# Diagnosis and Research on Domestic Animal Diseases



#### **Project Site**

La Plata City (Buenos Aires Province)

#### 1. Background of Project

While Argentina, one of the leading stock-farming countries in the world, has been aiming to bring about economic stability by gaining foreign currency from the expansion of the export of livestock products, various domestic animal diseases have hindered attainment of this goal. Against this background, Japan implemented a project under the Project-type Technical Cooperation scheme from 1989 to 1996 in the faculty of veterinary sciences of the National University of La Plata (UNLP) aiming at the improvement of research capabilities and development of human resources concerning domestic animal hygiene for the promotion of the livestock industry in Argentina.

In this project, the technology of pathological and immunological research for diagnosis of microorganism infection was transferred. Upon completion of the cooperation period, the Government of Argentina requested Japan to implement a Third-country Training Program aiming at dissemination of skills and knowledge obtained through the project to Latin American countries.

### 2. Project Overview

(1) Period of Cooperation

FY1996-FY2000

(2) Type of Cooperation

Third-country Training Program

(3) Partner Country's Implementing Organization

The faculty of veterinary sciences of the National University of La Plata (UNLP)

#### (4) Narrative Summary

1) Overall Goal

The research level concerning domestic animal diseases in Latin American countries is improved.

#### 2) Project Purpose

Trainees' capabilities of diagnosis and research of domestic animal diseases are improved.

#### 3) Outputs

- Trainees understand the situation of diagnosis and research of domestic animal diseases in Latin American countries.
- b) Trainees understand general concepts and master skills of diagnosis and research concerning immunodiagnosis, biochemistry, laboratory animals, microbiology, virology, parasitology, genetics, physiology, as well as carry out veterinary practices.

#### 4) Inputs

#### Japanese Side

Short-term experts 8 Trainees received 3

Training expenses 50 million yen

#### **Argentine Side**

Instructors and management staff

Training facilities, accommodation and training equipment

Training expenses

#### (5) Participant Countries

Bolivia, Brazil, Chile, Paraguay, Mexico, Nicaragua, Ecuador, Uruguay, Costa Rica, Cuba, Guatemala, Colombia

#### 3. Members of Evaluation Team

JICA Argentina Office

(Commissioned to Mr. Guillermo Marrero)

#### 4. Period of Evaluation

17 January 2000-15 March 2000

#### 5. Results of Evaluation

#### (1) Efficiency

Providing inputs generally in line with plans during the period of project implementation, the training was operated and managed efficiently.

#### (2) Effectiveness

A total of 135 people participated in the training courses from 1996 to 1999. According to the questionnaire survey conducted after the completion of each annual training course, about 80 percent of the trainees said that their technology levels were raised. It can, hence, be judged that the project purpose, i.e. to improve the trainees' capabilities of diagnosis and research, was achieved.

#### (3) Impact

After returning home from the training, most of the trainees utilized the skills and knowledge they learned in their work. Some trainees were promoted or received higher salaries.

#### (4) Relevance

About 90 percent of the trainees who answered the questionnaire said that the training was useful for improving the situation of domestic animal diseases in their country. In addition, the number of applicants for the training increased from 28 in 1996 to 45 in 1999. This indicates the increasing demand for this type of training program in Latin America. Therefore, the relevance of the program was evaluated to be high.

#### (5) Sustainability

Implementation and management of the training courses is well organized by the faculty of veterinary sciences of the National University of La Plata (UNLP), thus institutional sustainability is considered to be strong. However, while UNLP is considering the continuation of this program, realization will be difficult without additional financial assistance from Japan.

#### 6. Lessons Learned and Recommendations

#### (1) Recommendations

The training courses were implemented four times from 1996 to 1999. The number of applicants continued

to increase every year. Hearing the strong requests for the extension of this program from the participating countries, it is desirable to continue the training program as long as possible.

#### 7. Follow-up Situation

Accepting the recommendation above, the training program was extended another five years until 2005. In addition, Japan and Argentina signed the Record of Discussions (R/D) of the Partnership Program, and aftercare cooperation for the Project-type Technical Cooperation was started for two years from 2001, for the purpose of reinforcing the faculty of veterinary sciences of UNLP as a focal point for South-south Cooperation.

# International Seminar on Fisheries



Project Site Mar del Plata

#### 1. Background of Project

The National Fisheries School (NFS) was found in 1985 in the city of Mar del Plata, which is the center of the fishing industry in Argentina. In establishing NFS, the Japanese Government extended grant aid cooperation for the construction of facilities (FY1983) and Project-type Technical Cooperation for technology transfer (FY1984-FY1989). A Third-country Training Program was then implemented in NFS for five years from FY1992 aiming to disseminate the skills and knowledge NFS learned through the above-stated cooperation to neighboring Latin American countries.

The terminal evaluation in 1994 evaluated this training program very high and recommended an extension of the cooperation. The participating countries of the training program also assessed the program highly and strongly desired its continuation. Against this background, the Government of Argentina requested the extension of the cooperation period, and the Japanese Government decided to extend it another five years from 1996.

### 2. Project Overview

#### (1) Period of Cooperation

FY1996-FY2000

#### (2) Type of Cooperation

Third-country Training Program

#### (3) Partner Country's Implementing Organization

National Fisheries School (NFS)

#### (4) Narrative Summary

#### 1) Overall Goal

Instructors and administrators who have sufficient

skills and knowledge in the field of fisheries share them with others in their respective countries. Further, networks of instructors and administrators in Latin American countries are formed for the exchange of information and human resources.

Bolivia

Brazil

#### 2) Project Purpose

Instructors and administrators in the field of fisheries enhance their level of skills and knowledge and become well versed in the situation of coastal waters of Latin American countries.

#### 3) Outputs

- a) Trainees learn about fishing tackle and fishing methods.
- b) Trainees learn about fish processing.
- c) Trainees learn about modern equipment for fishing and navigation.

#### 4) Inputs

#### Japanese Side

Short-term experts 6 Trainee received 1

Training expenses 41 million yen

#### Argentine Side

Instructors and management staff

Training facilities, accommodation and training equipment

Training expenses

#### (5) Participant Countries

Mexico, Brazil, Chile, Colombia, Ecuador, Peru, Uruguay

#### 3. Members of Evaluation Team

JICA Argentina Office

(Commissioned to Mr. Manuel Figueroa Garcia)

#### 4. Period of Evaluation

7 November 1999-7 February 2000

#### 5. Results of Evaluation

#### (1) Efficiency

Inputs such as lecturers and training expenses were prepared in line with plans and led to successful training. The training equipment provided by the Japanese Project-type Technical Cooperation has been effectively utilized. Since each training course was evaluated by trainees and experts at the time of completion and the evaluation results were fed back into the following years program, the content of the training improved every year.

#### (2) Effectiveness

By FY1999, 404 people from 10 countries applied to this training program, and of these, 70 trainees from nine countries were selected and participated.

Since the trainees and their offices evaluated the program as successful, based on their answers to the questionnaires, the project purpose was judged to be sufficiently achieved.

#### (3) Impact

A number of trainees shared what they learned in the training courses with their colleagues at home, thus contributing to the dissemination of skills and knowledge. In addition, the trainees have formed networks and intend to continue exchanging ideas and information.

Some networks created through the training program were developed to realize some joint projects. One example is the establishment of a postgraduate course on fishing production system management. This postgraduate course was opened at the FASTA University in Mar de Plata City (Argentina) in collaboration with the Sea Sciences School of Valparaiso Catholic University (Chile). The leading staff members are trainees of the training program from Argentina and Chile.

#### (4) Relevance

Most of the trainees answered in the questionnaire that the skills and knowledge they learned in the training courses were useful to improve technologies and trainings at home. The constant increase in the number of applicants also indicated the high demand for this program. Further, the attendance of personnel from various governmental agencies and local governments at the opening and closing ceremonies of this program demonstrated the high interest of the people concerned.

Considering these factors, the plans and contents of this training program were judged to be relevant to needs.

#### (5) Sustainability

While NFS bore a part of the training expenses, it was considered difficult for NFS to bear all of the costs after the Japanese cooperation is terminated. Japanese assistance was, therefore, expected to be continued. Besides financial matters, no other specific problems regarding sustainability were observed.

#### 6. Lessons Learned and Recommendations

#### (1) Lessons Learned

The Internet was introduced into this training program in 1999. The Internet can be an extremely effective means to activate exchange among trainees and support to produce tangible outcomes utilizing skills and knowledge learned in training courses.

#### (2) Recommendations

The demand for this training program was high as stated above, and it was anticipated that further impacts would be achieved if the cooperation were continued. It was, therefore, considered desirable for Japan to extend further assistance for the continuous implementation of this training program after the year 2000.

#### 7. Follow-up Situation

The Third-country Training Program in the same field "Seminar on Evaluation and Monitoring Method of Fishery Resources" has been implemented since 2001 based at the National Institute for Fisheries Research and Development in Argentina.

# The Assessment and Monitoring of Fisheries Resources Project



Project Site Mal del Plata

#### 1. Background of Project

The Government of Argentina prioritized the strengthening and promotion of the export of primary and processed products for the stabilization of the economy, which experienced rapid inflation following the Falkland Islands conflict in 1982. As fisheries is one of the most important export industries for the nation, fisheries policies needed strengthening based on scientific analysis. Therefore, the Government of Argentina requested the Government of Japan to implement technical cooperation to improve the capability of the National Institute for Fisheries Research and Development (INIDEP) on fisheries resources assessment, aiming to enhance the function of INIDEP, the only national fisheries research organization in Argaentina.

#### 2. Project Overview

#### (1) Period of Cooperation

1 December 1994-30 November 30 1999

#### (2) Type of Cooperation

Project-type Technical Cooperation

#### (3) Partner Country's Implementing Organization

National Institute for Fisheries Research and Development (INIDEP)

#### (4) Narrative Summary

#### 1) Overall Goal

The Argentine Republic implements fisheries resources management policies based on the scientific information provided by INIDEP.

#### 2) Project Purpose

The capability of INIDEP in fisheries resources assessment is improved.

#### 3) Outputs

- a) Counterparts' research methodologies and techniques for ecological characteristics/ reproduction / life cycle of target species are improved.
- b) Counterparts' research methodologies and

techniques for determining the impact of fishing on the target species are improved.

Bolivia

Brazil

 c) Counterparts' knowledge and skills in utilization of satellite images to analyze fisheries resources are improved.

#### 4) Inputs

#### Japanese Side

Long-term experts 8 Short-term experts 15 Trainees received 15

Equipment approx. 176 million yen Local cost approx. 25 million yen

#### Argentine Side

Counterparts 25
Building and equipment
Local cost

#### 3. Members of Evaluation Team

#### **Team Leader:**

Akira NIWA, Director, Fisheries Cooperation Division, Forestry and Fisheries Development Cooperation Department, JICA

#### Fisheries Biology:

Shigeyuki KAWAHARA, Director, Oceanic Resources Division, National Research Institute of Far Seas Fisheries, Fisheries Agency

#### Fisheries Ecology:

Kenichi TATSUKAWA, Research Associate, Ocean Research Institute, University of Tokyo

#### **Coordinator:**

Ikuo TAKEKAWA, Fisheries Cooperation Division, Forestry and Fisheries Development Cooperation Department, JICA

#### **Project Evaluation Analysis:**

Kazuo UDAGAWA, IC Net Limited

#### 4. Period of Evaluation

10 July 1999-24 July 1999

#### 5. Results of Evaluation

#### (1) Efficiency

Though the timing of inputs was close to schedule, the dispatch of some experts in the field of fisheries technology was delayed due to the difficulty in identifying qualified experts. The provision of equipment (selection and timing) had an important positive impact on technical transfer. The equipment was registered and managed with barcodes and used effectively by counterparts and other INIDEP staff. The project finished the cooperation for fisheries technology by the end of the project, having achieved the intended outputs in that field for the first three years. Instead, for the remaining two years, the project conducted technical transfer in satellite image analysis because the needs of INIDEP were high. Thus, the efficiency of the project is judged as high.

#### (2) Effectiveness

Newly introduced methodologies for research and surveying included six in the field of marine ecology and marine biology, and two in fisheries technology. These were all effectively utilized by the INIDEP staff, enhancing the research skills of counterparts. Results were well disseminated: 51 articles appeared in INIDEP's periodical journal, seven manuals were published by INIDEP, and an international seminar was planned and conducted by INIDEP. The effectiveness of the project was considered high.

#### (3) Impact

No negative impacts were found. A positive impact is that a histological study as well as age determination with otolith and statolith have been applied to the studies of other species that were not targeted by the project. In addition, satellite image analysis will benefit not only INDEP research activities but also will be useful for other institutions such as universities and fisheries associations. A significant number of staff improved their status from temporary to permanent employment.

#### (4) Relevance

In 1998, the Argentine Government established the Federal Fisheries Council in accordance with the Fisheries Act, in which INIDEP is defined as the sole institute that will assess fisheries resources and recommend management measures based on its scientific research. As the role of INIDEP has been ever important, the project purpose and the overall goal were confirmed valid at the time of final evaluation.

#### (5) Sustainability

The sustainability of the counterpart organization was confirmed as high because the number of INIDEP staff increased throughout the project period and this was a permanent arrangement. In addition, following the enactment of the Fisheries Act, INDEP's responsibilities expanded.

Financial sustainability was judged as relatively high



Evaluation meeting with team members and counterparts

because the budget of INDEP will be sustained. Though there is the uncertainty of maintained revenue for expenditures due to the expansion of research activities, the budgetary problem should be overcome as the priority of fisheries management is expected to be higher, and the national wealth of Argentina is sufficient.

Technical sustainability is high because almost all counterparts have worked continuously at INDEP and improved their skills throughout the project period. Many temporary staff became permanent staff, which increased the sustainability of the knowledge and techniques of the counterparts.

#### 6. Lessons Learned and Recommendations

#### (1) Lessons Learned

Projects in highly specialized fields such as this one face difficulty in identifying qualified long-term experts. The system of cooperation of the Japanese side should be examined at the stage of planning.

Necessary equipment must be available at an early stage of the project in order to maximize technical transfer utilizing the equipment.

#### (2) Recommendations

Annual reports are to be submitted by INIDEP to JICA for the next few years. JICA should consider providing additional cooperation in the form of short-term experts, based on the above reports. Financial support should continue after the close of the project in order to maintain or improve the equipment that is necessary for research activities.

#### 7. Follow-up Situation

In order to disseminate the positive results of this project to other Latin American countries, a Third-country Training Program on "The Seminar on Assessment and Monitoring of Fisheries Resources" has been implemented from 2001.

# The Plant Virus Research Project



Project Site Cordoba

#### 1. Background of Project

Agriculture and livestock is an important industry in Argentina, making up more than 60 percent of total exports. However, several factors inhibit further productivity and quality improvements, including the decrease of agricultural population, stagnated expansion of production areas, and extensive vermin damage. It was recognized that virus control methods and strategies were vital in order to overcome difficulties and strengthen export competitiveness. Although the Argentine Government was researching viral diseases, the issues of insufficient human resources development and lack of technical skills remained.

The above-mentioned situation led the Argentine Government to request technical cooperation from Japan. The technical cooperation aimed to contribute to the improvement of the research activities on plant virus diseases by developing the capability of the research fellows in the Institute of Plant Pathology and Physiology (IFFIVE), an experimental research institute of the National Institute of Agricultural Technology.

#### 2. Project Overview

#### (1) Period of Cooperation

1 March 1995-19 February 2000

#### (2) Type of Cooperation

Project-type Technical Cooperation

#### (3) Partner Country's Implementing Organizations

National Institute of Agricultural Technology(INTA) Institute of Plant Pathology and Physiology(IFFIVE)

#### (4) Narrative Summary

#### 1) Overall Goal

To improve the productivity and quality of agricultural products in Argentina by establishing control methods for plant viral diseases.

#### 2) Project Purpose

To strengthen the research capability of the Institute of Plant Pathology and Physiology (IFFIVE) for solving problems related to viral diseases of four crops: maize, soybean, tomato and sunflower.

#### 3) Outputs

- a) Methods for the identification and diagnosis of plant viral diseases are developed.
- Epidemiological study of viral diseases is carried out.
- c) Comprehensive control methods of viral diseases are developed.

#### 4) Inputs

#### Japanese Side

Long-term experts 5 Short-term experts 16 Trainees received 21

Equipment approx. 282 million yen Local cost approx. 59 million yen

#### Argentine Side

Counterparts 23 Land, buildings and facilities

Local cost approx. 0.48 million pesos

(approx. 54 million yen)

#### 3. Members of Evaluation Team

#### **Team Leader:**

Ichiro FUJISAWA, Director, Department of Plant Protection, National Agriculture Research Center, Ministry of Agriculture, Forestry and Fisheries

#### **Identification and Diagnosis of Virus Diseases:**

Hiroki KOGANEZAWA, Head, Entomology and Plant Pathology Laboratory, Department of Crop Science, Shikoku National Agricultural Experiment Station, Ministry of Agriculture, Forestry and Fisheries

#### **Development Ecology:**

Akira KAWAI, Head, Entomological Laboratory, Department of Plant Protection and Soil Science, National Research Institute of Vegetables, Ornamental Plants and Tea, Ministry of Agriculture, Forestry and Fisheries

#### **Cooperation Evaluation:**

Takayuki KURIYAMA, Senior Technical Officer, Technical Cooperation Division, International Affairs Department, Economic Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries

#### **Project Management:**

Akio TAKIGUCHI, Livestock and Horticulture Division, Agricultural Development Cooperation

Department, JICA

#### 4. Period of Evaluation

12 September 1999-26 September 1999

#### 5. Results of Evaluation

#### (1) Efficiency

The Argentine Government recognized that input by both Japanese and Argentine sides was adequate in terms of time, quality and quantity. Dispatching one long-term expert for the duration of the five-year cooperation period fostered a relationship of mutual trust among the experts of both sides. The dispatch of short-term experts who were members of the receiving institution of the counterpart training also enabled effective planning of the counterpart training in Japan.

All 20 counterparts who were sent to Japan for training stayed at the IFFIVE and have been contributing to the development of the research activities. In addition, INTA has made remarkable efforts to assure the necessary budget even during the budget stringency of the current administration. As a whole, the project was smoothly and efficiently implemented.

#### (2) Effectiveness

During the period of the Project, antisera were prepared for the detection of major viruses of four main agricultural products, and the serological and molecular biological methods for diagnosis of the diseases were established.

In addition, the basic knowledge for the development of integral control methods for maize and tomato was acquired. Some unexpected results were also found, such as the discovery of a new virus type sunflower disease. Through various project activities, IFFIVE has become one of the most important institutes in South America in the field of plant virology. The high achievement of the institute is demonstrated by the fact that eight researchers of IFFIVE were awarded monetary aid by the National Secretary of Science and Technology. As a whole, the Project purpose was achieved.

#### (3) Impact

As a result of IFFIVE's extension activities, the introduction of a disease-resistant variety of maize was promoted, and subsequently maize yield losses affected by the Mal de Rio Cuarto Virus (MRCV) were reduced. IFFIVE has been contributing to the development of plant virology research in Latin America through the training of young researchers and receiving many visiting researchers from both within and outside the country.

#### (4) Relevance

This project is recognized to be highly relevant to the national needs of Argentina since maize, soybean, and sunflower are important products that share 18.6 percent of total exports, and the establishment of a control method for diverse diseases was considered an urgent necessity.

#### (5) Sustainability

IFFIVE has been receiving political and financial



An expert giving a lecture to counterparts

support from INTA, and the continuity of this support was assured by the Argentine side. INTA has also made an effort to secure their own financial resources by establishing their own funding agency. Furthermore, the research capability of IFFIVE has reached the highest level in South America; thus, sustainability is highly recognized.

#### 6. Lessons Learned and Recommendations

#### (1) Lessons Learned

Dispatching the same experts throughout the project period will contribute to establishing a positive working relationship between the counterparts of the participating countries. The short-term experts should be selected from members of the receiving institution, so that they can plan the counterpart training in Japan before their short-term visit. This will make technology transfer activities more effective.

#### (2) Recommendations

Based on the above-mentioned evaluation, it was concluded that this project successfully achieved its purpose. Therefore, the cooperation came to an end on February 29th of the year 2000. Although the project terminates, it is expected that INTA will continue allocating the necessary budget for IFFIVE, and that IFFIVE will continue developing young researchers, as well as the extension service to farmers. IFFIVE is interested in establishing the Training Program for Third Countries, and Japan should consider additional cooperation to support this move.

#### 7. Follow-up Situation

In order to disseminate the positive results of this project to other Latin American countries, a Third-countries training program on "the Detection Technology of Plant Viral Diseases" will be carried out from 2001 to 2004.

# **The Industrial Energy Conservation Project**



**Project Site Buenos Aires** 

#### 1. Background of Project

In Argentina, oil accounts for half of the primary energy and the amount of oil deposits estimated to be in the country would be exhausted in about 15 years. Despite this, energy consumption has been steadily on the increase. In addition, a long economic stagnation has lead to low efficiency in energy utilization in industry. The National Institute of Industrial Technology (INTI) started guiding factories and investigating their energy consumption in response to the need to conserve energy. There were many problems, however, in carrying out this role due to the lack of energy audit technology, a shortage of materials and equipment, and other constraints.

Under these circumstances, the Government of Argentina requested the Japanese Government to carry out a development study on the rational utilization of energy in industry through applying appropriate technology. Responding to the request, JICA conducted the "Study on the Rational Use of Energy in Industry" from December 1987 to January 1989. Based on the recommendations drawn from the study, the Government of Argentina established the Energy Management Training Center, whose name was later changed to the Energy Research Development Center, and requested Project-type Technical Cooperation for the center from Japan of July 1991.

#### 2. Project Overview

#### (1) Period of Cooperation

1 July 1995-30 June 2000

#### (2) Type of Cooperation

Project-type Technical Cooperation

# $(3) \ \ Partner\ Country's\ Implementing\ Organization$

National Institute of Industrial Technology (INTI)

(4) Narrative Summary

#### 1) Overall Goal

Industrial energy conservation is promoted in Argentina

#### 2) Project Purpose

CIPURE (Center of Investigation and Development for the Rational Use of Energy) in INTI is able to lead and promote energy conservation in the field of industry through expansion of its functions.

#### 3) Outputs

- a) Counterparts who promote and guide energy conservation are trained.
- b) Counterparts train energy managers in industry.
- c) Counterparts promote energy conservation awareness and knowledge in industry.

#### 4) Inputs

#### Japanese Side

Long-term experts 8 Short-term experts 23 Trainees received 16

Equipment approx. 483.5 million yen Local cost approx. 33 million yen

#### Argentine Side

Counterparts 19

Land, laboratory and training building

(part of cost is from a loan financed by the Inter-American Development Bank)

Equipment

Local cost approx. 2.38 million US\$

(approx. 250 million yen)

#### 3. Members of Evaluation Team

#### Team Leader:

Hiroyuki ARAI, Director, Planning and Financial Cooperation Division, Mining & Industrial Development Cooperation Department, JICA

#### **Technical Cooperation Planning:**

Kenichiro KOREEDA, International Affairs Office, Coal and New Energy Department, Technical Agency of Natural Resources and Energy, MITI

#### **Technology Transfer Program:**

Shinichi SHIBUSAWA, Sumitomo Management Co., Ltd.

#### **Energy Conservation Technology:**

Takeshi, SEKIYAMA, The Energy Conservation Center, Japan (ECCJ)

#### **Project Management:**

Hisae OSHIKANE, Second Technical Cooperation Division, Mining & Industrial Development Cooperation Department, JICA

#### **Data Compilation and Analysis:**

Tomoyuki YAMASHITA, Tokyo Electric Power Services Co., Ltd.

#### 4. Period of Evaluation

28 March 2000-15 April 2000

#### 5. Results of Evaluation

#### (1) Efficiency

The following problems were found: First, the construction of the training center building by Argentina was completed well behind schedule. Secondly, there was a shortage of qualified instructors in the field of electricity and appropriate counterparts in the field were not assigned to the project. In addition, design and delivery problems by a manufacturer delayed the initial operation of the training plant until the third year. However, since approximately 40 percent of the short-term experts, together with the long-term experts, spent a great deal of time and worked intensively on the installation and trial run, the expected outputs were obtained from the third year. The other inputs were made almost appropriately in terms of quality, quantity and timing, which efficiently lead to the gaining of outputs.

#### (2) Effectiveness

CIPURE became capable of independently receiving orders for factory audits in the field of energy conservation and of providing training courses. CIPURE's activities were evaluated highly by the companies that dispatched workers to the training, and the number of companies applying for the training course was steadily increasing. Therefore, the project purpose was expected to be attained by the end of the period of cooperation.

#### (3) Impact

The project had direct impact on the companies that received CIPURE's energy conservation audit. After receiving the audit, they started to procure energy-saving machinery and to improve technology in order to save energy. Because there was an increasing number of companies that were trying to obtain the International Standard for Environmental Management Systems ISO14000 certification in Argentina, there was also an increasing number of requests from companies to CIPURE for assistance before energy management inspection.

#### (4) Relevance

The Government of Argentina regarded selfsustainability in energy as very important and showed much interest in energy conservation from the viewpoint of the policy to reduce production costs in order to enhance its ability to compete internationally. Therefore, this project was highly relevant.

#### (5) Sustainability

Since CIPURE charges for the training and factory audits, it is able to generate sufficient income to sustain its activities. Technically, the necessary skills and equipment were in place to maintain and further develop CIPURE's activities. Therefore, the project was considered to be sustainable.

#### 6. Lessons Learned and Recommendations

#### (1) Lessons Learned

It was found that the type and quantity of machinery to be provided for training use should be decided only after clearly establishing the content of the technical training program.

It was also found that the project should include more stakeholders including beneficiaries in the activities and request them to cooperate in diffusing awareness and knowledge of the project with a view to maximizing the impacts.

#### (2) Recommendations

Since it was probable that the project purpose would be attained as planned, the Japanese Government agreed with the Government of Argentina on ending the project as scheduled.

It was advised that CIPURE work together with other related agencies such as the Energy Conservation Agency, and take on the important role of executing agency for energy conservation in Argentina so that its energy conservation activities are further spread.

Argentina had the desire to extend their energy conservation activities to neighboring countries from the base of CIPRE. To this end, it was recommended that Argentina should reinforce its operating system in order to promote South-south Cooperation and training in third countries.

# **Population Statistics Project**

#### Project Site

Buenos Aires, Salta Province, Misiones Province, San Luis Province, Santa Fe Province, Chubut Province





#### 1. Background of Project

Argentina maintains considerably high economic and social standards, but at the same time, there are still a number of problems to be solved, such as the nation's fiscal deficit and high unemployment rate. The improvement of social welfare and health services are also important issues. However, the basic national statistical system especially for population statistics, which is indispensable for planning and implementation of policies in these fields, is under developed. The Government of Argentina, thus, requested Japan to provide Project-type Technical Cooperation for the purpose of improvement of population statistics at the central Government and provincial levels, which might lead to the more effective planning of national development programs and population policies.

#### 2. Project Overview

#### (1) Period of Cooperation

15 September 1995-14 September 2000

#### (2) Type of Cooperation

Project-type Technical Cooperation

#### (3) Partner Country's Implementing Organizations

National Bureau of Statistics and Census (INDEC), Secretariat of Economic Policy, Ministry of Economy

#### (4) Narrative Summary

#### 1) Overall Goal

A population statistics system useful for the formulation of social welfare and health policies is established.

#### 2) Project Purpose

A population statistics system is developed.

#### Outputs

a) A population statistics information system is

established.

- b) Preparatory work for the 2000 population census is carried out.
- c) A staff training system is established in INDEC.

#### 4) Inputs

#### Japanese Side

Long-term experts 5 Short-term experts 12 Trainees received 16

Equipment approx. 230 million yen Local cost approx. 60 million yen

#### Argentine Side

Counterparts 20

Land and facilities

Local cost approx. 30 million yen

#### 3. Members of Evaluation Team

#### Team Leader:

Hirohiko KOYAMA, Northern Territories Issue Association

#### **Population Statistics:**

Masato AIDA, Director, Management and Planning Office, Population Census Division, Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications

#### **Cooperation Planning:**

Seiji KATO, Deputy Director, Planning Division, Medical Cooperation Department, JICA

#### **Participatory Planning:**

Seizo YAMADA, Katahira & Engineers International

#### 4. Period of Evaluation

11 March 2000-26 March 2000

#### 5. Results of Evaluation

#### (1) Efficiency

Inputs were mostly implemented in an efficient manner. The timely dispatch of short-term experts familiar with the development of computer technologies particularly contributed to high efficiency. Also, the training of counterparts in Japan, executives first and then a gradual shift of target to working-level officers, enhanced overall awareness of the project.

#### (2) Effectiveness

The outputs (the establishment of the population statistics information system, the preparation of the 2000 population census and the establishment of the training system for INDEC staff) were all achieved. With regard to the building of the database, in particular, the introduction of GIS (Geographical Information System) enabled municipality boundaries to be shown on maps on a nationwide scale, which made demarcation of census tracts and sampling easier. Also, for the smooth and efficient conduct of the 2000 population census, a systematic test survey was conducted for the first time. Considering these facts, it was judged that the project purpose was fully achieved.

#### (3) Impact

Through the project, the central and provincial governments made joint efforts in the discussion and preparatory work for the 2000 population census, and that strengthened their cooperative relationship. Also, the database developed by the project was used not only within INDEC but also by administrative organizations in charge of infrastructure development projects, private firms, research institutions and students, and was highly valued by organizations and people using population statistics.

#### (4) Relevance

The overall goal of the project, "A population statistics system useful for the formulation of social welfare and health policies is established" was consistent with the "enrichment of social welfare and health services", a basic policy of Argentina. Therefore, relevance of the project was evaluated to be high.

#### (5) Sustainability

Few problems were found regarding the retention rates of the trained staff in INDEC and provincial statistical offices, as well as regarding their technical and management capabilities. The facilities and equipment were also well maintained. Thus, institutional and technical sustainability were judged to be high. In terms



Trainees from Branch office of Bureau of Statistics and Census

of the financial aspects, there was some concern about securing a large enough portion of the national budget to cover necessary expenses in the future.

#### 6. Lessons Learned and Recommendations

#### (1) Recommendations

Since conducting a regular population census is an indispensable activity for a nation, the Argentine authorities must work to maintain and further develop the established systems such as the population statistics information system and the staff training system through their own efforts.

The population census scheduled for 2000 was postponed to the year 2001 due to the domestic situation in Argentina. In conducting the 2001 census, the Argentine side expressed their need for cooperation by Japanese experts. It was expected that upon submission of an official request, Japan would respond positively as early as possible.

The Argentine side also requested cooperation in conducting a Third-country Training Program. However, it was recommended that this be considered later.

#### 7. Follow-up Situation

The population census was scheduled for mid-November 2001. Two Individual Experts are to be dispatched to verify the contribution of the project outputs to the census and to provide advice on the census evaluation.

With regard to the possibility of a Third-country Training Program, the Japanese side is planning to assess the needs on the Argentine side based on the performance of the census.