

Terminal Evaluation

Asia

1. Outline of the Project

Country:

India

Project title:

The Project for Prevention of Emerging Diarrheal Diseases in India

Issue/Sector:

Health/ Medicare

Cooperation scheme:

Project-type Technical Cooperation

Division in charge:

First Medical Cooperation Division, Medical Cooperation Department

Total cost:

490 million yen

Period of Cooperation 1 February 1998- 31 January 2003

Partner Country's Implementing Organization:

National Institute of Cholera and Enteric Diarrheal Diseases (NICED)

Supporting Organization in Japan:

National Institute of Infectious Diseases,
International Medical Center of Japan, Sapporo Medical University,
Osaka Prefecture University

Related Cooperation:**1-1 Background of the Project**

In India, the infant mortality rate was high, and the main cause of the deaths was acute diarrheal diseases. One of the reasons acute diarrheal diseases spread was the insufficient techniques of prevention, diagnosis and treatment of these diseases. Because the drug-resistant Shigella was confirmed in India, the prevention of spreading diarrheal diseases became the prime task. National Institute of Cholera and Enteric Diarrheal Diseases (NICED) in Calcutta, which played the core role in India's diarrheal diseases environment research, developed the methods of research, prevention and treatment for diarrheal diseases, and WHO designated NICED as one of the cooperating organizations. Under these circumstances, the government of India requested the government of Japan for the technical cooperation with the aims of establishing countermeasures for diarrheal diseases including a fostering plan of the human resources necessary for molecular biology/epidemiology, developing research facilities, promoting collaborative research, and making NICED the implementing organization.

1-2 Project Overview

To establish the countermeasures for spreading diarrheal diseases, the project implemented the cooperation activities to the researchers of NICED, such as development of diagnosis techniques and treatment methods, and establishment of blood serum bank.

(1) Overall Goal

The prevention and treatment methods on diarrheal diseases are improved.

(2) Project Purpose

Countermeasure for spreading diarrheal diseases is developed and established in NICED.

(3) Outputs

- 1) Effective diagnosis technique is developed at molecular level.
- 2) Medical treatment for acute and chronic diarrheal diseases are developed.

- 3) Blood serum bank for the patients with diarrheal diseases is established.
- 4) Drug resistance of pathogenic microorganism in intestine is researched.
- 5) Reservation facilities for the strains and diagnosed blood serum of enteropathogen are developed.
- 6) Epidemiological surveillance system for enteropathogen of humans and water is established.
- 7) A network among related hospitals is established.
- 8) The project is smoothly operated.

(4) Inputs

Japanese side:

Long-term Experts	5	Equipment	239 million yen
Short-term Experts	30	Local Cost	20 million yen
Trainees received	13	Third-country Training Program	1
Dispatch of Third-country Experts Program		2	

India's Side:

Counterparts	13		
Land and Facilities			
Local Cost	Equipment	100 million yen	

2. Evaluation Team

Members of Evaluation Team General: Yoshifumi TAKEDA, Jissen Women's University
 Basic Medicine: Hideo HAYASHI, University of Tsukuba
 Cooperation Planning: Yutori SADAMOTO, Staff, First Medical Cooperation Division, Medical Cooperation Department, JICA
 Project Evaluation: Naoki TAKE, ITEC

Period of Evaluation 2 September 2002 - 13 September 2002
Type of Evaluation: Terminal Evaluation

3. Results of Evaluation

3-1 Summary of Evaluation Results

(1) Relevance

In West Bengal, diarrheal diseases were the most major cause of death and diseases. The project is correspondent to the health care needs of West Bengal where NICED is located. The project is also in line with the health care policy of India which is advocating to halve the death rate by infectious diseases in the years between 2002 and 2010, and the cooperating policy of the government of Japan to promote the cooperation in the field of infectious diseases. Therefore, the project is relevant to the policies of both Japanese and Indian governments.

(2) Effectiveness

The project aimed to establish the techniques of the countermeasures against the diarrheal diseases in India by developing medical facilities, fostering human resources, and promoting joint research programs at NICED. As a variety of techniques was established by implementing the project, the above purposes were mostly accomplished. However, one of the outputs, "Medical treatment for acute and chronic diarrheal diseases is developed", is the task that should be dealt with from now on.

(3) Efficiency

As it took a long time for the actions such as delivering equipment and dispatching participants, the efficiency of the project was lowered. However, the efficiency of the project is sufficiently high, considering the facts that relatively small inputs such as the number of dispatched Japanese experts realized huge outputs, that it took enough time for training in Japan, and that the intelligence of NICED did not leave the institute (all the counterparts who took training in Japan remained in the project).

(4) Impact

The approach to the overall goal "the prevention and treatment methods on diarrheal diseases are improved" has just begun, and it will take more time to disseminate the research effects of NICED through the project to the residents. However, there were many positive impacts through the project implementation such that in-country training was conducted, and the quick response to the outbreak of cholera in all over India was possible. The most positive impact in this field was that one of the counterparts was selected as a foreign member at the National Academy of Sciences, U.S.A.

(5) Sustainability

NICED could maintain and manage the delivered equipment and purchased reagent, the consumables and even expensive equipment such as an electron microscope without any problems, because the Indian Council of Medical Research (ICMR) allocated a greater amount of budget after the project was commenced. If this situation continues, NICED can assure the financial sustainability. Meanwhile, the researchers of NICED who received the training in Japan remain in NICED, and so far as the current research environment is assured, the technical sustainability will also be assured.

3-2 Factors that promoted realization of effects

(1) Factors Concerning the Planning

N/A

(2) Factors concerning the Implementation Process

- 1) The Project transferred the techniques to the researchers of NICED under the common understanding for the improvement of diarrheal diseases countermeasures. The capability of researchers were improved as well as NICED becoming widely known inside and outside of India.
- 2) With enough funds allocated by ICMR, NICED could maintain and manage the transferred equipment without any problems.
- 3) At the training in Japan, participants spent long hours to acquire new techniques and knowledge, so they could play major roles in establishing new techniques in NICED.
- 4) All the participants went back to NICED after the completion of the training in Japan, and they continued their research activities as well as kept close contact with implementing organizations, which led to the realization of technical sustainability.

3-3 Factors that impeded realization of effects

(1) Factors Concerning the Planning

N/A

(2) Factors concerning the Implementation Process

- 1) As the procedures such as delivering equipment and dispatching participants were unexpectedly time-consuming, the efficiency of the project was lowered.
- 2) The long absence of the chief adviser affected adversely to the project. It took a lot of time to develop the policy and plan of the project activities.

3-4 Conclusion

The project was in line with the health care needs of the relevant region and the policy of the Indian government. With relatively small inputs, large outputs were realized, and new techniques for developing the countermeasures against diarrheal diseases were established in NICED. Judging from the above, the project purpose was partially accomplished. However, the project is now at the stage where the foundation of activities (implementing vaccine trials) directly connected to the project purpose to decrease diarrheal diseases has just been established, so it can not be said that the project purpose is attainable until the activities to implement the vaccine trials are commenced.

3-5 Recommendations

- 1) It is necessary to plan and implement the dissemination of the project effect during a five-year cooperation period to the local

residents.

2) For the effects of the project to be understood by the Japanese people, it is necessary to make efforts to promote PR activities of the project, so that the people will understand how the project is positioned as development cooperation for advancing the countermeasures against diarrheal diseases in India, and how the effects are going to be disseminated to those who need support.

3-6 Lessons Learned

The main reason why the project accomplished enormous effects is that India and Japan had a superior mutual understanding of the project. Both countries moved toward the purpose of enhancing capability of the personnel to cope with the diarrheal diseases in India, which was supported by the reliable relationship and friendship between the two sides. It is therefore essential to establish good relationships with counterparts in any field.

3-7 Follow-up Situation

Following the diagnosis techniques of microbiological diarrheal diseases mostly accomplished in Phase I, a five-year cooperation is planned to be implemented at NICED as Phase 2 of the project with the aims of establishing diagnosis on diarrheal diseases caused by parasite and virus and of establishing an information network on diarrheal diseases.