

Environment Management Framework (EMF)

Crop Intensification

The key objective of interventions in crop production is to increase crop productivity so that farmer income is enhanced. The dominant and “business-as-usual” approach to achieving this is to intensify crop production by introducing hybrid seed varieties that respond well to chemical fertilizers and apply chemical pesticides to control pests and diseases that attack the crop.

- A. A suggested “good practice” is Sustainable Crop Production Intensification (SCPI) which views agriculture as a part of a larger ecosystem and tries to reduce the eco-footprint of agriculture while at the same time enhancing productivity and returns to the farmer.

- B. Specifically, SCPI proposes to: minimize soil disturbance, enhance and maintain a protective organic cover on the soil surface, the use of well adapted, high-yielding varieties, enhanced crop nutrition based on healthy soils, integrated management of pests, diseases and weeds, and efficient water management.

Water Harvesting and Water Management

Water harvesting and water management activities are expected to be implemented under three water regimes in the RACP, namely, rain fed, groundwater based and surface water based. The suggested measures include:

- A. RACP should as a rule apply water wherever feasible only through micro irrigation devices. Other cultural means of conserving resources such as zero or minimal tillage, constant maintenance of green cover or soil mulching, etc., should be promoted.

- B. As in the case of crop production, the RACP should mainstream the concepts of matching cropping pattern to water availability, use of micro irrigation system as a rule and adoption of water conservation techniques.

- C. Overall, activities under this subcomponent are expected to reduce absolute quantity of water use in agriculture while increasing water-use efficiency. Therefore, environmental impacts are expected to be positive.

Livestock Management

RACP has recognized the importance of livestock in ensuring nutrient recycling in cropping systems. Accordingly, it has included a component that focuses on improving small ruminant livestock management, especially for goats. Further, the project proposes to provide health care through health camps and Rural Technology Centre-cum-Animal Health Centres. Suggested mitigation measures include:

- A. Develop silvi-pasture (tree & grasses) lands on common and private land
- B. Bring in improved feed practices such as using chaff cutters
- C. Use of mineral supplements to increase productivity
- D. Herd and breed management techniques
- E. Inclusion of fodder crops in the cropping pattern to ensure year-round feed and fodder availability etc.