Performance Assessment of Integrated Watershed Management Programme (IWMP) of Rohtak District, Harvana

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Abstract

Watershed management aim at restoring the ecological balance by harnessing, conserving and developing degraded natural resources such as soil, vegetative cover and water. Preparatory phase of IWMP aims at building appropriate mechanism for adoption of participatory approach and empowerment of local institutions. Study covered two projects under Batch-IV (2012-2013) of Rohtak district. This preparatory phase continues for a period of one to two years. The main focus of this phase is on "preparedness" of various project partners i.e. Project Implementation Agency(PIA), Watershed Development Team (WDT), village level institution building (Watershed Committee(WC), User Group (UG) and Self Help Group(SHG)) and build their capacity and works viz. prepare Detailed Project Report (DPR) and excute Entry Point Activities (EPA). A Clustered Sampling Technique was applied with a sample of 100% of the total watershed area in consultation with PIAs. Fair degree of randomization processes was adapted to off-set any bias towards representing population, however, care and caution was exercised to capture the processes and results held during the preparatory phase of the project cycle. EPA, DPR, SHG, WC showed 9.5 marks which indicate excellent rating and Capacity Building and WDT indicate very good rating and UG shows poor rating. These scores indicate the level of achievement of the project against each mile stone/ indicator. Preparatory phase activities focused on optimum use of available resources and integrated planning to deliver a sustainable output for the beneficiaries. When survey was done at project sites, it was found that communities had a sense of feeling that they were the stakeholders of the project. During the consultation process, the concerned watershed community perceived that the project would not only provide temporary wage labor during the implementation of certain construction based schemes or land based conservation measures but also may offer some long-term engagement and employment opportunities through productivity enhancement and livelihood initiatives.

Keywords: IWMP, PIA, EPA, WDT, SHG, UG Introduction

Watershed is defined as an unit of an area which covers all land and water area that contribute runoff to a common point. It is a complete dynamic unit, which invariably respond to any change that may be brought about within its extent. The soil and water must therefore be considered, planned and managed on watershed basis for effective results. Watershed approach has conventionally aimed at treating degraded land with the help of low cost and locally accessed technologies such as in-situ soil and moisture conservation measures, a forestation etc. through a participatory approach that seek to secure close involvement of the user communities. The broad objectives were promotion of the overall economic development and improvement of socio-economic conditions of the resource poor section of the people in-habiting the programme areas. With this aim, the Govt. of India has launched the "Integrated Watershed Management Programme (IWMP).

The IWMP made an attempt of bring together the ideals of natural resource management and rural development through a decentralized and people driven participatory approach. This has been implemented by conducting intensive ground level individual household

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surveys, village level meetings and using participatory techniques. Integrated Watershed Management Projects (IWMP) are considered to be important vehicles for rural transformation. At the national level Department of Land Resources (DoLR), Ministry of Rural Development, Government of India, is the nodal agency for the programme. State Level Nodal Agency (SLNA) is coordinating the programme in each state, where IWMP is being implemented. Common Guidelines for Watershed Development Projects (2008) were developed by the DoLR for steering the programme in the country. IWMP programme is being executed in many states of India and In Haryana it began in the financial year 2011-12. As per the Common Guidelines, IWMP is to be executed over a period of 5 to 7 years. Each project is divided into three phases. In each phase a specific set of activities, milestones and purposes/ results to be achieved Jayalakshmamma (2013).

Watershed Management in general and Integrated Watershed Management Programme (IWMP) is an integrated approach with multiplicity of interrelated sectors. These could be broadly classified under Natural Resource Management, Production Systems, Livelihood for the asset-less along with supporting structures like Capacity and Institution Building, M&E Convergence of various schemes, soil health, ground water level, livestock, forestry and social and economic status of the beneficiaries and other stake holders. As per Kumar and Bansal (2014).

In an agrarian nation like India, rural development is directly dependent on agriculture which is intricately linked to the natural resources like soil and water. Not only the national economy rests on the success of agro-output, but it also serves as a major occupation and is the prime livelihood option of the rural people. About 70 per cent of India's cultivated lands are under rain fed agriculture without proper irrigation cover. Rain fed agriculture in India's semiarid tropics are characterized by low productivity, degraded natural resources, and widespread poverty. Environmental concerns associated with agriculture relate mainly to the sustainability of the resource base for agricultural production (e.g. soil quality), protection of biodiversity and habitats, and environmental services of resources influenced by agricultural land use (e.g. carbon sequestration). Degradation of soil and vegetative resources already threatens agricultural productivity, biodiversity, and water quality and availability in many 'hot spots' in the developing world. Soils is about 16 per cent of agricultural land area in developing countries, and a higher proportion of crop and dry lands, have degraded moderately or mainly through soil erosion, nutrient depletion and salinisation. Edison et al.(2010).

Preparatory phase happens to be the most critical in the implementation of participatory watershed development. This is more so in the context of IWMP, which envisages a broader vision of geo-hydrological units with an average size of 1,000 to 5,000 hectares comprising of clusters of micro-watersheds (IWMP note, 2010). The preparatory stage should help in strengthening the cooperation and coordination between the village communities across the watershed Jangra et al. (2017).

The main objectives of the present study were under total six main components which were assessed in this evaluation viz. Entry Point Activity, Institution Building, PIA level Works, Capacity Building of project stake holders, process adopted and followed in preparation of DPR.Government of Haryana is implementing the Integrated Watershed Management Programme (IWMP) of Government of India (GoI) since 2011-12. Currently two batches (III & IV) of projects are under implementation under IWMP Haryana. The implementation is on the lines of the Revised Common Guidelines for Watershed Development Projects-2011, issued by the Government of India (GoI).

Study Area

In the present study preparatory phase evaluation was conducted for Rohtak district of Harvana.Rohtak district is one of the 22 districts of Harvana state in Northern India. It is located in the southeast of Haryana and northwest of Delhi, bounded by Jind and Sonipat districts to the north, Jhajjar and Sonipat districts to the east, and Hisar, Sirsa, and Bhiwani districts to the west. Rohtak city is the district headquarters. Rohtak district of Haryana lies between 28° 40': 29° 05' north latitudes and 76° 13': 76° 51' east longitudes. In Land use pattern of Project area under geographical area, agriculture use, rain fed area and wasteland is 12550, 9717, 7228 and 2833 (ha) respectively.InRohtak district, two projects are running under Batch-IV Project in Meham, LakhanMajra and Sampla blocks for preparatory phase evaluation have

covered. The project is having 13 and 8 villages under IWMP-1 and IWMP-2 projects, respectively. **Methodology**

The secondary source of data was used for the evaluation. MPRs (Monthly Progress Reports) were collected from Assistant Soil Conservation Officer (ASCO) and Technical Expert (TE). Besides these, the rules, guidelines and instructions issued by Government of India and Government of Haryana have also been studied.

On the basis of the secondary data available from the ASCO and TE offices, the methodology adopted for conducting this evaluation comprised of steps such as Finalization of sample size and villages, Literature review for deciding sample size and norms to be adopted, Appointment of field team, Training of field team, conducting Field work as per scheduled plan, data tabulation and analysis and preparation of Evaluation Report.

The preparatory phase of the district under Batch-IV (IWMP/2012-13) was executed from financial year 2012 – 13. As per Detailed Project Report (DPR), during this duration, all activities involved in the project by adopting participatory approach and empowerment of local institutions (WC, SHG, and UG) should be completed.

In order to have first hand information, a joint visit in the project area was made along with Panchayati Raj Institution (PRI) members. In this survey, physical location of the watershed, drainage pattern, slope, land use and other problems related to the area were assessed. Sarpanches and local people were involved in the discussions and needs and scope of watershed works were taken up.

The following table was followed for the marking criteria, which further used to assess the various activities, such as EPAs in physical and financial terms, capacity building and IEC, SHGs, UGs and WCs.

Table 1: Quality rating versus percentage of achievement of the total

Quality rating	Marks 9.5	% achievement of the total	
Excellent			
Very Good	8.5	60 - 80	
Good	7	50 - 60	
Fair	5.5	30 - 50	
Poor	4	<30	

On the basis of above mentioned methodology, data were collected and evaluation of preparatory phase was completed.

Results and Discussion

As per interaction and the data given in the MPR, 98% of the amount budgeted in the DPR was spent in actual.As per the quality-rating table, as explained in Methodology section, EPAs in financial terms stood in the excellent category with a score of 9.5.Villagers were happy with the project. Score of different activities is presented in figure 1.

As per DoLR guideline 02 WDTs are required in each project but in Batch-IV only one WDT is available for the project. Meeting of WC takes place at a regular interval. Proceedings of the meetings are kept in a summarized form. Details of the proceedings writings were not found in practice. Meeting of the UGs are not taking place. Therefore, the performance of the UGs could not be checked. Activities under approved LAP have been started in almost all projects. Almost 100% achievement was found under SHG.Performance of PIAs under the evaluation has been rated based on the three aspects laid down in the guidelines. The data pertaining to above three aspects was collected from the records maintained & updated at PIA level. So far as the involvement of WDT is concerned, it is assessed by interacting with the TE, ASCO& WDT & triangulating the feedback from them with the villagers.

Table 2: Detail of Capacity Building

Component	Y/N	Marks
Capacity Building Plan prepared	Y	8.5
Awareness camp Conducted	Y	7
Exposure Visit Conducted	Ν	0
Workshops/Training	Ν	0
Total person Trained	219 (Nos.)	7
Farmers & Landless Trained	Ŷ	6
Women Trained	Y	6
WDT Trained	Y	7
WC/GP members Trained	Y	4
Expenditure Made	Y	5.5

Capacity building is another component that is critical for the long term sustainability of the programme. Awareness programme, orientation programme, training has so far been conducted under project IWMP 1 & 2. No exposure visit/study tour has been organized in both projects is presented in table 3. Total persons trained under Batch IV projects are 219.



Figure 1: Component of Preparatory Phase of IWMP in marks

Within the preparatory phase DPR preparation is considered to be the most critical activity, as it provides the basis and guides all the future watershed implementation activities. DPR has been prepared and uploaded on website.All the base line surveys included PRA exercise and out of seven tools, 5-6 tools have been used during PRA.Copies of the DPR were not available, only abstract is available at the WCs level.

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