

Foreword

India has looked to watershed development as a way to realize its hopes for agricultural development in rainfed and semi-arid areas. These areas were bypassed by the Green Revolution and have experienced little or no growth in agricultural production for several decades. By capturing scarce water resources and improving the management of soil and vegetation, watershed development has the potential to create conditions conducive to higher agricultural productivity, while conserving natural resources.

The NAP (National Agriculture Policy) seeks to promote the integrated and holistic development of rainfed areas through conservation of rain water and augmentation of biomass production through agro and farm forestry with the active involvement of the watershed community.

While much has been written about watershed development, there have been few efforts to systematically evaluate it. By doing so, this evaluative study will contribute immensely to our understanding of the promise and challenges of watershed development. This report may be important for various reasons. First of all, the concept of '*Sahbhagita*' was not practically seen at the ground level. There may be success stories of watershed development but its replication on a large scale is still a dream.

The findings relating to the internal rate of return of the project is up to 202 per cent and the cost-benefit ratio varies from 1:1.87 to 1:2.02, which clearly reveal that the project is beneficial but the problem of sustainability continues. The beneficiaries were found passive recipients rather than active contributors. To make the programme success recommendations are given, which need due attention.

I have immense pleasure in putting on record the crucial work done by the team leader Dr. Ranjan Kumar Sinha, Senior Research Officer and, of course, all team members namely Dr. (Smt) Rosline Kusum Marandi and Dr. S D Mishra, Research Associates and Sri Jai Shankar Choudhary, Computer Typist for completing this study with fruitful results. They all indeed deserve full appreciation.

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Preface

The concept of watershed management is as old as the concept of crops grown under irrigated conditions and this concept led to development of tanks/reservoirs for increasing the production to meet the demand of ever growing population since ages. After India achieved independence, the importance to executive authorities at village level has gradually declined due to changes in policies in the democratic set up and liberalization of spirit of freedom. This led to more damage to vegetation in rural areas leading to deterioration in environment through soil degradation. Hence, government of India and different state governments took up amelioration measures such as afforestation, soil conservation, run-off water utilization programmes etc. However, expected results did not forth come on constant and continuous basis. Therefore, Government of India launched watershed development programmes (WDPs) in 1983-84 in a big way to conserve and utilize natural resources for enhancing the productivity and higher socio-economic status. In 2000, watershed development programme has been thoroughly restructured by retaining the technical strengths of the older programme and incorporating the lessons learnt from successful projects, especially on community participation. Moreover, to bring about uniformity in approach between the watersheds based programmes being implemented by various agencies, a common approach for watershed development adopted by the Ministries of Agriculture and Rural Development. The programme undertaken by the Ministry of Agriculture is popularly known as Revised National Watershed Projects for Rainfed Areas (NWDPR) envisaged as WARSA JAN SAHBHAGITA. Up-scaling of programme was carried out by spending about Rs. 100,000 millions per annum then till now. It has been carried out during 10th Plan also and thus, its evaluation was needed for evolving better strategies/policies to preserve, conserve and utilize natural resources for betterment of ever growing population.

It is in this backdrop this evaluative study has been conducted in Bihar along with other states. The draft report of the study has been evaluated by Prof. (Dr) Kazi M B Rahim, Director, AER Centre, Visva-Bharati, Santiniketan (West Bengal). We are grateful to him for giving us valuable comments and suggestions, which have been appropriately incorporated while finalizing the report.

We deem it our duty to acknowledge and appreciate the guidance and co-operation all those who have greatly helped us to complete this study. First of all, we are grateful to Prof. (Dr) Balkrishna Jha, Director of the Centre for his overall guidance. We sincerely express our thanks to Shri Raghwendra Pal Singh, Director, Soil & Conservation, Government of Bihar and their colleagues namely Dr. Brajesh Kumar, Dy. Director (Planning), Shri R K Verma, SCO, Nawada, Sri Rabindra Kumar Verma, DSCO, Rohtas, Aurangabad and Kaimur and of course, the Secretaries of the NGOs who have

participated in the programme. We express our thankfulness to the respondents for providing us necessary information and sparing their valuable time.

At the last, the present work is the outcome of the dedicated efforts made by the research team of the Centre, so we take the opportunity to thank Dr. Rajiv Kumar Sinha for his co-operation in data collection, Mr. Jai Shankar Choudhary for computer typing and Mr. Anil Kumar Saraf and Mr. Ganesh Prasad Vishwakarma for secretarial assistance.

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