the basis of the extent of un-irrigated land with potential for well irrigation and improvements of land held by the rural poor. The allocation was shared by the State and Central Governments in the ratio of 20:80. The allocation to the states from the Centre was based on the proportion of rural poor in the State to the rural poor in the country. This scheme was implemented by Zilla Panchayats and District Rural Development Agencies(DRDAs) in some of the states.

2.1 Status of Irrigation in Goa:

Though Goa is endowed with adequate water resources estimated at 8570 Million Cubic Metres (MCM), with the topographical/ geographical and other constraints, the level of utilization of surface water resources (as per 1991 census) was expected to be only 1125 M.C.M. The use for domestic and industrial purpose was 80 M.C.M and 100 M.C.M respectively. In addition 16 M.C.M ground water resources were available. As per the State Irrigation Department estimates, the potential of irrigation schemes is

expected to be 89660 hectares in the State. Before liberation there was no prime effort to make use of the available water resources. There were only 2 minor irrigation schemes in the state. By 1991 Anjunem Irrigation Project, Salaulim Irrigation Project and Tillari Irrigation Project were taken up. Later Mandovi Irrigation Project was also taken up. As per 1991 census, investigation for projects namely Uguem, Siridao and Khandepar and Kushawati were carried out with capacity of irrigating 17355 hectares.

In North Goa, 100% of the rural population is served by drinking water. 64% of the villages have protected water supply i.e. tap water. In Sattari only 39% of the villages have tap water. Proportion of the cultivated area to total area works out to be 50% for the North Goa district. The proportion of irrigation area to total cultivated area was only 6%. In Ponda it was highest with 13% and in Tiswadi and Sattari it was the lowest with 2% and 3% respectively.

In South Goa, 100% of the rural population is served by drinking water. As per 1991 census, 69% of the villages had tap water. In Sanguem 49% had supply of tap water. The proportion of cultivated area to total area worked out to be 37% and the proportion of irrigation area to total was only 4% in the district. In Salcete – Mormugao it was 8% while in Canacona and Quepem it was 1% and 3% respectively.

In Goa census data on different sources of irrigation is not available. Land use data are very old and based on survey results of 1977 almost more than 20 years old and therefore may not depict the present position. The 1991 census hand book presents the above figures which should be taken for vague reference only.

Since in Goa it could be difficult to implement canal irrigation due to hilly terrain, small holdings can be irrigated with the construction of wells in the agricultural holdings of small and marginal farmers.

There are other schemes apart from MWS to assist the poor farmers for irrigation purposes in the State. Under Department of Horticulture Scheme, Small and Marginal farmers will be given 50% assistance to create an irrigation facility suitable to their land

holding size. A subsidy of 5,000-10,000 is given and farmers are insisted to grow horticulture crops. For Minor Irrigation under IRDP Scheme also financial assistance is given to construct new dug wells and installation of pumps for irrigation purpose. A subsidy of Rs.15,000/- per hectare is also given for installation of Drip Irrigation under centrally sponsored scheme. Apart from this the SC's / ST's and backward class people can get financial assistance for economically viable schemes from the Goa State SC & Backward Classes Finance and Development Corporation Limited.

2.2 MWS in GOA:

MWS has been in operation in Goa since 1988-89. As there are no ST farmers and freed bonded labourers in Goa, the wells are constructed only in the land belonging to SC and Non SC including OBC small farmers coming below poverty line. The wages paid to the labourers were as per the rates approved by the Government. All the cases so far assisted under MWS in Goa are for well construction only. There is no construction of check dams and land improvement works undertaken under MWS. MWS is implemented in 9 blocks in the state.

The Rural Development Agency (RDA) is responsible for implementation of MWS Programme in the State. RDA which is registered as an Agency under Societies Registration Act, 1960 extended its programme to all the eleven blocks in 1980 under the present name RDA. It is an autonomous body. Chief secretary to Government of Goa is the Chairman of RDA. Some of the Prominent posts like Project Director, Accounts Officer, Junior Engineers etc. are filled on deputation by the State Government. Other employees of the agency are temporary staff. The payment of salaries of all the deputed staff and other staff is made by RDA. Provision is made for adjusting the salary payment under the administrative expenditure under different rural development programmes.

District Rural Development Agencies (DRDAs) came into existence in 80's as registered societies to provide an organisational structure to implement various rural development schemes sponsored by the Centre. It is reported that Panchayat

representatives all over the country are demanding the transfer of DRDAs to Zilla Parishads. In Goa also with the proposed new Panchayat Raj set up, it is expected that RDA will be handed over to Panchayat. These agencies do not have their own resources and the main staff consists of deputed persons. Their role in implementation and monitoring of rural development programmes is limited.

Table – 2.1
Construction of Wells for farmers under “Million Wells Scheme” in Goa

Year	No. of Projects	Taluks covered	Group	Expenditure: Rs. in Lakhs			Mandays
				Labour	Material	Total	Created
1988-89	13	6	S.C/S.Ts	0.47	0.33	0.80	0.03
1989-90	7	3	S.C	0.44	0.34	0.78	0.033
1994-95	30	5	Non SC/OBC	2.22	1.25	3.47	0.08
1995-96	28	4	Non SC/OBC	3.51	8.72	12.23	0.14
1996-97	34	6	Non SC/OBC	5.36	3.89	9.25	0.21
1997-98	16	8	Non SC/OBC	2.88	4.00	6.88	0.072
1998-99	52	9	Non SC/OBC	10.44	2.88	13.32	0.329

Source: Annual Reports, Rural Development Agency, Panaji, Goa.

Since SC/ST Population in the state is only 1.76% and 0.03% respectively the assistance is being extended to non-SC/ST poor. Only during the initial years of 1988-89 and 1989-90 SC/ST Poor were assisted. The assistance for Non-SC & OBC has crossed the extended limit of 33%, which was the maximum limit allotted for non-SCs/STs. Though the 1991 census record shows ST population to be 376 in Goa, we do not find even a single ST MWS beneficiary after 1993-94. This could be because Goa has many of these people who are mainly migrants and are not cultivators as they do not have any land. They are usually the casual or agricultural labourers from the neighboring States who have come in search of work to Goa.

The RDA Annual reports for the period 1990-91 to 1993-94 do not give any

details about the MWS for those particular four years. There was no proper explanation from any of the officers or the Junior Assistants of the RDA for not giving any details about the Scheme in the annual reports during this period. The possible reasons could be; (i) there may not be any funds coming for the scheme in the particular year (ii) RDA may not have received proposals from beneficiaries or (iii) RDA is not maintaining the records properly. However, we could not get a definite answer for these data gaps.

As per the RDA annual reports during this 10 year period i.e. from 1988-89 to 1998-99, only 180 wells have been constructed under Million Wells Scheme in Goa. 28% of the wells are constructed in Pernem in North Goa wherein, the number of cultivators and the SC population is highest in the State. 23% of the wells are constructed in Sattari and 12% are constructed in Canacona. In Mormugao and Tiswadi there is no implementation of Million Wells Scheme as the records show the number of wells in both these talukas to be zero. The reason could be that the number of cultivators is comparatively lower in Tiswadi (6.8%) and Mormugao (1.6%). In Salcete there are only two MWS wells. In Salcete, though number of cultivators is more, SC population is very less i.e., 1.1% of State population. As Mormugao, Tiswadi and Salcete are called forward blocks with less number of poor, the number of beneficiaries is less.

During the seven years for which the figures are presented in Table 2.1, total number of wells constructed is 180 and the total expenditure shown is Rs.46.73 lakhs i.e., with an average expenditure of Rs.25,960 per well. But if we consider only the initial two years i.e., 1988-89 and 1989-90 the average expenditure on 20 wells is only Rs.7,900/- at current prices. In 1995-96, the average expenditure has been Rs.43,680 which is the highest during the entire period of 10 years from 1988-89 to 1998-99. If we take the total expenditure for the latest year 1998-99, the average expenditure is Rs.25,615. So the expenditure incurred in 1995-96 needs to be checked.

Looking into the table 2.1, considering the total figures for the available years (considering this to be the total for State) we find that of the total expenditure, 54% is spent on labour and the remaining 46% is incurred on material. Totally 89400 mandays

were created with the construction of these wells.

The picture presented below shows the type of wells constructed in Goa. These wells belong to Sacorda village (Panas Sacorda and Madlawada Sacorda). In the first picture the well is constructed without top border and in the second, it can be seen that the beneficiary has arranged for stones to complete the border work.



Figure-1



Figure-2

2.3 Profile of the State:

Goa is a small state with rich natural endowment and cultural heritage. The scenic beauty due to adjoining Western Ghats and Arabian Sea has made it an international Tourist centre. Goa was under portuguese rule for many years and continued to be in the hands of Portuguese even after Independence. In 1961, Goa was liberated and was Union Territory with Daman and Diu. In 1987 Goa was conferred statehood. The state is divided into 2 districts; North Goa and South Goa and, 11 talukas comprising of 13 municipal councils and 188 Village Panchayats. The geographical area of the state is 3702 sq.kms. Inhabited revenue villages in the state are 360.

Goa lies on the Western Coast of India on the coasts of Arabian Sea. To the east lie the Western Ghats and to the South lies Karnataka. On the north lies Maharashtra and river Terekhol runs between the two States. The State has a rich forest cover of more than 1424 sq.km. Total population of the state as per 1991 census is 11.70 lakhs. By 2001 A.D. Goa is expected to support a population of about 1.54 million. Scheduled caste population is 20619 (1.76%) and Scheduled tribe population is only 376 (0.03%) as per

1991 census. As per the 1998-99 RDA Annual Report, present SC population is 24,336 constituting 2.08% of the total population. Goa attracts a large number of migrant workers. Decennial growth rate of population is 16.08. Average household size which was 5.1 in 1981 has reduced to 5 in 1990-91. Percentage of total workers to total population is 35.28 which has been the same since 1987-88.

Total male population in the state is 5.95 lakhs and female population is 5.75. Literacy rate which was 57.25 in 1987-88 has increased to 75.51 in 1997-98. Per capita income of the state which was 6227 in 1996-97 at constant prices, is favourable as compared to all India figures of Rs.2573/- as in 1995-96.

Rice is the main food crop and coconut, cashew, arecanut, sugarcane are the main cash crops grown. Fruits like mango, pineapple and banana are also grown on a large extent. Total cropped area is 1,69,203 hectares (1997-98). Of this irrigated area was 36569 (22%) hectares.

Net state domestic product which was Rs.39,313/- (at constant prices) at the time of attaining state hood (1987-88) rose to 81,284 in 1996-97. There were 5488 small scale industrial units and 113 large and medium industrial units as registered in 1997-98. Iron ore is the main mineral extracted in Goa. 17621 thousand tonnes were produced in 1997-98. All the villages have been electrified in Goa.

Rural population constitutes 59% of the total population. There are 183 Village Panchayats functioning in the State. The Goa Panchayati Raj Act, 1994 to establish two tier Panchayati Raj System in the State with elected bodies at village and district level was enacted keeping in view the provisions of the 73rd Amendment of the Constitution. The village Panchayats of the state have been constituted under the provisions of the new Panchayat Raj Act in the month of January 1997. In addition to RDA, different Welfare Schemes for the weaker sections are implemented by different departments of the Government in Goa.

The Rural Development Agency implements IRDP, TRYSEM (now both are merged under SJSRY), Industries, Trade, Service and Business (ISB), Womens Programs like DWCRA, employment/ welfare programmes like JRY, IAY, Million Wells Scheme, Employment Assurance Scheme, National Programme of Improved Chulhas, National Social Assistance Programme and Balika Samruddhi Yojana. Directorate of Social Welfare implements schemes for the welfare of S.C's, handicapped persons and those severely disabled. The Directorate of Animal husbandry and Veterinary Services provides assistance to scheduled caste families to purchase milch animals and to establish backyard poultry production units. In addition the Goa State Scheduled Castes and Other Backward Classes Finance and Development Corporation Limited, assists the individuals belonging to scheduled castes and other backward classes by way of loans and advances for economically and financially viable schemes and projects.

Supplementary Nutrition to the child and, care and protection to the delinquents, women and girls is provided by Directorate of Women and Child Development. Directorate of Agriculture provides subsidies for bio-gas plants, subsidies under Western Ghats Development Scheme, Horticulture Development, Irrigation and for increasing production of rice, pulses and groundnut. Marginal Fisherman get subsidies for purchase of various implements and also insurance coverage for minimum charges from the Directorate of fisheries, and schemes for the welfare of the aged and destitutes are implemented by Institute of Public Assistance.

The entire process of Planning, execution and implementation of different programmes reveals that Village Panchayats act as per the rules laid down by State Government and guidelines of RDA or different departments of the State Government.

Panchayats in Goa are financially weak and are treated as only implementing agencies to look after different Welfare Programmes. Much improvement is needed in the functioning of Panchayats, their financial position and devolution of power.

2.4 Concurrent Evaluation of MWS:

Since Independence Government of India has been implementing number of Development and Poverty Alleviation Programmes in rural areas. These programmes are executed by the Ministry of Rural Areas and Employment. The Monitoring Division of the Ministry undertakes concurrent evaluation of these programmes to evaluate their implementation and impact with an objective to understand the problems and gaps in the implementation and also the reach of the programme. These studies are undertaken with the help of Research Institutes in the country. The present study is one of the studies sponsored by the Ministry of Rural Areas and Employment to undertake Concurrent Evaluation of IAY and MWS.

Objectives:

The present study on MWS has the following objectives;

- (i) Assessment of implementation and policy environment of the programmes and their impact on the beneficiaries.
- (ii) Assessment of selection procedure of beneficiaries and their socio-economic conditions.

2.5 Study Area:

North Goa and South Goa are the two districts wherein the sample survey of the beneficiaries was carried out for Concurrent Evaluation of MWS. There was no choice of other districts as Goa comprises of only two districts. North Goa consists of 6 talukas viz. Tiswadi, Bardez, Pernem, Bicholim, Sattari and Ponda, while South Goa includes Salcete, Mormugoa, Sanguem, Quepem and Canacona. The total geographical area of North Goa and South Goa are 1736 sq.kms and 1966 sq.kms respectively. There are 220 inhabited villages and 18 towns in North Goa and 140 inhabited villages and 13 towns in South Goa as per the 1991 census. There are 118 Village Panchayats in North Goa and,

65 Village Panchayats in South Goa.

Chapter - III

Findings of the Study

The Concurrent Evaluation of MWS was carried out in 24 States and 3 UTs during the period October, 1998 to April, 1999 by 45 research Institutions spread throughout the country. The study covered 448 districts, 33092 individual beneficiaries and 11681 beneficiaries of 1635 group projects. **In Nagaland, Sikkim and A&N Islands the study covered only group beneficiaries while in Madhya Pradesh, Tripura, Meghalaya, Mizoram, Goa, Gujarat and in Union Territories of Dadra & Nagar Haveli and Lakshadweep beneficiaries of Individual Scheme have been covered.** The analysis presented in the following pages is based on the survey data provided by different Institutes and is partly a consolidation of the findings in the State Reports and, covers only 32715 individual beneficiaries and 10706 group beneficiaries of 1485 group projects due to data gaps* for some of the States

Detailed findings from the study are presented in five parts.

Part - A presents the details of individual beneficiaries and their households, particulars about the assistance and the impact of the scheme on beneficiary households. **Part - B** presents the details of group projects and the beneficiary households of group schemes. In **Part - C**, major observations made by investigators with respect to maintenance of MWS records, availability of information regarding MWS at district, block and village level, status of MWS assets, selection of MWS beneficiaries and the impact of MWS on beneficiary households in terms of improvement in their socio-economic condition are discussed. Specific features of MWS for each State and Union

* *[For Manipur and Maharashtra database shows records of group projects & group beneficiaries. But it was not possible to import tables. Data could not be replaced by hard copies also as the reports do not contain analysis for group schemes. For Karnataka and Tamil Nadu State Reports present group analysis. But, database does not contain details of group household data. For Tamil Nadu, the Nodal agency has confirmed that data is not available. For Karnataka, revised data files are not sent by the nodal agency. With these limitations we had to complete the analysis for group schemes, omitting these four States. For Sikkim, group project (G 1-G 15) details are not presented, as there is no database as confirmed by the Nodal agency]

Territory are presented in **Part - D**. **Part-E**, presents a comparative analysis of individual and group schemes.

All the pie charts represent all India picture. Bar charts are drawn for presenting State wise details. Table I-1 to I-43 are for Individual schemes while tables G-1 to G-33 present details of group projects.

PART - A INDIVIDUAL SCHEMES:

3.A.1 Particulars about the operation of the MWS:

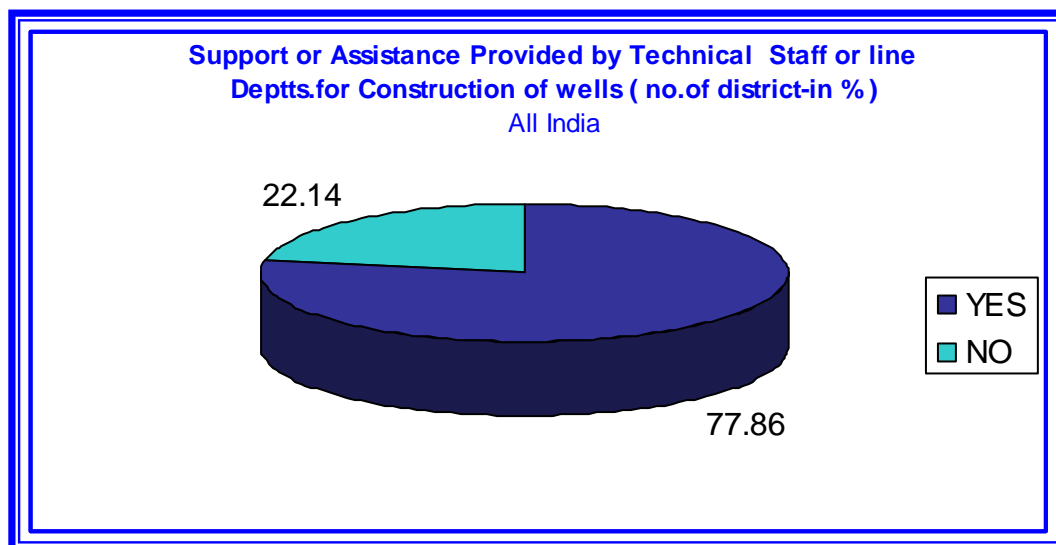
Statistical Tables I-1 to I-8 presented at the end of the Fourth Chapter give State-wise details about the operation of the scheme at the district level, which is discussed below.

(i) **Implementing Agency:** DRDA is the main agency for implementing Rural Development Programmes including MWS in many of the States. With the introduction of 73rd Amendment to Constitution, Zilla Panchayats, Intermediate Panchayats and Village Panchayats are playing a major role in the selection of beneficiaries and in the implementation of the scheme. Panchayats are predominant in Karnataka, Kerala and West Bengal.

Director, Area Development Programmes and Principal Secretary, Rural Development are the Co-ordinating and Supervising Officers and the Department of Rural Development of the respective State Government is the nodal agency for implementing the scheme.

Of the total districts surveyed in the country as shown in Table - I-2, 88 per cent have governing body at the district level. Though district officials have said that there exists governing body, in reality it is observed that this body does not function regularly in many of the States. 68 per cent of the districts hold meetings quarterly and 10 per cent each hold meeting half yearly and yearly. In the remaining districts (11%) meetings are held occasionally or not held at all. As per the Officials' Statement, beneficiaries get support and

technical assistance from line departments for construction of wells, the extent of which is shown in chart presented below.



Source : Table I-3

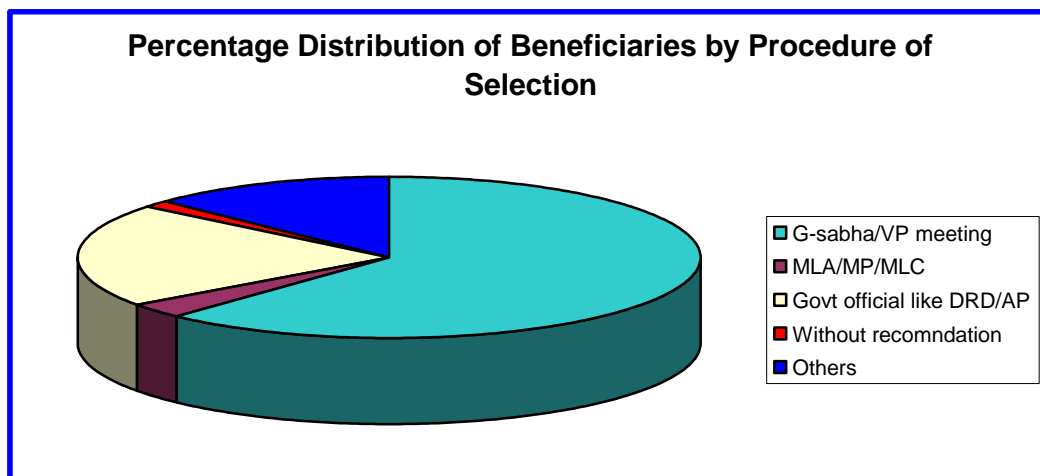
The mode of disbursement of funds (Table I- 4) to the beneficiaries was mainly by cheque / draft (71.57%). In 31 per cent of the districts beneficiaries are paid cash. In Assam, Arunachal Pradesh, Tripura, Meghalaya, Mizoram and West Bengal, assistance given to beneficiaries is mainly in the form of cash. Money order is also one of the routes by which payment is made to beneficiaries. Only one per cent of the districts in the country use this mode, but in Meghalaya nearly 14 per cent of the districts pay by money order. Other modes of payment (9%) include delivery of scheme in kind i.e. construction or land development works by engineers of line department, supply of materials etc.

Average time lag (Table I- 5) in the actual disbursement of sanctioned amount varied from one week to more than 6 months. 31 per cent of the districts made payment within one week and 33 per cent sanctioned the amount within 15 days. While 17% of the districts took one-month time lag, 14 per cent of the districts sanctioned within 3 months. In nearly 5 per cent districts payment was delayed for more than 3 months. Figures in Table I- 6 indicate that generally there is no problem in the receipt of assistance from Centre and State to districts. 80% of the districts surveyed received the instalments of funds from the Centre and State in a timely manner. But many

of the districts in States like Bihar, Meghalaya, Mizoram, Orissa and all the Union Territories have not received the funds in time.

ii. Procedure of Selection / Sanction of the Scheme:

MWS is operated by DRDAs and ZPs through the involvement of the Village Panchayat and the Block Development office. Table I-14 shows that 62 per cent of the beneficiaries in the Country are selected in Gram Sabha or in Village Panchayat meeting. It is encouraging to know that only 3 per cent are selected on the recommendation of politicians (MLAs / MPs and MLCs). **But, politicians do influence selection process in Manipur, J&K and Assam** as more than 10 percent beneficiaries are selected on their recommendation. 21 per cent of the beneficiaries are selected by DRDA and ZP officials. 13 per cent are selected by other means. These beneficiaries might have received assistance as per the target or fixed allotment made to a particular village. The graph shown below presents all India distribution of beneficiaries by procedure of selection.



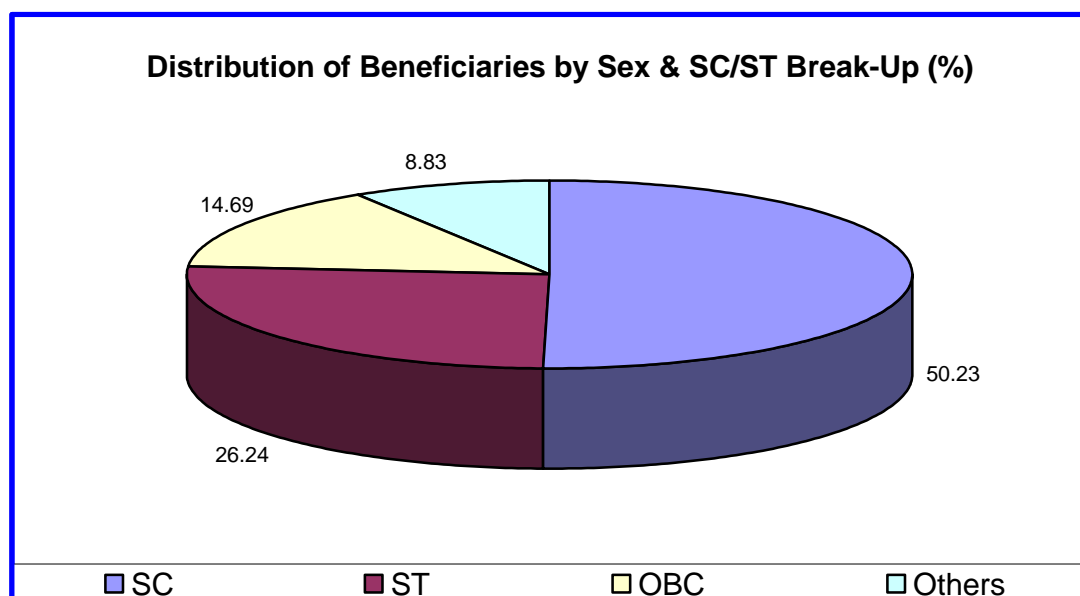
Source: Table I-14

1. Recommended through Gramsabha/V.P.Meeting
2. Recommended through MLA/MP/MLC.
3. Recommended through Govt. Officials like DRDA/ZP.
4. Without Recommendation
9. Others.

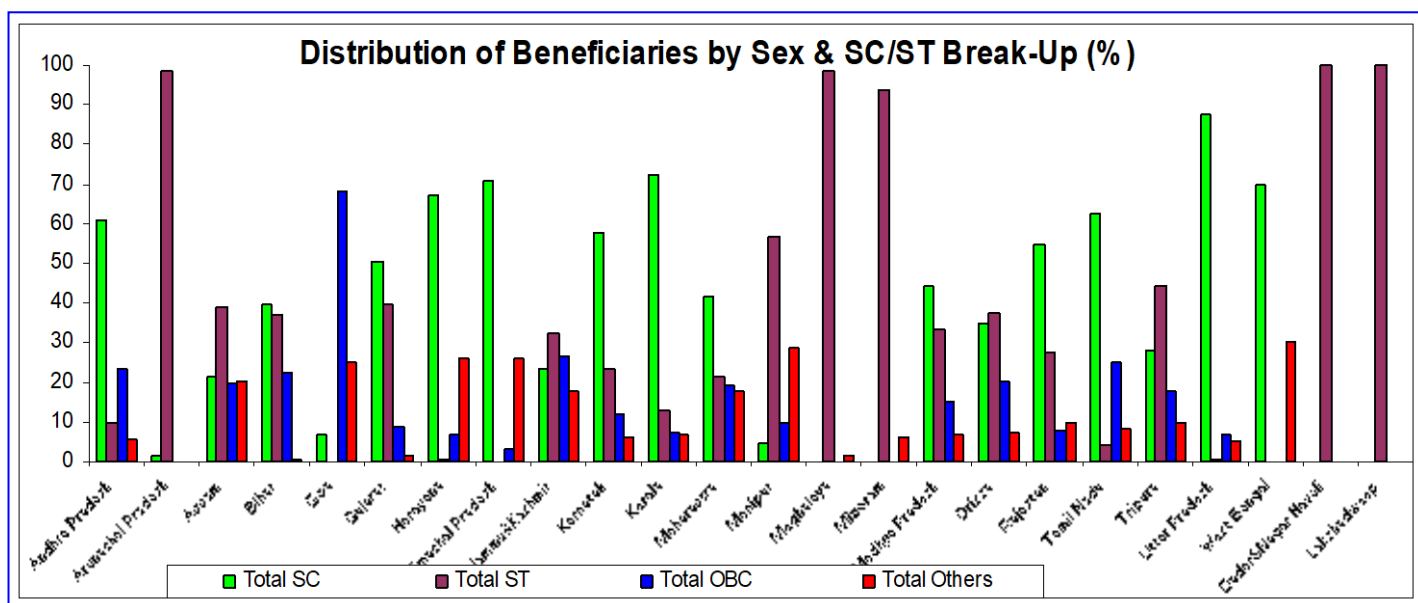
It is a known fact that in many States Gram Sabhas are rarely held. Beneficiaries were selected by village Panchayat Committee or under influence of politicians. But, selection in Gram Sabha has since been made mandatory. DRDA officials and Village Panchayat members said that as per the recent Central Government orders, from April 1999, the resolutions are to be passed only in Gram Sabha and only those proposals which are passed in Gram Sabha have to be sanctioned. And, only those families which are included in BPL list are to be given assistance.

3.A.2 Socio-economic status of the beneficiary households:

As discussed earlier MWS was introduced mainly for the benefit of poor SC/ST agriculture households. We can see from Table I-9 and the related graphs presented below, that 91 percent of the beneficiaries in the country belong to SC/ST and other backward categories. Only 9 percent are from other categories. Only in States like Goa (due to limited SC/ST population), Haryana, Himachal Pradesh, Manipur and West Bengal more than 25 percent of the beneficiaries are from non-SC/ST groups. Except Goa, all the other States listed above have 20 to 36 percent of the population belonging to SCs / STs.



Source: Table I-9



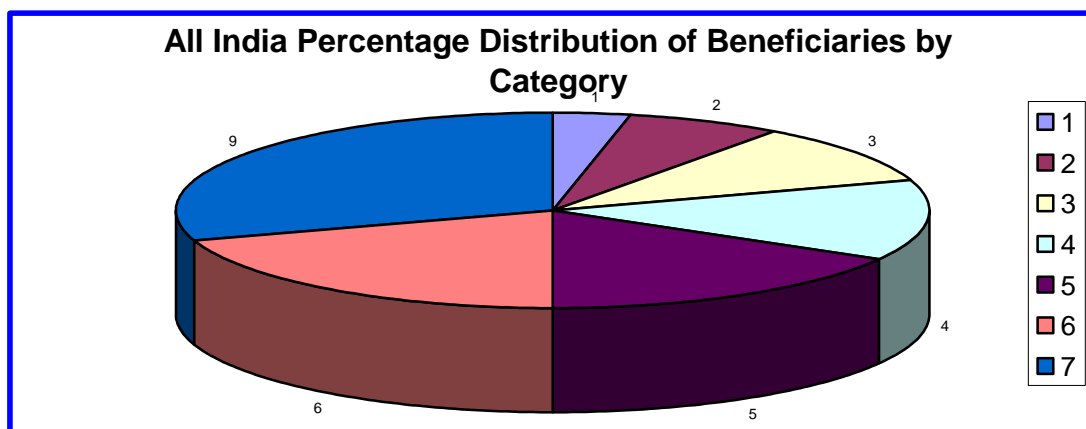
Source: Table I-9

Majority of the MWS beneficiaries in the country are males (90%). This majority is due to the common fact that majority of the land holdings are in the names of male members and it is the male section which takes benefit of government schemes unless the scheme is specific for women. **Only in Lakshadweep 69 percent of the beneficiaries are females. In Kerala (37%) and Meghalaya (46%) also we have fairly a good number of female beneficiaries.**

Out of total 32786 beneficiary households, only 7.73 percent of the households are headed by females (Table I-10).

The objective of MWS is that the poor and those who have suffered due to some incidents like natural calamities or those who are victims of atrocities should get benefit of irrigation through construction of open wells. But, hardly, 6 percent (refer to Table I-11 and graph below) of the families belong to these three categories. Less than one percent of the beneficiaries are freed bonded labourers. Beneficiaries who were bonded labourers are larger in number in Tripura (5%) Manipur (4.38%), Kerala (3.17%) and Andhra Pradesh (1.69%). Majority of the beneficiaries belong to the category of small and

marginal farmers belonging to other SC/ST households living below poverty line.

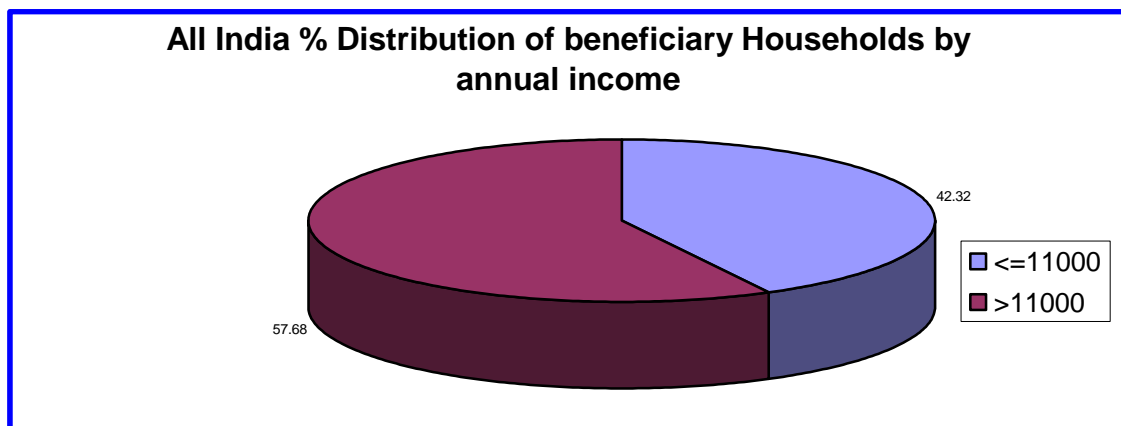


- 1.Freed bonded labourers.
- 2.SC/ST poor,small marginal farmers who are victims of atrocities.
- 3.Poor,small,marginal farmers belonging to SC/ST households below poverty line headed by widows and unmarried women.
- 4.Poor,small marginal farmers belonging to SC/ST households affected by flood,fire,earthquake,cyclone and similar natural calamities
- 5.Poor,small,marginal farmers belonging to other SC/ST households below poverty line.
- 6.Poor,small,marginal farmers belonging to Non-SC/ST households below poverty line.
- 9.Others.

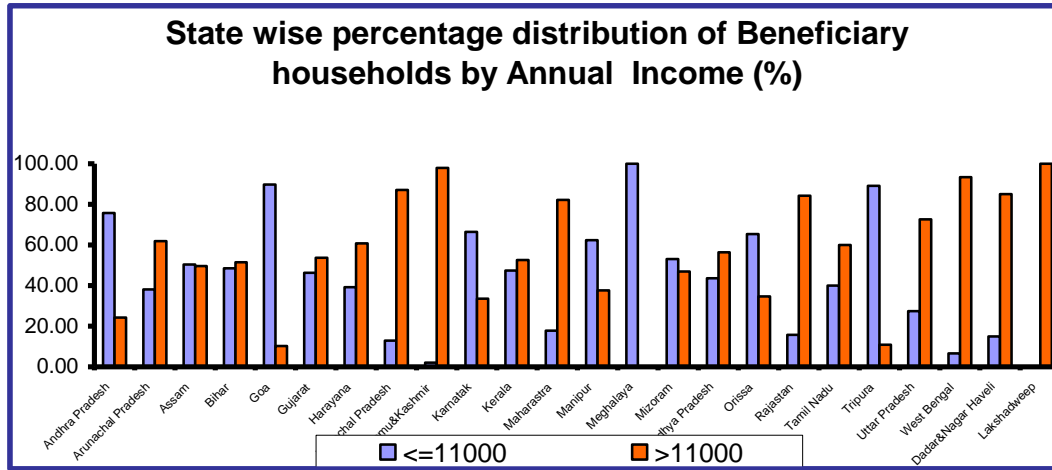
Source: Table I-11

The average size of household in the country is four (4.18%). In Gujarat and Rajasthan the household size is six and in Dadra & Nagar Haveli it is almost seven. The average size of household, which was earlier five for the country, has come down to four. 42 percent of the households (Table I-13) have an annual income of less than Rs 11000/- which is the limit to identify the families below poverty line. **But majority (58%) of the households are not poor if we consider the income limit of Rs 11,000.** On an average, the annual household income for the country, as a whole is Rs 16103. In all the States, except Meghalaya, Goa, and Tripura, average annual income of the households is above Rs. 11000. But, the percentage of poor is very high in Meghalaya (100%), Goa (89.8%), Tripura (89.21%), Orissa (65.38%), Karnataka (66.38%), Manipur (62.34%) and Andhra Pradesh (75.76%). **In Meghalaya all the beneficiary households live in poverty. This indicates that people are very poor in the State and continued assistance is necessary to lift them from**

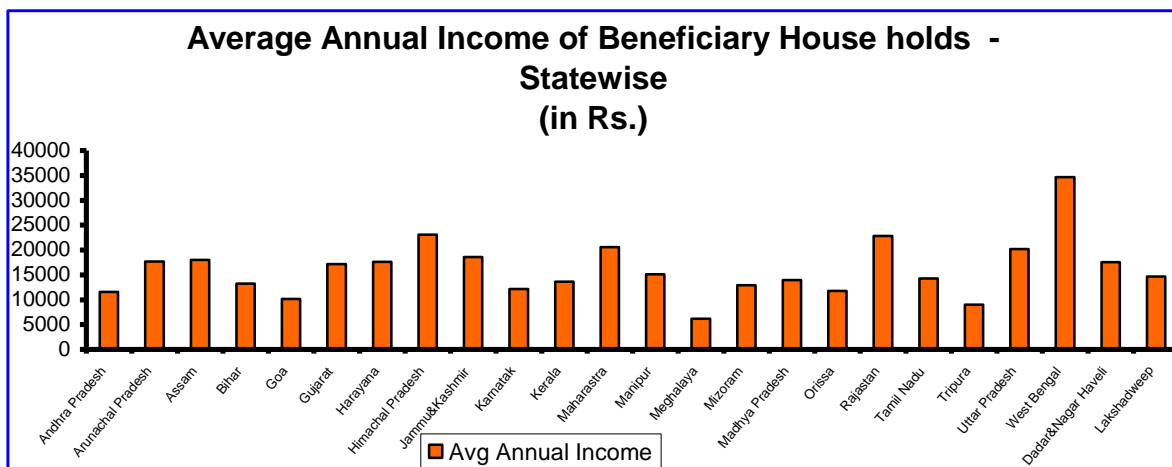
poverty. All the beneficiaries except ten are tribals. For the country as a whole, majority (58%) of the beneficiary households (refer to graphs below) have an annual income above Rs. 11000. Of this 25 per cent families have been earning above Rs. 11000 due to change in crop production after MWS. The average increase in income from crop production shown in Table I - 36 also supports this point. There is average increase in the income in the range of Rs.1000 to Rs.84436 for the households except in Himachal Pradesh and Lakshadweep. Whether the remaining families were above poverty line at the time of getting assistance or whether their income increased due to any other factor is not know as we cannot probe much into this, as the details of the household income data at the time of assistance are not collected from the beneficiaries. But details about crop income do provide some insights about the selection of beneficiary on the basis of poverty. These are discussed in the section on impact of MWS.



Source: Table I-13



Source: Table I-13

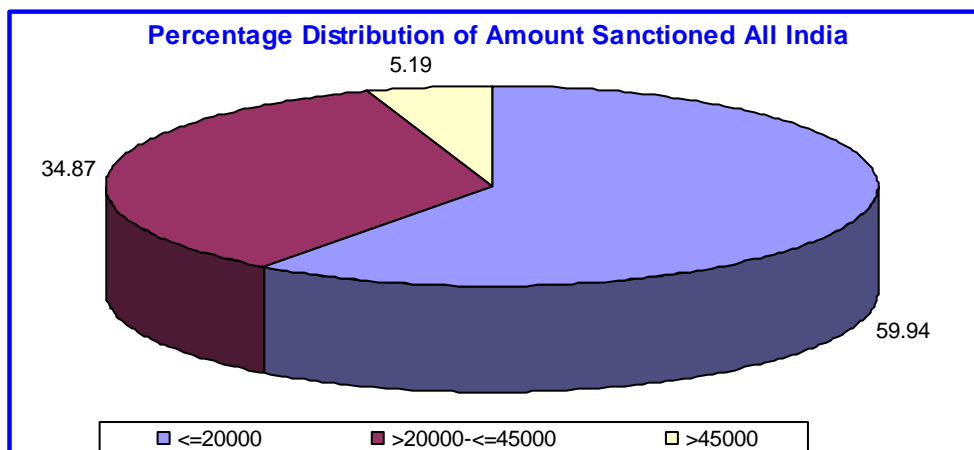


Source: Table I-13

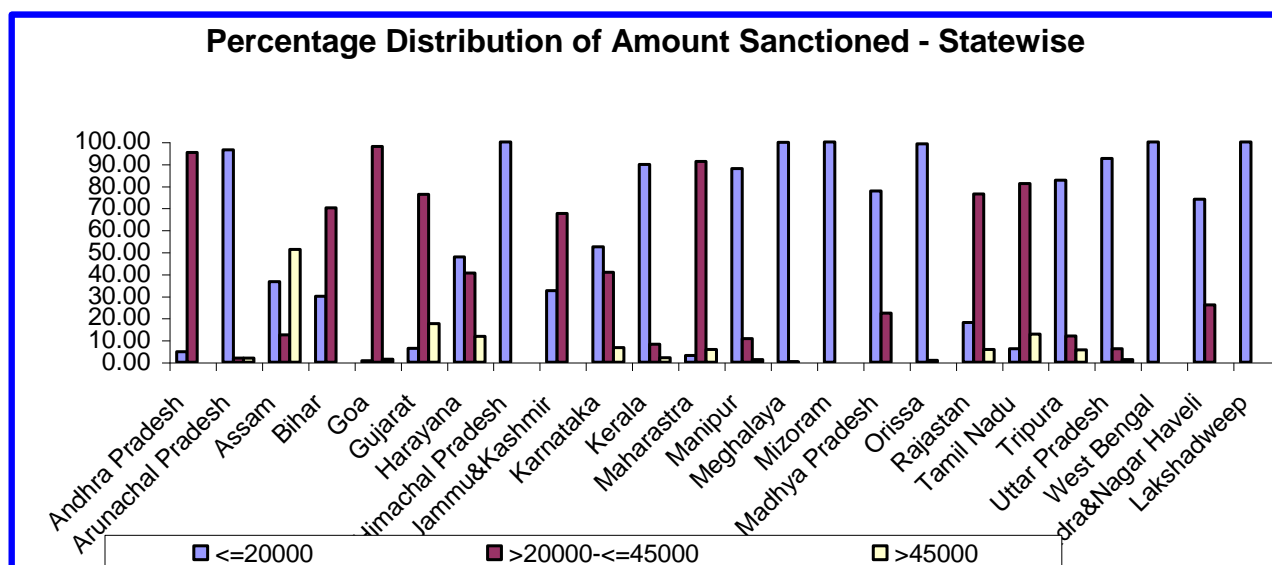
3.A.3 Provision of Assistance:

Majority of the beneficiary families (60%) in the country have received assistance up to Rs.20000/- (Table I-20 and also refer graphs below). 35 percent have received assistance in the range of Rs 20000 to Rs 45000. Generally Rs 31375/- (1998-99) is the maximum limit in normal areas for the MWS assistance. This rate is said to be prevailing since 1994. However, cost norms differ from State to State and in between districts. The officials say that they will not sanction more than the fixed limit and if the actual cost is less than that, they may sanction the amount equivalent to the actual cost. **The data available for different States (not given in Table 20) indicate that for 6197 beneficiaries (nearly 19 percent of the total sample), an assistance of more**

than Rs 32000/ has been sanctioned. The number of beneficiaries who have received more than Rs 32000 is higher in Tamil Nadu, Gujarat, Assam, Rajasthan, Haryana and Maharashtra. Except Assam, none of these States are hilly regions where the fixed amount of assistance to be provided is comparatively higher due to geographical factors. For 580 beneficiaries the amount sanctioned is not given in the database. The figures show zero. 5 percent (totally for the country) have received above Rs 45000. In Assam more than 50 percent beneficiaries have received assistance above Rs 45000. The other States in which more than 10 percent of the beneficiaries have received assistance above Rs 45000/- are Gujarat, Haryana and Tamil Nadu. The graphs presented below show all India and State-wise distribution of assistance for MWS.



Source: Table I-20



Source: Table I-20

The figures shown in Table I-20 do not reveal the actual amount released to beneficiaries. Though the amount is sanctioned, full amount may not be given to the beneficiary if construction is not started, half done or if bills are not submitted.

Generally the sanctioned amount is given in instalments. In States like Assam, Meghalaya, Uttar Pradesh, West Bengal, and Lakshadweep majority of the beneficiaries have received assistance in lump sum. As shown in Table I-22, all the States and UTs have paid in lump sum at least to few beneficiaries. Beneficiary may get lump sum amount if he shows well constructed by him with his own funds or with other's help after knowing that the scheme is sanctioned in his name. Table I-22 shows that 25 percent of the payments are made in lump sum. 23 percent each is made in first and second instalments. 15 percent payments are made in 3rd instalment while, 9 and 4 percent payments are extended even up to 4th and 5th instalments respectively. If we refer to table I-22, we can find that 48% (lump sum + first instalment) payments are given as single payments.

There is no time frame for sanctioning of the work. Since there is a procedure of visiting the site of construction before sanctioning, there may be delay in the sanction. Table I-21 shows that there is delay of one month to

more than 6 months in actual sanction of the work. Only 33 percent of the proposals have been sanctioned within one month. 27 percent have taken up to 3 months. A major point that needs to be considered is that nearly $\frac{1}{4}$ of the cases in the country are sanctioned after 6 months.

3.A.4 Implementation of the scheme and works undertaken in MWS:

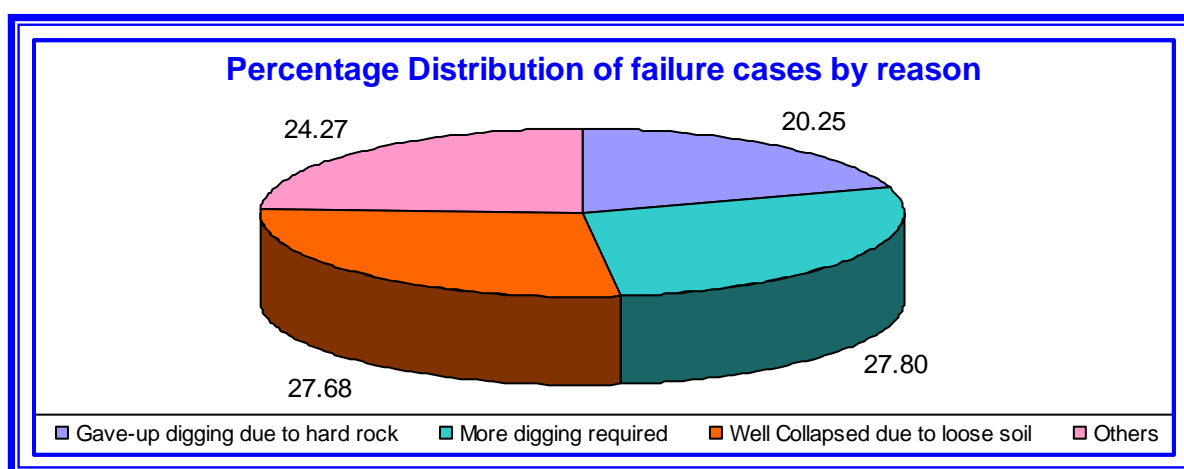
As discussed earlier DRDAs/ZPs are responsible for implementation of MWS in the country. They generally act as mediating agency. Recently, as per the orders of Central Government the selection of the beneficiaries is said to be done by Gram Sabhas and Village Panchayats. As, many rural schemes are being transferred to Panchayat, supervision and execution of the schemes are done by ZP engineers, engineers of agriculture and irrigation departments. These agencies also provide technical help (Table I-3), if needed, to beneficiaries. In 78 percent of the districts surveyed in the country, support and assistance is provided by technical staff of agriculture and engineering departments.

Majority of the districts in the country have reported to have maintained geological map of the coverage of MWS (Table I-8). But the details about the implementation of the scheme area wise i.e., in between talukas and villages covered are not maintained in most of the DRDA /ZP offices. **But, it is note worthy to mention here that the very purpose of maintaining the geological map is not realised by the district officials. These maps are not used in planning and implementation of the programme.**

We should note that MWS is not a popular scheme as IRDP. It was an independent scheme only from 1996. Though there is no repayment of assistance like IRDP, villagers know little about this scheme. Farmers come to know about this programme only if they attend Gram Sabhas or through Village Panchayat Secretaries and Agricultural Assistants. Table I-16 shows that MWS works are sanctioned as per the request of beneficiaries. In actual practice, poor farmers do not request for MWS on their self-judgement. Only

when they are told to apply by the concerned officials or Panchayat members they apply. Group schemes are undertaken in many instances even without the notice of farmers. When the work is started, beneficiaries are told about this and their names are included in the list of beneficiaries. No farmer would oppose the scheme, as he would expect some benefits, which would accrue without much cost on his part.

During the time of survey, it was found by the investigators that 90 percent of the works sanctioned under MWS were in completed stage and used by beneficiaries. Only 6 percent works were under progress. All India failure cases of the total MWS works for the sample beneficiaries during these ten years is 3.5 percent (Table I-17). Rajasthan has almost 14 percent failed projects. Andhra Pradesh (11%), MP (9%) and Gujarat (7%) also have a sizable number of failed works. Wells are grouped as failed category (i) if a dug well has a yield of less than 2 litres per second for continuous working duration of at least 2 hours per 24 hours in Rabi season. (ii) If the quality of water is bad i.e. with electrical conductivity and residual sodium carbonate or boron is of higher value (iii) if during excavation any unidentified sub-surface strata caves in, leading to collapse of side walls to such an extent that re-excavation would be necessary. The pie chart drawn below shows the distribution of failure cases by reasons.



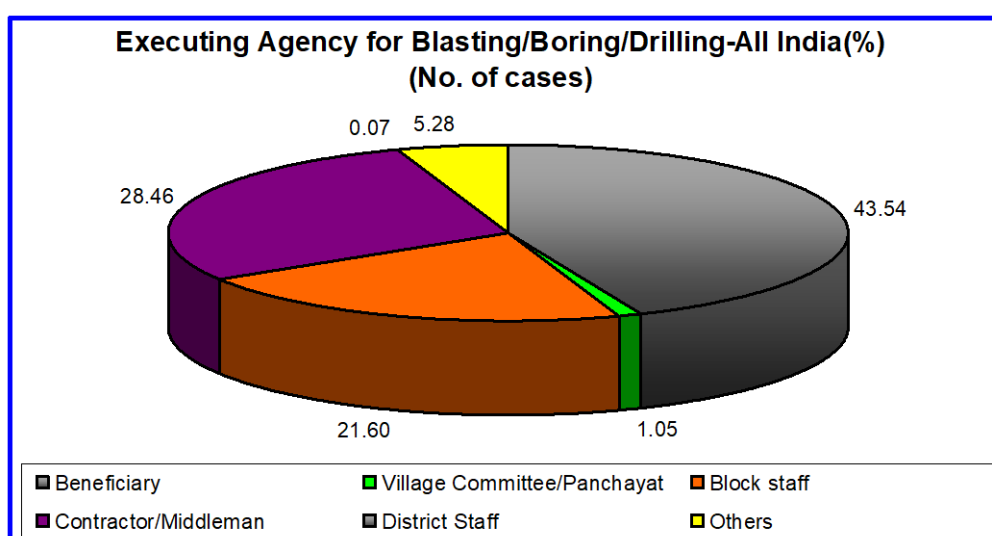
Source: Table I-18

But, if we refer to Table I - 7 which give official data about the impact of MWS, the failure rate is almost 13 percent. The difference could be due to the fact that Table I-17 gives success rate for only wells while Table I-17 includes other works also. In States like Goa, if the wells are complete with sufficient water supply and construction of border walls, the cases are referred to as 'complete' in DRDA files. And usually, if the palates of wells are not constructed they are referred to as 'incomplete'. Farmers stop digging the well when they get sufficient water and do not do the construction work on top. Palates are not constructed if there are rocks. Only if the top part is mud, palates are constructed, and engineers do not certify the well as complete if the opening border of the well is left without any finishing work.

Requirement for more digging, hard rock and collapse of well due to loose soil are the main reasons for failure of wells. **Of the total failed (1754) wells only 16 percent (282) have been certified by the concerned agency as failure and of this for 22 percent cases, 100 percent compensation has been given and 15 percent cases received 50% compensation. Remaining beneficiaries have not received compensation at all.**

Table I-23 shows that on an average completion of MWS work has taken one to more than 6 months. MWS works in Gujarat, Tamil Nadu, Maharashtra, Bihar and Dadra & Nagar Haveli have taken more than six months for completion. All the open wells constructed in Goa, Arunachal Pradesh, Himachal Pradesh, Mizoram and Lakshadweep were dug manually by the labourers. None of the sample wells required blasting, boring and drilling (Table I-24) in these 5 States. But, for 23200 wells, which is 71 percent of total sample of MWS works undertaken for evaluation in the country, one or the other operation of blasting, boring and drilling was required. **While in Table I-3 majority of the district officials have said that technical assistance is provided by line departments, in table I-25, we find that majority i.e. 44 percent of the cases of blasting/boring and drilling are managed by**

beneficiaries themselves. Second major executing agency for technical works is contractors or middleman (28.46%) while block staff executed 22 percent of the cases. We can also see from the Table I-26 that apart from technical work, total construction is managed more by beneficiaries. Block staff (engineers) has executed 14 percent works and contractors have taken up nearly 10 percent of the works. The percentage distribution of beneficiaries by executing agency is shown in the chart below.



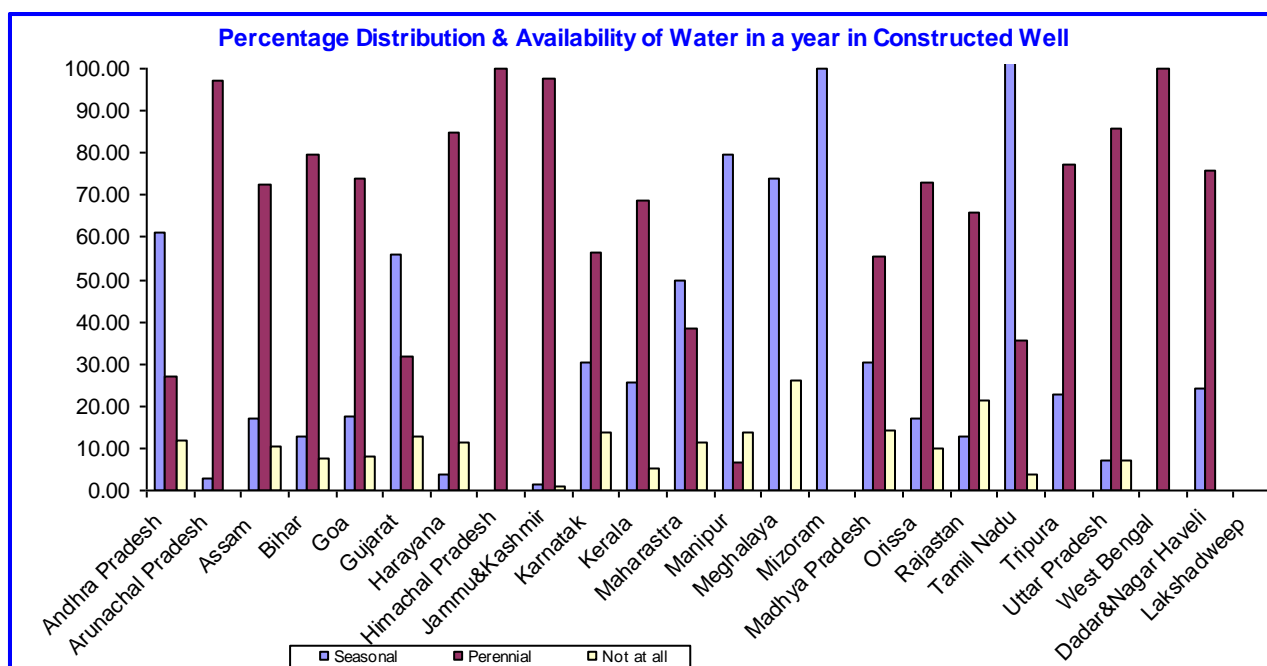
Source: Table I-25

MWS guidelines specify that a dug well should have a minimum diameter of 3 metres and a minimum depth of 10 metres. **But nearly 35 percent of the wells have diameter less than 3 metres.** Even the depth of the constructed wells is less than 10 metres in 48 percent of the total wells constructed. 23 percent wells have depth of more than 20 metres.

As per Table I-29, only 89 percent of the wells/works have been constructed in the holdings of beneficiaries. Some of the wells have been constructed in landowner's holdings. Some works may be in neighbour's land but benefits accrue to the other farmer also. In table I-29 these are shown as others. **Though it is specified in the guidelines of the programme that the**

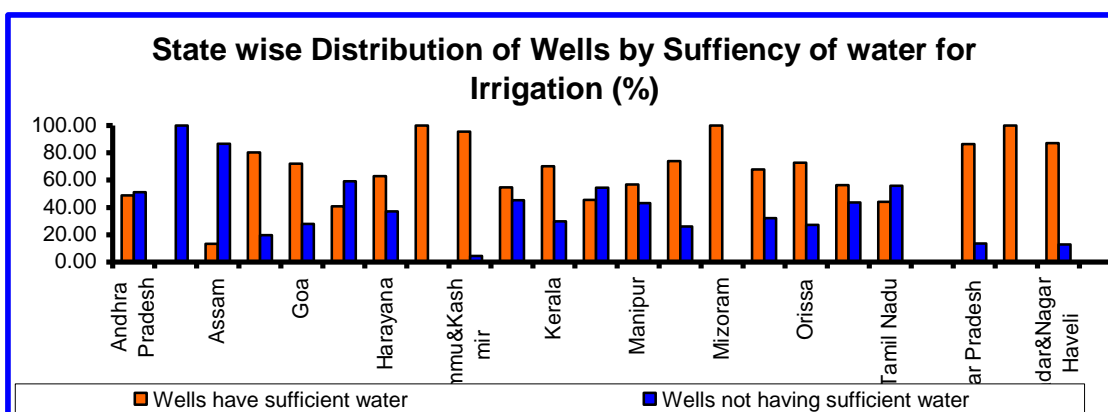
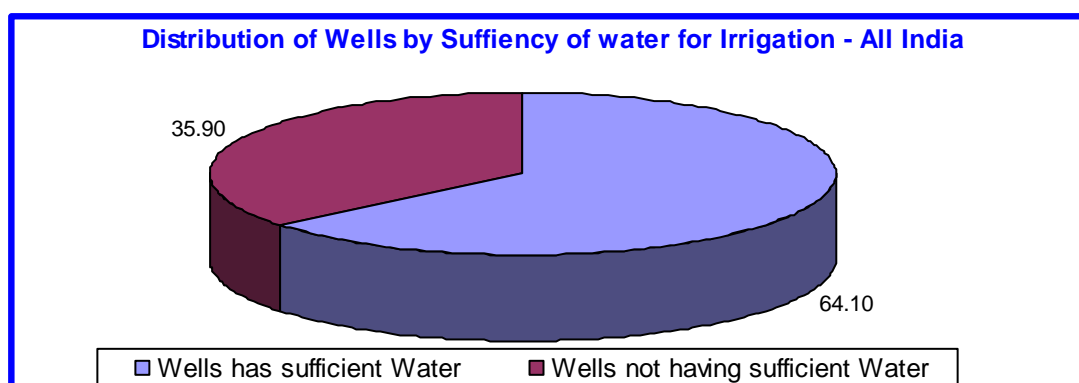
wells should be registered in beneficiary's name, only 68 percent (Table I-30) of the works surveyed in the country have been registered in beneficiary's name. One of the possible reasons for this could be the inclusion of works like land development, water harvesting structures etc which are not really considered as assets by beneficiaries. Only wells are considered to be an important asset.

The percentage distribution of water availability in the constructed wells on an average seems to be good. In 61 percent of the wells, water is available throughout the year. But this is not the situation in all the States. Table I-31 (also refer graph below) shows that the availability of water is very low in States like Mizoram, Meghalaya, Manipur, Maharashtra and Andhra Pradesh. Majority of the wells in Arunachal Pradesh, Haryana, J&K, Orissa, and Tripura, UP, West Bengal, Bihar, Goa, Assam and Dadra & Nagar Haveli have water availability throughout the year. Statewise status of water availability for the number of wells surveyed in the country is shown in the graph below.



Source : Table I-31

Table I-32 presents distribution of wells by sufficiency of water for irrigation. In Table I-31, we can see that majority of the wells in Arunachal Pradesh and Assam have water availability throughout the year. But in Table I-32, the figures reveal that though water availability is perennial, it is not sufficient for irrigation in these two States. Contrast to this, in Meghalaya, where water availability is seasonal, it is sufficient for irrigation purpose. Both availability and sufficiency of water for irrigation are fulfilled for J & K, Bihar, Goa, Orissa, UP, Kerala and Dadra & Nagar Haveli. **Totally, 64 percent of wells in the sample region in the country have sufficient water for irrigation, which is an encouraging and positive factor for the success of MWS.** The graphs shown below present State wise and all India picture of the availability of water.

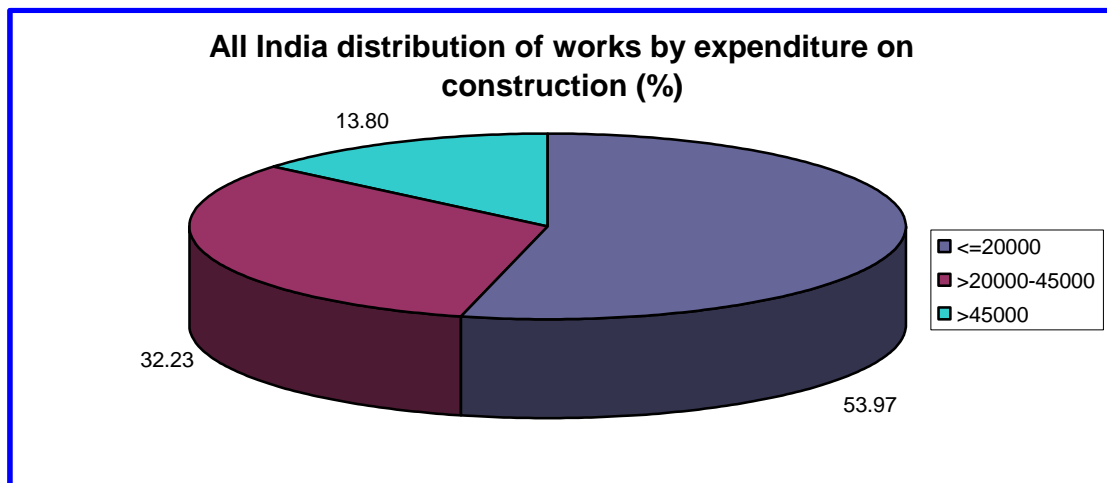


Source: Table I-32

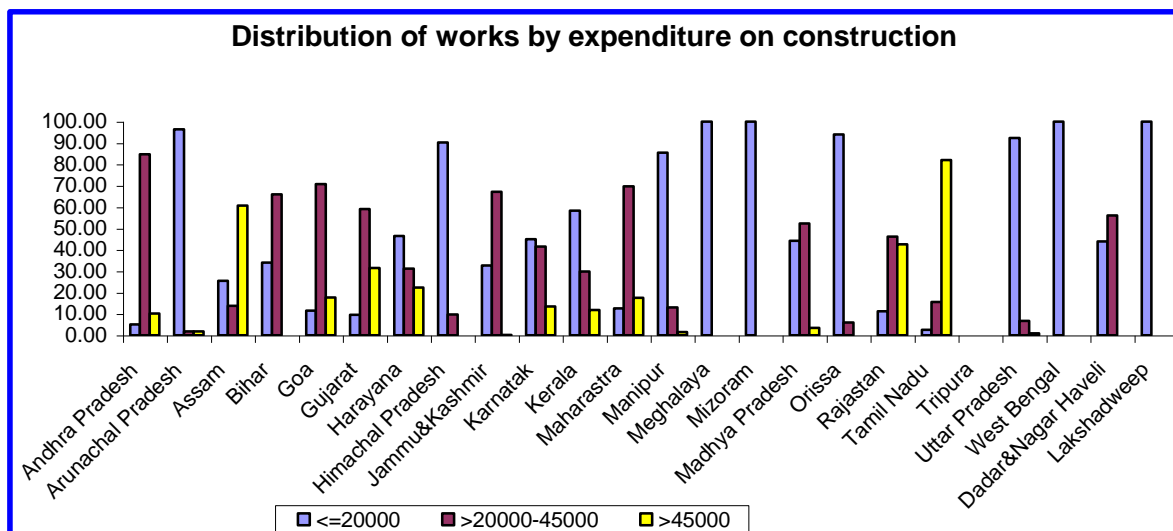
3.A.5- Range of assistance and cost of construction:

The range of assistance for MWS has been changing over different periods. The maximum amount of assistance fixed by the Central Government

reported during the survey period was Rs. 31,375 (reference Goa) for normal areas. But as discussed earlier many (19%) have received more than Rs 32000/- as assistance. This amount represents average sanction and average cost of construction but, actual sanction amount and cost norms vary between States and districts. Here we shall discuss about the extent of cost incurred by beneficiaries for the construction of well. The distribution of wells by cost of construction is presented below.



Source: Table I-33



Source: Table I-33

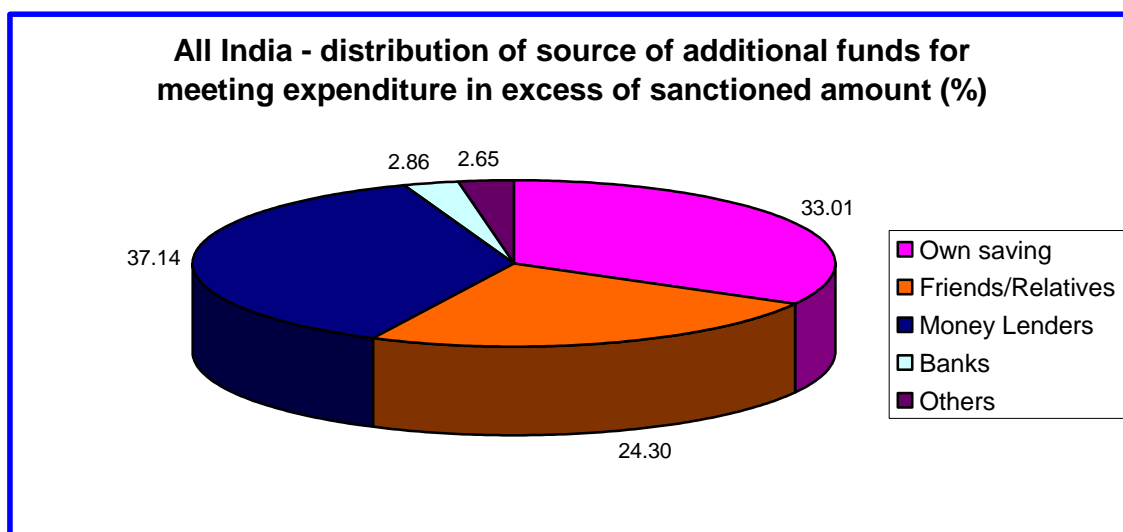
Table I-33 and the graphs drawn above shows that there is a **wide variation in the average expenditure in the construction of wells and other works**. The Schedule of Rate (SOR) varies across districts and States and as a result there is variation. Average expenditure in Meghalaya on wells as well as

other works is less than Rs 5000/-. It should be mentioned here that in Meghalaya open dug wells are not feasible because of topography, therefore land development works, drainage and water harvesting structures are undertaken. The cost of construction in these cases is lower as compared to construction of well.

The average expenditure on MWS works is highest in Assam (Rs. 98521), Rajasthan (Rs. 45253) and Gujarat (Rs.40113) respectively. **In Tamil Nadu, actual sanction of assistance above Rs 45000 is only for 13% of the beneficiaries, but 82% of the wells constructed had an expenditure exceeding Rs 45000. Similar is the case with Assam, where 51% of the works received assistance above Rs 45000 while, the actual expenditure was more than Rs. 45000/- for 61% of the works.** However, all India figures show that majority i.e. 54% of the works had an expenditure of less than or upto Rs 20000. That means additional 6% of the beneficiaries (Table 20 shows sanction up to Rs 20000 for 60%) received more than their actual expenditure. Of those who incurred expenditure above Rs 45000 (14%) only for 5 percent cases, amount sanctioned was above Rs 45000. Beneficiaries who were required to make higher expenditure i.e. above Rs 45000 had to meet the additional expenses from their own pocket.

Table I-34 and the graph drawn below show how the beneficiaries met the additional expenditure. Of the total beneficiaries who reported expenditure, as many as **50 percent said that expenditure exceeded the sanctioned amount. Beneficiaries have borrowed from moneylenders (37.14%) and friends (24%). 33 percent of them have used their own savings.** This shows that these 33% (6120) farmers are capable of meeting the expenditure. But, the fact that other beneficiaries have borrowed from moneylenders is a cause of concern particularly when it is related to poverty alleviation programmes. Banks do not give loans for meeting any such expenses unless there is a specific programme. The rate of interest with

moneylenders is as high as 36% to 48% per annum.



Source: Table I-34

Average expenditure on well is high in TamilNadu and Rajasthan due to higher cost of hired labour per well. All India average cost of hired labour is Rs 9792. On the basis of this, if we calculate family labour, it amounts to Rs 3202 per well. Totally the labour cost would be Rs 12994 i.e. nearly 48% of the total average cost for MWS wells (Rs 27012). This gives wage to material ratio of almost 50:50.

Usually wells do not require any maintenance after construction at least not within a short period. Only 6 percent (Table I-37) of the wells surveyed required maintenance and the repair seems to be major as more than Rs 1000 was spent on 60 percent of repairs. Savings and borrowings from friends and moneylenders were the main sources in meeting these expenses on repair.

Well water is useful for irrigation only when there is electric device to lift the water. Manually it is very hard for the farmers to supply the water to fields. But poor farmers cannot install pump sets. Table I-39 shows that 18% of the farmers have used lifting device. 12% of them have received assistance for lifting device under other poverty alleviation programmes. And 6 percent have taken lifting device under other programmes.

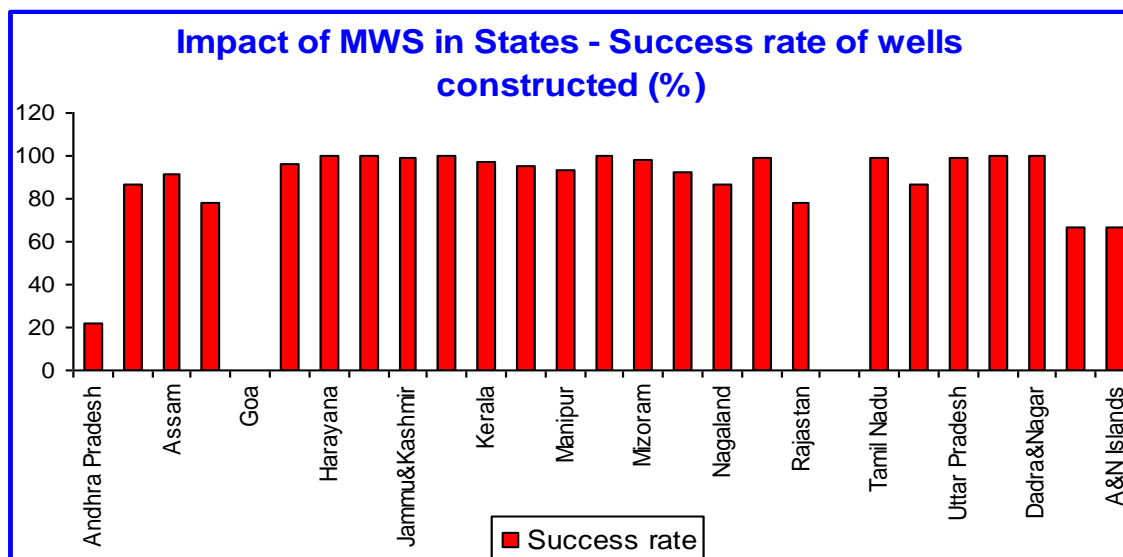
3.A.6 Impact of the Scheme:

One of the main objectives of MWS is to facilitate irrigation to the small and marginal farmers so as to ultimately improve the income of the beneficiary households.

To understand broadly about the impact of the scheme, details were collected from district offices and from beneficiary households.

The impact of MWS in the district was sought to be assessed through the success rate of constructed wells under the scheme (as per records maintained in district office) and the additional area covered for irrigation so far (i.e., up to 1997-98) after the start of MWS in the district.

The success rate is worked out as the percentage of the number of success wells to the total number of wells constructed in a district.



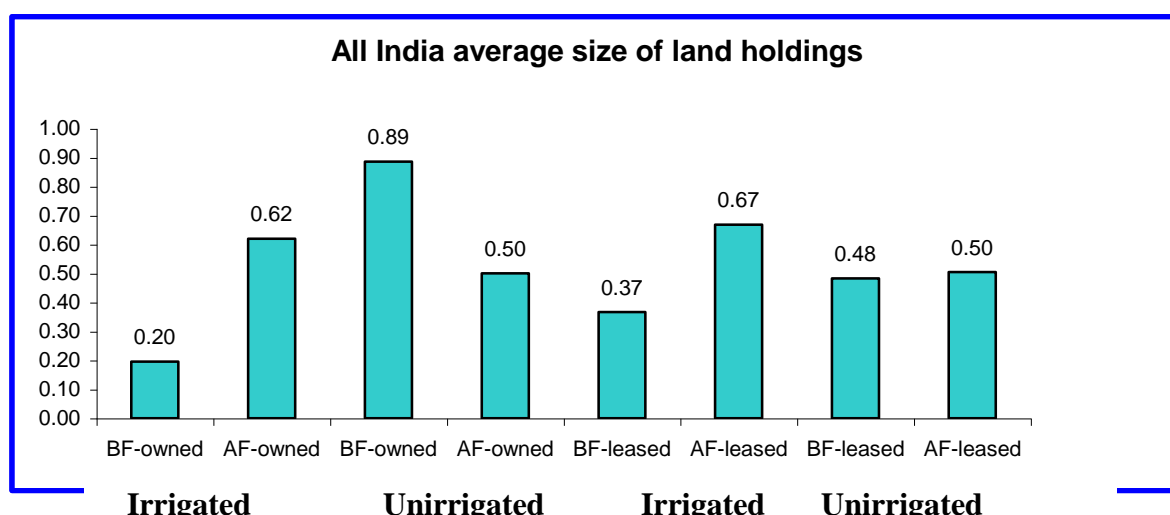
Source: Table I-7

Table I-7 and the graph presented above, show the impact of MWS at State level based on the information supplied by districts. However it should be noted that the figures reflect general picture and the data for some districts does not relate to the period since the inception of the scheme. This is because,

the data is either not collected by DRDA/ZP or the records are not maintained at all. Table I-7 does not give complete picture, as it does not say anything about other works like water harvesting and land development works. **The success rate of wells for the country as a whole is 87 percent.** The success rate is lowest for Andhra Pradesh (22%) and 100 percent for Haryana, Meghalaya, Himachal Pradesh and Dadar&Nagar Haveli. In Goa, DRDA has not maintained properly the details about the works undertaken and the impact of MWS. For Tripura, data was not available.

An additional area of 733181 hectares (Individual + group schemes) in the country has been covered for irrigation by MWS (Table I-7). Of this total area, Madhya Pradesh accounts for 23%, Bihar accounts for 16% and Andhra Pradesh accounts for 14%. As per the data available in Table I-7 on an average irrigated area per well works out to be 1.56 hectares.

For estimating the impact of MWS at the beneficiary level, information regarding (i) the area under irrigation (before and after MWS) (ii) income from crop production (before and after MWS) was collected from beneficiary households.

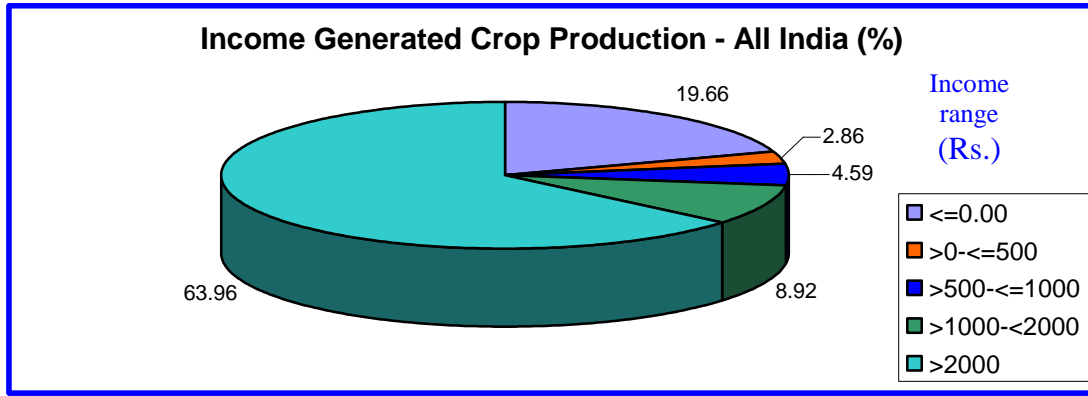


Source: Table I-35

As shown in Table I-35 and chart above, there is significant rise in the area under irrigation after the implementation of the scheme. Before the implementation of the scheme, the average area of irrigated land was 0.20 hectare (1/2 acre), which increased to 0.62 hectare (1.1/2 acre). On an average, for marginal farmers it amounts to complete irrigation. For small farmers, more than 1/5 the of the land is under irrigation. Simultaneously, as shown in table, there is reduction in the average size of unirrigated land. The impact of MWS on irrigation has been very significant in Gujarat (0.05 acre to 3.19 acre) M.P (0.15 acre to 4.12 acre), A.P (0.32 acre to 2.49 acre) and Dadar and Nagar Haveli (0.00 to 2.05 acres). There is no impact of MWS on irrigation in Lakshadweep as the projects taken up under MWS are all for renovation of wells used for drinking purpose. As shown in Table I-36, the land holdings of beneficiaries (i.e. unirrigated) has remained the same (0.09 hectare)

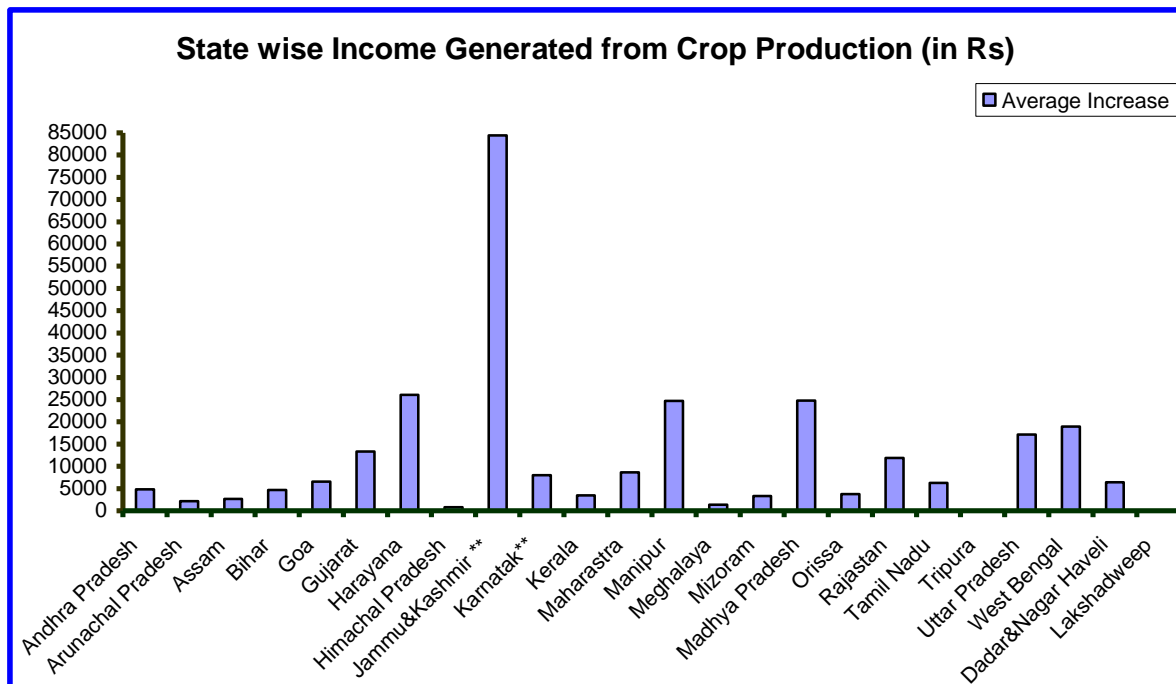
Uttar Pradesh is the only State in which the average owned area for individual scheme beneficiaries under irrigation has come down after introduction of MWS (but for group beneficiaries the average irrigated land increased from 15.54 to 23.54 hectares). This is because of the drastic decrease in the irrigated area in one of the districts (Mau district), from 27 hectares to 0.74 hectares. This has brought down the average for the State as a whole. However the irrigated area has increased marginally for (1.01 acre to 1.38 acre) leased in land.

Totally, for the country as a whole, land under irrigation (own) for individual beneficiaries has increased by 210%.



Source: Table I-36

If we consider income also, the impact seems to be encouraging (refer Table I-36 and graphs presented above and below). There is an improvement in the income (income from crop production) of nearly 80% beneficiaries in the country. For the remaining 19.66% MWS makes no difference. There is no change in their agricultural income. The increase in the income for 80% beneficiaries is significant because majority (64%) have earned more than Rs 2000 as a result of MWS. 3 percent have earned up to Rs. 500, 4 percent have earned up to Rs 1000 while 9 percent have earned up to Rs 2000.



Source: Table I-36

At the State level, the improvement is seen more in Gujarat, Haryana, J&K, Manipur, Mizoram and Uttar Pradesh where, more than 70 percent of the beneficiaries have earned more than Rs 2000 from crop production after the introduction of MWS. The impact has been comparatively lower in Arunachal Pradesh, Kerala, and Lakshadweep. The average increase in the crop production is Rs. 12356/- for the country. **The average increase in income is highest for J & K amounting to Rs.84436/-.** Farmers in Haryana, Manipur, Madhya Pradesh UP, West Bengal and Gujarat also experienced on an average an increase in the value of their produce. The overall impact has been lower in Arunachal Pradesh, Assam, Himachal Pradesh and Meghalaya.

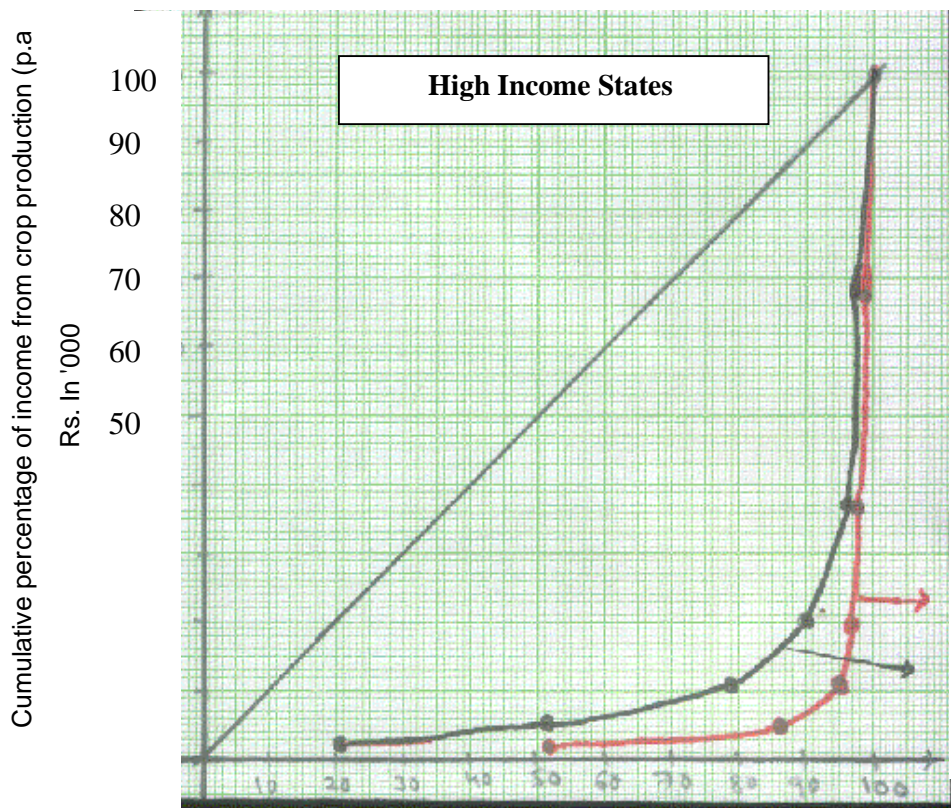
The tables presented below (A-1 to A-5) and the Lorenz curves drawn for respective tables, show the extent of variation in the crop income distribution from the average (line of equal distribution) in different category of States and also the variation in income before and after the introduction of MWS.

Based on the Eleventh Finance Commission's Classification of States, changes in income from crop production are presented for different groups of States.

Table A - 1
Beneficiary families according to Income from crop production (High Income States)

Column (1) Annual Income from crop production Rs. In (000)	Column (2) cumulative frequency of column(1)	Column (3) cumulative % of column (2)	Column (4) No of families before MWS	Column (5) cumulative frequency of column (4)	Column (6) cumulative % of column (5)	Column (7) No. of families after MWS	Column (8) cumulative frequency of column (7)	Column (9) cumulative % of column (8)
< 5	5	2	2671	2671	51	983	983	20
< 11	15	5	1777	4448	86	1478	2461	51
< 20	35	11	517	4965	95	1366	3827	79
< 30	65	20	97	5062	97	529	4356	90
< 50	115	37	53	5115	98	327	4683	96
< 100	215	68	39	5154	99	125	4808	99
> 100	315	100	45	5199	100	57	4865	100

Fig - A-1



Cumulative percentage of families

Table A-2
Beneficiary families according to income from crop production -Low Income States

Column (1) Annual Income from crop production Rs. In (000)	Column (2) cumulative frequency of column(1)	Column (3) cumulative % of column (2)	Col (4) No. of families before MWS	Col (5) C. F. of Col (4)	Col (6) Cumulative % of Col (5)	Col (7) No. of families after MWS	Col 8 C. F. of Col (7)	Col (9) Cumulative % of col (8)
< 5	5	2	6980	6980	48	3640	Before MWS	
< 11	15	5	4565	11545	79	5172		
< 20	35	11	1561	13106	90	3587		
< 30	65	20	335	13441	92	1051	After MWS	
< 50	115	37	270	13711	94	507		
< 100	215	68	372	14083	96	337	14294	94
> 100	315	100	454	14537	100	333	15127	100

Fig - A - 2

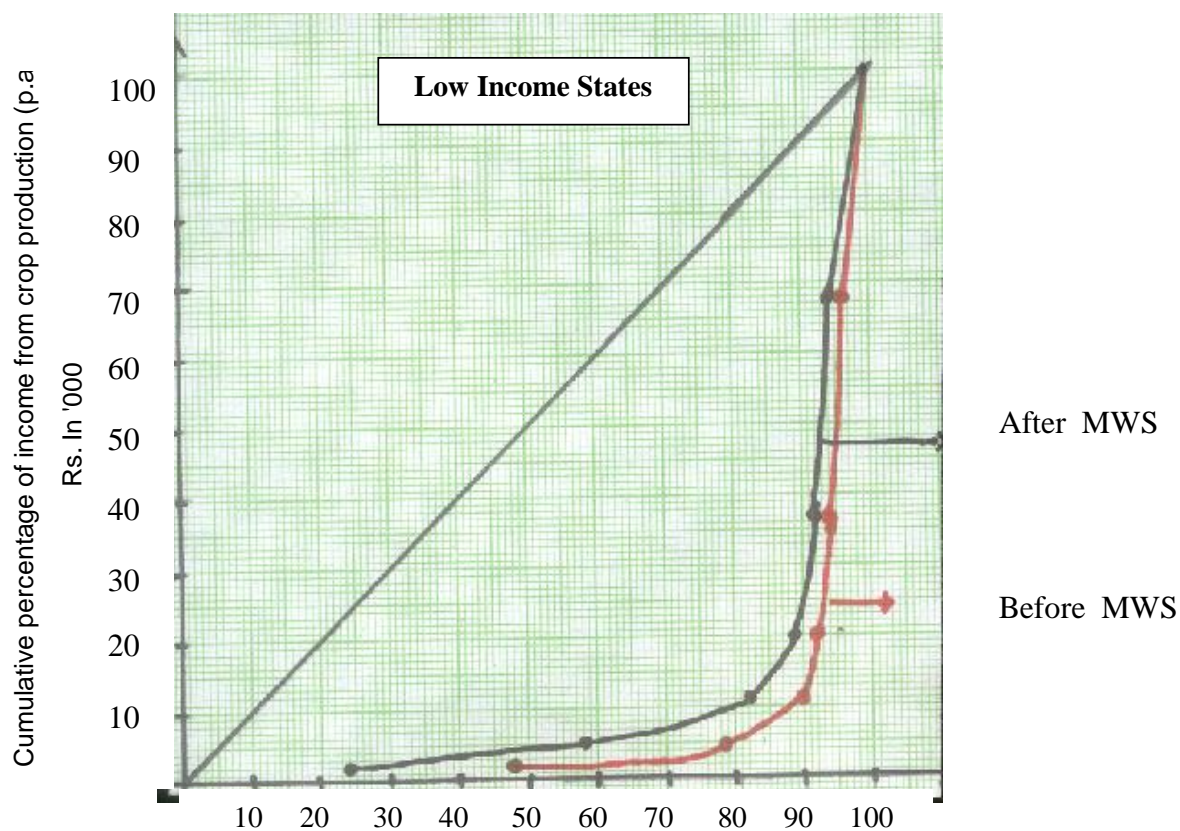
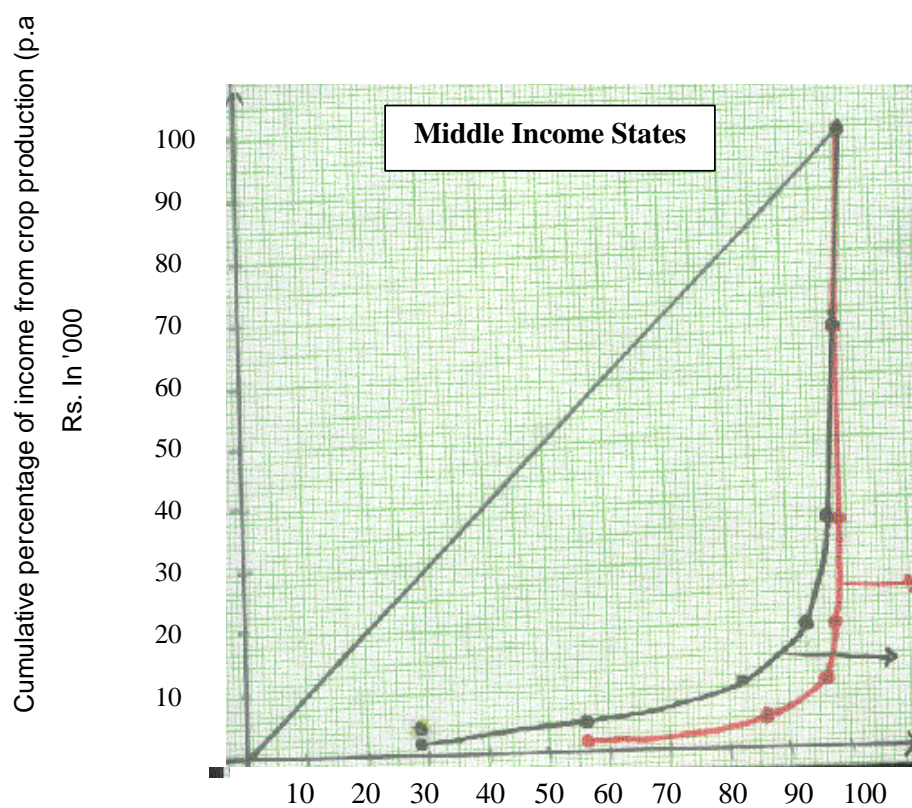


Table A-3

Beneficiary families according to income from crop production - Middle Income States

Column (1) Annual Income from Crop production Rs. In (000)	Column (2) cumulative frequency of column(1)	Col. (3) cumulative % of column (2)	Column (4) No. of families before MWS	Column (5) Cumulative frequency of (4)	column (6) cumulative % of (5)	Column (7) no. of families after MWS	Column (8) cumulative frequency 8 (7)	Column (9) cumulative % of (8)
< 5	5	2	2375	2375	56	1236	1236	29
< 11	15	5	1230	3605	86	1176	2412	56
< 20	35	11	423	4028	96	1080	3492	82
< 30	65	20	91	4119	98	474	3966	93
< 50	115	37	47	4166	99	188	4154	97
< 100	215	68	18	4184	99	77	4231	99
> 100	315	100	28	4212	100	48	4279	100

Fig - A-3



Cumulative percentage of families

Table - A-4
Beneficiary families according to income from crop production -Special Category States

Column (1) Annual Income from crop production Rs. In (000)	Column (2) Cumulative frequency of column(1)	Column (3) cumulative % of Column (2)	Column (4) No. of families before MWS	Col. (5) C.F. of Col. (4)	Col (6) cumulative % of col (5)	Col (7) No. of families after MWS	Col (6) C. F. of Col (7) After MWS	Col (9) cumulative % of col (8)
< 5	5	2	1186	1186	35	304	970	45
< 11	15	5	1464	2650	79	66	1620	76
< 20	35	11	281	2931	87	650	1742	81
< 30	65	20	70	3001	90	122	1811	85
< 50	115	37	82	3083	92	69	1881	88
< 100	215	68	65	3148	94	70	2138	100
> 100	315	100	203	3351	100	257		

Fig - A - 4

Cumulative percentage of income from crop production (p.a)
Rs. In '000

→ Before MWS
After MWS

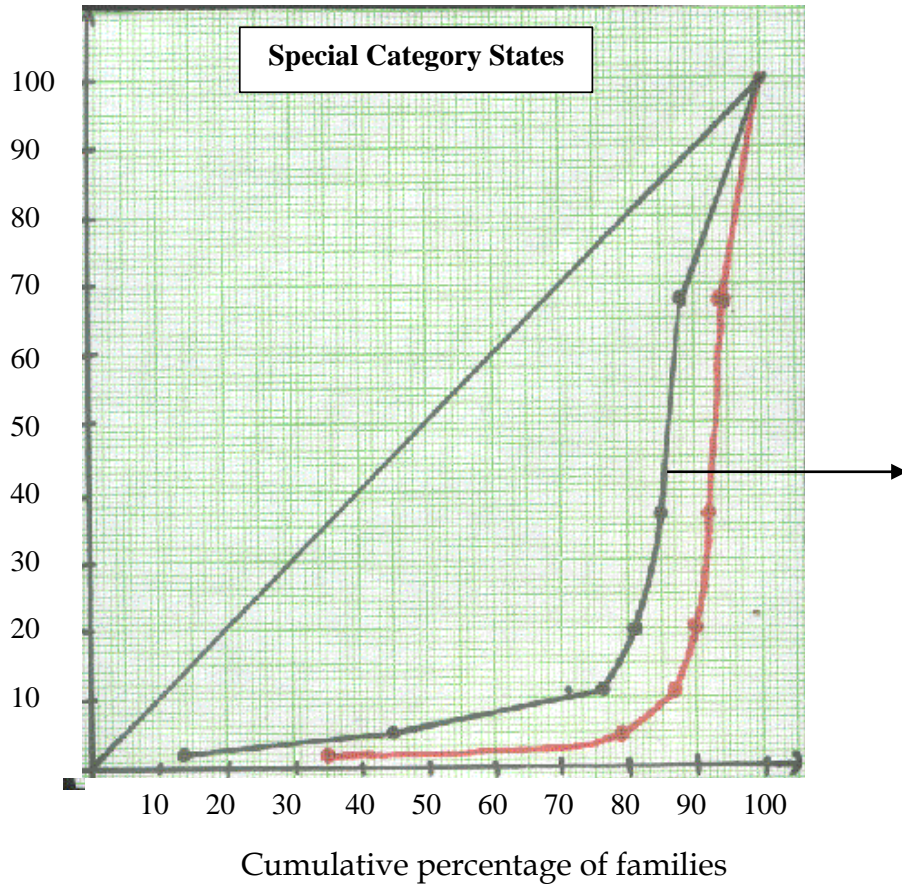
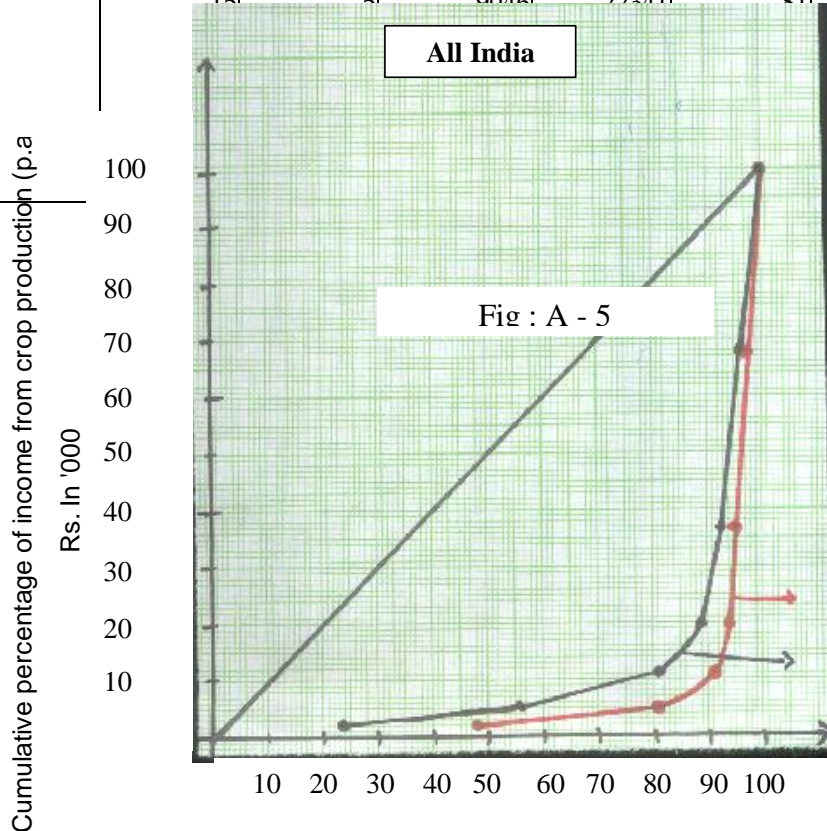


Table A-5
Crop Production income & the number of beneficiary families (All India)

Col (1) Annual Income from crop production Rs. In '000'	Col (2) cumulative frequency of col (2)	Col (3) cumulative % of col (2)	Col (4) No. of Families before MWS	Col (5) cumulative frequency of col (4)	Col (6) cumulative % of Col (5)	Col (7) No. of families after MWS	Col (8) cumulative frequency of col (7)	Col (9) cumulative % of col (8)
< 5	5	2	13295	13295	48	6342	6342	24
< 11	15	5	9046	22311	81	8492	14834	56
< 20						6683	21517	81
< 30						2176	23693	89
< 50						1091	24784	93
<100						609	25393	96
<200						1195	26588	100



For high income States, the number of families below poverty line which was 86 per cent before MWS, has come down to 51 per cent after introduction of MWS (a reduction of about 35%). For middle income and special category States, the reduction in percentage of families below poverty line is 30% and 34% respectively. **But, for poor States, the decline is very low as only 21 per cent of the families have crossed poverty line after MWS.**

On an average (All India), 25 per cent of sample beneficiary families have crossed poverty line after the introduction of MWS.

The impact of MWS in terms of income is significant in high income States and special category States. Lorenz curves drawn for all the categories of States shows that there is improvement in the economic status of poor beneficiary families after the introduction of MWS. The curves have come closer to line of equal distribution after MWS. For high income status, there is no change in the income levels of the rich. The number of families rich has remained more or less the same in high income groups. But for special category States, the impact has been positive for all the income groups. The number of families earning less than Rs. 11000 (poor) has declined from 79% to 45%, while the number of families earning above Rs. 50000 has increased from 6 per cent to 15 per cent. For middle income States, there is no change in the number of families in high income groups category. Lorenz curve (Fig A-2) for poor income States shows that the impact of MWS on income is lower as the gap between two curves is narrow as compared to curves drawn for other categories of States.

If we exclude J & K and Himachal Pradesh from special category States, the north eastern States show poor performance in terms of average increase in income (Rs. 6842), average irrigated area (0.13 Ha) and availability of water (42 %).

However, we should consider certain issues while taking the changes in irrigated area and income from crop production (before and after) as indicators to measure the impact of MWS.

Firstly, though there is no change in irrigated area, beneficiary may experience increased income, which could be due to increase in the intensity of irrigation.

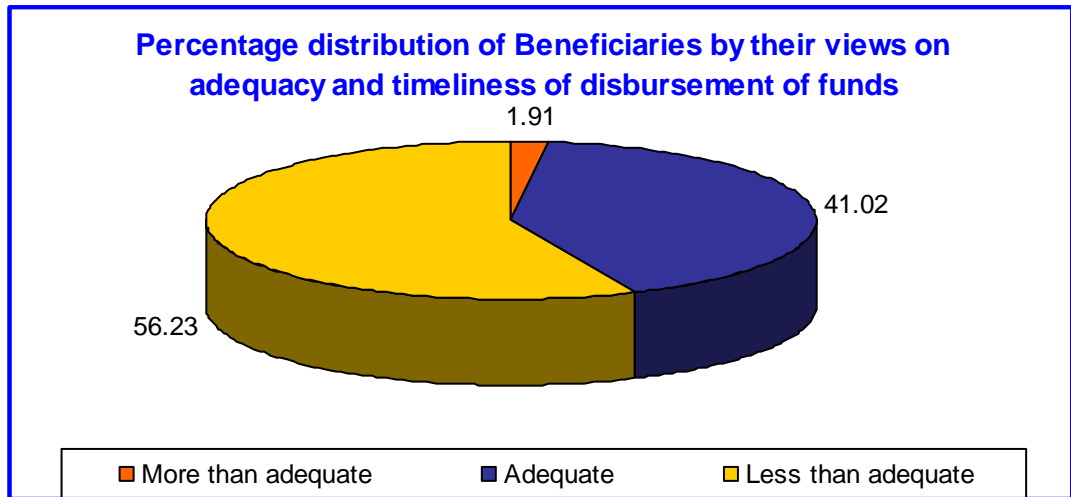
Secondly, the lower or no change in the crop income for 20 percent of the individual beneficiary families in the country may be attributed to increased cost of living, price of fertilisers, seeds and other materials over the years in addition to an uneconomised use of MWS. There may be other factors like crop failure, lower prices etc.

Similarly, the increased income may be the result of other factors in addition to MWS. Increased employment opportunities, higher wages, economic growth inducing demand and higher prices for crops could be the reasons for increased income from crop production. Due to use of fertilisers there may be increase in productivity of soil.

But, in general, we may say that since the changes are experienced after the implementation of MWS, the improvement in the economic status can be attributed to MWS.

3.A.7 views of the beneficiaries about the scheme:

Beneficiaries of MWS are happy that such a scheme has been introduced to increase the agricultural production and household income via increasing irrigation potentials. They are also happy for the reason that there is no repayment. Villagers were unaware of this scheme until they received the assistance. Generally villagers get the information from panchayat members when they meet them on road side, market places or bus stand. From April 1999 selection in Gram sabha is made compulsory. **This may induce, in future, the villagers to attend Gram Sabha in large number and also make them aware of different programmes.**



Source: Table I-41

Though beneficiaries are happy about the nature of the scheme, they are not satisfied with the amount sanctioned. It is felt that amount sanctioned for well is not sufficient to complete the construction. Table - I - 41 and graph presented above shows that nearly 56 percent of the beneficiaries have felt that amount sanctioned is inadequate. For those who have taken up land development works, amount sanctioned seems to be adequate. In majority of the MWS works, hired labour is involved. Family labour constitutes only 1/3rd of the total labour. Usually land development works like levelling, bunding do not require much labour. But digging of well is a huge task and necessitates the use of hired labour. Therefore, construction of wells/checkdams is costlier than other works. Beneficiaries generally feel that it takes a month to get the sanctioned amount.

3. A. 8 Payment made for sanction of scheme:

It is well known that in India corruption has griped all the sectors like octopus. Files are never moved from the table unless payments are made. Till today, government is unable to find a solution to this problem. But, when it is a question of poor, the matter needs to be tackled seriously. To know the extent of this vulnerability, beneficiaries were asked whether they paid to public functionaries for getting the scheme sanctioned. Table I - 40 shows the

extent of bribery involved in the implementation of MWS. **Nearly 8.5 percent of the beneficiaries have made payment to get the scheme sanctioned. But, none of the beneficiaries in Goa, west Bengal, J & K, North eastern States and Union Territories of Dadra & Nagar Haveli and Lakshadweep have paid any amount to government officials.** As shown in Table I - 41, bribery is more rampant in **Bihar (36%), MP (33%), Tamil Nadu (29 %), Maharashtra (16 %) Gujarat (16 %) AP (14%) and UP (11%)** respectively. All the beneficiaries who paid bribe for getting the scheme sanctioned have paid less than Rs. 1000/-

3.A 9 Reasons for not contacting the beneficiaries:

The information about the beneficiary families and the MWS assistance was available from five sources in the villages viz. The beneficiary, other members in the household, neighbours, village officials like agriculture assistants and panchayat members. Even if beneficiary himself was present in the house, in addition to his comments, others also contributed to data information. Of the total beneficiary households surveyed, 29 % (9531) beneficiaries could not be contacted directly. Majority (68%) of them were temporarily outside the village, 5 percent had migrated in search of job and 8 percent had expired. And the remaining 14 percent of the beneficiaries were not available during the survey period. Either they were busy in the fields or gone to neighbouring village or to weekly market.

Part - B - Group Schemes

As discussed earlier, MWS was introduced in the country mainly to provide open dug wells for the purpose of providing irrigation to land holdings of small and marginal farmers. But, the geographical and topographical factors and, also the projects which required large investments and use of neighbouring fields for the successfulness of the scheme, necessitated the implementation of group schemes. Group schemes are undertaken mainly when the benefits spill over to nearby fields.

A review of group project schemes implemented in the country is presented here.

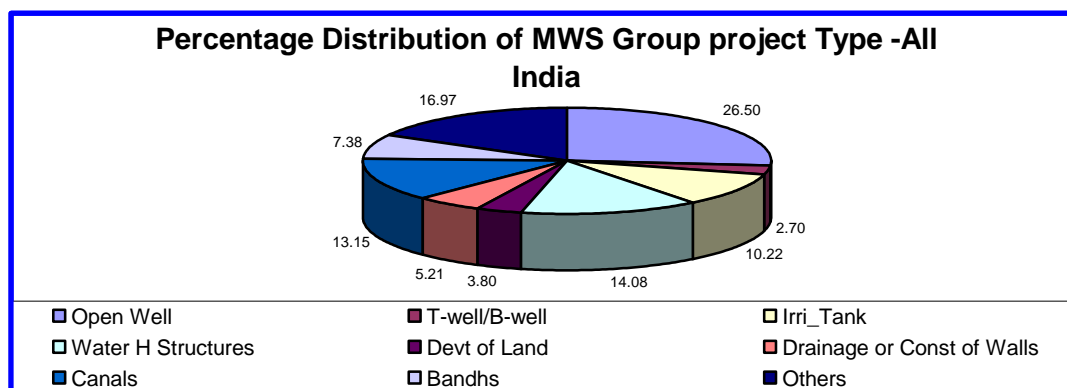
Of the total 24 States and 3 Union territories surveyed in the country, group beneficiaries were covered under the study in 18 States and 1 Union territory. But the analysis presented here is for only 14 *States and for the Union territory of Andaman and Nicobar Islands.

The tables G-1 to G-33 presented at the end of fourth chapter present the details about group projects and group beneficiaries.

3.B.1 Type of projects and their status:

The analysis presented in part-B relates to 1485 group projects and a sample of 10706 beneficiaries. Tables G-1 and G-2 present the percentage distribution for all India of various types of projects sanctioned and executed by districts. The nature of works undertaken include open well, tube well/bore well, irrigation tank, water harvesting structures, development of land, drainage or construction of walls, canals, and bandhs. Out of 1485 projects, open wells were prominent (26.5%). Water-harvesting structures accounted for 14.08 per cent while, irrigation canals and tanks accounted for 13.15 percent and 10.32 per cent respectively. Nearly 4 percent of the works

were land development projects. Drainage or construction of walls amounted to 5 percent. Though borewells/tubewells are not generally permitted, nearly 3 percent works were of this type. The nature of works undertaken in the country is presented below.



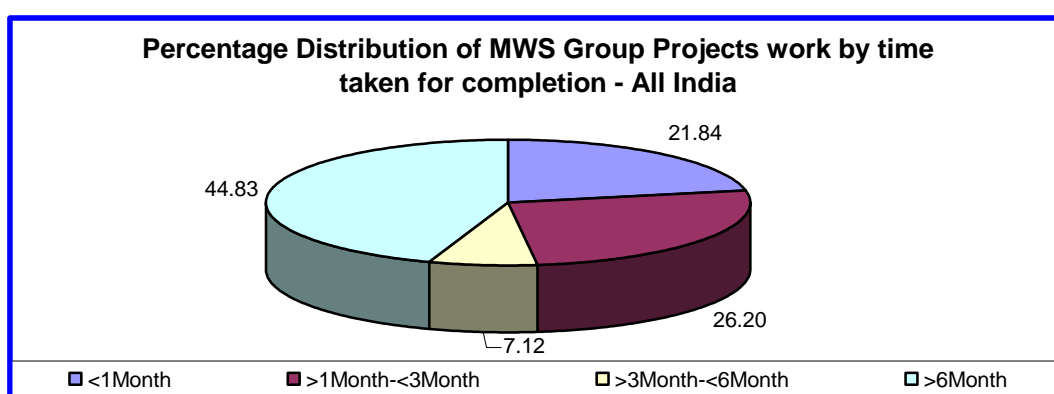
Source : G-Table-1

In Andhra Pradesh, Andaman and Nicobar Islands and Haryana, more than 60% of MWS works are wells. In Rajasthan all the group schemes are in the nature of water harvesting structures. Tubewells/borewells account for nearly 10 percent in Andhra Pradesh, Bihar and Nagaland. Irrigation tanks are common in west Bengal (42.86%), Himachal Pradesh (24.07%) and Orissa (24.05%). Land development works are taken up to 33% in Uttar Pradesh. Haryana accounts for 31 percent of the works in drainage or construction of walls. 37 percent and 34 percent of the canal works are taken up in J&K and West Bengal respectively. Majority of the bandhs are constructed in Assam (51%). In Sikkim, minor irrigation channels along with water tanks are constructed.

As presented in Table-G-2, 91 percent of the group projects were completed during the field survey. 7 percent were under progress and only 1.5 percent projects have failed due to hard rock and other reasons not specified. The rate of failure is highest in Himachal Pradesh (6.48%). Less than one percent of the works sanctioned were yet to be started.

3.B.2 Time taken for completion:

Majority of the MWS group projects (45%) in the country took six or more months to be completed. Almost 22 percent projects were completed within one-month and 26 percent were completed within 3 months. In J&K, 46 percent of the works were completed within one month. In Rajasthan, Andhra Pradesh and Kerala more than 70 percent of the group works have taken six or more than six months for completion. The graph presented below shows the extent of time taken for completion of projects.



Source : G- Table-4

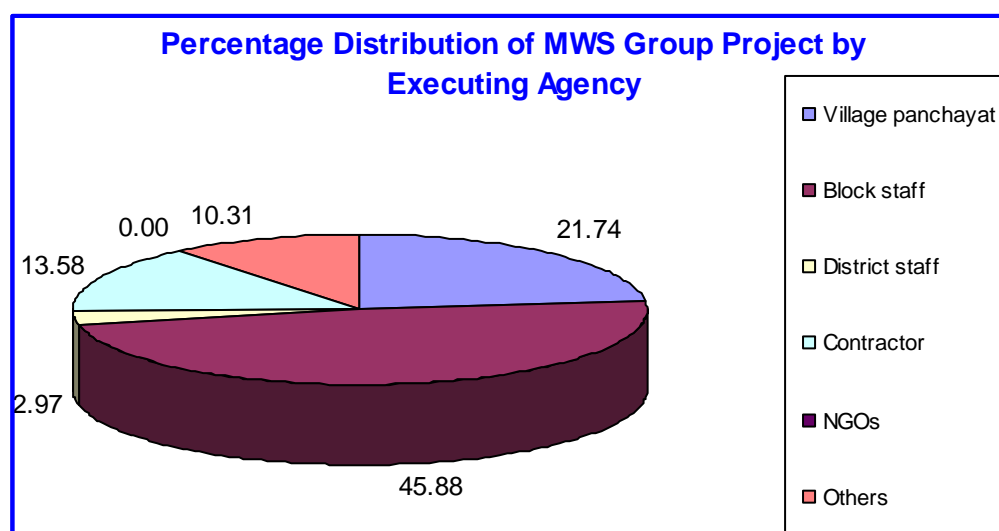
3.B.3 Range of assistance/amount sanctioned/instalments paid.

Table G-5 shows that less than 50 percent of the group projects received above Rs. 45000. Group schemes are taken when benefits accrue to group of farmers and when there is higher construction cost so that there is economy in construction. But, for nearly 51 percent of the projects the amount sanctioned is less than Rs 45000. In Rajasthan, all the projects have received Rs. 45000 or more. In Bihar, Kerala and Uttar Pradesh also the amount sanctioned for more than 80 percent projects is Rs 45000 or more.

As major works under group scheme take longer period for completion, the amount sanctioned is generally in instalments (65.19%). Only in J&K, the amount is sanctioned in lump sum. In Haryana, Nagaland and Arunachal Pradesh also, more than 80 percent is given in lump sum.

3.B.4 Executing agency:

As shown in Table G-7 and graph presented below, MWS group projects in the country are executed by five main agencies. Line departments, Village Panchayats, block staff, district staff and contractors are reported to be involved in completion of the projects. The block staff has executed more group projects (46%). Village Panchayats have been entrusted recently with more rural development works and as a result there is increased involvement of Panchayats in development programmes. 22 percent MWS group works are executed by VPs. Contractors have also been involved in construction activities. Nearly 14 percent works are executed by contractors. **In Kerala, 76 percent group projects are entrusted with contractors. In Bihar (47%) and Assam (37%) also, contractors play a major role.**

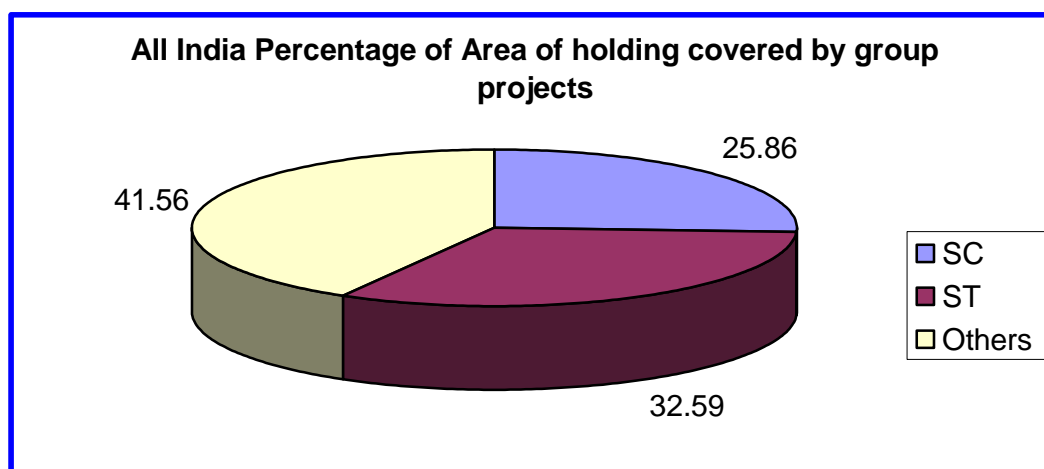


Source : Table G-7

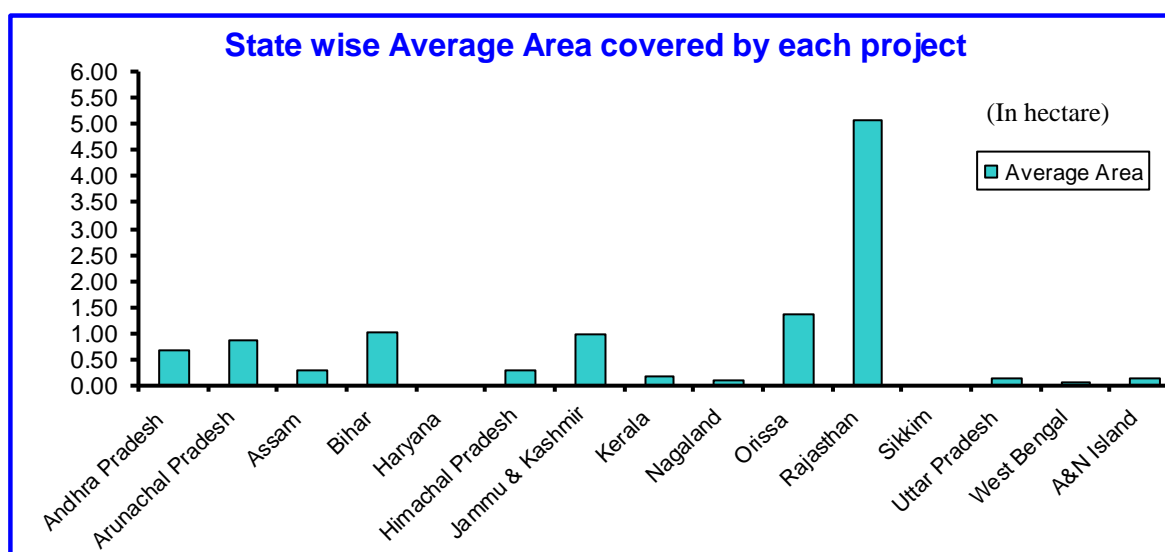
3.B.5 Coverage of MWS (beneficiaries and area of holding) group projects

Though the actual number of beneficiaries covered under 1485 group projects is 95716, the concurrent evaluation of MWS covered only a sample of 10706(11%) beneficiaries as per the sampling design. Table G-8 presents number of beneficiaries and area covered by group projects. **Unlike individual projects where more than 70 per cent of the beneficiaries were SCs/STs, in group projects, only 58 per cent of the beneficiaries were SCs/**

STs. The total area of beneficiary holdings covered by all the sample group projects is 30564.26 hectares.



Source : Table G - 8



Source : Table G- 8

Average area covered and percentage area of holding covered by group projects according to social groups is shown above. Of the total 3054.26 hectares, 25.86% (7903.56 ha) belongs to SC, 32.59 per cent (9959.42 ha) belongs to ST and 41.56 per cent (12701.28 ha) belongs to others.

As per table G-9, group projects covered freed bonded labourers in Assam, Bihar and Orissa. On an average, less than 1 percent beneficiaries are bonded labourers. But during field survey of beneficiary households, freed bonded labourers were found in the sample of group beneficiaries (table G-19) in Andhra Pradesh, Assam, Bihar, Haryana, Nagaland, Sikkim and Uttar Pradesh. Nearly 50% of the sample covers SC/ST poor and the remaining belong to non-SC/ST poor and others category.

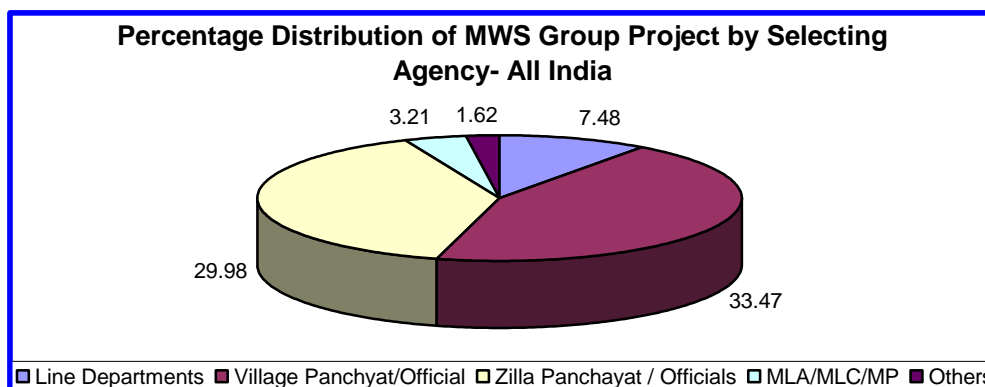
3.B.6 participation of beneficiaries in Group projects:

As per the official records of project works (Table G-10), 33 percent of the beneficiaries covered by group projects participated in project works viz. planning, selection of sites, provision of labourers, provision of finance and in supervision. The data collected shows that involvement of beneficiaries in the selection of site is maximum (27%), closely followed by participation through provision of labour. 23 percent of the beneficiaries involved in planning. Participation in the form of providing supervisory inputs by the beneficiaries was found to be about 17 percent. Beneficiaries have participated by making financial contribution also (7.67%). Of the total beneficiaries who participated in-group works in the country, participation is maximum (29%) in Andhra Pradesh. Participation of beneficiaries in-group projects is nil in Haryana. Table G-24 which reports participation as per beneficiary Statements also presents the same picture.

3.B.7 Agencies involved in selection of group projects and procedure of selection of group beneficiaries:

Group works are identified and selected by different agencies. Involvement of VPs in selection of majority (33%) of the projects is a welcome feature (Table G-11). The next major selecting agency is block office or the taluk Panchayat office (30%). Involvement of politicians is found to be negligible (1.62%). Line departments have selected only 7.48% of the works.

Village Panchayat involvement in selection of group projects is more in Haryana, Himachal Pradesh, Orissa and Uttar Pradesh.



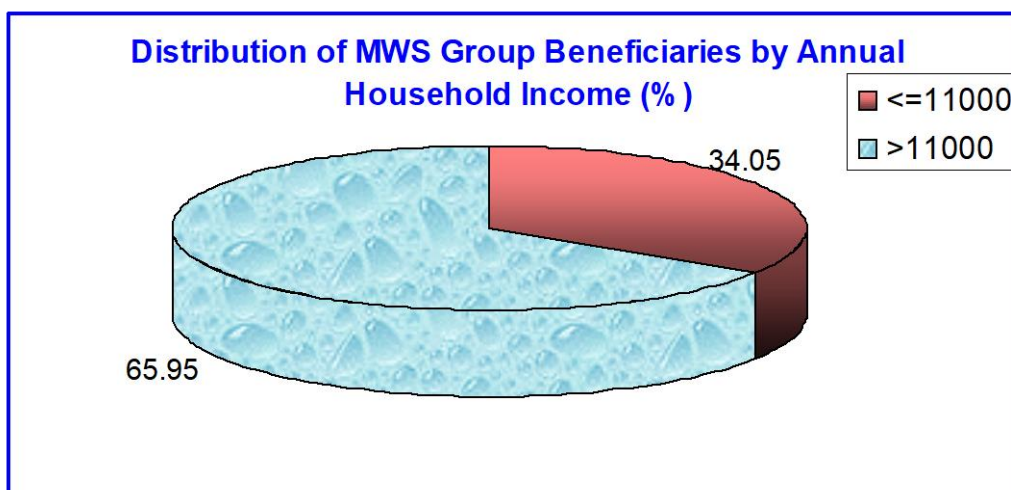
Source : Table G-11

Selection of group beneficiaries is recommended through Gram Sabha or in the VP meeting. It seems impossible to eliminate the influence of politicians. Though not major, nearly 5 percent or more beneficiaries were recommended by MLAs/MPs/MLCs (Table G-22). More than 14 percent selections are made by officials of DRDAs/ZPs.

In many cases, beneficiaries even do not know that they are selected under MWS projects. Many projects include farmers, without their notice, as beneficiaries of the scheme.

3.B.8. Economic status of group beneficiary households:

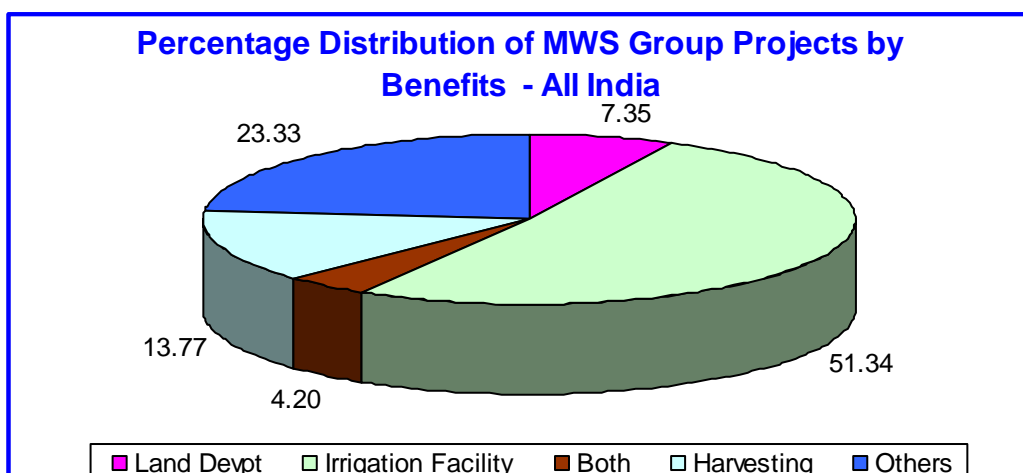
As shown in Table G-21 and graphs below, 66 percent of the MWS group beneficiaries had annual household income above Rs 11000/-, the rest 34 percent had Stated their annual income below Rs. 11000/-. The average household income varied from Rs.11550/- in Andhra Pradesh to Rs. 28044/- in Himachal Pradesh. Average per capita income of beneficiary households in the country is Rs. 4071/-p.a.



Source : Table G-21

3.B.9 Benefits from group schemes:

The flow of benefits and the nature of the flow were assessed during the survey based on the information available about projects from concerned officials and from beneficiary households. **Both figures i.e. data provided by officials about the project and by beneficiaries with reference to benefits (Table G-12 & G-26), indicate that in 52-57 percent cases the flow of benefits were perennial in nature.** All the projects in J&K, Nagaland, West Bengal and Andaman and Nicobar Islands have showered either seasonal or perennial benefits to beneficiaries. **Maximum benefits of group projects have accrued to beneficiaries of Bihar, J&K, Nagaland, Uttar Pradesh, West Bengal, and Andaman and Nicobar Islands** where, the flow of benefits is perennial in more than 60 percent of the cases.



Source : Table G-25

Table G-25 and the graph shown above present the extent of benefits accrued to beneficiaries by different projects. **Out of total beneficiaries who were interviewed during the survey, 86 percent have received benefits from group projects.** Works intending to increase irrigation facilities have resulted in getting 51 percent of the total benefits. Water harvesting structures also helped farmers to get benefits up to 14 percent. **There is no substantial contribution from land development works (7%).** From other sources, beneficiaries received 23 percent benefits.

3.B.10 Expenditure on maintenance of group projects:

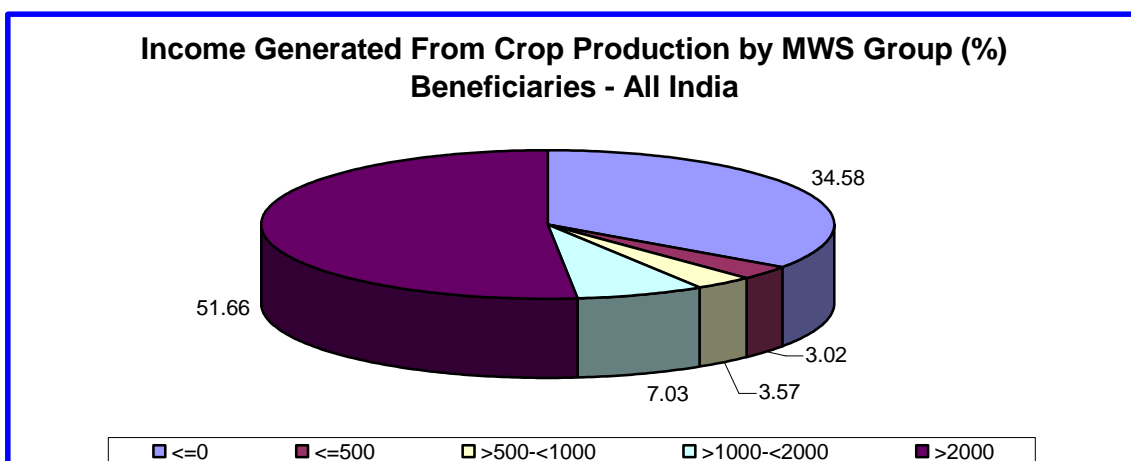
Official reports as per project schedule indicate that 8 percent of the projects implemented and surveyed in the country (sample regions) needed maintenance and required spending by beneficiaries (Table G-13). In seven States and Andaman and Nicobar Islands, no expenditure on repair and maintenance were reported. Beneficiaries in Andhra Pradesh, UP, Assam, Himachal Pradesh and Nagaland spent on maintenance of group works. In Andhra Pradesh, in 78% cases the expenditure incurred was above Rs 1000. Maximum number of individual beneficiaries (57%) have reported self-saving as a source of expenditure on repair and maintenance of works. Money lenders/friends are also a major source for borrowing (38%/24%) to meet the maintenance expenditure.

3.B.11 Payments made for sanction of MWS:

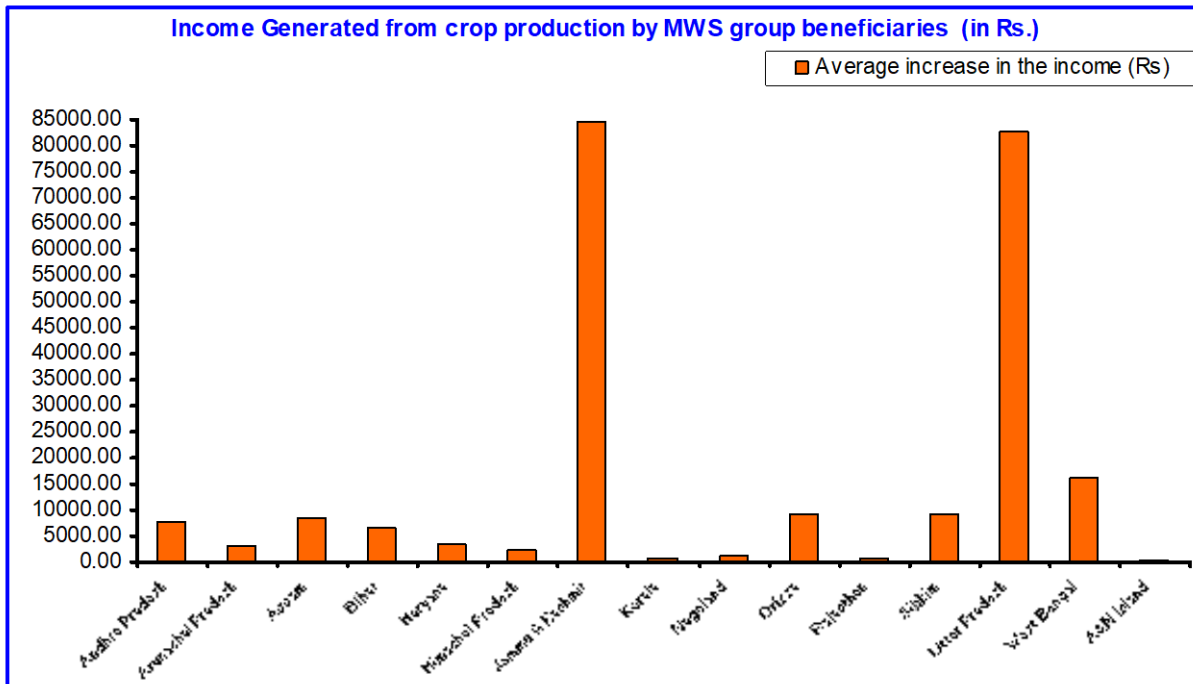
On an average 4.36 percent of the beneficiaries (Table G-29) had to pay to public functionaries for getting group projects sanctioned. All the beneficiaries have paid less than Rs. 1000. **Andhra Pradesh has maximum number of beneficiaries who paid bribe to get the work done (55.42%)**. None of the beneficiaries in Arunachal Pradesh, Haryana, J&K, Kerala, Nagaland, Rajasthan, Sikkim and Andaman and Nicobar Island paid any amount to government officials.

3.B.12 Impact of the group schemes:

Table G-30 shows that the **average size of irrigated holdings has increased from 2.22 hectares to 6.06 hectares** and a corresponding decrease has been recorded in the average size of unirrigated holding. **The extent of increase is 173%**. Also there is a substantial increase in the leased-in irrigated land after the introduction of MWS. The leased-in land has increased from 0.17 hectares to 4.56 hectares. The impact in terms of changes in irrigated land is significant in Bihar, Andhra Pradesh and Uttar Pradesh.



Source : Table G-31



Source : Table G-31

Impact of MWS is expressed in terms of income generated from crop production (Table G-31 & refer to graphs presented above) also. As shown in this table, all the 14 States and Andaman and Nicobar Islands have experienced increase in crop income after the introduction of MWS. **The average increase in income is highest for J&K followed by Uttar Pradesh and West Bengal.** On an average, all India figures show an increase of Rs. 15740. **An encouraging factor is that majority of the beneficiary households (54%) have experienced increased income above Rs 2000.** The impact of group schemes is very low in Nagaland, Kerala, Rajasthan and Andaman and Nicobar Island. More than 75 percent beneficiary families in these States have experienced negative income or no change in the income after MWS. For the country as a whole negative or no change in income is for 32% beneficiary families.

The Lorenz Curve drawn below shows that for group beneficiaries, there is variation in the number of families in all the income groups. The number of families below Rs.11,000 has reduced from 70 percent to 51 percent.

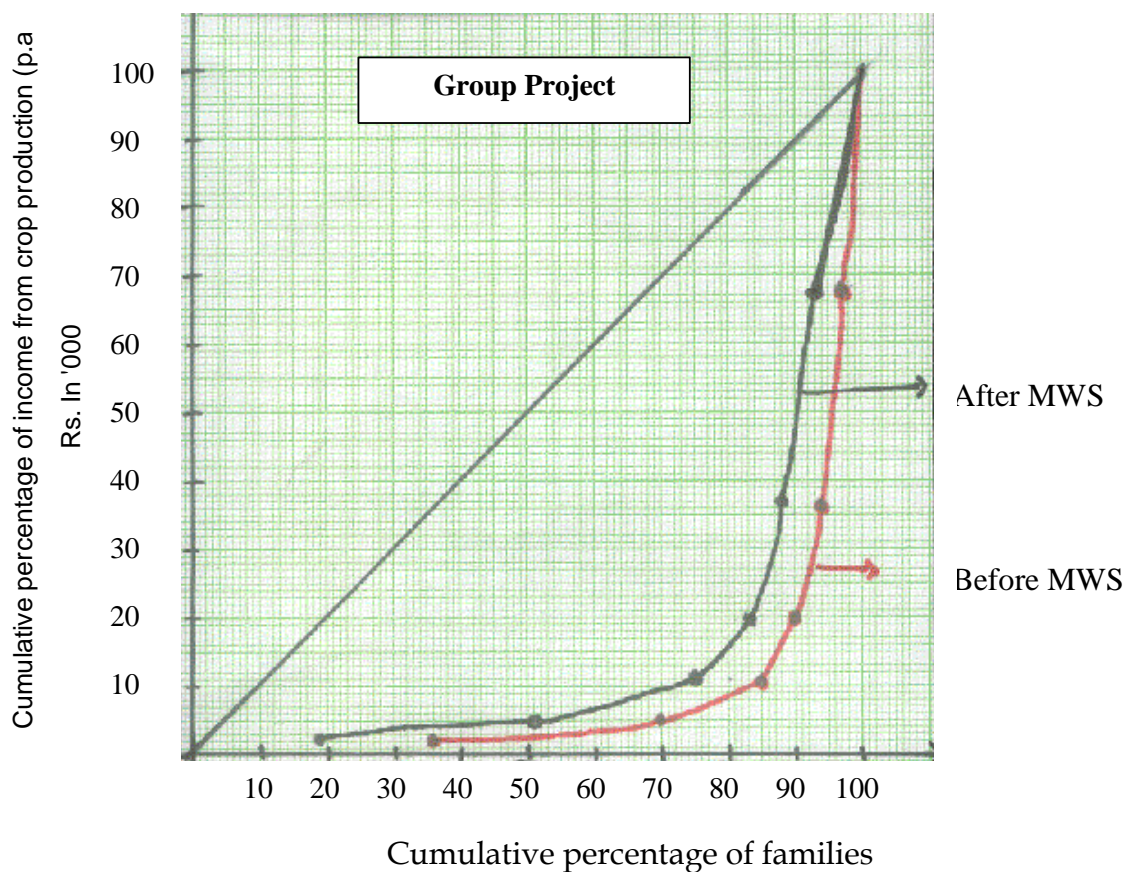
The number of families above Rs.50,000 increased from 6 percent to 12 percent.

There is shift in the income level of families in all the income groups.

Table - 1
Crop Production income & the number of beneficiary families - Group Projects - All India

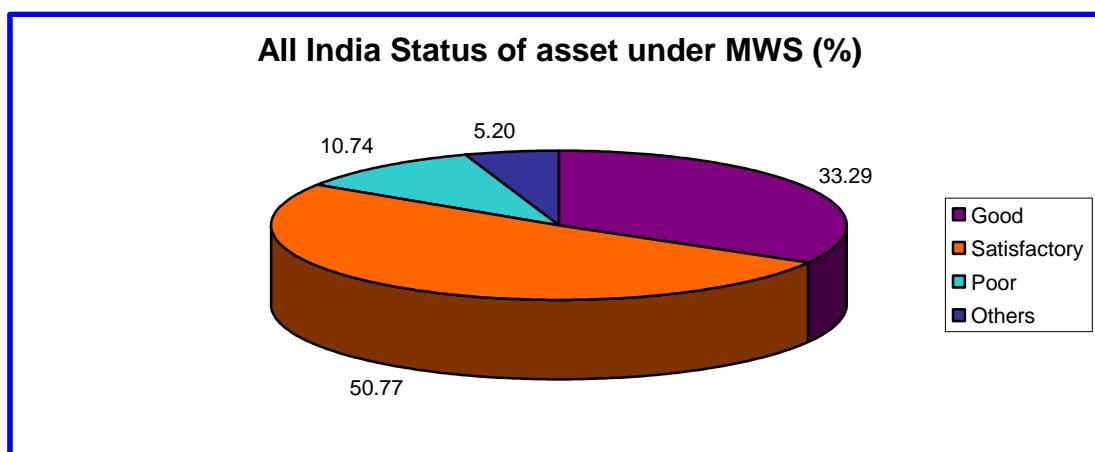
Col (1) Annual Income from crop prod Rs in '000'	Col (2) cumalae frequency of col (1)	Col (3) cumulative % of col (2)	Col (4) No of families Before MWS	Col (5) cumulative frequency (4)	Col (6) cumulative % of col (5)	Col (7) No of families after MWS	Col (8) cumulative frequency Of (7)	Col (9) cumulative % of (8)
< 5	5	2	3606	3606	36	1813	1813	19
< 11	15	5	3323	6929	70	3041	4854	51
< 20	35	11	1473	8402	85	2187	7041	75
< 30	65	20	564	8966	90	771	7812	83
< 50	115	37	386	9352	94	526	8338	88
< 100	215	68	264	9616	97	409	8747	93
< 200	315	100	307	9923	100	701	9448	100

Fig - B-1



3.B.13 Views of the investigators:

Investigators have generally opined that the amount sanctioned for group projects is adequate (table G-15). Exception to this Statement is Andhra Pradesh, where, only in 12.56 per cent of the cases the amount sanctioned was adequate. In most of the cases (more than 86%), the payment was reported to be received in time. Table G-15 shows that 42 percent cases required more than a month to get the payment. In spite of such a delay investigators felt that receipts of payments is prompt/timely.



Source : Table G-32

As per the observations made by investigators, the status (refer to graph above) of the group projects seems to be satisfactory. Including those, which are in good condition, the total number of projects at satisfactory level accounted for 84 percent. Group projects are in better status in Haryana, Orissa, Sikkim, and West Bengal, Bihar, J&K and Nagaland. They are in poor status in Kerala, U.P, Assam and Andaman and Nicobar islands.

Comments of investigators on the selection of beneficiaries needs to be seriously looked into. It is felt that 32 percent of the group beneficiaries are not selected as per the Ministry's guidelines. Some times the involvement of other beneficiaries cannot be avoided, particularly, when the neighbouring two or three holdings belong to forward socio-economic groups. But, the problems of identification of poor, vulnerable groups has to be strictly followed.

Investigators comments on beneficiaries socio-economic conditions justify the positive impact shown in tables G-30 and G-31. Investigators have observed that the socio-economic conditions of 74 percent of the group beneficiaries has improved.

Information regarding group schemes was given in block offices, panchayat offices and by agricultural assistants. Beneficiary details were given by beneficiary himself, other members of the household, neighbours and panchayat members. Investigators were unable to meet 24% of the beneficiaries personally as 90 per cent were temporarily outside the village and 6 percent had migrated from the village.

Part-C

Major Observations of the Investigators:

The district survey schedules designed for the concurrent evaluation of MWS included questions relating to maintenance of records, availability of information and problems faced by executing agency in the implementation of programs. Investigators were asked to note these and make their comments. But this information was not properly coordinated in the database. Therefore, we have tried to compile these details from the available State Reports (hard copies). In addition investigators who visited the fields of farmers and beneficiary families have commented on the status of the assets, their economic conditions and the selection of beneficiaries. These details are presented in Table - I 43. The problems identified and the general observations made by the investigators are discussed below.

3.C.1. Problems in primary data collection:

Village Sarpanch, Panchayat members and Agricultural Assistants guided the investigating team in the collection of beneficiary details. The main gap in data availability was relating to the amount sanctioned, number of instalments, date of sanction, commencement of work and completion of work. These details were not available for all the beneficiaries. This was also the case with the cost of construction of wells. Beneficiaries do not know about the cost particularly when the well/tank/land development or any other scheme is carried out by contractors, agriculture department or by Village Panchayat. Group schemes are generally taken by agriculture department. Village Panchayats monitor the construction and also supply materials. It is generally the sarpanch who, in the name of Panchayat , undertakes the works .He is the local contractor.

In States like Goa, North Eastern States and in the Union territory of Dadra and Nagar Haveli, investigators had problems in data collection due to lack of transport, scattered villages/ houses and hilly terrain.

In the case of limited number of beneficiaries, census survey of the MWS beneficiaries in all the districts of the State has been carried out. The answers to the details regarding the differences in the cost of production and the value of production are very vague. Particularly for the details of income before the scheme, the cropped area, production, price, labour use and the cost of cultivation it is difficult to get accurate answers.

3.C.2. Information from secondary sources:

Generally it is observed that the details of MWS, particularly the number of beneficiaries, the amount and the year of sanction are not maintained properly in DRDA or ZP offices. Records of the beneficiaries whose names have been suggested by Village Panchayat are also not maintained by district offices. But the officials and the clerical staff of the district and block offices were co-operative in giving the available information.

3.C.3 Problems in implementation:

None of the implementing offices has reported about any problems in the implementation of MWS.

3.C.4 Status of the MWS assets:

Investigators have opined that 55 percent of the MWS assets are in satisfactory condition. 34 percent assets are found to be good and nearly 8 percent are in poor status. Majority of the MWS assets in Gujarat, West Bengal and Dadra & Nagar Haveli are Stated to be good. More than 10 percent of the assets are found to be in poor condition in Assam, Goa, Himachal Pradesh, Karnataka, Kerala, Manipur, MP and Rajasthan.

3.C.5 Selection of Beneficiaries:

The general feeling of investigators in all the State/UTs is that majority (94%) of the beneficiaries are selected as per the guidelines of the Ministry. But, the comments that 35 percent of the beneficiaries in Assam, 21 percent in Haryana, 16 percent in Himachal Pradesh, 13 percent in Orissa, 11 percent in Maharashtra and 10 percent in West Bengal are not selected as per Ministry's guidelines is a cause of concern and a major issue that needs to be urgently looked into in these States.

3.C.6. Improvement in the socio-economic conditions:

Farmers in Jammu and Kashmir, Mizoram, Manipur, Meghalaya, Tripura, Dadra & Nagar Haveli, Himachal Pradesh and West Bengal seem to have benefited more from MWS. As shown in Table I-42, the socio-economic conditions of more than 90 percent of the beneficiaries in the above mentioned States and Union territories has changed after receiving assistance. In Jammu & Kashmir, socio-economic condition of all (100%) the beneficiaries has changed, as a result of assistance under MWS. As per the Statement of investigators, on an average, there is improvement in the conditions of 72 percent beneficiaries in the country.

The status of other beneficiaries (28%) has not changed due to MWS. Though, average for the country is encouraging, Table I-43 shows that there are large variations across the States. In Lakshadweep, according to investigators, MWS has made no impact on beneficiary households. There is no change in the status of 97% of the beneficiaries. This is also the case of Arunachal Pradesh and Kerala where status of 67 percent and 55 percent of the beneficiary households remained unchanged. In Maharashtra and Rajasthan also, more than 40% beneficiary households seem to have not benefited from the scheme.

For those whose status has improved, growth process can also be one of the factors contributing to their improved life. This could be due to increased employment opportunities and increased wage rate. **Beneficiaries have also felt that there is an improvement in their farm earnings due to use of fertilizers, which of course is possible only when there is irrigation.** Investigators have found that except in the case of failed wells, **the beneficiaries have made use of the MWS structure whether it is open well, tube well or tank. Land development works have helped in retention of fertility of soil and water storage. MWS helped farmers to take up multiple crops and also raise plantation crops and vegetable. In many States, well water is used for drinking purposes, particularly in Lakshadweep and Kerala. MWS has also increased the value of beneficiary land, as it is a permanent asset.**

Part -D

Specific Features* of MWS: State-Wise

Andhra Pradesh:

Assistance under MWS has been given mainly for construction of open wells (56%). Three-fourth of the sample beneficiary families are below poverty line. But average household income of the beneficiary families in the State is Rs.11568/-. Though, concurrent evaluation was carried out in 22 districts, the information about the beneficiaries is available for 18 districts only. Districtwise details are presented for all the 22 districts.

Open well is a predominant asset that was created under the scheme. The extent of area under irrigation has gone up because of MWS to the tune of about 0.8-hectare on an average. The status of the MWS asset is found to be satisfactory in 90 per cent of the cases. A significant amount of additional land is brought under irrigation due to MWS (102523 hectares). **But, only 41 percent beneficiaries have experienced increase in their income and average increase is Rs.4811. Investigators have felt that the socio-economic condition of 83 percent families has improved.**

Arunachal Pradesh:

In Arunachal Pradesh, due to rocky terrain, open dug wells and borewells are not feasible. In addition to land development works, construction of water harvesting structures, irrigation ponds and channels and diversion bunds are implemented in the State. Major parts of MWS works are group projects. The status of MWS works is found to be satisfactory and an additional 1144 hectares land has been brought under irrigation after the introduction of MWS. Average irrigated (owned) area has increased by 0.39

* Source: (1) Data base

(2) State Reports on MWS

hectares. An increase in income is experienced by only 33 percent beneficiaries and the average increase in income for these families is RS. 2193. The economic status of beneficiary households is poor and has not changed due to MWS.

Assam:

In Assam open wells are constructed on major scale under MWS. Tube/bore wells, irrigation tanks and land development works are also undertaken. 50 percent of the beneficiary households live below poverty line, though average annual household income is Rs18033. Beneficiaries are selected in Gram Sabha. Only $\frac{3}{4}$ of the beneficiaries have received assistance on their request. **In Assam the cost of construction seems to be the highest in the country as more than 50 percent have received amount above Rs. 45000 and the average expenditure on MWS works is Rs.98521.**

There is improvement in the socio-economic status of 69 percent families. 13 percent of the assets are in poor condition. Total area brought under irrigation amounts to 30338 hectares. There is increase in average irrigated area by 0.11 hectares.

Bihar:

In Bihar, both individual and group schemes are undertaken. The involvement of contractors in construction is reported to be 22 percent and, contractors execute about 77 percent projects.

The average increase in the income of beneficiaries generated from crop production was Rs 4675 in the case of individual beneficiaries and Rs 6656 in the case of group beneficiaries. An additional area of 113530 hectares has been brought under irrigation due to MWS.

Goa:

In Goa, due to limited number of beneficiaries, all the available beneficiaries (we can say it as a census survey) in two districts were surveyed. As there are no ST farmers and freed bonded labourers in Goa, assistance is given to farmers belonging to SC, OBC and non-SC category who are below poverty line. Only open wells have been constructed under MWS. DRDA is responsible for implementation of MWS in the State. Village Sarpanch generally acts as the local contractor for undertaking government schemes including MWS. Land under irrigation has increased by 26 percent. There is improvement in the income of nearly 69 percent beneficiary families in the State. MWS has helped farmers to take up cash crops like sugarcane and also plantation crops. Rice (which is the main crop in the State) yield (per acre) also increased. **Farmers have felt that there is still scope for increasing the irrigation capacity in their fields. There is no doubt that MWS has benefited the small and marginal beneficiary farmers in the State.**

Gujarat:

The MWS evaluation in Gujarat covered only individual schemes, as 98 percent of the schemes are open wells sanctioned to individual beneficiaries. Irrigation tanks, water harvesting structures and land development works account for less than 2 percent. In Gujarat, ground water is an important source of irrigation. It is reported that in many areas over utilisation has led to emergence of 'dark' and 'grey' areas. Poor farmers who cannot afford bore/tube wells get access to ground water through MWS assistance. **The concurrent evaluation of MWS in the State revealed that water level had gone down in many parts and as a result water availability is found to be seasonal.**

Additional area brought under irrigation amounts to 17879 hectares. Average irrigated land (own) increased by 1.27 hectares (3.18 acres). There is

increase in the income from crop production for more than 90 percent of the families with an average increase of Rs 13296.

Haryana:

DRDA is the main implementing, monitoring and supervision agency at the district level. Group projects are sanctioned in the name of Gram Panchayat and sub-leased in individual's name. Group projects are sanctioned for construction of wells, drainage or construction of walls widely known as fields channels, tube/bore wells and water harvesting structures. Open wells are prominent under MWS. The impact in terms of area brought under irrigation is very low (only 271 hectares). Average irrigated (own) land increased by 0.80 hectares. Though 19 percent of the beneficiaries did not experience-increased income, the average increase in income for the remaining 81 percent of the beneficiaries is very significant (Rs.26085). The status of majority (98%) of MWS works is found to be good and satisfactory.

Himachal Pradesh:

The evaluation of MWS was carried out in 12 districts of HP. Wells, irrigation tanks; nallahs and kuhls were undertaken by beneficiaries and under group projects. Though in HP group schemes were surveyed, due to data constraints (non-availability) the discussion in earlier sections pertains only to individual schemes. In HP, the beneficiaries from general category are more than SC/ST groups.

An additional area of 7337 hectares has been brought under irrigation due to MWS. There is an increase in the average irrigated land of individual and group beneficiaries by 0.08 hectares and 4.26 hectares respectively. The average increase in income of individual beneficiary households is Rs. 762.

J&K:

The concurrent evaluation was carried out in 13 districts covering 1300 beneficiaries. Kargil district was not covered under the study, due to cross - border conflicts.

Rice, maize and wheat are the major crops grown in Kashmir. MWS is reported to be popular in J&K. Open wells, irrigation tanks and land development works are undertaken. The impact of MWS has been very encouraging in the State. Irrigated (own) land increased by 0.66 hectares. Irrigated leased- in-land increased by 9.61 hectares. More than 80 percent beneficiaries have earned above Rs. 2000. The average increase in income from crop production is Rs 449568 and it is the highest in the country. Investigators have observed that the socio-economic conditions of all the beneficiary households has improved. **In spite of disturbances due to political and militancy problem, MWS has made a tremendous impact on beneficiary households. A total of 11040 hectares has been brought under irrigation.**

Karnataka:

In Karnataka, the implementation of MWS is the responsibility of ZPs. ZP co-ordinates the work by block offices, Public Works Department (PWD) and Agriculture Department.

Individual schemes included construction of wells while group schemes were mainly minor irrigation projects, construction of new and repair or maintenance of old water harvesting structures and percolation tanks.

Check dams, vent dams, bunding and branch terracing have been taken up under group schemes. In many of the group schemes, before starting the work the agriculture department (ex: Dharwad district) takes the consent of landowners who would benefit from these schemes. Later they are named as beneficiaries and registered under MWS programme. The quality of group

schemes benefiting only few is lower. But bigger projects like in Hospet, Chitradurga (check dams) seem to be successful and used by beneficiaries.

In Karnataka total land brought under irrigation is 66656 hectares. Average irrigated (own) area increased from 0.29 hectares to 0.44 hectares. Average increase in annual income from crop production is Rs.8015. The status of MWS works of 18 percent beneficiary households is in poor condition. And 18 percent beneficiary households have experienced no change or reduction in their agricultural income. Overall there is improvement in the socio-economic status of 65 percent families.

Kerala:

The implementation of **MWS in Kerala has been unique compared to other States in the country.** During the ten years of its implementation (1989-99) in the State, **more than 50 percent of the assistance is given to construction of houses.** Of the total projects covered in the study 34 percent beneficiaries had received assistance for construction of houses. The beneficiaries are selected by VP and D.R.D.A. Other works include irrigation tanks and land development schemes. **In one of the districts (Thrissur), 24 per cent of the sample beneficiaries had taken assistance for well and 76 per cent had taken assistance for construction of houses.** In Kollam district, **public wells are constructed under MWS and are source of drinking water to many households.**

It is reported that records of coverage and irrigated area are not properly maintained in DRDA's offices. An estimated additional area brought under irrigation amounts to 34669 hectares. Average irrigated area (own) has doubled (0.06 to 0.12). But, the overall impact is very low as there is no improvement in socio-economic condition of 45 percent families and for 72 percent of the beneficiary households there is no change in income from crop production.

Madhya Pradesh:

DRDA is the main implementing agency for MWS in the State. The impact of MWS in the State has been tremendous. An additional area of 168374 hectares has been brought under irrigation. This accounts for more than 18 percent of the total area brought under irrigation due to MWS in the country. Average irrigated area (own) increased by 1.61 hectares. Average increase in income is also very high at Rs 24750. But, for 21 percent of the beneficiaries, MWS makes no difference. There is no change in their income level. These beneficiaries include MWS failure cases also, which is 6% in the State.

Maharashtra:

The study was carried out in 29 districts covering 2828 beneficiaries. MWS implementation is co-ordinated by DRDA. Open wells are the only schemes sanctioned under individual assistance. Group schemes generally include bandhs. Introduction of MWS has been reported to be a boon to State's agriculture as more than 80000 hectares of land is brought under irrigation. Average irrigated (own) land has increased by 0.64 hectares (more than 1.5 acres). 77 percent of the beneficiaries have experienced increase in income from agriculture and an average increase of Rs. 8645.

Manipur:

Manipur is a small State with majority of the population being tribals. The survey covered 706 beneficiaries in seven districts.

DRDA/ZP are responsible for monitoring and supervision of the scheme. Beneficiary selection is recommended in Gram Sabhas. Irrigation tanks are major works undertaken as construction of wells is not feasible. Construction of drainage or cementing of irrigation wells were the other major activities. **Wells have been constructed in the holding of Panchayats also.**

An additional area of about 3763 hectares has been brought under MWS. There is significant change in the income of beneficiaries. Average increase in income is RS.24700. There is improvement in the social and economic status of more than 50 percent families.

Meghalaya:

In Meghalaya open dug wells are not feasible due to topography. **In some valley regions soft formations are said to be identified by farmers. The tribal farmers bore some kind of well for irrigation purpose in the identified area.** The availability of water in these wells is said to be low as below 8-10 feet, there is rock formation. Water from these sources is used for irrigation. Land development works account for more than 76 percent. Additional area irrigated is only 18 hectares. The wells provide water for irrigation to all the farmers who dug them though the availability is low and seasonal. There is average increase in income by Rs. 1336 and all the farmers (98%) except 2 percent have benefited. The success rate of these wells in the contest of hilly region is said to be 100 percent and they are in good condition.

Mizoram:

Mizoram is a hilly area. Due to geological constraints, most of the works sanctioned were for land development. **In Mizoram, land generally belongs to community or is a common property and Village Council is the authority over the allotments to be made** MWS is implemented by DRDA. Beneficiaries are selected on the recommendation of Village Councils, government officials and local leaders. Village Councils enjoy statutory status like Village Panchayats. Impact of MWS seems to be significant in the State. None of the MWS works is in poor condition. An additional area of 68.7 hectares has been brought under irrigation. There is increase in the income of all the beneficiary households, except 2 percent families.

Nagaland:

The study covered seven districts of the State and only group schemes. Rural development activities are administered by "Village Council" through its functional body-Village Development Board.

In Nagaland, due to hilly terrain **and community land ownership, it is difficult to get institutional credit.** No doubt, MWS will be a gift to farmers who are unable to get finance for agriculture development works. **It is reported that drinking water is a priority compared to irrigation.** Well irrigation is not feasible due to hilly terrain. Terraced fields, which are irrigated were said to be under individual ownership while, unirrigated lands are under community ownership. These fields are said to be cultivated following jhuming /shifting agricultural practices.

Though the overall impact of the scheme is low in the State, an additional area of 2862 hectares has been brought under irrigation. There is increase in the area under irrigation which is seen in only two districts (Phek and Zunhoboto). Except for 4 percent of the families there is no change in the income from crop production. The socio- economic status of the beneficiary households is good. But, this cannot be attributed to MWS. **MWS has helped villagers to get drinking water and water to meet their other domestic requirements and kitchen gardens.**

Orissa:

In Orissa MWS survey was carried out in 30 districts, covering 2582 beneficiary families. Under individual schemes, wells are sanctioned on large scale. Group projects include irrigation tanks, water harvesting structures, canals and bandhs. Selection of beneficiaries is made through Gram Sabha.

An additional area of about 13790 hectares has been brought under irrigation. Average irrigated area has increased from 0.14 hectares to 0.59

hectares. More than 90 percent of the assets are in good/satisfactory condition and more than 90 percent of the beneficiary families have experienced increase in income. The study shows that MWS has made positive impact on beneficiary households.

Rajasthan:

The Million Wells Scheme is reported to be popularly known as Jeevan Dhara in Rajasthan. Open wells are the major works in addition **to which group projects are taken up mainly in mountainous Mewar regions.** Group projects consist of water harvesting structures or Anicuts. In Rajasthan, the positive impact of MWS seems to be 50 percent only. Though there is increase in the area under irrigation in the State due to MWS (24472 hectares), 41 percent of the beneficiary families have not received benefits in terms of increase in income from crop production. 22 percent of the assets are in poor condition. Average increase in income due to individual schemes is Rs. 11920.

Sikkim:

In Sikkim, only group projects have been assisted under MWS. As open wells are not feasible due to hilly terrain, minor irrigation channels along with water tanks are constructed. Irrigation channels are constructed to channelise the run off water for irrigating the fields. **Water tanks are used mainly to provide drinking water to villages through pipes.** Irrigation is mostly flow irrigation. Minor irrigation channels involved more than a village. Other works included construction of walls for diverting water flows, plantations of banana and fast growing plants for soil and water conservation and barbed wire fencing for protection of plants. The survey covered only those farmers who used the available water for irrigation.

For executing the group works, **Committees of 5 local farmers for each project were constituted. These farmers took the work on contract basis.** The schemes are recommended through Gram Panchayats and supported by Panchayat engineers.

A point to be noted here is that there is no selection of beneficiaries. All the families falling in the catchments area were benefited irrespective of their eligibility and personal considerations.

Tamil Nadu:

In Tamil Nadu, mainly open wells are taken up under individual schemes. In addition, minor irrigation works and water harvesting structures are taken under group projects. Bore well construction was assisted in few areas where open wells were not feasible. Presently, the selection of beneficiaries is said to be done by a task force committee consisting of the president and members of the concerned village Panchayat and officers of the block development office in the presence of Gram Sabha.

As a result of implementation of MWS, an additional area of about 102523 (11.33% of all India figures) hectares is brought under irrigation. Average irrigated area, which was 0.13 hectares before the introduction of MWS has increased to 1.01 hectares after MWS. The impact of MWS in terms of income has not been favourable. There is no change in the household income of 59 percent families. MWS has helped only a small group out of total beneficiary households. This does not imply that MWS works are of low

standard. Investigators who visited the sites have opined that the status of most of the MWS works are in good and satisfactory condition. The economic status of beneficiary households (of 83%) has increased, but this is not due to MWS alone.

Tripura:

A total of 380 beneficiary households in 4 districts were covered under this study. Since tribals constitute major component of the population, 44 percent of the beneficiaries belonged to ST category. Irrigation tanks and water harvesting structures are mainly carried out under MWS. Nearly 10 percent of the works are open wells. An additional area of only 286 hectares has been brought under irrigation. Average irrigated area has increased only by 0.02 hectares. Though there is only a marginal improvement in the status of beneficiaries, investigators have opined that the scheme has benefited farmers and, beneficiaries are happy and are satisfied with the scheme.

Uttar Pradesh:

In UP, MWS is implemented in all the 83 districts by DRDA. Nearly 90 percent of the individual schemes are tube/ bore wells. Remaining schemes are open wells. Under group projects, beneficiaries preferred development of land and construction of canals.

In UP, though there is significant increase in the average income from crop production (Rs. 17112), the impact in terms of irrigated area is very low. It is the only State in which the average owned area under irrigation has come down after introduction of MWS. This is because of the drastic decrease in the irrigated area in Mau district from 27 hectares to 0.74 hectares. This has brought down the average for the State as a whole. However, for leased -in land, the irrigated area has increased marginally from 1.01 acre to 1.38 acres. The changes in income therefore should not be attributed to only MWS. Factors like increased prices of agricultural produce, use of modern

equipments, fertilisers etc need to be increased. Increase in intensity of irrigation due to MWS might have led to increase in income in addition to MWS acting as a catalyst.

West Bengal:

In West Bengal, nature of MWS works include open wells, water tanks, ponds, minor irrigation channels, land development, soil conservation, embankments, bridges, bunds and water harvesting structures. Tanks and ponds are reported to be used more for fisheries than irrigation. In West Bengal different department are involved in MWS implementation. Beneficiaries are identified by Gram Panchayat and recommended by Block Samitis. Wells are usually said to be constructed by ZP, minor irrigation channels by Block Samitis, embankments for flood protection by Irrigation and Waterways Dept, irrigation tanks by Fisheries Department and soil conservation by the Department of Soil Conservation and Panchayats. Works taken up under MWS in west Bengal are mostly group projects.

An additional area of about 19948 hectares has been brought under irrigation. Average increase in irrigated (own) area is 0.44 hectares. All the beneficiaries, except 3 percent, have experienced increased income from crop production and on an average increased income is Rs 18935.

UTs:

Andaman & Nicobar Islands:

MWS has been launched in the UT in 1990-91. DRDA is the main implementing agency. **As Andaman & Nicobar Islands face drinking water problem, MWS works are also a source of drinking water in addition to irrigation.** The UT comprises of two districts and five blocks.

In Andaman & Nicobar Islands, major works relate to open wells and are taken under group projects. Some 20 percent work relates to drainage or construction of walls. All the works taken are complete. The impact of MWS is negligible in terms of irrigated area. Only 2 hectares have been brought under irrigation after MWS implementation. There is no increase in income from crop production also. **Well water is used for drinking and household cleaning purposes.**

Dadra & Nagar Haveli:

Dadra & Nagar Haveli is a single district and a single taluk consisting of seventy-two villages. As per the sampling design, only 100 beneficiaries are covered under the study.

DRDA is the implementing agency. Only open wells are constructed under MWS.

Houses are constructed in the fields near the site of wells. All the wells were found to be successful and had water at the depth of 5 to 20 mts. 76 percent of the wells had water throughout the year. All the beneficiaries are from ST category.

The success rate of wells used by beneficiary families was 100 percent. An additional area of 191 hectares has been brought under irrigation due to MWS. Except one beneficiary family all others (99%) have experienced increase in income from crop production. Beneficiaries do not have leased-in land. The average annual increase in household income from crop production is estimated to be Rs. 6426.

Lakshadweep:

In Lakshadweep, 90 beneficiaries from 2 blocks were covered for Concurrent Evaluation. Lakshadweep is the only district in the UT. Villages

are not administrative units but selection of all beneficiaries is said to be done by Village Panchayat.

In Lakshadweep, women beneficiaries account for 69 percent as women enjoy a unique position. Majority of the households are female headed. All the beneficiaries are Muslims and in Lakshadweep they are classified as scheduled tribes.

In Lakshadweep, assistance is for renovation of wells, which are used only for drinking purposes. Therefore, there is no change in the income from crop production and average irrigated area.

Part E

Individual and Group Schemes: A comparative Analysis

The evaluation study covered, only the individual beneficiaries in MP, Tripura, Meghalaya, Mizoram, Goa, Gujarat and the Union territories of Dadra and Nagar Haveli. In Nagaland, Sikkim and Andaman and Nicobar islands, the study carried only group beneficiaries. Open well is a major work undertaken in both individual and group schemes. It accounts for nearly 56 per cent of individual schemes and 26 per cent of group schemes. Land development works (10.54%) and tube/bore wells (9%) are also sanctioned for individuals. Other major group projects are water-harvesting structures, canals, irrigation tanks, bandhs, and drainage or construction of walls. Land development works account for only 3.8 per cent of total works of group schemes.

The impact of individual and group schemes has been summarized in tables E-1 and E-2 presented at the end of this section.

The analysis covers 32715 individual beneficiaries and 10706 group beneficiaries of 1485 group projects. A total area of about 733181 hectares has been brought under irrigation due to individual and group beneficiary schemes in 23 States and 3 UTs (as per district records). In Goa, the records for irrigated area due to MWS are not maintained.

Average irrigated area for the country increased by 0.46 hectares in the case individual schemes and by 3.84 hectares in the case of group schemes. Though group schemes covered larger area, the impact in terms of income generation is significant for individual schemes. While there was no change in crop income for 20 per cent individual beneficiaries, 32 per cent group

beneficiaries did not experience any change in crop income. But the average increase in income for those who have benefited is higher for group beneficiaries (Rs. 15740) than individual beneficiaries (Rs. 10513).

The success rate of wells is more or less the same for individual and group beneficiary schemes. In more than 50% MWS works, water is available throughout the year. Investigators have felt that 89% of the individual assets and 84% of the group assets are in good condition. There is improvement in the socio-economic condition of 74% of the individual as well as group beneficiaries.

The impact in terms of increase in average irrigated area (own) is significant for high-income States and lower for special category States. Average irrigated area increased by 0.72 hectares for high-income States and by only 0.19 hectares in special category States. The special category States are all hilly areas where there is little scope for extending the irrigated area. The intensity of irrigation can be improved. Moreover, the individual schemes designed for these areas was not in consonance with the topographical factors.

A specially designed area oriented scheme needs to be prepared for hilly areas, considering the local water harvesting practices and knowledge. In Lakshadweep, wells are not used for irrigation and hence there is no change in irrigated area. **As per the observations made by investigators, one of the encouraging factors that is to be noticed from table D-1 is that the socio-economic status of 77 per cent individual beneficiaries has improved in low income States as compared to lower percentage of families in other States. Even in terms of increase in income, the number of families experiencing no change or reduction in income is lower in poor States (but, only 21 per cent beneficiary families have crossed poverty line in low income States).** The number of cases where water availability is perennial is also highest for low-income States. The overall impact has been poor in Union territories.

In general, it seems that group projects are more feasible than individual projects. **The average area of irrigated land is larger due to group projects and there is improvement in the socio-economic status of 74 per cent beneficiaries (Investigators have opined that there is improvement in the socio economic status of 74 per cent individual beneficiary families also).** The extension service is also better for group projects than individual schemes. If the problems of water management, selection of sites, lack of co-ordination among beneficiaries etc are solved, group projects can become a great asset to village community.

CHAPTER - IV

Conclusions and Suggestions

The execution and implementation of Million Wells Scheme in different States and Union Territories, discussed in the earlier chapter reveals that MWS has been considered as a helpful scheme that provides assistance to small and marginal farmers, who are below poverty line. Though the scheme was introduced only for SC/ST poor farmers, later it was extended to poor families irrespective of their social status. The scheme has been merged under Swarn Jayanti Gram Swarozgar Yojana (SGSY) from April 1999. Though the assistance to construction of wells may be continued, the emphasis will be on provision of group assistance. The status of the MWS in the country as reflected in different States has been discussed in the earlier two chapters. The major conclusions drawn from the findings of the study and few suggestions that could be incorporated for the improvement in the future programmes are presented below:

Major Conclusions:

- 4.1. The District Rural Development Agencies (DRDAs) and the Zilla Panchayats (ZPs) are responsible for implementation of MWS in the country. Zilla Panchayats/ Village Panchayats play a major role in rural development schemes in Karnataka, Kerala and West Bengal. Village Councils in Mizoram and Nagaland (comparable to Village Panchayats in other States) select the beneficiaries.
- 4.2. In many States DRDAs are not functioning properly. They only transfer the amount released by the Centre to beneficiaries. The monitoring of

selection, supervision of the work and, planning and allocation of the works as per the needs of each block are not undertaken by the DRDA. Block offices and Village Panchayats are increasingly involved in rural development works. Though politicians' role in selection of beneficiaries is found to be only 3% in the country, politicians do influence selection process in Manipur, Jammu and Kashmir and Assam as more than 10% of the beneficiaries in these States are selected on the recommendations of MLAs / MPs.

- 4.3. Of the total districts surveyed in the country, 88 per cent have governing body at the district level. Though district officials have said that there exists governing body, in reality it is observed that this body does not function regularly in many of the States.
- 4.4. The assistance to beneficiaries is made mainly in terms of cheque/draft (71.57%), except in Assam, Arunachal Pradesh, Tripura, Meghalaya, Mizoram and West Bengal where payment is made in cash.
- 4.5. As per the Officials' Statement, in 78 per cent of the districts support and technical assistance from line departments for construction of wells to beneficiaries. But as per beneficiary's Statements, it was found that 44 per cent of the cases involving blasting, boring and drilling were managed by beneficiaries themselves.
- 4.6. As per the officials' Statement the average time lag in the actual disbursement of sanctioned amount varied from one week to more than 6 months.

- 4.7. Generally, the districts have not faced problem in the receipt of funds from Centre and States. But districts in Bihar, Meghalaya, Mizoram, Orissa and all the UTs have not received the funds in time.
- 4.8. Majority of the MWS beneficiaries (91 per cent) belong to SC/ST agriculture households. Only in States like Goa, Haryana, Himachal Pradesh, Manipur and West Bengal more than 25 per cent of the beneficiaries are from non-SC/ST groups. Investigators have pointed out that selection of beneficiaries in Haryana, HP and West Bengal including few other States is not as per the guidelines of the Ministry.
- 4.9. Ninety per cent of the beneficiaries are males. Only in Lakshadweep 69 per cent of the beneficiaries are females because of the female dominance in all walks of life. In Kerala (37 per cent) and Meghalaya (46 per cent) also we have fairly a good number of female beneficiaries. In Meghalaya nearly 80 per cent of the beneficiary households are female headed households. This female dominance may be the reason for comparatively larger number of female beneficiaries. All India figures suggest that out of total 32786 beneficiary households, only 7.73 per cent of the households are headed by females.
- 4.10. On an average, the annual household income of MWS beneficiaries in the country is Rs.16103. The average annual income is above Rs.11, 000 in all the States except, Meghalaya, Goa and Tripura. The percentage of those below poverty line is higher in Meghalaya (100%), Goa (89 %), Tripura (89.2%) and Andhra Pradesh (75.76%). In Karnataka and Manipur also, more than 60 per cent of the beneficiary families live below the poverty line (< Rs 11000 p.a.).

4.11. For the country as a whole, majority of the families (60%) have received assistance up to Rs, 20,000, while 19 per cent have received above Rs. 32, 000. 5 per cent of the beneficiaries received above Rs.45, 000. In Assam itself more than 50 per cent beneficiaries have received assistance above Rs.45, 000.

It should be mentioned here that beneficiaries are not satisfied with the sanctioned amount. While a major portion goes for meeting the cost of materials which is generally more than the cost norms under MWS, the remaining amount is not sufficient to meet the labour cost. Family labour constitutes only 1/3rd of the total labour.

(In Rs)	Cost incurred (Number of families)	Range of assistance
Up to 20,000	54%	60%
20,000 to 45,000	32%	35%
45,000	14%	5%

4.12. Though MWS is an irrigation programme, in many States, assets created under MWS have been the source of drinking water to beneficiaries as well as villagers. Water is used for domestic purposes also. It is reported that in Haryana some community projects are for drinking water. **In West Bengal, tanks and ponds are used for fishing than irrigation. Some of the tanks are particularly used for drinking. In A & N Islands, as there is drinking water problem the well water is used mainly for drinking and household cleaning purposes. In Lakshadweep, assistance is used for renovation of existing wells which are used only for drinking purposes. In Kerala, in Kollam district, public wells are constructed under MWS and are source of drinking water to many households. In**

Sikkim, water tanks are constructed for drinking purpose. Apart from these States, MWS has been a source of drinking water in addition to irrigation, wherever the farmers have constructed houses in farm sites.

- 4.13. Though it is specified in the guidelines of the programme that the wells should be registered in beneficiary's name, only 68 per cent of the works surveyed in the country have been registered in beneficiary's name.
- 4.14. Totally, 64 percent of wells in the sample region in the country have sufficient water for irrigation which is an encouraging and positive factor for the success of MWS.
- 4.15. To meet the additional cost of construction 50 per cent of the beneficiaries have borrowed from money lenders (37.14 percent), friends (24%) and, also used their own savings (33 %).
- 4.16 **In Kerala, more than 50 per cent of the total MWS assistance is given to construction of houses. And, in most of the districts, 34 per cent of the sample beneficiaries have received assistance for house construction. MWS assistance is also used for drinking water purpose and improving drainage facilities to control floods.**
- 4.17. The impact of MWS has been significant both in the case of individual and group schemes. i) **The success rate of wells for the country as a whole is 87 per cent as per official records.** As per beneficiaries' Statement failed cases account for only 3.5 per cent (individual schemes) and 1.5 per cent (group schemes).

ii) An additional area of 733181 hectares has been covered for irrigation by MWS in the country. Irrigated area per well works out to be 1.56 hectares. **Average irrigated area increased from 0.20 hectare to 0.62 hectare under individual schemes and from 2.22 hectares to 6.06 hectares under group schemes.**

For individual beneficiaries the impact on irrigation has been significant in Gujarat, MP, AP, and Dadra and Nagar Haveli. In group schemes, Bihar, AP and UP have benefited more. Andhra Pradesh has benefited from both the schemes. In Gujarat, Haryana, J & K, Manipur, Mizoram and UP, more than 70% have earned above Rs.2000 under individual schemes and in UP, Jammu and Kashmir and West Bengal average increase in income is very significant. **MWS has not made any positive difference in the earnings of 20 percent individual beneficiary families and 32 per cent group beneficiary families.**

This could be due to increased cost of living, price of fertilizers, seeds and other materials over the years in addition to an un-economized use of MWS. Other factors like crop failure and lower prices may also result in low returns.

We may conclude to say that by and large MWS has benefited small and marginal farmers in the country. The overall impact has been positively significant in terms of increase in income in Bihar, Gujarat, Haryana, Jammu and Kashmir, Karnataka, Maharashtra, Manipal, Madhya Pradesh, Orissa, Tamil Nadu, UP., West Bengal and Dadra & Nagar Haveli. There is not much progress in Kerala, Meghalaya and Lakshadweep.

The identified gaps in the programme and the possible solutions that could be incorporated to combat them are discussed below.

Suggestions:

Though MWS is no more implemented as a separate programme, the assistance to farmers to construct wells for irrigation purposes may be continued under a different programme viz. Swarnjayanti Swarozgar Yojana (SGSY) and the emphasis will be on group assistance rather than individual assistance. But the agencies involved in the implementation are the same for both the programmes and loop holes of both the schemes that need to be corrected, continue to exist hindering the progress if, proper measures are not taken.

As specified earlier, 78 per cent of the total operational holdings in India are held by small and marginal farmers with less than 2 hectares per holding.

In many States, the scheme was implemented without hydro-geological survey. Though majority of the district officials have reported that geological map of the coverage is prepared for the district, hardly any districts have used

these maps in implementation. Geological map and water table data should be taken into consideration while making assistance. It should be the base for planning and estimating requirements. In addition, VPs/BDO/DRDA

Considering these large number of marginal holdings it may not be economical to have wells in each of the holdings. Since the owners of these holdings are poor, the assistance may be given to undertake well irrigation which would cover more than two or three holdings. This would be economical and might benefit more number of farmers. Of course, suitable measures need to be initiated for eliciting co-operative spirit among sharing farmers.

must provide guidance to beneficiaries to identify the site of well construction and to know the possibility of ground water availability from the government appointed geologists free of cost.

As experienced by the investigators, in almost all the States, records of the scheme are not maintained properly. The progress/ success of a scheme would depend on the lessons that are learnt from the experiences of the past. All the concerned implementing agencies should be directed to maintain these records for all the rural development programmes.

DRDAs and ZPs should work out the requisites and also the feasibility of assistance for each block. Reasons for lack of response from farmers, non-utilization of assistance, lack of implementation in a particular block etc, can be discussed when the implementing agencies discuss on a common platform. In general there is a need for;

Many States have reported that there is no coordination between different line departments (agriculture, soil conservation, irrigation department, etc) and Panchayats/DRDAs. This is because of lack of district planning. Therefore, the first step that needs to be taken with regard to State schemes as well as other Centrally Sponsored Programmes is the district planning.

1. Co-ordination of DRDA, ZP, BDO and VPs or Village Councils.
2. Identification of potential beneficiaries.
3. Allocating blockwise works based on number of potential beneficiaries and geological survey of the area.
4. From the identified list, selection of beneficiaries in the Gram Sabha.

Though government officials and beneficiaries have said that the majority of the selection is made by VP, in reality that is not the general

practice. Villagers say that selection is done by VP as ultimately the lists are sent by VP. But, Gram Sabha selections are rare. The comments on the selection of investigators (3.C.5) in Assam, Haryana, Himachal Pradesh, Orissa, Maharashtra and west Bengal suggests that there is bias in the selection of more than 10 percent of the beneficiaries.

Therefore, the present first come first served method for selecting among the poor **and the sanctioning by government officials and on the recommendation of politicians is a biased method and will not benefit the poorest.**

Many States have observed inefficiency in the functioning of DRDA. If DRDAs continue to exist, they should be more active and hold regular meetings to discuss and implement the rural development programmes. The staff needs to be given orientation in rural development programmes. There is also need for increasing the tenure of Project Directors of DRDA. Usually, they are on deputation and transferred every one year. As a result, there is lack of accountability.

For hilly areas, especially northeastern States, the construction of wells is not feasible due to topographical factors. But, MWS scheme does not contain any special programmes for such areas. It is the farmers in those regions who use the assistance for renovating the existing schemes based on local practices. Special program studying the topography need to be planned at the national level with the help of a panel of experts (economists ecologist, geologist and agriculture experts).

Cost norms also need to be different for such States where the construction cost would be comparatively higher.

In States like Mizoram and Nagaland where there is community ownership of land, DRDAs and ZPs should arrange for meeting of village

leaders and farmers before sanctioning of the scheme to enable proper understanding among them.

On the whole, MWS seems to have generated mixed effects on the economic conditions of the farmers. The study has brought out very purposive and useful feed back on the efficacy and implementation of the MWS. The objective of employment and creation of individual and community assets has been fairly achieved under the scheme. It has been useful and effective means in alleviation of poverty and development of self-confidence in rural poor due to creation of an economic asset. i.e. open well. It has encouraged farmers to enhance both crop production and per acre productivity and provides income on long-term basis. The overall socio-economic status of the beneficiary families has gradually changed due to benefits accrued from the scheme.

Financial assistance to farmers for open wells and other works must be continued as it will not only help farmers to increase their earnings but also contributes to the stock of food and other agricultural products in the country through increased irrigation capacity. **It is true that while majority of the farmers appear to have realized advantages from the scheme, there are many areas where much needs to be done. With improvements in respect of release of funds, identification of location of sites for wells, area oriented programmes, co-ordination between different departments in planning and execution, provision of extension services, identifying and coordinating farmers for group schemes, and close monitoring of the utilization of wells by the needy and deserving, MWS may prove to be a social welfare innovation with tremendous economic implications.**