

Terminal Evaluation

Latin America and the Caribbean

1. Outline of the Project

Country:

Brazil

Project title:

Study of Poisonous Animals, Diagnosis and Treatment of Accidents Caused by Poisonous Animals and Production of Antivenoms

Issue/Sector:

Health/Medical Care

Cooperation scheme:

Third-Country Training Program

Division in charge:

Central America and the Caribbean Division, Regional Department III (Latin America and the Caribbean)

Total cost:

20 million yen

Period of Cooperation

Fiscal Years 1999
-2003

Partner Country's Implementing Organization:

Butantan Institute

Supporting Organization in Japan:**Related Cooperation:****1-1 Background of the Project**

The Butantan Institute in Brazil was founded for the purpose of producing plague vaccine, and later commenced research and production of antidotal serum. The institute is famous around the world today. Many of its researchers received training in Japan and were engaged in the researches on toxin and the production of serum. As it produces 605 vaccines in 15 categories a year, and the level of research and techniques are high, it is capable of implementing training courses for neighboring countries.

Under these circumstances, and when many accidents were caused by poisonous animals such as poisonous snakes in Central and South American countries and Portuguese-speaking African countries, the Brazilian government requested to the Japanese government for a third-country training program to decrease the number of the accidents and deaths caused by poisonous animals by producing necessary types of serum.

1-2 Project Overview

The project implements a Third-country Training Program to cope with the accidents caused by poisonous animals in Central and South American and Portuguese-speaking African countries.

(1) Overall Goal

To improve the standard level of knowledge and treatment on poisonous animals in all of Latin American countries and Portuguese-speaking African countries.

(2) Project Purpose

The level of knowledge and treatment against poisonous animals in the organizations that sent participants are improved.

(3) Outputs

- 1) The participants acquire theoretical and practical knowledge of the major techniques and the up-to-date techniques necessary for serum production, classification of poisonous animals and clinical aspects of poisonous accidents.
- 2) The participants acquire specific knowledge about poisonous animals, serum production and anti-poisonous control.
- 3) The participants acquire the capability and knowledge to improve the production of anti-poisonous serum and improve quality service of poisonous accidents.

(4) Inputs

Japanese side:

Short-term Experts 3

Local Cost 20 million yen

Brazilian Side:

Equipment

Lecturer and Staff

Facilities

Local Cost 12 million yen

(5) Participant Countries

Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Argentina, Bolivia, Chile, Colombia, Ecuador, Peru, Uruguay, Venezuela, Angola, Mozambique, Sao Tome and Principe, Guinea-Bissau and Brazil.

2. Evaluation Team

Members of Evaluation Team JICA Sao Paulo Office
(Commissioned to: Kiyoshi IRYA, Professor, University of Sao Paulo and Franz Naoki YOSHITOSHI, Researcher, University of Sao Paulo)

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| Period of Evaluation | 1 February 2003 - 31 March 2003 | Type of Evaluation: Terminal Evaluation by Overseas Office |
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3. Results of Evaluation

3-1 Summary of Evaluation Results

(1) Relevance

The science's involvement in preventing people's deaths caused by poisonous animals had been taboo for a long time because of cultural and religious reasons. Therefore, even nowadays, in many countries, accidents occur because of lack of information regarding the characteristics of poison, in addition to lack of serum. This course provided a wide range of knowledge on the production of antidotal serum and on poisonous animals. Every year, the number of applicants was 3 times as many as the capacity of each course. Thus, the courses met the demand of neighboring countries. This indicates that the relevance of the course was high.

(2) Effectiveness

Based on the answers to the questionnaire survey from participants (27 out of 45 participants), they all remained at the same organizations as before the project and disseminated and transferred the acquired techniques to their colleagues through lectures, seminars and workshops. Eighty-two percent (82%) of the respondents indicated that the contents of the training were useful in their daily work, and the project contributed to improve the level of techniques at the organizations for which the participants worked. Judging from the above information, the effectiveness of the project was high.

(3) Efficiency

According to the answers to the questionnaire survey, 90% or more of the respondents evaluated highly the capability of lecturers, curriculum and textbooks, because of the similarity in their customs and languages. Therefore, as a whole, the participants were satisfied with the project. However, Some respondents mentioned the difference of knowledge levels among participants and the necessity for a curriculum whose focus is a little more geared toward serum production.

(4) Impact

Having joined the project, the participants improved their technical levels and transferred the acquired techniques to their colleagues. Moreover, ex-participants started some of their own activities. In Paraguay, the protocol on diagnosis and treatment for accidents caused by poisonous snakes were revised. In Colombia, a program for poisonous animals was revised. The Butantan Institute, the implementing organization, organized a framework for new technical cooperation with the organizations that the participants worked for. The effects and influence of technical transfer and human network have been widespread.

(5) Sustainability

After the termination of the project, the relationship between the participants and the Butantan Institute has continued. There has been a follow-up study of the participants by the Butantan Institute through exchange of technical information by email, and technical cooperation among research institutions the participants work for. These activities contributed to the continuity of the effects of the project. As for financial sustainability, it was difficult to share the cost that JICA offered for the Brazilian side. The steady progress of the project is expected because the Butantan Institute wishes to continue the project with the objective of transforming it to create a post-graduation level course.

3-2 Factors that Promoted the Realization of Effects

(1) Factors Concerning the Planning

- 1) The dissemination of the techniques was carried out smoothly, as the project selected research fields which strongly required the training.
- 2) The participants were greatly satisfied with the project as the technical foundation was firm in the field, and the project was implemented at organizations with sufficient equipment and facilities.

(2) Factors concerning the Implementation Process

The similarity in the kinds of poisonous snakes, culture and language which exist among the Central and South American countries made the steady communication possible and enhanced the understanding of the participants.

3-3 Factors that Impeded the Realization of Effects

(1) Factors Concerning the Planning

The contents of the training covered a relatively wide range, and as the participants had different specialties, it took time to explain each topic.

(2) Factors concerning the Implementation Process

N/A

3-4 Conclusion

As the project was able to offer a superior technical foundation and facilities to the participants, they evaluated the project highly. The similarity of languages and cultures among the participants made the technical transfer to the participants from outside Brazil efficient. However, the differences of the participants' knowledge level and specialties sometimes interfered with the progress of the training.

Many of the ex-participants have remained with the same organizations, continued the researches and disseminated the attained techniques through the project. Some of them were engaged in different tasks such as new projects, animal management, snake breeding and construction of a museum.

3-5 Recommendations

- (1) It is recommended to develop the curriculum which prioritizes practical training, improvement of textbooks, serum production and detoxification therapy (or implement two courses biyearly, dividing the kinds of poisonous animals) to realize more efficient training.
- (2) It is recommended that each JICA office give lateral support to ex-participants for organizing new projects.
- (3) It is recommended that the term for lecturers' stay be extended, so that they will have enough time budgeted for the implementation of the training.

3-6 Lessons Learned

(1) It is recommended that attention be paid to the differences among participants in terms of their technical levels, when planning a project for Central and South American and Portuguese-speaking African countries.

(2) It is essential that the levels of knowledge of the participants are even at the selection stage to promote efficient training and to achieve optimum effects. Therefore, it is recommended that careful consideration be given to the contents of a project.

3-7 Follow-up Situation

N/A