

CHAPTER 3

SUMMARY OF GUIDELINES FOR THE NEXT GENERATION OF WATERSHED MANAGEMENT PROGRAMMES AND PROJECTS

This chapter presents a brief synthesis of the workshop's conclusions and recommendations regarding the preparation of future programmes and projects in watershed management. The following is based on the results of the group discussions, the presentations and the plenary sessions. Results are presented under some of the major themes introduced during the sessions.

LEGISLATION AND POLICY

- It is often essential to establish policies and legislation in order to bring about changes in land use, provide continuity and ensure medium- and long-term results for national programmes and projects in watershed management.
- The formulation of policies that address the many problems and opportunities associated with watershed management requires broad stakeholder participation.
- The policies and priorities of the many institutions associated with watershed management must be harmonized in order to avoid conflicts of interest and unnecessary overlapping of functions.

PARTICIPATION

- The key elements for successful watershed management programmes and projects are the active participation and organization of land users and the achievement of positive economic, social or environmental results.
- Successful watershed management depends on having the participation of all stakeholders – local populations, beneficiaries, local authorities and interest groups – in the design, implementation and evaluation of programmes and projects.
- An approach that is either extremely top-down or extremely bottom-up is not a recipe for success in watershed management. Community participation, horizontal linkages among authorities and local organizations and mutual agreements among communities, government and the private sector are all desirable.
- It is important to consider programmes for preserving local communities' traditional technologies, knowledge, customs and sustainable land and water management systems, which have been used for many centuries throughout the region.

RESOURCES MANAGEMENT

- Farmers are most interested in resource management activities that improve production at the farm level, and should take the lead in defining the content of technical assistance and evaluating its impact.
- Maintaining areas that are still in good condition is often more effective than rehabilitating deteriorated lands in terms of providing the best and lowest-cost project outcomes. Efforts need to focus more on protected areas, especially in upper watersheds.
- Watershed land use responds to market forces, and positive results can be achieved through providing farmers with access to new markets for environmentally friendly products and through value-added processing.
- Programmes and projects that focus on preventing natural disasters are often more effective than those that focus on responding to disasters after they have already occurred.
- More attention should be paid to water issues, which have not been adequately addressed by past watershed programmes and projects.
- As the human population expands and freshwater resources decrease, both water quality and flooding will be of growing concern.

UPSTREAM–DOWNSTREAM ISSUES

- Upstream land use will have an increasingly important effect on downstream areas, especially where water quality – particularly drinking-water – is an issue.
- The impact of upstream activities on downstream resource users (such as irrigation districts, hydroelectric works, urban users and industry) will be an important issue for future programmes and projects.
- Upland people need to be supported and empowered so that they can actively manage their own resources.

FINANCING WATERSHED MANAGEMENT PROGRAMMES AND PROJECTS

- The self-financing of watershed management programmes and projects through natural resource use, the application of taxes, and payments for intangible benefits can reduce the need for external sources of funding.
- The feasibility of cooperation and payment schemes between downstream and upstream stakeholders depends largely on the economic value of the downstream impact and the capacity to assess it reliably.
- Future projects should use diverse methods of valuing environmental services and the financial mechanisms that can provide fair compensation for them.
- Payment systems for environmental services should identify the types of service to be paid for, the demand and the ability to pay.

EDUCATION AND TRAINING

- Training programmes need to recognize the great diversity of cultural and geographic conditions in Latin America. Rather than relying on set models, they should develop strategies,

methodologies and tools geared to watershed management under local conditions, and should consult with the people for whom they are planned.

- There is a need for criteria and indicators to evaluate training programmes and quantify their impacts on watershed development.
- Training for watershed management professionals should take a holistic approach that allows them to integrate multidisciplinary approaches when making decisions.
- Environmental education at all levels is essential if watershed management is to be successful.

RESEARCH AND INFORMATION

- Research should be based on demand and oriented to solving the problems that affect watershed users, including providing them with tools to assist their understanding and use of information.
- Watershed users should participate in the identification of research topics and the validation of land-use management practices.
- There is a need to establish demonstration watersheds in order to facilitate information exchange, training, monitoring and evaluation. Dialogue between scientific and traditional knowledge should also be promoted.
- Cost-effective, practical models that obtain results quickly and are useful for difficult predictions and effective in the planning and management of watershed natural resources need to be developed and used.
- Appropriate sustainable resources and land management options are major issues for further investigation.

PROJECT DESIGN

- Project design and implementation should be based on community participation, consultation and consensus, in preparation for self-management of the watershed.
- In order to reduce community frustration, projects must always have sufficient resources and time to reach the desired objectives.
- Watershed management should follow an ecosystem approach that considers such aspects as habitats, biodiversity, fragile ecosystems, management of protected areas, water quantity and quality, and sustainable development strategies.

TRANSBOUNDARY WATERSHEDS

- The management of transboundary watersheds is an important instrument to support integration, cooperation and peace processes at the subregional and regional levels.
- An ecosystem approach should be applied to transboundary watersheds.
- Experiences of transboundary watersheds within the region should be used as the basis for developing a Latin American international watershed approach.