

Watershed Management for Agricultural Sustainability

A. Zaman¹, Md. Hedayetullah² and Parveen Zaman³

¹*Emeritus Professor, Centurion University of Technology and Management, M S Swaminathan School of Agriculture
Paralakhemundi-761 211, Odisha, India*

Email: profazaman@gmail.com

²*Assistant Professor, Department of Agronomy, Directorate of Research BCKV, Kalyani-741235, West Bengal, India*

Email: hedaye.bckv@gmail.com

³*Assistant Director of Agriculture, Pulse and Oilseed Research Station Beldanga 742133, India*

Email: parveenzaman1989@gmail.com

Abstract

The effect of watershed management programme was studied with introduction of new crop-cultivars including six rainy season crops namely direct seeded rice (drilled rice), transplanted rice, arhar, groundnut, sesamum and maize and two winter season crops namely mustard and wheat. The crop demonstration programme were undertaken for consecutive four years during 1988 to 1991 to utilize different land situations and for effective use of created irrigation potential at a drought prone tract of West Bengal (India). The results of the crop demonstration revealed that with selection of crops and its suitable varieties, adopting improved agronomic practices including scientific management of fertilizers and irrigation water, plant protection measures, the productivity of both land and crops markedly increased. The crop production strategy on the basis of land capability classification changed the land use, cropping pattern and crop intensity in the watershed area. The scenario of rainfed agriculture got a dramatical change with creating irrigation potential, harvesting and reclying the excess rain water. Watershed approach appeared to be most effective and integrated management of all natural resources like soil-plant-water-animal and human to uplift to socio-economic status of the