

# Terminal Evaluation

## Latin America and the Caribbean

### 1. Outline of the Project

**Country:**

Chile

**Project title:**

Integral Management of Watershed with an Emphasis on Soil and Water Conservation

**Issue/Sector:**

Forestry/Forest Preservation

**Cooperation scheme:**

Third-Country Training Program

**Division in charge:**

South America Division, Regional Department III

**Total cost:**

36 million yen

**Period of Cooperation**

Fiscal Years 1999 - 2003

**Partner Country's Implementing Organization:**

Corporacion Nacional Forestal (CONAF), Chilean International Cooperation Agency (AGCI)

**Supporting Organization in Japan:**

Ministry of Agriculture, Forestry and Fisheries of Japan

**Related Cooperation:**

Project-type Technical Cooperation; "Erosion control and afforestation in watersheds in semi-arid area of Chile"

### 1-1 Background of the Project

The government of Japan implemented the Project-type Technical Cooperation; "Erosion control and afforestation in watersheds in semi-arid area of Chile" (March 1993 - February 1999, including a one-year follow-up period) to cooperate with Chile's Corporacion Nacional Forestal (CONAF) in the fields of physical erosion control, nursery, and afforestation. To disseminate the effects to the Middle and South American countries that held similar problems on soil erosion, the government of Chile planned the implementation of the Third-country Training Program on "Integral Management of Watershed with an Emphasis on Soil and Water Conservation" and requested the government of Japan for cooperation.

### 1-2 Project Overview

The project, setting Chile's CONAF as an implementing institution, transfers specialized knowledge such as comprehensive soil conservation and forest hydrology theories to the experts of watershed management in Latin American countries and implements practices on the sites where that knowledge is actually applied to.

#### (1) Overall Goal

The sustainable development and management of natural resources are promoted in the Latin American countries.

#### (2) Project Purpose

The integral management of watersheds is promoted in the participant's countries.

#### (3) Outputs

- 1) The participants advance their skills and practical knowledge of diagnosing environmental problems associated with watershed management.
- 2) The participants acquire the basic knowledge about forest hydrology and soil conservation associated with watershed management.
- 3) The participants advance their skills and practical knowledge on water conservation and soil improvement techniques of disintegrating watersheds.

- 4) The participants acquire the basic knowledge on making plans for adequate management and stewardship of watershed.
- 5) The participants acquire the basic knowledge on formulating programs in the field of watershed management and soil conservation through case study.
- 6) The participants exchange experiences of their own countries' problems and processes of soil erosion and breakdown of natural resources.

#### (4) Inputs

Japanese side:

Short-term Experts	4
Local Cost	208,000 dollars (approximately 28 million yen)

Chilean Side:

Counterparts	99
Local Cost	88,000 dollars (approximately 12 million yen)

Facilities and Equipment

#### (5) Participant Countries

Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Argentina, Bolivia, Brazil, Colombia, Ecuador, Peru, Uruguay and Venezuela.

## 2. Evaluation Team

**Members of Evaluation Team** JICA Chile Office  
(Commissioned to: Asesorias Forestales B&M)

**Period of Evaluation** January 2003 - 24  
March 2003

**Type of Evaluation:**  
Terminal Evaluation by Overseas Office

## 3. Results of Evaluation

### 3-1 Summary of Evaluation Results

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#### (1) Relevance

According to the questionnaire survey to the ex-participants (24 participants responded to the survey), on the contents of the consistency to meet the needs 92.0% of the respondents mentioned that "they were satisfied with the contents of the training", while 86.0% indicated that "they could utilize the acquired knowledge and techniques to their daily works". 83.3% of the respondents have already utilized what they had learnt in their daily works, and 37.5% particularly described that they "utilized those knowledge and techniques to a high degree". Judging from the above results, the training met the needs of respective participant countries and the relevancy of the training was high.

#### (2) Effectiveness

The participants acquired the knowledge and techniques to cope with soil erosion. 95.8% of the respondents to the survey stated that "they would recommend this training course to others", which showed that most of the participants were satisfied with the specialized knowledge attained in the course. 86.0% indicated that "they could actually apply the acquired knowledge and techniques" in their respective countries. During the cooperation period, 86 reports and publications related to the Management of Watershed had been published, and 50 of them were directly related to the concerned course. Judging from the above facts, the effectiveness of the training was high.

### (3) Efficiency

CONAF efficiently operated and managed the training course, and the appropriate input was implemented to accomplish the objectives and outputs. 98.4% of the participants were experts of watershed management and the selection of participants was suitable to the project. According to the yearly reports of CONAF between FYs 1999 and 2002, evaluation by the participants showed that 97.0% of the participants on average stated that "all the training objectives had been accomplished". Among the respondents, 83.3% evaluated the specialized levels of lecturers to be "very good". Judging from these results, the efficiency of the training was high.

### (4) Impact

Among 234 activities (89.8% of them were projects and programs, and the others were plans and researches) related to the planning, administration and execution of watershed management programs that were surveyed, 21.0% of them were directly connected to the training. 66.7% of the respondents to the questionnaire survey shared the acquired knowledge and techniques through seminars etc. The training indirectly contributed to the preparation and establishment of 63 laws and regulations related to the forestry/erosion and watershed management in 17 Latin American countries including Chile. Among them, 12 laws were established in Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Panama and Uruguay between the years 1999 and 2000, and 30.0% of them were directly connected to the training.

Judging from the above, the impact of the training was tremendous.

### (5) Sustainability

Based on the results of the evaluation, CONAF had enough capability in implementing and managing the training course. The government of Chile plays an important role in the concerned fields in the policy promoting the South-South cooperation, and the government will continuously support the cost to implement training courses in the future. Judging from the above factors, the sustainability of the training was high.

## 3-2 Factors that promoted realization of effects

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### (1) Factors Concerning the Planning

- 1) The policy of the Japanese government on the promotion of the South-South cooperation projects has been continued.
- 2) The Chilean government supported the training.
- 3) The Chilean government continued the support projects to the third countries.

### (2) Factors concerning the Implementation Process

- 1) The inputs from the Japanese side such as the provision of local cost to implement the training, to procure equipment and to dispatch lecturers etc. were appropriately conducted. The facilities and equipment delivered from the Japanese side were appropriately maintained and managed.
- 2) The techniques transferred from the Japanese side were maintained and further developed at CONAF.
- 3) CONAF had enough capability to implement the training.

## 3-3 Factors that impeded realization of effects

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### (1) Factors Concerning the Planning

N/A.

### (2) Factors concerning the Implementation Process

N/A.

## 3-4 Conclusion

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Through the training, the profound knowledge was transferred to the experts from Latin American countries, the importance of comprehensive watershed management was exhibited, and the training was conducted efficiently. The transferred techniques and knowledge are widely utilized in participating countries.

## 3-5 Recommendations

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### (1) Recommendation for the Beneficiary Countries/Implementing Organizations

- 1) It is recommended to utilize the FAO (U.N. Food and Agriculture Organization) network for the watershed management as a way of collecting information among Latin American countries.

- 2) It is recommended to extend the field visits to other bio-climatic regions of Chile to include areas with higher precipitation in order to experience watershed management activities in tropical rain forests.
- 3) It is recommended to include the environment and society to the training themes in order to generate an integrating viewpoint of the management of watersheds.

#### (2) Recommendation for JICA

- 1) It is favorable to hold another new course with an integral vision of the watershed that provides solutions for overcoming rural poverty, improving local economies and restoring a degraded environment.
- 2) It is possible to implement cooperation projects related to the field treated in the training in Latin American countries through dispatching Chilean experts, implementing wide-area seminars etc.
- 3) It is recommended to introduce a monitoring system of the course in order to support related projects in participating countries.
- 4) It is favorable to establish a network of the training participants among JICA, CONAF and participating countries, utilizing internet networks in order to operate the transferred techniques.

### **3-6 Lessons Learned**

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It is necessary to consider the conditions of the relevant countries such as climate, environment, culture, economy, etc. at the stage of selecting participant countries in order to enhance the effects of training.

### **3-7 Follow-up Situation**

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N/A.