
ENGLISH TRANSLATION



PREPARING FOR THE NEXT GENERATION OF
WATERSHED MANAGEMENT
PROGRAMMES AND PROJECTS

LATIN AMERICA

Proceedings of the Latin American Workshop

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Edited by
Moujahed Achouri
Carlos Carneiro
Alejandro Mañon
Kyran Thelen and
Larry Tennyson

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Italy

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PREFACE

On the occasion of the International Year of Mountains, and in response to the clear consensus reached by the international community regarding the need to ensure harmonious and sustainable development of mountainous areas and watersheds, the Food and Agriculture Organization of the United Nations (FAO) and its partners in the subject undertook a large-scale assessment and global review of the current status and future trends regarding knowledge about and techniques for integrated watershed management.

The objectives were to promote the exchange and dissemination of experiences of integrated watershed management techniques, identify constraints to the implementation and development of those techniques during the decade from 1990 to 2000 and capture relevant new paradigms and approaches. The lessons learned from diverse experiences are being used to define a new generation of integrated watershed management projects.

Experts from four continents contributed to the assessment, which yielded four main outputs: 1) a review of experiences in watershed management, based on questionnaires that were sent to active partners in the field; 2) substantive reports from four regional workshops held in Nairobi (Kenya), Kathmandu (Nepal), Arequipa (Peru) and Megève (France); 3) four case studies from the Mediterranean basin, Nepal, Bolivia and Burundi; and 4) an international conference in Porto Cervo, Sassari Province, Sardinia, Italy.

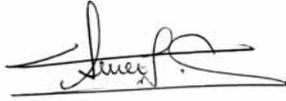
Watershed management concepts and approaches were reviewed, and different experiences assessed. The results of this exercise are presented in several documents, including the proceedings of workshops and reports on the four case studies.

The conservation, use and sustainable management of watershed resources in order to meet the demands of growing populations have been a high priority for many countries over the past several decades. In this respect, integrated watershed management through people's participation has become widely accepted as the approach that ensures sound sustainable natural resources management and a better economy for upland inhabitants, as well as people living in downstream areas.

As an element of FAO's wider review and assessment process of watershed management strategies and approaches for the decade 1990 to 2000, the Latin American Regional Workshop on Preparing the Next Generation of Watershed Management Programmes and Projects was held from 15 to 17 June 2003 in Arequipa, Peru. As elsewhere, considerable progress has been achieved in Latin America in the development of participatory integrated watershed management approaches and methodologies, especially since the 1990s.

Organized in conjunction with the Third Latin American Congress on Watershed Management, the workshop pursued the broad objectives of considering and discussing watershed management programmes and projects in the Latin American region, their achievements, gaps and lessons learned, defining guidelines and new approaches for the next generation of watershed management and proposing new project ideas.

The workshop aimed also to contribute to a better understanding of the current status of watershed management in Latin America, raising awareness of and providing the necessary advocacy and support for effective watershed management at the local, national and regional levels in the future.



El Hadji Sène
Director
Forest Resources Division,
FAO, Rome



Carlos Marx R. Carneiro
Secretario Técnico de la
REDLACH
Santiago de Chile

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PUBLISHERS NOTE

This bilingual volume is part of a series including the proceedings of the other regional workshops (Africa, Asia and Europe) on the next generation of watershed management programmes and projects and the final international conference. The volume include summaries of presentations and discussions held in the course of the event. Readers interested in further information are referred to the authors listed in Annex B.

ACRONYMS

COFO	Committee on Forestry (FAO)
GIS	Geographic Information Systems
GPS	global positioning systems
IUCN	World Conservation Union
NGO	non-governmental organization
REDLACH	Latin American Technical Cooperation Network on Watershed Management
UNCED	United Nations Conference on Environment and Development

INTRODUCTION

In extensive areas of Latin America and the Caribbean there is a lack of balance between development and the conservation and protection of natural resources. This is leading to the deterioration and degradation of natural resources and the environment, especially in areas where land is used intensively and there is a large human population.

The root cause of this situation is a lack of planning and integrated management, which affects the sustainability of forest management, as well as contributing to water pollution, the erosion of productive soils and the instability of fragile ecosystems. The relationships among different elements of the environment – climate, soil, water, vegetation, wildlife and human activities – determine the ways in which a region can be developed sustainably to meet the needs of its population. The exploitation of natural resources (especially water, soil and vegetation) is a threat to fragile ecosystems and needs to be carried out in harmony with resource conservation.

In the 1950s, countries in Latin America and the Caribbean started to adopt the watershed management approach as a way of promoting the conservation and sustainable use of natural resources. Since then, the watershed management concept has evolved significantly throughout the region, and has now become a participatory process that involves the local population and watershed users. The community establishes specific objectives, for which integrated actions directed at the environment and the social, economic, institutional and legal situation are then designed, managed and implemented to achieve.

So far, only a few projects throughout the region have been planned and implemented according to the integrated management approach. Some of these have been very successful in terms of new technologies, coordination of public and private organizations, and wider stakeholder participation. However, the progress that has already been made and the steps that are necessary to improve future programmes have not yet been fully assessed and identified.

Watershed management has also made considerable progress at the global level, especially during the 1990 to 2000 period, when new approaches and methodologies to promote participatory integrated watershed management were developed. It is now essential that a systematic review and assessment of watershed management strategies, their achievements and gaps be carried out in order to establish what works and what can be done to improve future programmes; the experiences of 1990 to 2000 should receive particular emphasis. Such information is necessary for the development of innovative approaches and appropriate strategies for the future.

In response to this need, a global assessment is currently under way. Its main objective is to respond to the various needs and characteristics of the different stakeholders involved in watershed management at the global, regional and national levels. An important feature of this assessment is a series of workshops held in each of the major regions of the world.

The Latin American Regional Workshop on Preparing the Next Generation of Watershed Management Programmes and Projects was held from 15 to 17 June 2003 in Arequipa, Peru.

Its broad objectives were to promote the sharing and dissemination of information on watershed management achievements and existing gaps, and to support the development of effective watershed management through better designed and adequately implemented projects and programmes.

The workshop set out to:

- provide an opportunity for concerned parties to share information and contribute to a better understanding of the current status of watershed management; and
- raise awareness and provide the necessary advocacy and support for implementing effective watershed management at the local, national and regional levels.

The workshop was organized in conjunction with the Third Latin American Congress on Watershed Management, which preceded it and was held at the same location (see Annex C). The congress aimed to provide an opportunity for analysing, evaluating and exchanging information and ideas regarding watershed management in the region. It was arranged around five basic themes: 1) policies, legislation and institutions; 2) economic and financing aspects; 3) social and cultural aspects; 4) research and education; and 5) management instruments. More than 300 papers were presented at 20 congress workshops, and 1 000 specialists from various disciplines related to watershed management participated. The results provided a useful contribution to discussion of the next generation of watershed management programmes and projects.

These workshop proceedings provide a summary of the information presented, an analysis of the lessons learned and the gaps, and recommendations regarding the next generation of watershed management programmes and projects.

Using an in-depth analysis of watershed management activities from recent decades (especially 1990 to 2000) as a basis, and taking account of important events such as the International Year of Mountains (2002) and the International Year of Freshwater (2003), the workshop's main objectives were to:

1. assess and identify the nature and extent of achievements and existing gaps in state-of-the-art watershed management projects, programmes and approaches in the region;
2. identify lessons learned and principal issues emerging from past experiences in the region, with particular focus on the 1990 to 2000 period;
3. draw up guidelines for the formulation and implementation of the next generation of watershed management projects and programmes, with special focus on the role of effective watershed management in the conservation and sustainable use of water resources.

The workshop was attended by 30 experts from 16 Latin American countries, as well as specialists from FAO and the World Conservation Union (IUCN). The regional participants were the national coordinators (or their representatives) of the Latin American Technical Cooperation Network on Watershed Management (REDLACH), and also played important roles in the Third Latin American Congress on Watershed Management where many had served as moderators for the congress workshops. These people were therefore particularly well informed about the current situation regarding watershed management in the region