Impact Assessment of Watershed Projects in Madhya Pradesh – 2008

Background:

Watersheds constitute a concerted chain of efforts for upgrading the multiple use of common pool resources [CPRs] for relatively longer period of time say four to seven years. It cuts through the complexity and ownership mentality of private – public and common village property based patches of land and builds long – term synergies along land with water, bio-mass, livestock and with human entrepreneurship. In other words, any impact assessment of watershed project must examine and portray five phenomena viz. a – whether it affected ecological longivity of the village, b – caused economic prosperity of the concerned households, c – fostered institutionalization process of the village community so that operation, maintenance and repair based activities of watershed projects keep moving ahead, d – the most backward and poor household of the village also gets benefited on a long – term basis and e- whether the watershed could galvanize into action human enterprise.

The Government of Madhya Pradesh conceived the programme of watershed management as medium for rural development and constituted Rajiv Gandhi Mission for Watershed Management. The Mission was established keeping in mind the fact that State has large area of land which is degraded and unproductive.

Study Area:

The present impact assessment study covered 44 micro – watersheds in 47 villages of 8 districts encompassing 19560 ha. of area under Drought Prone Area Programme [DPAP] and 28 micro – watersheds in 27 villages of 7 districts spread over an area of 27692 ha. under Integrated Water Development Programme [IWDP]. These projects were sanctioned between the years 1998 to 2003. The study was performed at three levels: district, micro –watershed and beneficiary / nonbeneficiary. In addition 28 non – watershed villages were also taken –up to present a comparative picture of impact of watershed programmes.

Survey tools employed for the study included review of secondary information, structured interviews through pre – determined schedules, semi – structured interviews, group discussions, informal discussions etc.

The districts covered for field investigation included Ratlam, Dhar, Rajgarh, Badwani, Betul, Chhindwara, Chhatarpur, Shivpuri, Damoh, Seoni, Shahdol and Satna.

Objectives:

The important objectives of the study were :-

- To assess the economic development of the village communities who are directly or indirectly dependent on watershed through optimum utilization of natural resources like land, water, vegetation etc.
- To assess the impact of DPAP and IWDP on restoration of ecological balance in the villages through simple, easy and affordable technological solution and institutional arrangements that make use of and build – upon local technical knowledge and available materials.
- To assess the impact of the projects in terms of improvement of economic and social conditions of the resource – poor and disadvantaged sections of the community through greater access to income generating opportunities and focus on their human resource developmen.

Impact:

The overall impact of watershed development over the area under review was as follows:-

- Ecological and livelihood impact realized through augmentation of surface and ground water in drought prone areas of Malwa, Baghelkhand, Bundelkhand, Mahakaushal and Chambal regions.
- Change in cropping pattern and productivity: a decrease was observed in the average yield of crops like kodo, kutki, jowar and bajra whereas rise in per hectare yield was observed concerning crops like wheat, soybean and cotton.
- On an average 8 and 25 hectare area was added per micro project for Kharif season for DPAP and IWDP micro-watersheds respectively. Under IWDP micro-watersheds the rabi season data gave more promising results concerning productivity.

- Employment generated per micro – watershed was 27162 person days that included 14539 man days and 12623 woman days under DPAP while for IWDP it was 29291 person days comprising of 17199 man days and 12092 woman days. The maximum employment generation were in blocks Betul, Rajgarh and Pati [Badwani]
- The study has revealed that not more than two third of the fund under training component could be utilized as the district officials in some cases were unable to decide as what to do with the budget.
- The district level Watershed Development Advisory Committees were set-up in all the 12 districts to assist the implementation at grass – root levels. Members of Users Groups [270] and Self Help Groups [83] also extended their support directly or indirectly in various watershed development activities.
- Women empowerment, being one of the milestones, remained to be achieved. The participation of women mostly ended with their engagement as labour in watershed works.

Recommendations:

Based on the overall analysis of survey data and field observations the following recommendations were made :-

- It should be ensured that the fund reaches the PIA / W.C. within a stipulated time limit.
- It should be mandatory that every PIA must have one female as member.
- The officials at DRDA level must be regularly oriented towards the emerging issues and challenges of watershed management.
- Active participation of Watershed Committees be ensured in the planning, execution and maintenance of watershed activities.
- The Mission must evolve a system and mechanism to encourage quality institutions to take-up the work of capacity building at grass – root levels.
- The project must ensure that at least one water harvesting structure must be constructed out of public contribution to develop a sense of belonging towards the project.