## Summary of Terminal Evaluation

### I. Outline of the Project

<table>
<thead>
<tr>
<th>Country: Mexico</th>
<th>Project title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue/Sector: Agriculture</td>
<td>Cooperation scheme: Technical Cooperation Project</td>
</tr>
<tr>
<td>Division in charge:</td>
<td>Total cost(estimated at completion of the Project) : about 579 million yen</td>
</tr>
<tr>
<td>Period of Cooperation</td>
<td>Partner Country’s Implementing Organization:</td>
</tr>
<tr>
<td>(R/D) : from 10 December 2001 to 9 December 2006</td>
<td>Supporting Organization in Japan: Ministry of Agriculture, Forestry and Fisheries</td>
</tr>
</tbody>
</table>

### 1. Background of the Project

As the income gaps between metropolitan and rural areas are enormous in Mexico, developments of rural areas by creation of employment are the most urgent subjects at present. Although the livestock industry may be the expected candidate to develop rural areas, there exist serious contagious diseases such as brucellosis and tuberculosis in this country and these are the most important factors to inhibit the promotion of livestock industries. Not only diseases in domestic animals cause economic loss directly, but also some of those may be pathogenic to mankind and sometimes infect them through livestock products.

So it is essential to decrease the outbreak of animal diseases for the development of livestock industry. For these reasons the government of Mexico requested the Japanese government for the project-type technical cooperation (presently technical cooperation project called ‘Improvement of regional veterinary diagnostic services to improve the animal health status as results of improvement of diagnostic technologies and diagnostic facilities in the rural areas.

According to the request, JICA dispatched several missions to preliminary investigate the proposal in detail and to draw up an overall plan. Both Governments signed the Record of Discussions (R/D) on 18 July 2001 and the Project began at the period of five years starting from 10 December 2001.

### 2. Project Overview

#### (1) Overall goal

Animal health status is improved in the state of Jalisco.

#### (2) Project purpose

The integrated diagnostic system is strengthened at the laboratories of the COMITE in the state of Jalisco.

#### (3) Outputs

1) Basic examination techniques are improved at El Salto Lab.

2) Diagnostic techniques for infectious diseases prevailing in the state of Jalisco are improved at El Salto Lab.

3) Knowledge and techniques of animal health are improved in personnel concerned with animal health, including ones of the other COMITE laboratories in the state of Jalisco.

#### (4) Inputs

Japanese Side:
II. Evaluation Team

| Members of Evaluation Team | 1) Dr. Yusuke TADA: Leader  
Senior Advisor, Institute for International Cooperation, JICA  
2) Dr. Kenji MURAKAMI  
Chief Researcher, National Institute of Animal Health, National Agriculture and Food Research Organization  
3) Mr. Yutaka NOZAKI  
Senior Project Manager, Pacific Consultants International  
4) Mr. Tasuku ISHBASHI  
Staff, Field Crop Based Farming Area Team I, Group II, Rural Development Department, JICA |

<table>
<thead>
<tr>
<th>Period of Evaluation</th>
<th>From July 17, 2006 to August 6, 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Evaluation</td>
<td>Terminal</td>
</tr>
</tbody>
</table>

3. Results of Evaluation

3-1. Achievements

(1) Indicator of Project Purpose is fulfilled mostly and project purpose has almost been achieved.

<table>
<thead>
<tr>
<th>Indicator of the Project</th>
<th>Level of Achievement</th>
</tr>
</thead>
</table>
| The campaign diseases can be diagnosed at the laboratories of the COMITE in the state of Jalisco | CDs could be diagnosed at the laboratories of the COMITE in the State of Jalisco, and the integrated diagnostic system is almost strengthened at the laboratories of the COMITE in the State of Jalisco. Within CDs, Bovine rabies and Tick borne disease is not diagnosed actually in the laboratories of the COMITE in the state of Jalisco by the following reasons:  
- Bovine rabies could be diagnosed at the El Salto Lab.  
However, the Secretariat of Health is responsible of this area, rabies samples are supposed to be send to the National Institute for Referential Diagnosis and Epidemiology of Mexico City.  
- Tick borne disease is not diagnosed in the El Salto Lab, because farm condition and clinical service are more important than laboratory diagnosis of the disease and the COMITE never received request of a diagnosis at the laboratories of the COMITE in the state of Jalisco.  
Therefore, the COMITE has not planned to add a parasitological section to the laboratories of the COMITE |
Indicators of Outputs are fulfilled mostly and Output have almost been Achieved.

<table>
<thead>
<tr>
<th>Indicators of Outputs</th>
<th>Level of Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-1 Number of basic examination techniques is increased at El Salto Lab.</td>
<td>Number of basic examination techniques was increased at El Salto Lab, and the basic examination techniques were improved at El Salto Lab.</td>
</tr>
<tr>
<td>I-2 More than 9 kinds of infectious diseases prevailing in the state of Jalisco are diagnosed at El Salto Lab.</td>
<td>More than 9 kinds of infectious diseases prevailing in the state of Jalisco were diagnosed at El Salto Lab, and the diagnostic techniques for infectious diseases prevailing in the state of Jalisco were improved at El Salto Lab.</td>
</tr>
<tr>
<td>I-3 Training courses and seminars are held more than 3 times a year.</td>
<td>Training courses and seminars were held more than 3 times a year, and knowledge and techniques of animal health were improved in personnel concerned with animal health, including one of the other COMITE laboratories in the state of Jalisco.</td>
</tr>
</tbody>
</table>

3-2 Summary of Evaluation Results

(1) Relevance: high

Livestock production is the key industry in Jalisco State, and the needs of the improvement of veterinary diagnostic technology are very high in the state. The promotion of livestock is the important policy of the federal government and the government of Jalisco State, and the improvement of the veterinary diagnostic technology is the important strategy to promote livestock industry, and the governments are implementing disease control campaigns to eradicate important diseases. Two-third of the operational cost for the activities of the El Salto Lab. are from the resources of the program" Alianza Contigo2001-2006(Alliance with you)". The program includes the improvement of animal health and promotion of livestock industry as one of the major driving forces of Jalisco's economy. So, the program has been the major supporter in team of budget source for the El Salto Lab since the Project started.

At the same time, the Project corresponds to the major developments issue" Agricultural and Rural Development, and the key phrase in the issue are, "Stability and Progress to the Rural Communities and Sustainable Agricultural Production (Livestock Promotion)". In this meaning the Project corresponds to the development operation policy of Japan.

(2) Effectiveness: high

Diagnostic techniques of the laboratories of COMITE have been increased remarkably as showed EMA’s accreditation of El Salto Lab. And also the integrated diagnostic system by joint activities between laboratory sections has been initiated. Through the project implementation, the El Salto Lab has increased its capacity for analysis and diagnostic services. As a result of that, the presence of El Salto Lab can make the related institutions and the clients/livestock farmers to recognize its importance and necessity to improve the animal health conditions. All these things seem that Outputs are highly contribute to achieve the project purpose.

(3) Efficiency: high

Inputs from both Japanese and Mexican side have generally been carried out as planed timing, quantity and quality, despite a few delays.

The joint coordination committee (JCC) has been held one time a year (4 times), and the monitoring meeting assembled every six months (6 times). These have contributed particularly for the efficiency of the Project.
Besides, the good communication among Japanese experts and C/P has contributed to increase the efficiency, through the monthly meeting.

(4) Impact: high

Main impact are showed as below

A. Technical Aspect

1) Animal health status is improved

At present, CSF, ND, and Avian Salmonellosis have rated as free, and AI and BTb status have been improved in the state of Jalisco during the Project period. The laboratories of the COMITE have contributed in the monitoring of these diseases and the techniques and equipments obtained by the Project were essential factor for the disease control and eradication.

2) Contribution to technical improvement of other states

The Irapuato Lab of the state of Guanajuato has applied the accreditation of EMA on AD and CSF diagnosis. The laboratory staffs had received a training of ELISA at the El Salto Lab.

3) Quality Control of the El Salto Lab is evaluated high

The El Salto Lab has obtained the accreditation of EMA on 11 diagnostic techniques of animal diseases at 1 June 2006. Only 8 laboratories have this level of accreditation in Mexico. The techniques and equipments established by the Project were indispensable factor for the accreditation.

B. Social Aspect

4) Understanding of the importance of improvement of animal health

The El Salto Lab has increased its capacity by the Project, and offers analysis and diagnostic services of CDs and some other diseases. As a result of that, the presence of El Salto Lab can make the related institutions and the clients/livestock farmers to recognize its importance and necessity to improve the animal health conditions.

For example, some farmer request diagnosis of PRRS, APP and mycoplasma at the time of AD diagnosis because veterinarians recommend it. It is one of the evidence of the improvement of understanding of its importance of animal health management.

It is expected that the improvement of animal disease status in the state of Jalisco would strengthen a livestock production and export and an economic development of the area.

Negative impact is not observed.

(5) Sustainability: relatively high

1) organizational aspects

The animal health campaign under the "Alliance with you (Alianza Contigo)" program is still continuing and the operational relation between SAGARPA, SEDER and the COMITE for the campaigns also maintained.

The importance of continuation of the technical improvement and extension activities organized by the Project is fully recognized by the Mexican side. The Mexican side has made a basic agreement to establish a 'Project sustainability Committee" which aims to maintain and promote more the outputs of the Project.

Organizational sustainability, therefore, is considered relatively high.

2) Technical Aspect

C/Ps have improved their confidence of their diagnosis and it is almost secured to maintain the level
of diagnosis after the end of the Project. It is important that C/P trained by the Project continues their work at laboratories of the COMITE and the COMITE takes measures to retain CIP at El Salto Lab.

Technical sustainability is considered relatively high.

3) Financial Aspect

The COMITE has secured the budget for the assignment of El Salt Lab staff facility management, maintenance cost and other overhead costs including a depreciation cost of equipment and the El Salt Lab could manage smoothly in the future.

Financial sustainability is considered relatively high.

3-3. Factors that promoted realizations of effects

(1) Planning Aspect

The Project Purpose was completely meets with the needs of the livestock farmers in Jalisco State. COMITE was selected as counterpart body, which had established the financially independent operative basis and which takes charge of veterinary diagnosis, and also beneficiaries’ association.

(2) Implementation process

The relation between Japanese experts and Mexican C/P were adequate. JCC and Monitoring meetings have held periodically to decide the general policy of the Project, approval of plans and monitoring the implementation process.

3-4. Factors that impeded realization of effects

(1) Planning Aspect

There are no major factors impede Relevance and Effectiveness of the project.

(2) Implementation process

At the beginning of the project, there were not enough communication between related personnel and institutions, and impede smooth conduct of the project. But it was remarkably improved in the latter half of the project.

4. Conclusion

According to the indicators, the Outputs and the Project Purpose will surely be fulfilled by the completion of the Project. In addition, the Project has contributed partially to the accomplishment of the Overall Goal.

Therefore, the Committee concluded that the Project is to be completed in December 2006 as planned.

5. Recommendations

(1) Establishment of the Project Sustainability Committee

The establishment of new "Project Sustainability Committee" for the self-standing and continuous development of the COMITE Laboratories has been proposed by SEDER.

This initiative is highly appreciated and requested to be realized before the end of cooperation period of the Project.

(2) Advertising of the COMITE Laboratory

Information about the activities of the Project and COMITE Laboratories has been distributed to the relevant organizations and stakeholders through the News letter and web-site. More about the COMITE El Salto Lab, the obtained accreditation of EMA is good evidence of the quality of laboratory practices and
(3) Maintenance of the accreditation of EMA and adjustment of animal experiment with NOM standard.

Accreditation of EMA is effective for every four years and annual monitoring and inspection conducted by the EMA inspection team is required for renewal. It is necessary for El-Salto laboratory to take continuous necessary efforts to maintain the obtained accreditation.

It is also requested to check and adjust the laboratory animal practices to the NOM standards which are required in accordance with Mexican regulations.

(4) Reinforcement of the integrated diagnostic system by joint activities, technical transmission between laboratory sections and common use of the equipment.

Participation of the staff from the sections for the initial step of sample collection and examination has been initiated. Discussions about the needed data and results of the laboratory test results among the staff of the sections are also conducted for the comprehensive diagnosis on field cases. These collaborative activities between the sections are required to be promoted for the reinforcement of the integrated diagnostic system.

Some of the equipment such as freeze-dryer can be utilized commonly by the sections of the COMITE Laboratories. To use such equipment more effectively and efficiently with the good routine maintenance activities, the promotion of common use and sharing the necessary operation techniques of such equipment are necessary.

(5) Technical renovation and technical linkage with other laboratories and institutes

To provide the good and sustainable diagnostic services, and to continuously attain the appropriate technology especially for the possible emerging and re-emerging animal health problems in the future, it is important to brush up continuously the necessary techniques in accordance with the progress of the diagnostic technologies by the continuous self-study and maintenance and establishment of technological linkage with other laboratories and institutes including Japanese institutions, other universities and CENASA.

(6) Measures to retain the staff and techniques

The skilled human resources are the most important products of the Project. It is highly appreciated that Mexican side already has taken several measures to persuade the staff. It is also necessary to best promote the exchange and sharing the techniques between the staff and sections in the laboratories in consideration about the successive technology transfer and sustainability of the technical achievement of the Project.

(7) Continuation of the preparation of necessary anti-sera.

Although some of the necessary anti-sera have been already produced and necessary techniques for the preparation have been established, some more necessary anti-sera have not yet been prepared because of the delay of the construction of the experimental animal facility. To assure the sustainable and good quality diagnostic services, continuous effort of the anti-sera production is required.

(8) Strengthening of Training activities including the construction of the training facility.

Training activities including the seminar, lecture and acceptance of the trainees from other laboratories and institutes have been conducted through the Project and good achievements and impacts have been obtained.
Early construction of the planned training facility is required for the further strengthening and promotion of the training activities which is one of the important activities of the COMITE Laboratories.

(9) Maintenance of the equipment

There is no apparent maintenance problem at present because of almost all the equipment is newly installed. It is appreciated that the COMITE set up the maintenance contract and allocate the budget for depreciation cost for the necessary future replacement of the major equipment. The continuous efforts of routine maintenance and proper use of the equipment by the staff is recommended.

6. Lessons Learned

(1) Direct involvement of the organization of the beneficiaries for the administration of the Project.

A Project site, COMITE Laboratories, belongs to the COMITE which is the organization of the livestock producers and primary beneficiary of the Project which provide the diagnostic services for the livestock producers. This relationship contributes the strong commitment, full participation and responsibility of the COMITE for the Project administration and management.

(2) Presence of the already available solid system for the collaboration of plural organization.

The Project is conducted under the already available solid framework of the Program "Alianza Contigo" in which financial supports by federal and state governments through the SAGARPA and SEDER are available for the promotion of activities of COMITE. These major stakeholders, COMITE, SAGARPA and SEDER are well understanding the importance of the Project and commonly sharing the Project purpose.