

## Summary of Final Evaluation Mission

Summary of Project	
Country : India	Project Name : The Project for Prevention of Diarrheal Diseases (Phase 2)
Issue/Sector : : Medical Science	Type of Assistance : Technical Cooperation Project
Division in charge : Human Development Department	Total cost : 290,000,000Yen
Duration of Project	(R/D) July 2003 ~ June 2008
	Partner Country's Implementing Organization : National Institute of Cholera and Enteric Diseases (NICED) under the Indian Council of Medical Research (ICMR)
	Supporting Organization in Japan : National Institute of Infectious Diseases, International Medical Center of Japan, Osaka University, Okayama University of Science, Sapporo Medical University
	Related Cooperation :
<p><b>1. Background of the Project</b></p> <p>The infant mortality rate in India is high (67 per thousand live births, according to the State of the World's Children 2003) and the first cause of infant death in the country is acute diarrheal disorder caused by impure water. The Indian Government had set a goal of reducing the infant mortality rate to 45 per thousand live births by 2007 and 28 per thousand by 2012 in its Five-Year National Plan (2002-2007) launched in 2002. 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 and promoting collaborative research, making the National Institute of Cholera and Enteric Diseases (NICED) as the implementing organization.</p> <p>In response to the above request, JICA's technical cooperation project for Prevention of Diarrheal Diseases (Phase I) was implemented between February 1998 and January 2003. After the successful completion of the Project Phase I, another five-year technical cooperation, the Project for Prevention of Diarrheal Diseases (Phase II) was launched on 1 July 2003, and will be completed on 30 June 2008. This time, a final evaluation was carried out from 14 to 28 November 2007 by Japan International Cooperation Agency to acknowledge and analyze the accomplishments of the Project.</p> <p><b>2. Project Overview</b></p> <p>(1) Super Goal</p> <p style="padding-left: 20px;">Mortality rate of diarrheal diseases will be reduced in India.</p> <p>(2) Overall Goal</p> <p style="padding-left: 20px;">Capacities of medical institutions in India to prevent diarrheal diseases will be improved.</p>	

(3) Project Purpose

Strengthen capacities and augment capabilities at NICED and to disseminate the same throughout the country for prevention and control of diarrheal diseases.

(4) Outputs

- 1) Capacity to identify diarrheal diseases at the molecular level is established.
- 2) Strains and diagnostic sera are appropriately managed and archived.
- 3) Constant surveillance of pathogens of diarrheal diseases is established.
- 4) Technical expertise to identify diarrheal pathogens is transferred to other parts of India and neighboring countries.
- 5) Surveillance network of diarrheal diseases is established in India.
- 6) Capacity to investigate the efficacy of drugs for diarrheal diseases is improved

(4) Inputs (As of January 2006)

Japanese Side :

- Long term Expert\* 2
- Provision of Equipment 60,961,338 JPY
- Short term Expert\* 14
- Local cost support including the In-country Training 32,784,127 JPY
- Training for Counterparts in Japan 18

\*The experts provided after November 2004 are categorized into “short-term experts” following the change of implementation system of JICA.

Indian Side :

- Identification of counterparts personnel 10
- Allocation of budget 502,449,480 JPY
- Office space for experts
- Drugs and Other supplies and consumables

Evaluation Mission

Members of Evaluation Team	Leader	Dr. Kishio ONO	Japanese Project Final Evaluation Team JICA
	Basic Medical Sciences		
	Evaluation Planning	Dr. Hideo HAYASHI	Professor, Chugoku Gakuen University
	Evaluation Analysis	Mr. Katsujiro HORI	Staff, Infectious Disease Control Team Human Development Department, JICA
		Ms. Saeko ICHIKAWA	Researcher, Social Development Department, Global Link Management, Inc.
Period of Evaluation	14 <sup>th</sup> of February 2007 ~ 29 <sup>th</sup> of February 2007.	Type of Mission	Final Evaluation Mission

## Results of Evaluation

### 1. Summary of Evaluation Result

#### (1) Relevance

Based on the assessment of the needs of the health sector in India and in the State of West Bengal, Indian national policy and the Japanese Official Development Assistance (ODA) policy towards India, the relevance of the Project is considered to be high.

In India's National Health Policy of 2002, it was indicated that diarrheal disease such as gastro enteritis and cholera continues to contribute to a high level of morbidity in the population. Furthermore it highlights the national need to strengthen its surveillance system, which in turn would enable timely intervention to contain the spread of infection for these diseases. The Project's approach to expand its constant surveillance system and to establish surveillance networks is very much in line with such national policy directions.

This is also in line with Japanese Government's 2005 Country Assistance Plan for India, which also highlights the need to support the prevention of infectious diseases not just through support to the development of physical infrastructure, but also with an emphasis on human resource development and institutional strengthening such as referral systems and networks.

#### (2) Effectiveness

The effectiveness of the Project is relatively high, as the Project Purpose will be achieved to a fair extent by the end of the Project period in June 2008. The Team has acknowledged the achievements of output 1.2.4.6 and its high correlation in achieving the Project purpose. However, it should be noted that the objectives and concepts of constant surveillance of pathogens (Output 3) and surveillance network of diarrheal diseases (Output 5) were not clear amongst stakeholders at the time of the Project Planning and during the Mid-Term Evaluation exercise. This resulted in the delay of its implementation, thus leading to incomplete attainment of outputs.

#### (3) Efficiency

The Project's efficiency is high with regards to its inputs and the current achievement levels of most of the Outputs. All equipments and training programs provided, as well as the dispatch of the short-term experts have been viewed favorably by the NICED staff. Despite the short length of stay by the experts in NICED, most of the counterparts considered these visits as a good opportunity to exchange information and technology, which enhanced NICED activities.

#### (4) Impact

The Project's impact is high with regards to its likelihood to achieve the overall goal in the near future. The Project has contributed greatly towards human resource development throughout India through in-country training programs, dissemination of information and knowledge in the form of; 1. publications of reports, 2. confirmation of the diagnostic results of the samples sent to NICED from other health institutions. These activities contributed greatly to enhance the diagnostic and treatment capacities of other medical and research institutions. As for the Project's impact in achieving the Super Goal to reduce mortality rate of diarrheal diseases in India, the direct impact of basic research work is hard to be assessed in the short-term. However, on-going NICED activities such as vaccine trial for cholerae and typhoid and the trial of use of probiotic drink, which is the subliminal effect of

the Project implementation, may contribute towards the reduction of mortality due to diarrheal diseases.

#### (5) Sustainability

The sustainability of the effects of the Project after its completion is considered high. Institutionally and financially, ICMR continues to support NICED as a centre of excellence, and this is reflected in the appropriate amount of budget allocated for the institution. Technical sustainability of the Project is also high, as NICED continues to retain most of its core research faculty within its organization. The level of their technical sustainability has been proven already with its capacity to host a series of in-country and third-country training programs as well as other human resource development initiatives within the organization.

However the sustainability of the surveillance network needs further consideration for it is still dependent on acquiring the technical expertise for establishing and sustainable operation of the network.

### 2. Factors that promoted realization of effects

#### (1) Concerning the Project plan

The Project plan was formulated in relevance to the research objective of each scientist. Therefore, the ownership of the activities can be considered extremely high.

#### (2) Concerning the Project implementation process

Through consistent cooperation and communication that has taken place over the years between NICED and the Japanese experts, strong mutual trust has been formulated. It should also be highly noted that this partnership has led to co-research activities by NICED scientists and Japanese experts outside the project framework

### 3. Factors that impeded realization of effects

#### (1) Concerning the Project plan

The Project plan considered minimum input for long term experts. Most of the technical assistance was conducted by short-term experts with an average stay of 9.6 days per dispatch. While effectiveness was considered by dispatching the same short-term experts over the years, the duration of the stay was not sufficient.

#### (2) Concerning the Project implementation process

The short duration of the short-term experts was one of the barriers in having concrete common understanding on the concept of surveillance network amongst the stakeholders. According to the consensus reached during the final evaluation mission, focus will be put on establishing the fundamental basis of networking during the remaining period of Project implementation.

### 4. Conclusion

This final evaluation confirmed that the Project has shown good achievement, and will accomplish the Project Purpose to a fair extent by the end of the Project implementation period. Although delay in establishing surveillance network of diarrheal diseases is observed, the implementation process has been

smooth due to the firm partnership maintained between the Japanese experts and NICED Counterparts, backed by mutual trust nurtured since the first phase of the Project. NICED has shown remarkable progress, both in its physical and human resource capacities, to conduct the crucial research activities for diarrheal disease prevention and control; and now it is in the process to establish a surveillance network in India for further improvement of prevention and control of diarrheal diseases. This establishment will require technical expertise as well as further commitment from the Indian side.

## 5. Recommendations

### (1) Measures recommended to be taken before the end of the Project

- It is recommended that NICED may continue to update the training materials for continuous in-country trainings in the future.
- It is recommended that NICED may start to prepare the management manual for the current surveillance network between IDH and NICED as a model of surveillance networking in India for replication to other institutions.
- It is recommended that NICED may start to make a concrete plan (including the budgetary plan and time framework) of the surveillance networking. In doing so JICA may consider the dispatch of an expert in the field of surveillance networking.

### (2) Measures recommended to be taken after the end of the Project

- It is recommended that the role of NICED to provide technical guidance to peripheral research centers may be systematized and be strengthened for assuring the quality of laboratories across nation.
- It is recommended that the role of NICED to conduct in-country and third country training programs be strengthened for continuous and sustainable human resources development. In order to accomplish this, the following measures are recommended.
  - ICMR may encourage sufficient budgeting for continuous implementation of the training programs.
  - NICED may consider setting up an administrative division for implementing systematic training programs and accumulating data of the trainees.
- It is recommended that NICED may establish the surveillance network on diarrheal diseases with the 25 medical institutions based on the result of the current Project.

## 6. Lessons Learnt

(1) Technology transfer in specific fields of science can be realized through the dispatch of short-term experts when long-term commitment to the project and partnership with counterpart organization is assured.

(2) It should be noted that in order to sustain the budget and working conditions for the Project, coordination with not only the Counterpart organization, but also with its policy level advisory body is essential. The Project was successful in increasing the counterpart budget steadily throughout the Project implementation period through sufficient coordination between ICMR, NICED and the Project.