

## Section 5. Development Cooperation

If Japanese companies cannot obtain financing from the Export-Import Bank of Japan or the Overseas Economic Cooperation Fund for development projects in the fields of social development, agriculture and forestry, or mining and industry in developing countries, whether due to the risks, low profitability, or technical problems, JICA's development cooperation program provides financing under lenient conditions, offers technical guidance if needed, and facilitates project implementation.

This program is characterized by its contribution to developing countries' economic and social development through tie-ups between Japanese government and the private sector mediated by the projects undertaken by Japanese businesses.

There are two types of development cooperation: i) development project investment and financing and ii) surveys and technical guidance.

### 1. Development Project Investment and Financing

JICA makes long-term, low-interest loans to Japanese companies that either themselves undertake a development project in a developing country or invest in a local company in a developing country that undertakes such a project. Projects eligible for this financing are of two main types:

#### 1.1 Related Facilities Improvement Projects

Loans are provided for the improvement of related facilities when such improvements will contribute to the development of the surrounding region or to the enhancement of the welfare of people living in surrounding communities and when such improvements are necessary as concomitant items to development projects (original projects). The development projects are those which are the objects of loans, debt guarantees or financing from the Export-Import Bank of Japan, the Overseas Economic Cooperation Fund, the Japan National Oil Corporation, the Metal Mining Agency of Japan, the Central Bank for Agriculture

and Forestry, the Central Bank for Commercial and Industrial Associations, or JICA, but for which there are obstacles to receiving loans, debt guarantees or financing from the Export-Import Bank of Japan or the Overseas Economic Cooperation Fund. The following types of facilities are eligible for such funds.

- (1) Public facilities that contribute to the lives and welfare of the local community: for example, schools, hospitals, public meeting places, churches, temples, public offices, post offices, fire stations.
- (2) Facilities that are needed to carry out a project and also improve public services: for example, roads, port facilities, sewers and water systems, meeting places, vocational training centers, electric power facilities.

In fiscal 1991, there were no eligible projects for either case.

## 1.2 Experimental Projects

These are development projects that are being implemented experimentally and which, if not implemented together with the development and improvement of technology, would render the achievement of these goals difficult and for which there are obstacles to receiving loans, debt guarantees or financing from the Export-Import Bank of Japan or the Overseas Economic Cooperation Fund.

Experimental projects include, for example, crop cultivation; animal breeding; afforestation; processing of yet-unused types of wood; mining, dressing, and refinement of limestone, phosphates, rock salt, and other minerals; construction of low cost housing; and the preparation of land for building (except for oil, natural gas, and metallic ore projects).

In fiscal 1991, financing was approved for seven new experimental projects valued at about ¥2.5 billion, including Angicau experimental afforestation project in Brazil, and loans totaling about ¥4 billion were granted for 18 existing projects.

## 2. Surveys and Technical Guidance

Surveys and technical guidance involve technical support to carry out the above-described projects eligible for JICA financing; they take the form of surveys and dispatch of experts to give technical guidance, as well as the training of local counterparts, which are all needed to implement a project.

### 2.1 Surveys

In fiscal 1991, JICA sent 30 survey teams overseas to conduct the following types of surveys needed to implement projects.

- (1) Basic development surveys: In place of the companies implementing projects, JICA studies local conditions, gathers data, investigates the feasibility of a project, and formulates basic concepts and implementation plans for the project at no cost. The different types of basic development surveys are shown in the table below.

Type of Survey	Principal Survey Objectives
< Related facilities improvement projects > Preliminary survey < Experimental projects > First basic survey Second basic survey	<ul style="list-style-type: none"> <li>• Gather basic materials regarding environmental conditions, the economic situation, the investment environment, and the conditions of the related facilities.</li> <li>• Investigate a project's feasibility as a business</li> <li>• Determine the basic conception of projects</li> <li>• Select appropriate business sites and related facilities</li> </ul>
< Related facilities improvement projects > Implementation survey < Experimental projects > Development plan survey	<ul style="list-style-type: none"> <li>• Gather materials with detailed information</li> <li>• Prepare implementation plans</li> <li>• Determine the basic design of related facilities</li> </ul>

- (2) Field demonstration surveys: In agriculture and forestry, if JICA thinks that the project will promote regional development, that data is

scarce, and that the project will require several years to turn into a business, JICA will send surveyors for relatively long periods and study the project's feasibility.

- (3) Regional development impact assessment surveys: JICA undertakes these surveys to determine to what degree a given project is contributing after the elapse of a certain period to the surrounding region's development and growth and how it is stimulating that country's development and growth.
- (4) Investment and financing examination and surveys: The following items are studied. i) Prior to financing, study of the adequacy of the planning, eligibility for JICA financing, cooperation effects. ii) After lending, determination of how the project is being implemented and study of policy on problems that arise after commencement. iii) In case of a long term financing, study of the above-mentioned items, etc., during the financing period. iv) With the cooperation of the overseas branch of the Japan Chamber of Commerce and Industry, holding of meetings overseas to explain the investment and financing system and to respond to individual inquiries about financing, as well as to determine demand and scout for and foster prospective loan candidates overseas.

## 2.2 Technical Guidance

The following types of technical support facilitating project implementation can be offered at the request of a loan recipient. The costs are sometimes assumed by the requester; this support is sometimes also offered in the context of projects other than JICA investment and financing.

- (1) In fiscal 1991, JICA sent 34 (including both new and continuing assignments) technical guidance experts (called "development cooperation experts").
- (2) In fiscal 1991, JICA invited 51 local counterpart technicians and engineers to Japan for training.

## Section 6. Emigration

Emigration from Japan began in 1868 (usually considered the first year of Japan's modern era). So far, about 1.03 million Japanese have emigrated, and approximately 1.65 million people of Japanese ancestry are living overseas, including the third generation. These people of Japanese ancestry not only contribute greatly to the industrial development of the countries that accepted them, but also many today occupy leading positions in politics, economics, and so on.

Japan's postwar emigration resumed in 1952 and as of fiscal 1991 JICA has helped 73,100 Japanese emigrate to 16 countries. About 53,600 have moved to Brazil; about 7,100 to Paraguay, 5,100 to Canada, and 2,700 to Argentina. Emigration to Australia began in 1978; and currently 428 Japanese have settled there. With the exception of counseling and information services, JICA does not conduct any direct support services for emigration to the United States, the nation that accepts the largest number of Japanese immigrants, in conformity with the U.S. Government's immigration policies.

To promote understanding and awareness of emigration in Japan, JICA provides information, conducts counseling services and preparatory arrangements, organizes lectures and training, implements support activities covering certain travel expenses and other pertinent arrangements for prospective emigrants, dispatches overseas development youths, organizes training programs for emigrants' descendant generations in Japan, and so forth. In such countries, besides agricultural experiments and research at JICA's agricultural experiment stations and state research stations and guidance and technical cooperation to Japanese emigrants in farming management, JICA has improved the social infrastructure through promotional measures in education, including Japanese language lessons, medical care and public health improvement, road construction, and electrification to support emigrants as well as in buying, clearing, and selling land, and making loans to finance projects.

Details are as follows.

## 1. Publicity

JICA carries out the following activities to promote public awareness of emigration in Japan by publicizing the activities of emigrants and people of Japanese ancestry:

- (1) Publication of the monthly *Kaigai Iju* (Overseas Settlement),
- (2) Provision of articles for newspapers/advertising in newspapers.
- (3) Organization of meetings, lectures, movies, exhibitions, research, and report sessions to publicize emigration,
- (4) Partial subsidies of the activities of the Japan High School Association for International Education and sponsoring of overseas travels to observe technical cooperation sites by high school teachers,
- (5) Partial subsidies for sending students overseas to experience the nature of emigrants' business by the Japan Student Federation for the Studies of Migration,
- (6) Dispatch of celebrity intellectuals to Latin America and other countries where Japanese have settled,
- (7) Inviting prominent Japanese emigrants to Japan,
- (8) Partial subsidies for the Convention of Japanese Abroad.

## 2. Counseling and Preparatory Arrangements

JICA provides information on emigration inquired by the general public and produces many relevant information materials. In fiscal 1991, JICA counseled 2,128 new inquiries and the following types of materials were produced:

- (1) Publicity materials on Overseas Development Youth
- (2) A film, *Viva, The Latin World! the life of the Overseas Development Youth in 1992/Brazil edition*
- (3) Panels introducing the Overseas Development Youth Program

### 3. Training and Lectures for Emigrants

JICA provides lectures and training opportunities for prospective emigrants and Latin American students of Japanese ancestry through the following programs:

- (1) Long-term training for prospective emigrant farmers  
One-year training in basic agricultural technologies, languages, and introductory lectures on the countries accepting emigrants.
- (2) Short-term training for prospective emigrants to Latin American countries  
Ten days of language training and introductory lectures about living conditions in Latin American countries.
- (3) Short-term training for prospective emigrants to industrialized countries  
Fifteen to twenty days of language training and introductory lectures about countries accepting emigrants.
- (4) Information for prospective female emigrants  
Forty-five days of language training and introductory lectures about living conditions in foreign countries for prospective female emigrants with the cooperation of the International Women's Training Center in Chigasaki, Kanagawa Prefecture.
- (5) Training for Latin American students of Japanese ancestry  
With the cooperation of the Overseas Japanese Association, JICA organizes training twice every fiscal year for Latin American students of Japanese ancestry studying in Japan under the principal auspices of prefectural governments.

#### 4. Travel Expenses

JICA provides travel expenses and offers accommodation to help emigrants to settle overseas. In fiscal 1991, JICA helped 36 people emigrate to Latin America, and provided the travel expenses for 17 people.

#### 5. Dispatch of Overseas Development Youth

JICA dispatches those Japanese youth with appropriate technical capabilities and strong interest in emigration for a certain time, initially for three years, enabling them to acquire foreign experiences and facilitate their migration settlement in those countries in need of proper vitalization of local communities of Japanese emigrants through the integration of technical and other social involvements of those young people. This scheme was inaugurated in 1985, and JICA has dispatched 41 Overseas Development Youth, sixteen of which are women, as of 1991, having screened 400 applicants in their capabilities and aptitude.

#### 6. Training of Emigrants and Their Descendants in Japan

JICA accepts emigrants and their descendants for the following sorts of training.

(1) Technical training for emigrants' descendants

JICA accepts about 30 emigrants' descendants every fiscal year for technical training from 18 to 24 months. 30 descendants were accepted as of 1991.

(2) Advanced technical training for emigrants' descendants

Every fiscal year, to train with highly advanced technology and knowledge, JICA organizes 2 years' courses and accepts about 15 emigrants' descendants who are engaged in areas which will prospectively require highly specified knowledge. In fiscal 1991, 13 descendants were accepted in advanced technical trainings.



(3) Training for Japanese language teachers

About 30 teachers who teach Japanese language in overseas schools established by Japanese emigrant groups for teaching Japanese to emigrants and their descendants are accepted for training in Japan every fiscal year for three months or a year. In fiscal 1991, 31 teachers were accepted in this program

(4) Training for doctors

JICA has accepted five doctors who have completed university-level medical schools in their countries for two years every fiscal year since 1987 under this program. Formerly, 1979-1986, the number of accepted doctors was three each year. As of fiscal 1991, five doctors were accepted in the program. In addition, JICA accepted three doctors who had undergone this program for refresh training up to six months in Japan.

(5) Social welfare workers' training

JICA has accepted two officers or staff people of local social welfare associations of Japanese descendants for about one month every fiscal year since 1983. This program was incorporated into the skill improvement training program for middle-level officials in fiscal 1991, and accepted two people likewise in the previous year.

(6) Skill improvement training program for middle-level officials

JICA has accepted ten emigrant association officials in middle-level positions for six months every fiscal year since 1984. The objectives of this program are i) providing opportunities for training in advanced technology and knowledge, and ii) vitalizing future activities of those associations, and fostering their future leadership. In fiscal 1991, 12 officials underwent the program.

(7) Training for students at Japanese language schools

Every fiscal year since 1987, outstanding students at Japanese language schools established by Japanese emigrant groups have been

invited to Japan for one-month training to acquaint them with Japanese life and culture through attending classes of junior high schools and home stay experiences and to contribute to their understanding of Japan and proficiency in their Japanese language abilities. 43 students were invited in fiscal 1991.

(8) Training for researchers of Japanese ancestry

This program began in fiscal 1989 to enable prominent Japanese ancestry researchers of educational and research institutions to receive training in advanced technology and knowledge so as to enhance human resource development with the aim of contributing to the total development of their countries and to establish a human resources linkage between Japan and their countries. In fiscal 1991, JICA accepted 26 researchers for three months on the average.

## 7. Counseling and Guidance for Emigrant Farmers

JICA has set up a horticultural experiment station in Argentina, a agricultural experiment station in Bolivia, and an agricultural experiment station in Paraguay. By dispatching experts to those stations, JICA supports experimental studies at these stations and provides farm management counseling and agricultural technical guidance for local farmers irrespective of whether they are Japanese emigrants, their descendants or national farmers. And to support improvements in agricultural technology of emigrants, JICA also dispatches agricultural experts from Japan and from Brazil, offers training in advanced agricultural areas, subsidizes emigrant agricultural research groups, takes special measures to improve farm management, and provides agricultural information via its agricultural information division of the JICA São Paulo Representative Office in Brazil. JICA also carries out joint research studies with research institutions in the recipient country and neighboring countries, and with such international institutions as FAO and CIMMYT.

## 8. Living Environment Improvement

The following activities were carried out in fiscal 1991 to support emigrants and improve the environment of their communities:

### (1) Medical care and public health improvement

JICA subsidized five clinic facilities in Paraguay and Bolivia. In addition to giving medical care to emigrants by contract with local doctors in Paraguay, Bolivia, and the Dominican Republic, JICA provided scholarships for medical students and nursing students and conducted mobile doctor consultation visits around remote areas settled by Japanese emigrants. In addition, JICA provided Peru-Japan Clinic and two other clinics in Brazil with medical equipments and repair services.

### (2) Education

In relation to education, JICA subsidized the construction of schools and school dormitories, provided teaching materials, dispatched Japanese language teachers to Brazil and four other countries, and assigned Silver Japanese language experts to Argentina and five other countries, and granted scholarships to promote Japanese language education for Japanese emigrants' children.

### (3) Improvements of living conditions

JICA subsidized 16 emigrant associations in Peru and other countries for the equipment of drinking water service in the colonies, and provided flood control facilities and materials.

### (4) Roads

JICA subsidized five emigrant associations in two countries for road repavement and repair vehicles, machinery, and construction work.

## 9. Acquisition, Reclamation, and Allotment of Land for Settlement

JICA acquires land and sells it to Japanese emigrants; in fiscal 1991, JICA sold 55 plots to Japanese emigrants in Paraguay, of which 8 plots were sold in Iguazu, 22 plots in Alto Parana and 25 plots in Iguazu.

## 10. Project Fund Loans

JICA conducts fund assistance schemes for emigrants and organizations contributing to the permanent settlement and economic stability of emigrants. In fiscal 1991, it lent approximately ¥1.3 billion in total to organizations and individuals in Paraguay, Argentina, Bolivia, and the Dominican Republic.

## 11. Surveys on Emigration

Every year, JICA conducts several surveys to gather basic data to attain understanding and awareness of emigration, and support and guidance for emigrants. In fiscal 1991, it performed surveys to study the living standards of emigrants in Argentina, the state of development of emigrant agriculture, Japanese language instruction in communities of Japanese ancestry in Latin America, as well as, the status and the environment of emigrants in Chile, and basic study of labor condition of 1,027 Japanese emigrants from Brazil, Peru, Argentina, Bolivia and Paraguay now working in Japan. In addition, JICA conducts yearly surveys on the economic status of farmers; in 1991 it interviewed about 550 families who settled in 16 colonies in five countries of Latin America with respect to their farming income, assets, and debts.

## Section 7. Disaster Relief Aid and Cooperation

Disaster relief and related cooperation includes emergency aid activities such as the sending of rescue, medical, and expert teams and the provision of equipment and supplies at the request of an international organization or a foreign country, including developing countries, struck by a major natural disaster.

Such emergency aid activities began with the sending of medical teams in December 1984 to save Ethiopians who were starving because of drought. Since then, Japan has sent relief to the following countries, and a cumulative total reached 70 as of March 1992: Mexico after the earthquake of September 1985, to Colombia after the volcanic eruption in November of the same year, to Cameroon after the poisonous gas eruption in September 1986, to Ecuador after the earthquake of March 1987, to Bangladesh after the floods of August 1988, to Soviet Armenia after the earthquake of December 1988, to China during the floods of June 1989, to Iran and the Philippines after the earthquakes of June and July 1990, respectively, to Peru during the spread of cholera in January 1991, to Iran and Turkey for the refugee inflows (April, 1991), to Bangladesh after the cyclone (April, 1991), to the Philippines after the typhoon (November, 1991), and to other regions struck by typhoons, earthquakes, forest-fires, etc. In fiscal 1990, JICA has responded to other unprecedented field of emergency relief including the spilt oil sweep in the Persian Gulf caused by the War. (carried out by a expert team dispatched to Saudi Arabia)

Especially in 1991, JICA dispatched 125 Japan Disaster Relief staffs for activities to rescue the Kurd refugees in Iran and in Turkey after the Gulf War, and to assist disaster victims in Bangladesh after the cyclone.

### 1. Dispatch of the Japan Disaster Relief Team (JDR)

JDR consists of rescue, medical care, and other expert teams; suitable staff combinations are put together to meet the needs of the type of disaster and request from the country where the disaster occurred.

(1) Rescue teams

Rescue teams are sent to save human lives in danger; they must be able to leave Japan within two days after disaster occurred and arrive at the scene of a disaster and begin to act within three days at the most after the occurrence of disaster. Because rescue activities require skills, experience, cooperation, and teamwork, rescue teams are composed of National Police Agency, Fire Defence Agency, and Maritime Safety Agency personnel who generally must be constantly ready to leave for a disaster site within 24 hours of its occurrence. In fiscal 1991, rescue team was sent once to Bangladesh after the cyclone.

(2) Medical teams

Medical teams mainly treat and assist disaster victims, but they also act if necessary to secure drinking water, prevent the spread of disease, and disinfect zones of refuge. Teams are composed of volunteer doctors and nurses from national, local, or private health care organizations and other health care professionals who register with JICA in advance together with a coordinator of a team. As of fiscal 1991, 163 doctors and 167 nurses and 120 medical coordinator are on JICA's list of volunteers. In 1991, medical teams were dispatched three times to help the refugees in Iran and in Turkey, and after the typhoon in the Philippines.

(3) Expert teams

The purpose of expert teams is to take emergency measures and restore conditions to normal after a disaster; generally, they work for ten to 15 days after a disaster to restore water supplies, electricity, transportation services, and telecommunications, as well as to take counter measures to disaster prevention, including suggestion on earthquake resistant construction. They are selected according to need from among qualified personnel recommended by Japanese government ministries and agencies.

Expert team was sent once in fiscal 1991 and to take measures against the oil spilt in the Persian Gulf. Teams of experts and researchers in seismic technology, fire-proof building, disaster prevention, and aseismic structures were sent in previous years to the sites of the above-mentioned Armenian and Mexican earthquakes and to Cameroon where the poisonous gas eruption took place to investigate the causes and study preventive measures.

## 2. Related Activities

Disaster-related cooperation work, in addition to sending of the above-mentioned teams, includes the following activities:

(1) Procurement and stockpiling of rescue equipment and supplies

Because equipment and supplies needed to rescue and relieve victims and restore activity to normal must be procured and sent to disaster sites as speedily as possible, JICA has set up stockpiles in Japan and overseas of blankets, tents, water purification equipment, generators, telecommunications equipment, drugs, and medical supplies and equipment. The domestic stockpile is currently located in Narita (Chiba Prefecture) and overseas stockpiles are located in Singapore, Mexico City, Pisa (Italy), and Washington D.C. (USA)

(2) Training and lectures

JICA holds lectures and gives training based on various scenarios, since rescue activities overseas involve different languages and practices, as well as traffic and communications situations that differ from those in Japan.

(i) Training for rescue teams

Training covers from emergency treatment and transport of injured people, which is basic to rescue work, to the operation of fiberscope, sonar and other special apparatus, the dismantling

and reassembly of helicopters, and the use of other equipments. The training also includes foreign language lessons.

(ii) Training for medical teams

Medical teams task requires basic knowledge on medical treatment, medical hygiene in developing countries as well as general knowledge on different cultures. In particular, by using past experiences as examples, the simulation method training, method of learning through experience, makes a remarkable contribution to effective implementation of rescue works at a practical experience.



## Section 8. Recruiting and Training of Qualified Japanese Experts for Technical Cooperation

The significance of technical cooperation is characterized in its contribution to fostering human resources in developing countries by transferring technology through overall personal interchange. Hence recruiting and training outstanding Japanese experts with full command of the knowledge and technologies they transfer is one of the most important requirements for technical cooperation. When JICA was formed in 1974, one of the priority tasks was therefore to secure these human resources. During fiscal 1983, the Institute for International Cooperation was established to actively carry out following tasks to recruit and train Japanese experts.

### 1. Training of Technical Cooperation Experts

The following types of training are carried out to train qualified experts.

#### 1.1 Pre-assignment Training

Experts prior to overseas assignment, normally lasting at least one year, are given the following sorts of training:

##### (1) Group pre-assignment training

This training session includes 2 weeks' practical training covering the role of technical cooperation experts, information on the country of assignment, personal health care, and 3 weeks foreign language practice; eight such training sessions are held each year. The main focus, however, is on the expert's presentation ability in foreign language; English, Spanish, French, Chinese, Indonesian, Thai, and other courses are held as necessary; courses amply cover the style of writing and expressions experts will need in their technical cooperation work; this necessitates the use of individualized training materials. During the practical training of two weeks, experts' spouses attend parallel

courses. During fiscal 1991, 584 experts and 206 spouses participated in this training.

(2) Individual language training

Experts who require further language training after the group pre-assignment training described above can take additional language courses;

(3) Third-country language training

Experts who will be sent to French- or Spanish-speaking countries are sent to France or to Mexico on the way to the country of assignment for six weeks at longest of training in the language of their assignment. In fiscal 1991, seven people were given French language training and one person was given Spanish language training in this way.

(4) Individual technical training

In fiscal 1991, JICA gave supplementary training to 67 experts in a specialized technology or in the operation, maintenance, or management of equipment.

## 1.2 General Technical Cooperation Training

(1) Training for project leaders and coordinators

Among those who will be sent as experts in project-type technical cooperation, project leaders and coordinations are given training in project administration and management. Such training sessions are held eight times a year. In fiscal 1991, 48 leaders and 65 coordinators were given this training.

(2) Training for local government staff

To support international cooperation activities oriented by local governments, 5 training sessions were held in fiscal 1991 and 49 local government staff were given this training.

(3) Training for NGO staff

Seven people took part in the training conducted in the training centers designated for foreign language training to support NGO activities.

### 1.3 Middle-term Training Course for Experts

Experts who will be sent in the near future and whose assignment has been tentatively made are trained in 68-day courses. Training is given three times yearly. In fiscal 1991, 113 experts were given this training.

### 1.4 Development Expert Training Course

Development expert training courses with 75 days' schedule are conducted in specific areas. In addition to the course for the experts of infectious disease control (anti-polio) and two courses for the environment experts (afforestation and urban environment) offered in previous year, education, WID, and poverty alleviation measures have newly started and 31 experts were given the training in fiscal 1991.

### 1.5 Long-term Technical Training in Japan

This technical training is given to repatriated experts who have tentatively been assigned to another overseas assignment. It lasts no more than one year and takes place at a university or research institution in Japan. In fiscal 1991, one expert was given this training.

### 1.6 Long-term Training Overseas

To foster human resources with future leadership potential, candidates are selected and sent to overseas universities or research institutions for a period not exceeding two years.

In fiscal 1991, 23 were sent abroad for this purpose.

## 2. Finding and Retaining Experts

Because it is not easy immediately to find and send experts to swiftly meet developing countries' requests, JICA has designed the following programs to ensure that enough experts are always available.

### 2.1 Special Technical Advisors

To ensure the availability of human resources with the advanced specialized technology and knowledge and ample experience required, JICA has people under contract, currently one person each in agriculture, construction, and industry, to advise it on the whole spectrum of technical cooperation.

### 2.2 Development Specialists

To ensure the availability of human resources with the required personality and experience in technical cooperation as well as the required technologies, a system was established in 1983 that recruits project-type technical cooperation leaders and other experts with important roles overseas. In fiscal 1991, eight more people were added to this pool, making a total of 64 people under contract as of March 1992.

### 2.3 Special Assistants

This program puts those repatriated experts, who performed well in fields where they are very likely to be assigned again, under a contract; about 30 such people are constantly available throughout the year.

### 2.4 Junior Development Specialist

A new scheme has started in fiscal 1990 to secure youths who are well experienced abroad (JPO and JOCV ex-participants, etc.) and foster qualified young human resources required for international cooperation. In fiscal 1991, 33 in total including new 22 youths are now on assignment.

## 2.5 Registration of Experts for Assignments

Those who wish to serve as experts if the occasion arises are registered for future assignments. These registered experts are screened and assigned overseas when pertinent requests are received from developing countries. As of end fiscal 1991, 955 experts have been registered.

## 3. Surveys and Research on Technical Cooperation

In order to implement effective cooperation programs in response to diversifying needs and advanced technical requirements from developing countries, it is important to fully understand the circumstances and problems of development in each individual country and area and, on that basis, to study what types of cooperation are generally effective and to promote specific cooperation planning based on the study findings. The systematic collection of instructive cases revealed by compilation and analysis of cooperation achievements thus far, the furnishing of this information to experts, and its use as teaching materials in expert training programs are effective ways to improve the quality of cooperation. To conduct these studies and develop these teaching materials, the following activities are carried out:

### 3.1 Country Aid Studies

Beginning in fiscal 1986, aid study groups were established for individual countries; researchers, university professors and knowledgeable people participate; they analyse current situations including economic, political and social conditions of recipient countries. Based upon these analyses, they make recommendations for further improvement of Japanese aid and suggest a number of aid programs. In fiscal 1991, studies on Egypt and China, which continued from fiscal 1990, were concluded and new studies started on Oceania and Nepal.

### 3.2 Sector Aid Studies

Committees similar to those of the country aid studies described above were also established to study for further betterment of assistance for cross-sectorial issues. In fiscal 1991, they studied population and development in continuation with the previous year.

### 3.3 Technology Transfer Methods and Related Issues

JICA carries out other activities in addition to the above: studies on technology transfer methods, studies on improving implementation methods, development of teaching materials for expert training programs, and organization of international conferences on technology transfers. In fiscal 1991, four case studies of project-type technical cooperation activities were completed and a video for introducing how project was produced. International conferences, including "Local Government and Overseas Cooperation" and "The International Seminar on Women in Development: Lessons Learned from Field Experiences in Integrating WID in Development Cooperation", were held.

## 4. Preparation and Provision of Information

### 4.1 The JICA Library

Located at the Institute for International Cooperation, the JICA Library has a collection open to the public of some 90,000 volumes, including ordinary books, JICA reports, textbooks and educational materials, and books and documentary materials collected in developing countries.

### 4.2 Organization and Provision of Information

The following activities are performed to organize survey findings and data and information on developing countries and to make them available to experts assigned abroad and other interested people.

- (1) *Kokusai Kyoryoku Kenkyu*: "International Cooperation Research" is published twice yearly in Japanese, once yearly in English.
- (2) Organization of developing country technical information: Technical information related to developing countries is collected by area and organized by country. Information on 36 countries and eight areas are available at present.
- (3) Provision of technical information to experts: JICA procures literature, manuals, and other technical data related to technology needed in technical guidance by experts and makes them available to cooperation experts.
- (4) Collection of information on countries of assignment: Materials are currently available on 78 countries, giving various information that experts will need once assigned.
- (5) Writing technical manuals on equipment: JICA has written seven technical manuals for guidance on the use of equipment.

## 5. Related Activities

### 5.1 Invitations of Overseas Development Experts

To familiarize with aid trends and policies in the advanced countries as well as the status of development policies and projects in developing countries, JICA invites foreign researchers, experts and officials in charge of development issues to Japan to give seminars and lectures, primarily to Japanese aid personnel. In fiscal 1991, JICA invited ten authorities to Japan.

## Section 9. Welfare and Recreational Benefits for Technical Cooperation Experts

A variety of programs have been established for the purpose of providing cooperation experts with welfare and recreational benefits. The main benefits are described below:

- (1) Temporary repatriation (Home leave)  
Experts on an assignment lasting at least two years (or two years and six months, in some regions) may return to Japan on vacation once every two years.
- (2) Personal health care travel (Recuperation leave)  
JICA subsidizes the costs of travel to a region with a better climate for health reasons in the case of experts assigned for more than one year to extreme climates in the Middle East or Africa or to areas where living conditions are particularly poor.
- (3) Personal health care  
Beginning in fiscal 1987, consulting physicians and nurses were appointed to give checkups and advice on health to the cooperation experts; itinerant medical advisory teams are sent overseas, to promote the health of experts on assignment in regions where medical services and sanitary conditions are poor. During fiscal 1991, five teams were sent to 15 countries.
- (4) Security program  
Primarily by JICA's overseas offices, information on peace and order situation is provided and exchanged, and regular contacts are established through "the Meeting on the Public Order Security". In regions where public security is especially poor, radiocommunication equipment is provided to enable emergency messages to be sent, and crime prevention systems is installed. JICA also subsidizes the hiring of security guards and dispatches security consultation and guidance



teams for JICA experts. During fiscal 1991, two teams were sent to three countries.

(5) Compensation

All cooperation experts are in principle covered under the Workmen's Accident Compensation Insurance in the event of injury or accident (including illness) in their official capacity; they benefit from an overseas mutual aid program that provides solatia and the cost of medical treatment and convalescence, transportation, etc., in the event of injury or accident outside their official capacity.

(6) Improvement of living conditions

In cases where the experts' basic living conditions are poor and their comfort is severely impaired, supplementary efforts are made to provide facilities and equipment, for such as electricity, water, sewerage and sanitation.

(7) "EXPERT"

To improve communication among experts on assignment, repatriated experts, and support associations in Japan, the quarterly magazine "EXPERT" is published to present experts' reports on their activities and inform readers of changes in expert-related programs.

**Fig. 1** Number of Training Participants Accepted, Study Team Members, Experts and JOCV Volunteers Dispatched, and Emigrants by Year

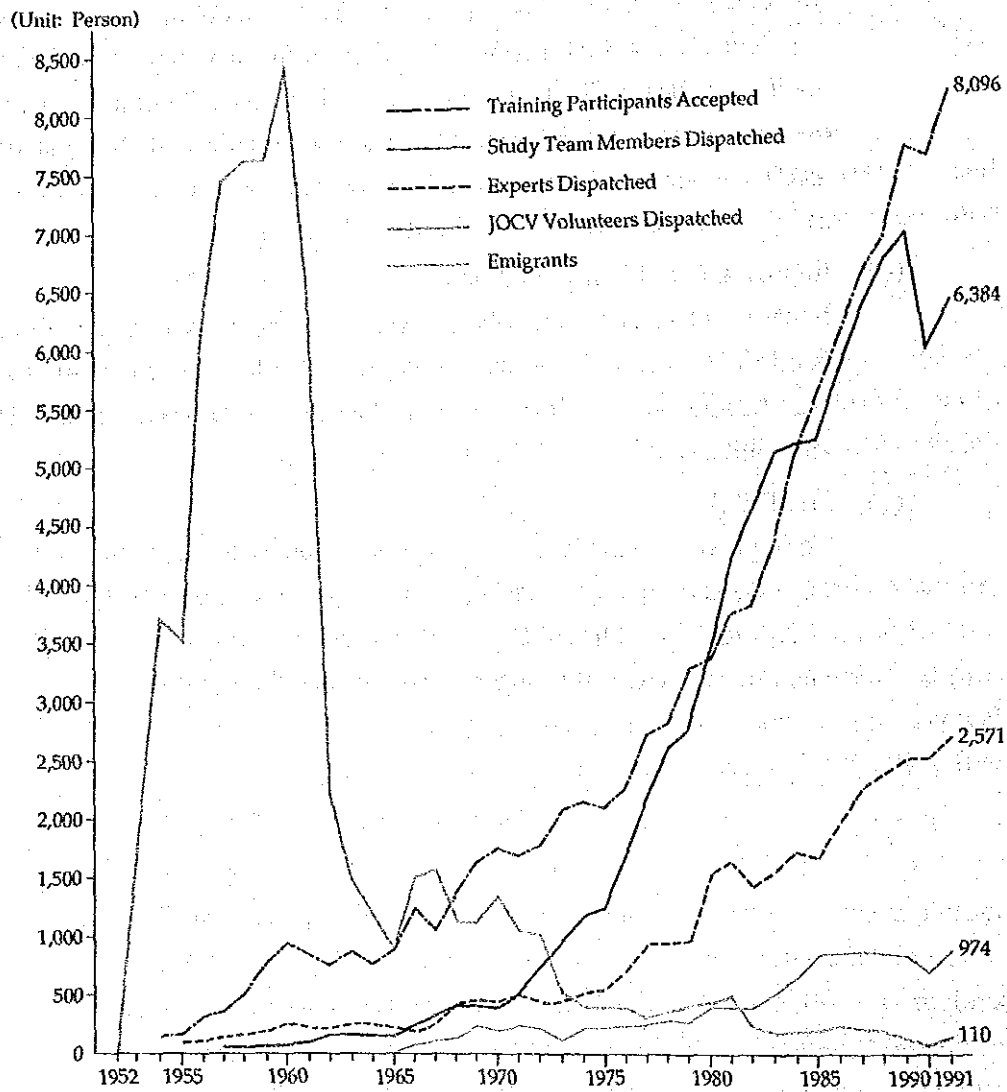
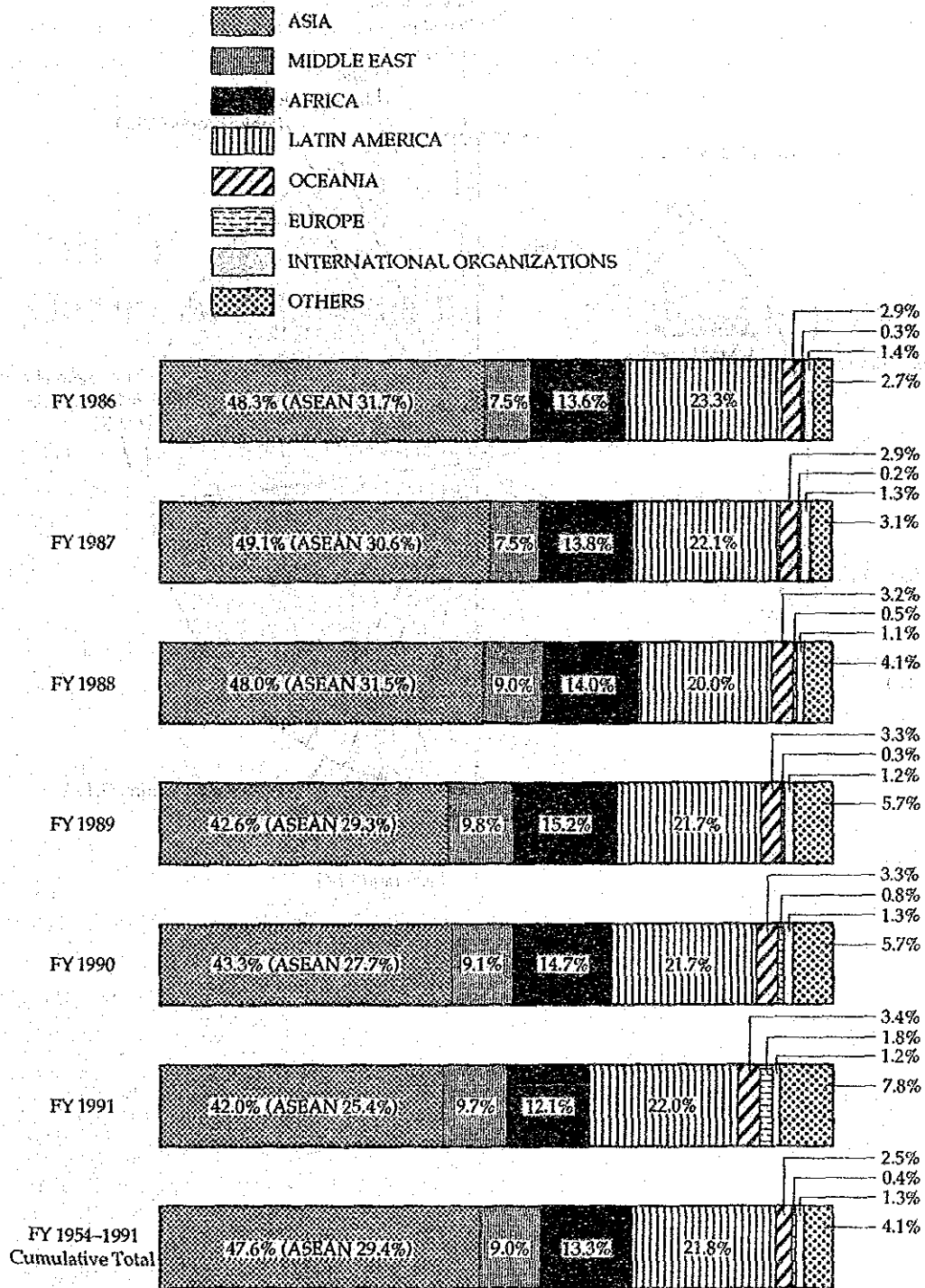
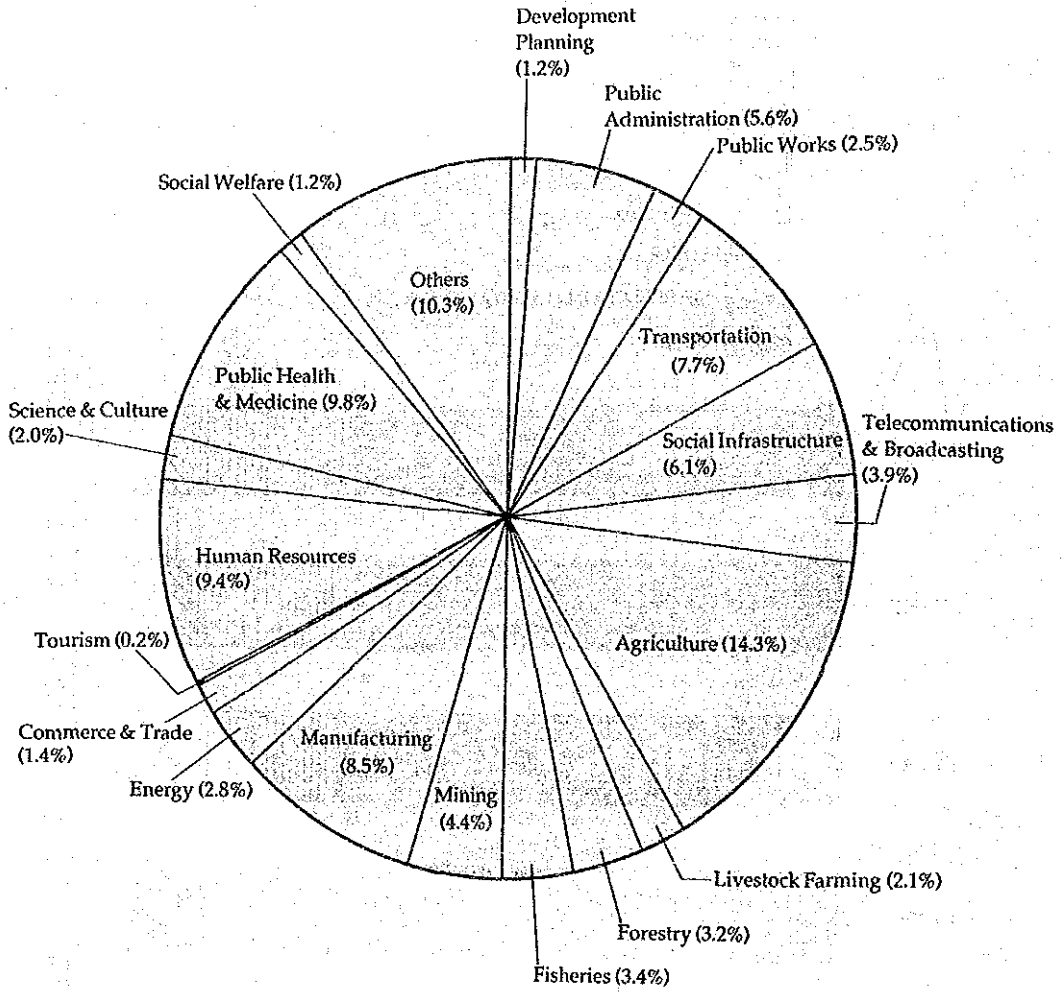


Fig. 2 Expenses of JICA by Region



**Fig. 3 Expenses of JICA by Sector**



## Part II

### Outline of Programs by Geographical Region

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## Chapter 1

### The Asian Region – Area 1:

### Eastern and Southeastern Asia

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#### 1. Regional Aspects

The Eastern and Southeastern Asian region extends from the tip of Hokkaido on the East to Central Asia's Pamir Knot on the West, and from the Timor Sea on the South to the former Soviet border on the North. The region includes Korea, China, Hong Kong, Mongolia, the six ASEAN countries (Brunei, Indonesia, Malaysia, the Philippines, Singapore, and Thailand), three countries in Indochina (Cambodia, Laos, and Vietnam), and Myanmar (formerly Burma). Its population is higher than that of any other region in the world, partially because it contains China, home to 1.1 billion people, or one-fifth the human race.

Political systems in this region span the spectrum from market economies like those of South Korea and the ASEAN states, to socialist regimes like those found in China, Mongolia, Myanmar, and the three of the Indochinese countries. Per-capita income widely ranges from US\$10,000 at the high end (Singapore) to around \$200 at the low (Laos; statistics unavailable for Mongolia, Cambodia, or Vietnam).

The Eastern and Southeastern Asian region is also diverse in terms of political stability. On the one hand, the changes that began in Eastern Europe in the middle of 1989 have eased tensions and promoted greater democracy regardless of the system of government. As for the Cambodia Issue, the largest long-pending question in the Southeast Asia, the Supreme National Council (SNC) has begun to move toward reconstruction of the nation by signing the Peace Pact at Paris Conference held in November, 1991; Indonesia and Singapore, key members of the ASEAN organization, have renewed their diplomatic relations

with China; dialog has begun on the Korean Peninsula; and Mongolia recently held the first free election in its history. There are, however, trouble spots. The opposition won the general elections in Myanmar, but the ruling government refuses to hand over power and keeps a military regime. But while these pockets of political instability remain, things generally appear to be stabilizing in the region.

Most of the countries in the region are well-endowed territorially and possess considerable natural resources. Economic structures are generally oriented towards earning foreign currency by exporting primary commodities, spending foreign currency to import capital and intermediate goods, and then using those imports to produce finished products for export. The Asian NIES and such ASEAN countries as Malaysia, Thailand, and Indonesia are posting high growth from their export-led economies and positive introduction of foreign capital. This, in turn, is contributing to greater economic development and political stability for the entire region. The outstanding economic growth of the region is watched by all the world with interest. In the year 1990's, however, showed gaps among individual countries. Generally, those located in the north stagnated due to slumping export demand and decreasing competitive force in export, while those in the south were active, thanks to rapid increase of direct investments from abroad.

The region's socialist countries face a number of problems, chief among them the upsurge in increasing fiscal and trade deficits, swelling foreign debts, and declining economic efficiency. Myanmar, for example, produced a bumper crop of rice this year and prices for the commodity remain stable. It even entered into a number of joint ventures with foreign companies. But sluggish exports have caused its trade deficit to expand, so the country continues to face serious difficulties. China has successfully reined in inflation with tighter credit policies, and its agricultural sector had a good year, but stagnant industrial production makes the overall picture sluggish. Having hit a dead end with their command economies, Mongolia, Laos, and Vietnam are striving to make economic structural adjustments designed to bring them free-market systems, and to improve

relationship with Western countries, in view of cutback in assistance from USSR and East European countries.

The August 1990 Iraqi invasion of Kuwait and the ensuing war between Iraq and the multinational forces in January 1991 had a profound influence on this region. The World Bank, for instance, declared the Philippines the "country most immediately impacted" by the war (the MII). Skyrocketing oil prices, export-limiting economic sanctions, and the lack of wages being sent home by workers abroad all had disastrous repercussions for its inflation rate and balance of payments. The NIEs and Thailand, however, were able to minimize the impact of the war thanks to sound macroeconomic management, while oil-exporters like China, Indonesia, and Brunei actually seem to have benefited from it. Among the socialist countries, though, damage was more serious. Soaring oil prices caused work to stop at some Mongolian factories, and the same combination of factors caused Vietnam to take a loss of about \$1 billion.

Successive, large-scale natural disasters also have a serious impact on national development. The economy of the Philippines has been particularly hard hit in this respect, suffering almost yearly from natural disasters including the eruption of Mt. Pinatubo and subsequent rock and mud slides in June 1991, and a typhoon on the island of Leyte in November of the same year. On the island of Kalimantan in Indonesia, widespread forest fires have raged for years, triggering abnormal meteorological conditions that have affected the lives and agriculture of people not only in Indonesia but also in neighboring countries.

Japan is itself a member of the Eastern and Southeastern Asian region, and so has historically had deep political, economic, and cultural ties with the other countries in this area. It values its close relationship with them, and since 1975 has taken the place of the United States as the region's largest aid donor. In recent years, Japan has provided over half of the bilateral ODA received by Eastern and Southeastern Asian countries.

Japan formerly gave over 70 percent of its bilateral ODA to this region, but growing aid to other regions made its share gradually declined to about 50 percent



currently. The predominant form of Japanese economic assistance to this region is loan aid to the governments, and grants account for 30 percent of Japanese ODA; though the composition of aid changes every year, thanks to sound macroeconomic management in the region and due to Japan's emphasis on policy of nation building efforts, technical cooperation has come to outweigh grant aid.

## 2. JICA Projects in the Region

JICA's cooperation with this region of the globe is on the largest scale in nearly every respect, including the number of types of aid, volume of spending, and the number of people involved. It is also a very aid-intensive area, since almost every one of the largest recipient countries of Japanese ODA is located in this region. It has a greater diversity of cooperation themes and areas than other regions, as well as a pronounced tendency toward increasingly high-level aid. Included among the recipients are countries that are already economically prominent, as well as countries that no longer qualify for grant aid, signs of a dawning age of new forms of cooperation.

### 2.1 Technical Cooperation

#### (1) Training Programs

In fiscal 1991, the 4,033 trainees from this region (including both newly arrived and continuing participants as well as youth invitations) accounted for 45.1 percent of all trainees trained in Japan. By country, the most numerous group was from Indonesia (780), followed by Thailand (739), China (649), Malaysia (557), and the Philippines (499). These country totals include participants under the Malaysian "Look East" program (89) and the Korean Engineers' Training Plan (65).

Training covers a wide variety of areas, from development planning to government administration, transportation and traffic control, telecommunications and broadcasting, machinery, agriculture, forestry, and fisheries, mining, energy, health care and medicine, and social welfare. In recent years, training in the

Japan-ASEAN Science and Technology Cooperation Project has also covered Japan's high technology, including microelectronics, biotechnology, and materials science.

Third-country training programs were also conducted in ASEAN countries except Brunei to strengthen technical cooperation among these countries.

## (2) Youth Invitations

The youth invitation program was established in 1984 for young people from the six ASEAN countries; later, it was expanded to include Myanmar and Oceania, and since fiscal 1987, it has also included China and Korea. In fiscal 1991, a total of 1,084 youth from Eastern and Southeastern Asia were invited to Japan: 200 from China, 147 each from the Philippines and Singapore, 150 each from Malaysia and Thailand, 149 from Indonesia, 43 from Brunei, and 98 from Korea. Circumstances beyond JICA's control led to the postponement of participation by Myanmar.

In terms of the participants' backgrounds, each country's group included workers, farmers, students, youth group leaders, teachers, and civil service employees. The proportion of those engaged in practical business affairs was high in the group from China, while the proportion of teachers and students was especially high in the groups from Brunei, Indonesia, Korea, and Thailand, and the proportion of civil service employees was especially high in the groups from Malaysia and Singapore:

## (3) Dispatch of Experts

In fiscal 1991, 1,902 experts, including both new and continuing assignments, were sent to this region, that is, 48.7 percent of all Japanese experts sent abroad. Of these, 1,298 were new assignments to 13 countries and Hong Kong: 350 to Indonesia, 268 to Thailand, 214 to China, 187 to the Philippines, and 107 to Malaysia. Their areas of expertise newly assigned were health care and medicine in 175 cases, followed by 168 experts in agriculture, 161 in human

resources, 138 in transportation, 103 in industrial technology, and 79 in science and culture.

#### (4) Independent Equipment Provision

In fiscal 1991, independent equipment (i.e., equipment whose supply is unrelated to any specific project) was provided to seven countries in this region in 24 shipments worth a total of ¥568 million; this was 32.3 percent of all equipment provided by JICA and the second largest supply of equipment to any region. The equipment supplied widely includes from broadcasting and telecommunication equipment to mineral research and analysis equipment, and the equipment for waste treatment.

#### (5) Project-type Technical Cooperation

There were 86 project-type technical cooperation projects in total carried out in this geographical area in fiscal 1991; this is more than 47 percent of all JICA project-type technical cooperation projects during the fiscal year. Of these, 20 were carried out in Thailand, 19 each in Indonesia and China, 10 in the Philippines, 6 in Malaysia, 5 in Korea, 2 in Singapore, 2 each in Brunei and Myanmar.

Newly started project in fiscal 1991 widely range from environmental protection, to advanced education, and high developed technologies, such as computers and biotechnology to the more common areas related to the basic human needs, including agriculture, health and medical care. There are also projects continued from previous year, including radiology, trading and enterprize training, industrial standardization, reforestation, environmental disaster prevention in addition to the basic human needs related areas.

#### (6) Development Studies

In fiscal 1991, 32 new development studies were begun in the region, bringing to 115, the total number of studies currently in progress. The main areas

where such studies were carried out ranged from social infrastructure to transportation, traffic system, communication, agriculture and forestry. In Thailand, studies focused on planning of tourism development, in Indonesia and the Philippines, which are topographically specified as island countries, studies were carried out on nation-wide ferry network plans. In Korea, Malaysia, and China, which were endowed with rivers of rapid stream and wide rivers, development studies focused on flood control. In Laos, on waste treatment, and in Brunei, on forest resources, a study focuses respectively.

## 2.2 Grant aid

In fiscal 1991, JICA expedited the execution of 41 grant aid projects valued at ¥37,327 million in seven countries – principally China, Indonesia, the Philippines, and Thailand. This region, because ASEAN and other newly industrializing economies are located in it, has recently seen growing emphasis on the specific development needs of each country, such as, environment issues in Indonesia, telecommunication network in Laos, satellite communication in Mongolia, agricultural land reform in the Philippines, and nursery tree supply in Thailand, in the form of basic design study, in addition to the basic human needs focused on in the past.

## 2.3 JOCV Volunteers

In fiscal 1991, 152 JOCV volunteers, 15.8 percent of all assignees, were sent on new assignments to seven countries. The Philippines received the most (36), followed by 33 to Indonesia, 31 to China, and 27 to Malaysia. Their areas of expertise included education and culture; agriculture, forestry, and fisheries; equipment maintenance and operation; health and sanitation; sports; industrial processing; and civil engineering.

## 2.4 Japan Disaster Relief Team

During fiscal 1991, emergency supplies were sent to China after severe floods and to the Philippines after volcano and typhoon disasters. For smooth

procurement and speedy dispatch of rescue equipment and supplies at the request, JICA has set up a stockpile in Singapore.

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## Chapter 2

### The Asian Region – Area 2:

### Southwestern Asia

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#### 1. Regional Aspects

The Southwestern Asia region consists of seven countries – Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka – with about one billion inhabitants, roughly one-fifth the world's population, and diverse climates and ethnic, religious, and cultural backgrounds.

Setting aside their political differences, in December 1985 the seven countries of the region founded the SAARC, a regional conference of countries in the Southwestern Asia area, to build technical and working cooperative ties among themselves.

It is evident from the per capita GNPs of the region, which range from \$170 to \$470 according to the 1992 World Bank report, that the region is one of the poorest in the world, with four of the least developed countries (Bangladesh, Bhutan, the Maldives, and Nepal). Almost every country in the region has chronic trade and balance of payments deficits, and many of their people depend heavily on money sent home by family members working abroad. The region's exports are mainly agricultural products, textiles, and minerals; its imports are mostly machinery and other capital goods.

The Gulf War provoked by the invasion by Iraq in Aug. 1990 into Kuwait territory has had a serious economic impact to the region of non oil producing countries. Especially, the region's economy was deeply affected by the drastic decline of the foreign currency revenues in the region due to the increase of oil price and return of the migrant workers.

Japan has traditionally had friendly relations with the countries of this region; in 1979, Japan gave the region 17.9 percent of its total ODA and became the largest ODA donor to the region. Since then Japan has always been among the three largest donors in the region. Recently, 10 percent to 20 percent of Japan's ODA has been given to this region, which ranks second only to Eastern and Southeastern Asia as a recipient; Japanese aid grew 12.6-fold from \$147 million in 1977 to \$1,854 million in 1990.

The predominant form of aid has changed over the years from loans made to governments, which once accounted for over 90 percent of aid to India and Pakistan, to outright grants, reflecting the presence of four least developed countries among the region's recipients.

Japan is striving to increase its grant aid to these four least developed countries; its cooperation focuses on economic infrastructure improvement, agricultural development, health and medical care, and other basic human needs as well as human resource development. Though its technical cooperation also focuses on basic human needs, little of Japan's ODA has normally taken the form of technical cooperation because few such requests have been received so far from countries in the region. Japan holds annual economic and technical cooperation consultations with India, Pakistan, Bangladesh, and, beginning in fiscal 1989, with Sri Lanka; at every opportunity, it conducts a dialogue on policy with interested countries and endeavors continually to implement carefully thought-out aid tailored to the needs in the economic and social development plans of recipient countries.

## 2. JICA Projects in the Region

JICA's cooperation with the region costs ¥9,000 million in fiscal 1991, 7.8 percent of its total budget. The main areas of cooperation are basic human needs and social infrastructure improvement. JICA is also carrying out cooperative projects in cooperation with international organizations regarding flood control in Bangladesh, etc.

## 2.1 Technical Cooperation

### (1) Training Programs

In fiscal 1991, the 801 trainees from this region (including newly arrived) accounted for 9.0 percent of all trainees trained in Japan. By country, the most numerous group was from Sri Lanka (207), followed by Pakistan (161), Bangladesh (148), Nepal (120), and India (115).

### (2) Dispatch of Experts

In fiscal 1991, 315 experts (including both newly assigned and continuing experts) – that is, 8.1 percent of all Japanese experts sent to this region. Assignees were sent to all seven countries of the region: 88 were sent to Bangladesh, 49 to Nepal, 45 to Pakistan, 33 to Sri Lanka, and 26 to India; their areas of expertise were health and medical care in the case of the majority (86), followed by agriculture, transportation, and development planning in that order.

### (3) Independent Equipment Provision

In fiscal 1991, equipment totaling ¥48 million in value (3 cases) whose use was unrelated to a specific cooperation project, was sent on occasions to this region; this was 2.7 percent of equipment provided by JICA in this category. It ranged widely from equipment for genetic research to materials for rice crop research, and audio-visual teaching materials.

### (4) Project-type Technical Cooperation

Project-type technical cooperation in 1991 was carried out in 17 projects in the region, nearly 9.3 percent of all JICA aid of this type. Six of these projects took place in Nepal, four in Sri Lanka, three in Pakistan, and two in Bangladesh. The fields in which cooperation took place included agriculture and health and medical care, as well as computers and construction machinery and technology.



## (5) Development Studies

In fiscal 1991, 25 development studies were carried out in the region (including 3 newly started studies); In Bangladesh, social and economic infrastructure improvement such as for flood control devices, and in Pakistan, agriculture centering on irrigation were the main areas of cooperation; in general, a large proportion of survey work was done in public works and public utilities.

## 2.2 Grant aid

In fiscal 1991, JICA expedited the execution of 38 grant aid projects valued at ¥29,162 million in seven countries. Nine grant aid provisions were made to Nepal and eight each to Bangladesh and to Sri Lanka, and seven to Pakistan.

## 2.3 JOCV Volunteers

During fiscal 1991, 124 JOCV volunteers, 12.9 percent of the total, were sent on new assignments to five countries in the region: 53 were sent to Bangladesh, 28 to Nepal, 18 to Sri Lanka, 16 to Bhutan, and nine to Maldives. The areas of cooperation they covered included education and culture; agriculture, forestry, and fisheries; equipment maintenance and operation of machinery; health and sanitation; sports; industrial processing; and civil engineering.

## 2.4 Japan Disaster Relief Team

Medical supplies and aid equipment were sent to Pakistan after a serious earthquake in fiscal 1990, and to Bangladesh after the cyclone disaster in fiscal 1991.

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## Chapter 3 The Middle East Region

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### 1. Regional Aspects

A vast grouping of 21 countries, the Middle-Eastern region extends from Central Asia's Pamir Knot in the East, to the Atlantic in the West, from Subsaharan Africa's Sudan in the South to the Balkan peninsula in the North. Important geographically as the crossroads of Asia, Africa, and Europe, it is important economically as the home of 70 percent of the world's confirmed oil reserves and the source of 50 percent of the world's oil exports.

Most of the region is arid, though there are areas of high humidity along the coast of the Red Sea, Mediterranean climates along the coast of that body of water, and an alpine climate in the mountains of Yemen.

Some 17 of the 21 countries in this region are Arab, the remaining four non-Arab countries being Afghanistan, Iran, Turkey, and Israel. The Middle-Eastern region is known as the birthplace of the Muslim, Jewish, and Christian religions.

The dominant political system continues to be the kingdom and emirate. Economically, the wealth spectrum extends from oil-and-natural-gas-rich countries like Libya, Algeria, Saudi Arabia, the United Arab Emirates, and the other Gulf states, to countries whose lack of resources makes them among the poorest in the world.

The Middle-Eastern region has extremely strong ties to Europe, having historically been under the influence of such European powers as Britain and France.

To the region's usual list of problems (the Palestinians, Lebanon, and Afghanistan) was added yet another in August 1990 as Iraq invaded Kuwait and

set off the Gulf War. Their impact on the world economy and even on world peace and stability have made these problems one of the main focal points of international politics.

## 2. JICA Projects in the Region

During 1991, JICA spent ¥11.23 billion on cooperation with this region, 9.7 percent of the total JICA cooperation budget and a 9.5 percent increase over the previous year. The main recipients of this aid were Egypt (¥2.22 billion, 19.8 percent), Turkey (¥1.65 billion, 14.7 percent) and Morocco (¥1.02 billion, 9.1 percent), with the remainder of the funds distributed evenly among other countries. Many of the countries in the Middle-Eastern region are at comparatively high stages of development, so aid tends to concentrate on infrastructure and other public works areas. Japan does not recognize the current government of Afghanistan and therefore provides the country with no official aid. It has also frozen its aid to Iraq as part of the economic sanctions adopted in the wake of that country's August 1990 invasion of Kuwait.

### 2.1 Technical Cooperation

#### (1) Training Programs

In fiscal 1991, the 689 trainees from this region (including both newly arrived and continuing ones) accounted for 7.7 percent of all trainees trained in Japan. This regional contingent is the fourth largest, after Asia, Africa, and Latin America. By country, the most numerous group was from Egypt (191), followed by Turkey (103), and Saudi Arabia (60). Japan also conducted a third-country training program in Egypt for seamen, nurses, and rice cultivators. The programs had 107 participants from neighboring countries like Algeria and Sudan, as well as from other countries in Africa.

## (2) Dispatch of Experts

JICA sent 419 experts to this region during fiscal 1991 (including both newly assigned and continuing ones), 10.7 percent of all Japanese experts sent abroad. Some 95 of these experts went to Egypt, 80 to Saudi Arabia, and 68 to Iran. After the Gulf War, JICA sent fact-finding missions to Saudi Arabia, Qatar, and the United Arab Emirates in order to study the environmental effects of the war. It also sent expert teams to Saudi Arabia and United Arab Emirates to work on the maintenance of sea water desalination plants.

## (3) Independent Equipment Provision

In fiscal 1991, a total of ¥161 million was provided in seven shipments to the Middle East region. ¥58 million was directed to Turkey, ¥48 million to Tunisia, ¥30 million to Yemen, and ¥12 million to Jordan.

## (4) Project-type Technical Cooperation

Project-type technical cooperation carried out in fiscal 1991 in the Middle East region involved 17 projects in eleven countries: Iran, Iraq, Jordan, Saudi Arabia, Sudan, Syria, Turkey, Yemen, Algeria, Egypt and Morocco. The areas covered included health and medical care, agriculture, fisheries, and human resources.

## (5) Development Studies

In fiscal 1991, 25 development studies were carried out in the region; of these five each were carried out in Egypt and Turkey, three each in Morocco and Tunisia, and two each in Iran and Oman. The areas covered included 5 projects of mining industry, 3 of energy, agriculture, social infrastructure and others.

## 2.2 Grant Aid

In fiscal 1991, a total of ¥10,813 million yen was granted to 8 projects in Egypt, 3 in Yemen, 2 in Morocco, and 2 in Sudan. Eight basic design studies were carried out by JICA.

## 2.3 JOCV Volunteers

In fiscal 1991, 208 volunteers were sent to six countries in the region. Morocco received 95 volunteers, Jordan 39, Syria 37, Tunisia 27, and Sudan 7.

## 2.4 Japan Disaster Relief Team

In the frame of the support to the Persian Gulf states after the Gulf War, emergency supply equivalent to a total of 300 million yen was sent to the refugees and evacuees in Jordan and Iran during January and March of 1991.

Also in November of the same year, emergency supply (tents and blankets) was sent to Yemen after the landslide disaster. In March 1992, another supply was sent to Turkey as an earthquake disaster relief.

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## Chapter 4

### The African Region

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#### 1. Regional Aspects

The African Region is defined as Subsaharan Africa excluding Sudan and the Republic of South Africa. Some 20.56 million square kilometers in area, it comprises 45 countries, most of which are still developing.

Twenty-eight of the world's 42 least less-developed countries are located here. According to DAC category, 37 of the region's members qualify as "low-income countries", while only 3 have per-capita GNP of more than \$1,500.

When most of the African countries achieved independence during the sixties, they were blessed with a favorable international economic climate that made it possible for industrialized countries to grant them aid and helped them achieve steady growth. But despite the continued expansion in aid, most of them are now stagnant economically. Much of this must be attributed to the problems of the African countries themselves, although changes in the international economic climate are also to blame. Slumping production over the last ten years has lowered per-capita national incomes, created perennial famines, and aggravated the deterioration of the environment. With their economies now achieving little or no growth, many countries find themselves hard pressed to service their past debts.

In light of these economic difficulties, international institutions and DAC-member countries have reached an agreement to place special emphasis on aid to Africa. Much of this aid is for structural adjustments, and it is administered through the IDA "Africa Fund", "Special Program for Subsaharan African Aid (SPA)", the IMF's "Structural Adjustment Facilities (SAF)".

Africa has felt the influence of the easing of East-West tensions brought on by the changes in Soviet policy. Many countries are abandoning Marxism-Leninism and making the transition from single-party dictatorships to multiparty democracies. This, in turn is fostering a more-stable international political climate for the region. The situation is also looking better in southern Africa. The Republic of South Africa has embarked on internal reforms, legalizing anti-apartheid groups, releasing political prisoners, and removing martial law for all provinces except Natal. Meanwhile, civil wars in Angola and Mozambique are coming to an end.

## 2. JICA Projects in the Region

Japan's ODA to countries in the African region is characterized by a relatively large percentage of grant aid due to the extremely difficult economic circumstances of the region and the humanitarian considerations involved. In fiscal 1990, grant aid accounted for 53.5 percent of Japan's net outlays to this region, compared to the 19.8 percent that it accounts for in total bilateral ODA.

A large proportion of technical cooperation for the African region goes for agricultural development (including post-harvest industries), human-resources development (to provide the region with the human resources required for growth over the middle term), and basic transportation and telecommunications infrastructure. Increasing in importance are forest conservation, measures to prevent desert encroachment, wildlife preservation, and other conservation areas. Now, more than ever, Japan needs to have an accurate grasp of the region's development needs and be able to respond to them in a flexible manner. In light of this, JICA has established an African Aid Study Group at its Institute for International Cooperation. Composed of authorities and experts in African aid, the group compounds various recommendations for Japan's middle- and long-term approach to Africa with respect to priority development areas for the region.

During fiscal 1991, JICA spent ¥13.98 billion on cooperation with this region, 12.1 percent of the total JICA aid budget and a 16.2 percent decrease over

the previous year. The main recipients of this aid were Kenya (24.2 percent), Zambia (14.3 percent) and Tanzania (13.1 percent). Major areas of cooperation included agriculture, forestry, fishing, mining, health and medical care, education, social infrastructure, telecommunications and broadcasting, transportation, and traffic control.

## 2.1 Technical Cooperation

### (1) Training Programs

In fiscal 1991, trainees received from the African region totaled 755, including both new and continuing assignments - nearly 8.4 percent of all trainees, ranking third after Asian region and Latin America. From Kenya came 169, Tanzania 83, and Ghana 62.

### (2) Dispatch of Experts

In fiscal 1991, 327 experts, including both new and continuing assignments, were sent to the African region, that is, 8.4 percent of all Japanese experts sent abroad. Of these, 134 experts were sent to Kenya, 57 to Zambia, 36 to Tanzania.

### (3) Independent Equipment Provision

In fiscal 1991, equipment was provided to African countries in 14 shipments worth a total of ¥216 million. The equipment worth ¥75 million was provided to Zambia, ¥38 million to Zaire, and ¥32 million to Tanzania.

### (4) Project-type Technical Cooperation

In fiscal 1991, project-type technical cooperation was implemented in this region as part of 17 projects in six countries out of 45 countries. 7 projects were carried out in Kenya, 3 each in Tanzania and Zambia, 2 in Ghana, one each in Nigeria and Senegal; the main areas covered were agriculture and forestry (7 projects), health and medical care (5), human resources development (4), and industrial development (1).



## (5) Development Studies

In fiscal 1991, 31 development studies were carried out; of these 6 projects, were implemented in Kenya, 4 in Zimbabwe, 3 in Madagascar, 2 each in Tanzania and Zambia, and one each in Senegal and Mauritius.

## 2.2 Grant aid

In fiscal 1991, grant aid went to the African region in 79 projects valued at ¥41,809 million; of these JICA conducted 18 basic design studies. The main area covered ranged from agriculture to social infrastructure, health care and medicines, and education and culture.

## 2.3 JOCV Volunteers

In fiscal 1991, 753 volunteers, 27.6 percent of all JOCV assignees and the second contingent to any region, were sent on new assignment to 11 countries in Africa, including Malawi, Kenya, Tanzania, Zambia and Ghana. The major field of specialty was education and culture, industry, agriculture, forestry and fisheries, social infrastructure, health and medical care, and others. The cumulative total of the volunteers dispatched to Malawi as of fiscal 1991 was 829, ranking first in Africa in terms of a number of the volunteers dispatched by country, and that to Kenya, was 788, ranking second after Malawi.

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## Chapter 5

### Latin America

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#### 1. Regional Aspects

Latin America is composed of 33 countries with comparatively high income levels. Many of these countries are at the level of "newly industrialized nations". With 20.55 million square kilometers of territory, this region accounts for 15.13 percent of the world's land mass, while its 420 million people are roughly 8 percent of the world population. Though Latin America is saddled with a number of serious problems, spiraling foreign debts chief among them, it is endowed with vast lands, is rich in both natural and human resources, and has great potential for future growth.

From north to south, the region is composed of 8 Central American, 13 Caribbean, and 12 South American states (including the Andean countries). Many of the Caribbean and Central American countries are very small. Eight of them have territories of less than 10,000 square kilometers, and 10 have populations of under 500,000. Income levels also vary widely. In 1990, Haiti, Guyana, Honduras and Bolivia had low per-capita GNPs of under \$750, eight of the region's countries had slightly higher per-capita GNPs of between \$750 and \$1,500, and the Bahamas and Barbados--thanks to oil exports and tourism -- had per-capita GNPs of over \$5,000.

When the Japanese think of Latin America, they tend to think of Brazil, Mexico, Argentina and other industrialized countries with relatively high income levels. They therefore regard this region as advanced with respect to other developing countries. But with only a few exceptions, prolonged political and economic disruptions have left Latin America with an underdeveloped social infrastructure. Without cooperation from outside, the countries of Latin America

are unlikely to ever be able to overcome the distortions and inefficiencies that have built up over the last forty years and achieve economic independence.

Even those countries that are continuing their efforts in promoting industrialization and economic and social development are still very dependent on primary commodities and therefore structurally fragile. Those that have sought rapid modernization by borrowing funds from industrialized countries and financial institutions (private banks, in particular), have seen prices fall for primary commodities while global interest rates have risen. As their balance of payments worsens, debt service becomes more and more difficult and economies move closer and closer to collapse.

Since the 1960s, Latin America has seen the successive rise to power of military regimes, but with the conclusion of civil conflicts in Nicaragua and El Salvador, democratically-elected governments have assumed power in every country except Cuba.

Chile and Mexico stand at the head of these economic reforms, which, based on the policy initiatives introduced by the present governments, seek to reduce government, reform fiscal policy and nationalized corporations, revamp tax collection systems, liberalize trade, and scrap protectionist barriers. The government of Argentina has embarked on a massive economic stabilization program designed to improve trade and privatize nationally-held companies. The new Colombian government has announced new economic liberalization measures. The other countries have also recently begun to move towards large-scale reforms.

At the end of 1990, Latin American countries had a total of \$428 billion in foreign debt, the equivalent of three years worth of exports, about half the region's GNP, and one-third the unpaid debts of all developing countries. Besides increasing their economic strength and acquiring the ability to repay their debts, they must have long-term aid from creditors, international institutions, and private banks if they are to solve their foreign debt problems.

Debtor nations are now making efforts to decrease their debt burdens, working with the support of the World Bank and IMF to reduce fiscal deficits, suppress inflation, increase exports, liberalize trade, and enact other structural reforms. But while building this foundation, they are continuously trying to achieve more immediate solutions such as those proposed under the Brady Plan. Mexico, Venezuela, Costa Rica, and Uruguay, all of which have taken advantage of the Brady Plan, are beginning to see results. The United States' new plan to support Latin America, with its goals of increasing trade with the region, promoting investment in it, and reducing its debts, is also expected to accomplish much in this regard. Japan is doing its part by serving as the major source of funds for World Bank-sponsored joint financing.

Latin America has long been a destination for Japanese emigrants. Today there are about 1.2 million Japanese nationals, Japanese emigrants, and people of Japanese ancestry living in the region, principally, in Brazil, Peru, Argentina, and Paraguay. Since the establishment of diplomatic relations with Peru in 1873, Japan and Latin America have maintained close ties of friendship through frequent exchanges of official visits and the presence of Japanese companies. As the world's largest ODA donor, Japan has major financial and technological contributions to make to the rebuilding, development, and expansion of the economies of this region.

In 1991, \$846 million, or 9.5 percent of Japan's bilateral ODA, went to this region. In 1977 and 1978, bilateral ODA to this region increased by an annual rate of over 60 percent, but it has been on the decline since 1983. This tendency is attributable to several factors, namely that Latin America's income levels are higher than other regions' and consequently few countries are eligible for financial aid, while those that qualify for loan assistance are saddled already with such enormous swelling debts that their debts are being rescheduled. Financial measures taken in recent years, however, including the rescheduling of these countries' debts by the Paris Club, have prepared the way, to some extent, for yen loans to the debtor nations of Latin America. Yen loans have been increasing

since 1989, although they did experience a slight year-on-year decline in 1990, and the downward trend in total ODA appears to have been arrested.

Japan is granting loan assistance to the region mainly in agriculture and such areas of economic infrastructure as transportation and traffic control, energy, and telecommunications and broadcasting. In fiscal 1991, loan assistance accounted for 54.7 percent of all ODA to Latin America.

Grant aid is being given primarily in agriculture, health and medical care, and education. Cooperation is frequent in fisheries and culture, due to the region's commercial fisheries' ties with Japan and the great value of its cultural legacy. In fiscal 1991, grant aid accounted for 17.9 percent of all ODA to Latin America.

The region both urgently needs technical cooperation and is eminently able to assimilate technology. Therefore the conditions for technical cooperation are met and JICA activity is brisk in this area. The fields where technical cooperation is being carried out principally include agriculture, transportation and traffic control, health and medical care, telecommunications and broadcasting, manufacturing industry, mining, human resource development, and culture; its share of total Japanese technical cooperation was about 12.4 percent in 1991, ranking second worldwide after Asia. Technical cooperation accounts for 27.4 percent of all forms of ODA to Latin America. Recent years have witnessed a trend of increased cooperation in fields related to the acquisition of foreign capital, such as export promotion, and in the environmental field.

The Caribbean region has many small islands with small populations. Japanese cooperation with them is still on a very small scale because many Caribbean nations became independent very recently and have relatively high income levels and small economies. In recent years, however, these countries have counted increasingly on Japanese aid, and Japan accordingly must study forms of cooperation adapted to the small scale of their economies.

In parallel with the greater worldwide attention being paid to environmental problems, the Latin American region is displaying a rapidly growing concern for the environment. The foremost issue in this respect is the destruction of the

natural environment as exemplified in the deforestation of the Amazon region. The government of Brazil is making efforts to protect the region, and in April 1989 devised an environmental plan that is devoted to forest conservation and environmental education. At the London Summit in 1991, the participating nations reconfirmed this plan and requested the Brazilian government, the World Bank, and members of the EC to move ahead immediately towards the realization of the projects outlined in this plan.

Latin America is plagued with worsening urban pollution that is related to economic development. Mexico City and Santiago suffer from particularly bad air pollution, while in Rio de Janeiro and Caracas the pollution of oceans and lakes is growing drastically worse. JICA is conducting a development study with respect to Mexico City's air pollution problem called "the air pollution control plan of the stationary sources in the metropolitan area of the city of Mexico" and is extending financial cooperation through yen loans and the Export-Import Bank of Japan. In addition, JICA is conducting development studies to devise a master plan to address the problem of water pollution in the ocean around Rio de Janeiro.

## 2. JICA Projects in the Region

Reflecting the comparatively long history of Japanese emigration to this region and historically friendly relations, cooperation with this region ranked second only to that with the Asian region in almost all aspects, including assistance by type of cooperation, amount of assistance, and number of personnel involved. The areas of cooperation widely range from agriculture, forestry and fishery to industry, mining, health care and medicines, and social infrastructure development. In recent years, countries in this region, primarily Mexico and Brazil, have started to work on environmental improvement projects.

Latin America is characterized by considerable cooperation needs and by the relative fulfillment of conditions for receiving cooperation, including the comparatively high educational and technical level of the people, which facilitate and enhance the effectiveness of technical transfers. In the implementation of

future JICA cooperation projects, however, ample consideration must be given to safety and safety measures in light of the deterioration of safety conditions in Latin American countries, as reflected in the murder of three JICA dispatched specialists by terrorists in Peru in July 1991.

## 2.1 Technical Cooperation

### (1) Training Programs

In fiscal 1991, JICA trained 1,988 new and continuing trainees (as well as emigrants) from this region. The total number is 22.2 percent of all JICA trainees, a contingent second only to the Asian trainees. This was a 134-person increase with respect to fiscal 1990: the training program is steadily growing. Some 386 trainees came from Brazil, 230 from Peru, 206 from Mexico, 163 from Argentina, and 133 from Paraguay.

### (2) Dispatch of Experts

In fiscal 1991, 822 experts, including both new and continuing assignments, were sent to this region, that is, 21.0 percent of all Japanese experts sent abroad, a number of assignments second only to those sent to Asia. Of these, 472 were new assignments to 18 countries: 81 to Brazil, 59 to Mexico, 48 to Bolivia, 46 to Chile, and 24 to Colombia. Their areas of expertise included almost every field, but health and medical care was the most important, followed by agriculture, mining, vocational training, fisheries, telecommunications and broadcasting, and livestock raising.

### (3) Independent Equipment Provision

In fiscal 1991, equipment worth ¥705 million, 40.1 percent of the total in this category, was provided in 26 instances to countries in Latin America. The main types of equipment supplied were agricultural equipment, electric communication equipment, fish catch processing equipment, etc., to Paraguay, Peru, Colombia, and other countries.

#### (4) Project-type Technical Cooperation

Project-type technical cooperation in fiscal 1991 involved 42 projects in 14 countries, including Argentina, Bolivia, Brazil, Chile, and Colombia. Of these, seven, including project for the informatics training center in Argentina, project for fisheries development research center in Bolivia, and project for the irrigated agriculture development on sloping area in Colombia were new projects that began in fiscal 1991.

The main focus of cooperation was on agriculture and forestry, but health and medical care and industrial development were also covered.

#### (5) Development Studies

In fiscal 1991, 53 development studies, including both new and continuing studies, were carried out in 18 countries including Colombia, Bolivia, and Brazil. The broad range of areas covered included geothermal development, agriculture and rural development, measures to combat air pollution, forestry resources, mineral resources, airport improvement, and flood prevention. In Brazil, just prior to the Earth Summit (UNCED) in June 1992, work commenced the study on recuperation of the Guanabara Bay ecosystem and on water transport plans relating to the Paranaiba River.

### 2.2 Grant Aid

Grant aid to this region has long been centered on agriculture, medical care, education, and other types of social infrastructure. In fiscal 1991, JICA expedited the execution of 31 grant aid projects valued at ¥16,150 million in 12 countries. In addition to the traditional areas of grant aid, fisheries and human resource development were covered.

### 2.3 JOCV Volunteers

In fiscal 1991, JOCV volunteers were sent to ten Latin American countries: Bolivia, Colombia, Costa Rica, the Dominican Republic, Ecuador, Guatemala,



Honduras, Jamaica, Paraguay, and newly to Nicaragua; 276 volunteers, 28.8 percent of all JOCV assignees, were sent on new assignments. This is equal to Asia in terms of the number of volunteers. Their fields of cooperation included education and culture, health care and medicines, agriculture, forestry, and fisheries, equipment and machinery maintenance and operation, sports, industrial processing, and civil engineering.

## 2.4 Emigration

During fiscal 1991, Japanese emigrants and people of Japanese ancestry in Brazil, Paraguay, Colombia, Bolivia, Argentina, newly Peru, Uruguay, Mexico, and the Dominican Republic were given farming guidance, help with residential environment improvement, and loans to start businesses. Overseas Development Youth were sent to those countries and emigrant trainees were invited to Japan.

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## Chapter 6

### Oceania

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#### 1. Regional Aspects

Extending on either side of the Pacific equator, Oceania includes Australia, New Zealand, eleven independent island countries, and several autonomous territories, protectorates, and overseas territories of extra-regional countries. It has total land area of 9 million square kilometers, 98 percent of which is in Australia, New Zealand, and Papua New Guinea. Other countries have a combined territory of only 180,000 square kilometers, and none has a population of over a million.

The region is divided along racial lines into Melanesia, Polynesia, and Micronesia. Since most of its countries are newly independent, the region's social structures are still immature and traditional society and former colonizers still have great influence on its people. While there is a wealth of cultural diversity in Oceania, Melanesia is generally characterized by atomized social structures, comparative equality, and mutually complementary societies. Polynesia and Micronesia, by contrast, are class-oriented societies based on the institution of chieftainship. Per-capita incomes in the region (excluding Australia and New Zealand) range from \$10,000 odd in phosphate-rich Nauru to \$530 in resourceless Tuvalu.

Oceania's economic slump worsened in these few years. International prices for wool and mining products have been low for the past several years, which has taken its toll on the Australian economy and reduced the amount of aid it is able to contribute. The region is on the whole politically stable, however, with the exception of the Bougainville incident in Papua New Guinea.

With a few exceptions, the countries of Oceania are small states with little in the way of natural resources. Their economic foundations are generally weak,

they depend on primary industry and are thus subject to fluctuations in climate and international commodity prices. They are also plagued by the distances between their islands and communities, the narrowness of their domestic markets, their remoteness from international markets, and their lack of the transportation and communication infrastructure that would compensate for these handicaps. There are thus many obstacles to be overcome before economic independence is achieved. While most maintain close relations with their former colonizers, aid from this direction has tended to decrease, and countries are being forced to rethink their economic development plans. But from the planning stages right through to the factory, the biggest problems they face are a lack of human resources.

Historically, Japan has had close ties with this area, and most feel friendly towards Japan. There is thus a great demand for Japanese aid. Its programs for Oceania involve the training of the human resources necessary to build these new nations, promoting the development of their agricultural, forestry and fishing industries, and providing the fundamental infrastructure needed to meet basic human needs. Japan began its cooperation relatively recently in this region, however, and consequently lacks sufficient expertise and experience with it. It therefore hopes to work closely with Australia, New Zealand and other major aid donors, as well as with such international and regional organizations as the South Pacific Committee (SPC) and South Pacific Forum (SPF). Though Oceania only received 1.2 percent of Japan's total bilateral ODA during 1991, aid to the region sextupled between 1985 (\$24 million) and 1990 (\$148 million). As most of the countries in the region are small, low-income island nations, the majority of Japanese aid takes the form of technical cooperation and grants. At the present time, the only recipient of loan assistance is Papua New Guinea.

## 2. JICA Projects in the Region

In fiscal 1991, JICA projects in the region spent ¥3,960 million, 3.4 percent of its total budget and 5.3 percent more than during the previous year. On a cost basis, the most money was spent on cooperation involving JOCV volunteers.

## 2.1 Technical Cooperation

### (1) Training Programs

A cumulative total of the trainees invited as of fiscal 1990 reached 1891. In fiscal 1991, 287 new and continuing trainees, nearly 3.21 percent of all participants, took part in JICA training programs. The subjects included more human resource development, transportation and traffic control, and public administration courses than in the past. Outside of the training program, 74 young people, mainly civil service and teaching personnel, came to Japan as part of the Youth Invitation Program. The third country training program was carried out once in Papua New Guinea and once in Fiji.

### (2) Dispatch of Experts

A cumulative total of the experts dispatched to the region as of fiscal 1990 reached 435. In fiscal 1991, 89 experts were sent to this region. Assignments' characteristics differed among countries: agricultural assignments in Fiji and forestry assignments in Papua New Guinea were especially frequent, and in other countries, experts were generally involved in work related to fisheries.

### (3) Project-type Technical Cooperation

In this area, projects are centered on agriculture, forestry, and fishery, and one agricultural project in Fiji, one forestry project in Papua New Guinea, one health and medical project in Solomon Islands, and one fishery project in Tonga were carried out in fiscal 1991.

### (4) Development Studies

A cumulative total of development studies as of fiscal 1990 was 24. In fiscal 1991, seven development studies were carried out in Oceania. The areas covered were improvement of social infrastructure, agriculture, forestry and fisheries, energy, transportation and traffic, and telecommunications.

## (5) Independent Equipment Provision

In fiscal 1991, equipment was provided to Oceania in 2 shipments worth total of ¥18 million to 2 countries. The equipment supplied includes medical and aquacultural equipment.

### 2.2 Grant aid

Grant aid was given to such projects as fisheries, agriculture, medical care projects. In fiscal 1991, ¥7,408 million was granted to 9 countries in 12 projects.

### 2.3 JOCV Volunteers

A cumulative total of volunteers dispatched to 7 countries in the region as of fiscal 1990 was 672. In fiscal 1991, 296 volunteers were sent to eight countries including the Marshall Islands as a new country, on new assignments in this region. Papua New Guinea received the most (62), followed by the Solomon Islands (52) (all including new and continued from previous year). Their areas of expertise included education and culture; agriculture, forestry, and fisheries; equipment maintenance and operation; health and sanitation; sports; industrial processing; and civil engineering.

### 2.4 Japan Disaster Relief Team

During fiscal 1991, emergency supplies were sent to Western Samoa after a devastating typhoon in December, 1991.

### 2.5 Project Formulation Study

In fiscal 1991, a conference was held in Sydney by Japan, Australia, and Fiji to formulate Japan-Australia joint aid projects in Fiji and to investigate prospective orientations for cooperation in the medical and educational fields.

## 2.6 Aid Studies

In fiscal 1991, JICA established an Oceania study group, made up of experts from a wide range of fields, within the Institute for International Cooperation. The results of their investigations were compiled into a report in the form of suggestions concerning aid perspectives and priority items in this region.

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## Chapter 7

### The European Region

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#### 1. Regional Aspects

Most of the countries in Europe are modernized and economically independent. The region includes 15 of the 20 members of the Development Assistance Committee of the OECD, and therefore the majority of European countries are aid donors, not recipients. Modernization has, however, been retarded in many of the Eastern European countries due to their long years of centralized planning under communist governments. Economically, these countries are far behind their neighbors.

But in the latter half of 1989, the countries of Eastern Europe, led by Poland and Hungary, began to democratize and liberalize. They are now engaged in economic reforms designed to give them market economies administered by freely-elected governments. In response to these moves, the West has organized the G24 (the OECD member states and the EC) to provide a framework for massive assistance and active support of the reforms now in progress.

This aid to Eastern Europe is a united response on the part of the West to the new world order of freedom and democracy ushered in by the reforms that started in this region. Japan is therefore also making active contributions.

According to DAC criteria, Cyprus, Greece, Malta, Portugal, Yugoslavia, Albania and Gibraltar are classified as eligible for aid, though Poland and Hungary were also added to their number in June 1990. When Portugal later became a member of DAC, along with Spain in December 1991, its name was removed from DAC's list of developing countries.

## 2. JICA Projects in the Region

The main objectives of Japanese aid to Eastern Europe are to contribute to the introduction and establishment of democracies and market economies, and to assist in the solution of the region's environmental problems. The cooperation takes the form of training, dispatch of experts, development studies, and JOCV volunteers.

During fiscal 1991, JICA accepted participants in the fields of business management, production control, and environmental protection from Poland, Hungary, Czech and slovak, Bulgaria, Rumania, Yugoslavia, and Albania. In addition, it dispatched experts in productivity enhancement to Poland, advisers in industrial and economic policy to Hungary, environmental specialists to Czech and slovak and Bulgaria, and advisers in transportation administration to Rumania.

It conducted development studies on the solid waste management for Poznan City in Poland, the municipal solid waste management in Budapest and the integrated air pollution control plan for Sajo Valley Area in Hungary, flue gas desulphurization for power station in Czech and slovak and the rational use of energy in Bulgaria. All of this technical cooperation was facilitated by the dispatch of project formulation study teams that identified potential objects of assistance and formulated the actual projects. In January 1992, a JICA office was opened in Austria with responsibility for the Eastern European region.

JICA also accepted participants and sent experts to Yugoslavia and Albania, two nations that have been categorized by DAC as eligible for aid. In Yugoslavia, a project-type technical cooperation program was implemented from 1984 until 1990 in the area of continuing education for primary health care.

It also accepted participants from Cyprus, Greece, Malta, and Portugal during fiscal 1991.



## Part III

### Performance in Fiscal 1991 by Country, Sector

## Bangladesh

Type of Cooperation	Sector	Public Works & Utilities										Mining & Industry		Commerce & Tourism		Human Resources Development		Public Health & Medicine	Social Welfare	Others	Expenses (¥ Thousand)
		Planning & Administration	Public Administration	Public Works	Transportation	Social Infrastructure	Telecommunications & Broadcasting	Agriculture	Livestock Farming	Forestry	Fisheries	Mining	Manufacturing	Energy	Commerce & Trade	Tourism	Human Resources				
Acceptance of Trainers	Total	2	8	1	10	11	9	27	1			7	5	3		21	1	17	6		296,893
	New operations in 1991																				
	Continued from FY 1990	19						13			1	7					3				
	Total	148	8	1	10	11	9	40	1		1	9	5	3	21	1	20	6			
Dispatch of Experts	Total	82	1			8		16										2	50		
	New in 1991																				
	Continued from 1990	1	1			8		16													
	Total	83	1			8		16										7	50		
Dispatch of Experts	Total	6	1					2											1		
	New in 1991																				
	Continued from 1990	8						2													
	Total	14	1					2											1		
Dispatch of Newsp. Trainers	Total	88	1			8		18											8	50	
	New in 1991																				
	Continued from 1990	9	1			8		18											8	50	
	Total	97	2			8		21											13	50	
Dispatch of Newsp. Trainers	Total	166	5	4		61	10	53											16		
	New operations in 1991																				
	Continued from FY 1990	6				2		4													
	Total	172	5	4		63	10	57											16		
Dispatch of Japan Overseas Cooperation Volunteers	Total	53	3			1		12	1			11							3		
	New operations in 1991																				
	Continued from FY 1990	76	4			5		9	6		11								10		
	Total	129	7			6		21	7		22								13		

# [ASIA]

## Bangladesh

### Public Works & Utilities

#### Development Study

NAME OF DEVELOPMENT STUDY	EXECUTING AGENCY OF THE RECIPIENT
North West Regional Study (Bangladesh Flood Action Plan No. 2)	Flood Plan Coordination Organization (FPCO)
Greater Dhaka Protection Project (Study in Dhaka Metropolitan Area of Bangladesh Flood Action Plan 8A)	Flood Plan Coordination Organization (FPCO)
Geodetic Survey Study	Survey of Bangladesh (SOB)

#### Grant Aid

CASE	EXPENSES (Million)	ACTIVITIES CONDUCTED BY JICA
The Project for the Construction and Rehabilitation of the Sewerage System	1,571	Expediting of Execution
The Project for the Improvement of the Storm Water Drainage System in Dhaka City	1,158	
The Project for the Construction of Meghna-Gumti Bridge	1,168	
The Project for the Procurement of Construction Equipment for Cyclone Rehabilitation	299	Aptness Study of the Requested Equipment
The Project for Procurement of G.I. Sheet for Post Cyclone Rehabilitation	204	Basic Design Study
The Project for Establishment of Microwave Link for Meteorology		Basic Design Study

ASIA

||||||| Agriculture, Forestry & Fisheries |||||

Equipment Supply

EQUIPMENT	EXPENSES (¥Thousand)	FACILITIES
Equipment for the Study of Soil Fertilizer for Rice Cultivation	40,466	Bangladesh Rice Research Institute

Project-type Technical Cooperation

\*Cumulative operations since each project started

PROJECT	*EXPERT DISPATCH (Person)	*COUNTER- PART (Person)	*EQUIPMENT SUPPLY (¥Thousand)	DURATION
The Institute of Postgraduate Studies in Agriculture Project, Phase (II)	25	6	21,836	90. 7. 4 - 95. 7. 3

Development Study

NAME OF DEVELOPMENT STUDY	EXECUTING AGENCY OF THE RECIPIENT
Master Plan Study for the Model Rural Development Project Pphase II	Bangladesh Rural Development Board (BRDB)
Feasibility Study on the Kurigram Irrigation and Flood Control Project - South Unit	Bangladesh Water Development Board (BWDB)

Grant Aid

CASE	EXPENSES (¥Million)	ACTIVITIES CONDUCTED BY JICA
The Project for the Construction of the Narayanganj-Narslingdi Irrigation Facilities	977	Expediting of Execution
Model Rural Development Project for Homna and Daudkandi Upazila	723	Basic Design Study
The Project for Establishment of Fish Landing Preservation and Distribution Facilities Monharkhali	652	Basic Design Study
The Project for the Supply of Irrigation and Cultivation Equipment to the Cooperative Farmers of the Cyclone and Tidal Bore Affected Areas	281	Aptness Study of the Requested Equipment
The Project for Construction of Foodgrain Storages in Dhaka		Basic Design Study

||||||| Human Resources Development |||||

Development Study

NAME OF DEVELOPMENT STUDY	EXECUTING AGENCY OF THE RECIPIENT
Shelter Construction Study	Ministry of Local Government, Ministry of Education

Grant Aid

CASE	EXPENSES (¥Million)	ACTIVITIES CONDUCTED BY JICA
The Project for the Seamen's Training School		Basic Design Study

||||||| Public Health & Medicine |||||

Project-type Technical Cooperation

\*Cumulative operations since each project started

PROJECT	*EXPERT DISPATCH (Person)	*COUNTER-PART (Person)	*EQUIPMENT SUPPLY (¥Thousand)	DURATION
Pilot Project on Control of Rheumatic Fever and Rheumatic Heart Diseases	40	12	248,037	88.11. 1 - 92.10.31

Grant Aid

CASE	EXPENSES (¥Million)	ACTIVITIES CONDUCTED BY JICA
The Project for Strengthening of Maternal & Child Health Training Institute		Basic Design Study

ASIA

Type of Cooperation	Sector	Public Works & Utilities														Expenses (₹ Thousands)		
		Planning & Administration	Public Works	Transportation	Social Infrastructure	Telecommunications & Broadcasting	Agriculture	Livestock Farming	Forestry	Fisheries	Mining & Industry	Energy	Commerce & Tourism	Human Resources Development	Others			
Acceptance of Trainers	Total	22																36,134
	New operations in 1991					6	2	1										
	Continued from FY 1990	1				1												
Dispatch of Experts	Total	23				7	2	1										
	New in 1991																	
	Continued from 1990																	
	Total	2																25,470
Dispatch of Survey Teams Members	Total	2																
	New operations in 1991					1	4	4										
	Continued from FY 1990	7				7												72,490
Dispatch of Overseas Cooperation Volunteers	Total	16				1	11	4										
	New operations in 1991					1	3	2										
	Continued from FY 1990	21				5	2	2										122,828
Total	37				6	8	5	4										

**Bhutan**

||||||| Public Works & Utilities |||||

Development Study

NAME OF DEVELOPMENT STUDY	EXECUTING AGENCY OF THE RECIPIENT
The Study on Groundwater Development in the Southern Part	Department of Agriculture, Ministry of Agriculture

Grant Aid

CASE	EXPENSES (¥Million)	ACTIVITIES CONDUCTED BY JICA
The Project for Development of Domestic Telecommunication Network	1,540	Basic Design Study

||||||| Agriculture, Forestry & Fisheries |||||

Grant Aid

CASE	EXPENSES (¥Million)	ACTIVITIES CONDUCTED BY JICA
Increase of Food Production	300	Aptness Study of the Requested Equipment

||||||| Human Resources Development |||||

Equipment Supply

EQUIPMENT	EXPENSES (¥Thousand)	FACILITIES
Equipment for Audio-Visual Technical Education	8,124	Development Support Communication Division, Department of Information, Ministry of Communication and Tourism

ASIA

Type of Cooperation	Sector	Sector													Expenses (Thousand)						
		Planning & Administration	Public Works & Utilities	Agriculture, Forestry & Fisheries	Mining & Industry	Energy	Commerce & Tourism	Human Resources Development	Public Health & Medicine	Social Welfare	Others										
	Total	Development Planning	Public Administration	Public Works	Transportation	Social Infrastructure	Telecommunications & Broadcasting	Agriculture	Livestock Farming	Forestry	Fisheries	Mining	Manufacturing	Energy	Commerce & Trade	Tourism	Human Resources	Science & Culture			
Acceptance of Trainees	New operations in 1991		16		13		2	5		2				2	2		44	5			
	Continued from FY 1990				1		1														
	Total		16		13		2	5		2					2	2	44	5			152,354
Dispatch of Experts	New in 1991			2	2			5		3								4	1		
	Continued from 1990																				
	Total			2	2			5		3								4	1		56,723
Dispatch of Survey Teams Members	New operations in 1991																	4	1		
	Continued from FY 1990																				
	Total																	4	1		14,010
Dispatch of Japan Overseas Cooperation Volunteers	New operations in 1991																	5			
	Continued from FY 1990																				
	Total																	5			



**Brunei**

||||||| Agriculture, Forestry & Fisheries |||||

**Project-type Technical Cooperation**

\*Cumulative operations since each project started

PROJECT	*EXPERT DISPATCH (Person)	*COUNTER- PART (Person)	*EQUIPMENT SUPPLY (¥Thousand)	DURATION
Forestry Research Project	33	13	202,462	85.10. 1 - 92. 9.30

**Development Study**

NAME OF DEVELOPMENT STUDY	EXECUTING AGENCY OF THE RECIPIENT
Study on Forestry Resources	Forestry Department, Ministry of Industry

||||||| Human Resources Development |||||

**Project-type Technical Cooperation**

\*Cumulative operations since each project started

PROJECT	*EXPERT DISPATCH (Person)	*COUNTER- PART (Person)	*EQUIPMENT SUPPLY (¥Thousand)	DURATION
ASEAN Project on Corrosion of Reinforced Concrete Structure	36	14	114,423	87.10. 1 - 92. 9.30

ASIA

**Cambodia**

Type of Cooperation	Sector		Total	Planning & Administration	Public Works & Utilities	Agriculture, Forestry & Fisheries	Mining & Industry	Energy	Commerce & Tourism	Human Resources Development	Public Health & Medicine	Social Welfare	Others	Expenses (Thousands)
	Development Planning	Public Administration												
Acceptance of Trainees	New operations in 1991		21	10							7			58,100
	Continued from FY 1990		2								4			
	Total		23	10							8			
Dispatch of Experts	New in 1991		9	1							3			9,196
	Contd. from 1990										3			
	Total		9	1							3			
Dispatch of Survey Teams Members	New operations in 1991		9	7							6			13,476
	Continued from FY 1990										8			
	Total		9	7							8			
Dispatch of Technical Cooperation Volunteers	New operations in 1991		16	12							6			13,476
	Continued from FY 1990										6			
	Total		16	12							6			

**China**

Type of Cooperation	Sector	Sector										Expenses (Y Thousand)								
		Planning & Administration		Public Works & Utilities			Agriculture, Forestry & Fisheries				Mining & Industry		Commerce & Tourism		Human Resources Development		Social Welfare	Others		
	Total	Development Planning	Public Administration	Public Works	Transportation	Social Infrastructure	Telecommunications & Broadcasting	Agriculture	Livestock Farming	Forestry	Fisheries	Mining	Manufacturing	Energy	Commerce & Trade	Tourism			Human Resources	Science & Culture
Acceptance of Trainers	New operations in 1991	578	7	53	2	20	14	17	38	16	11	3	5	36	19	44	21	14	50	3
	Continued from FY 1990	71			2		3	4	13	4	6	1	3	11		1	2	1	20	
	Total	649	7	53	4	20	17	21	51	20	17	4	8	47	19	45	23	15	70	3
Dispatch of Experts	New in 1991	385	3	5		39	6	9	21	8	10	2	2	14		5	2	4	55	
	Continued from 1990	14					3	3	2	1		3	1						1	
	Total	199	3	5		39	9	12	23	9	10	2	5	15		5	2	4	56	
Dispatch of Experts	New in 1991	79				3	1		3	3	7			6			1		5	
	Continued from 1990	57				6	1	1	8	9	9	4	3	6	1				9	
	Total	86				9	2	1	11	12	16	4	3	12	1		1		14	
Dispatch of Experts	New in 1991	214	3	5		42	7	9	24	11	17	2	2	20		5	3	4	60	
	Continued from 1990	71				6	4	4	10	10	9	4	6	7		1			10	
	Total	285	3	5		48	11	13	34	21	26	6	8	27		6	3	4	70	
Dispatch of Survey Teams Members	New operations in 1991	477	9	20		16	58	15	114	11	11	9	65	70		11	8	4	27	14
	Continued from FY 1990	11							4										5	
	Total	482	9	20		16	58	15	118	11	11	9	65	70		11	8	4	32	14
Dispatch of Grassroots Cooperation Volunteers	New operations in 1991	31		1		2			5					4			13		2	
	Continued from FY 1990	45		3					2		1			8			17		9	
	Total	76		4		2			7		1		12				30		11	

**China**

||||||| Planning & Administration |||||

Project-type Technical Cooperation

\*Cumulative operations since each project started

PROJECT	*EXPERT DISPATCH (Person)	*COUNTER- PART (Person)	*EQUIPMENT SUPPLY (¥Thousand)	DURATION
Education System Development Project for Chinese Patent Information Retrieval	45	20	234,346	86.11. 1 - 91. 4.30

Development Study

NAME OF DEVELOPMENT STUDY	EXECUTING AGENCY OF THE RECIPIENT
The Study on Water Pollution Control Plan for the Lake Poyang	State Bureau of Environmental Protection, Bureau of Environmental Protection of Jiangxi Province
The Study on the Regional Development Plan for Jiujiang City	Jiujiang City People's Government

Grant Aid

CASE	EXPENSES (¥Million)	ACTIVITIES CONDUCTED BY JICA
The Project for the Establishment of Japan-China Friendship Environment Protection Centre	302	Expediting of Execution
The Project for the Improvement of the Equipment of Fire Fighting in Beijing	1,239	Basic Design Study

||||||| Public Works & Utilities |||||

Equipment Supply

EQUIPMENT	EXPENSES (¥Thousand)	FACILITIES
Equipment for Radio Wave Quality Control	73,130	The Tianjin Commission of Science & Technology

EQUIPMENT	EXPENSES (¥Thousand)	FACILITIES
Equipment for the Study of Landslide Disaster Prevention	29,479	Geological Engineering Department of Changchun College

### Project-type Technical Cooperation

\*Cumulative operations since each project started

PROJECT	*EXPERT DISPATCH (Person)	*COUNTER- PART (Person)	*EQUIPMENT SUPPLY (¥Thousand)	DURATION
Beijing Posts and Telecommunications Training Center	119	18	83,106	86. 2. 5 - 92. 2. 4
Project of Promotion for Computer Systems on National Railway Management College	43	13	326,182	87. 7. 1 - 91. 6.30
Project of the Road Traffic Cadre Training Center	65	12	612,568	88.11.10 - 93.11. 9

### Development Study

NAME OF DEVELOPMENT STUDY	EXECUTING AGENCY OF THE RECIPIENT
Feasibility Study on Flood Forecasting System for the Hanjiang River Basin	Ministry of Water Resources
Study on Automatic Telephone System in Jilin Province Dehui County	The Posts and Telecommunications, Administration of Jilin Province
Study on Fengman Dam Improvement Project	Ministry of Energy Resources
Study on the Development Plan of Pu-Dong New Area including Wai-gao-giao Area in Shanghai City	Shanghai Municipality Science and Technology Committee
Primary Road Net Work Development Study in Zhe-jiang Province	Communications Agency of Zhejiang Province
The Feasibility Study on the Light Rail Transit System in Chongqing City	The State Science and Technology Commission of the Chongqing City

### Grant Aid

CASE	EXPENSES (¥Million)	ACTIVITIES CONDUCTED BY JICA
The Project for the Improvement of the Chengchun Purification Facilities	903	
The Project for the Improvement of the Equipment of Xinjiang Broadcasting Station	509	Basic Design Study

||||||| Agriculture, Forestry & Fisheries |||||

Project-type Technical Cooperation

\*Cumulative operations since each project started

PROJECT	*EXPERT DISPATCH (Person)	*COUNTER- PART (Person)	*EQUIPMENT SUPPLY (\$Thousand)	DURATION
Integrated Wood Utilization Research Project in Heilongjiang	69	26	643,096	84.10.15 - 91.10.14
Sanjianpingyuan Agricultural Research Center Project	66	32	723,260	85. 9.20 - 93. 3.19
The Shanghai Fish Processing Technique Development Center	43	20	451,054	86. 1. 1 - 92.12.31
Beijing Vegetable Research Center Project	27	22	185,900	88. 1. 1 - 92.12.31
Watershed Management Training Project on the Loess Plateau	20	9	222,623	90. 1.15 - 95. 1.14
Tianjin Dairy Farming Development Project	18	12	136,383	90. 3. 1 - 95. 2.28
Forestry Development Project in Fujian Province	6	4	48,966	91. 7. 1 - 96. 6.30

Development Study

NAME OF DEVELOPMENT STUDY	EXECUTING AGENCY OF THE RECIPIENT
Feasibility Study on Enbankment Improvement and Agricultural Development in Qinzhou District in Guangxi Zhuang Zu Autonomous Region	Public Works Bureau, Qinzhou District Administration, Guangxi Zhuang Zu Autonomous Region
The Master Plan Study on the Liao Ho Delta Agricultural Resources Integrated Development Project in the Liaoning Sheng	Water and Electricity Agency, Liaoning Province
Master Plan Study on Integrated Agriculture and Livestock Development Project in Xiangxinanzhi Shanmai	Agriculture Agency, Hunan Province
Feasibility Study on Facilities Improvement Project in Second Irrigation Section in Qianguo Area in Jilin Province	Water Resources Agency, Jilin Province

Grant Aid

CASE	EXPENSES (Million)	ACTIVITIES CONDUCTED BY JICA
The Improvement of Agricultural Water Supply in North District of Hubei Province	1,635	

CASE	EXPENSES (¥Million)	ACTIVITIES CONDUCTED BY JICA
Increase of Food Production	600	Aptness Study of the Requested Equipment

### Development Cooperation (Basic Development Study)

CASE	DURATION	PERSON ENGAGED
Preliminary Survey for Dairy Development Cooperation	91.11.19 - 91.11.29	7

### Development Cooperation (Investment and Financing Examination and Surveys)

CASE	DURATION	PERSON ENGAGED
Pilot Project for Culture of the Brewing Grape and Experimental Project for Raising Beef Cattle	91. 5. 7 - 91. 5.18	4
Pilot Project for Culture of the Soybean	91.10. 3 - 91.10.12	4

## ||||| Mining & Industry |||||

### Project-type Technical Cooperation

\*Cumulative operations since each project started

PROJECT	*EXPERT DISPATCH (Person)	*COUNTER- PART (Person)	*EQUIPMENT SUPPLY (¥Thousand)	DURATION
The China Mining Research Center for Non-Ferrous Metals	52	18	549,796	87. 3. 1 - 92. 2.29
The Research and Development on Resin Application	18	10	283,457	90. 2.21 - 94. 2.20
Shanghai Modern Molding Die Technology Training Center	9	6	222,866	91. 9. 1 - 95. 8.31

### Development Study

NAME OF DEVELOPMENT STUDY	EXECUTING AGENCY OF THE RECIPIENT
Feasibility Study on Industrial Wastewater Treatment & Recycling Project	State Science & Technology Committee
Study for Factory Modernization (The Third Beijing Cotton Mill)	State Planning Commission
Study for Factory Modernization (Anshan Tractor)	State Planning Commission

NAME OF DEVELOPMENT STUDY	EXECUTING AGENCY OF THE RECIPIENT
Study for Factory Modernization (Kwangchow Steel Pipe)	State Planning Commission
Study for Factory Modernization (Santon Qixia Tool)	State Planning Commission
Study for Factory Modernization (Hubei Machine Factory)	State Planning Commission
Study for Factory Modernization (Shanghai Heald Frame)	State Planning Commission
Study for Factory Modernization (Shehyan Towel)	State Planning Commission
Study for Factory Modernization (Kwangchow Oil and Fat Chemical Engineering)	State Planning Commission
Study for Factory Modernization (Loting Rannie)	Production Office of the State Council, State Planning Commission
Study for Factory Modernization (Puyuan Construction Machine)	Production Office of the State Council, State Planning Commission
Study for Factory Modernization (Jiaxing Woolen)	Production Office of the State Council, State Planning Commission
Study for Factory Modernization (Taiyuan Xishan Gypsum)	Production Office of the State Council, State Planning Commission
Study for Factory Modernization (Beijing Thermal Supply Corp.)	State Planning Commission
Feasibility Study on Quality Control System Plan for Shenfu Dongsheng Coal Field	Coal Refinery Corporation, Ministry of Energy
Study on Waste Water Treatment Project in Dexing Copper Mine	China National Nonferrous Metals Industry Corporation
Mineral Exploration	China National Nonferrous Metals Industry Corporation

### Development Cooperation (Investment and Financing Examination and Surveys)

CASE	DURATION	PERSON ENGAGED
Appraisal Team on the Experimental Project for Coal Water Mixture	91. 5.10 - 91. 5.18	3



Commerce & Tourism

Project-type Technical Cooperation

\*Cumulative operations since each project started

PROJECT	*EXPERT DISPATCH (Person)	*COUNTER- PART (Person)	*EQUIPMENT SUPPLY (¥Thousand)	DURATION
The Enterprise Management Center	76	39	287,307	83.10.11 - 91.10.10

Human Resources Development

Equipment Supply

EQUIPMENT	EXPENSES (¥Thousand)	FACILITIES
Equipment for the Study of Raising River Dolphin	84,505	Institute of Hydrobiology, Academia Sinica

Grant Aid

CASE	EXPENSES (¥Million)	ACTIVITIES CONDUCTED BY JICA
The Project for Construction of the Japan-China Youth Centre		Expediting of Execution
The Project for the Improvement of the Equipment of the Harbin Institute of Technology	452	Basic Design Study
The Project for the Construction of Dunhuang Cave Cultural Asset Preservation Research and Exhibition Centre	120	
The Project for Equipment Supply to Hunan Wuling University	931	

ASIA

Public Health & Medicine

Project-type Technical Cooperation

\*Cumulative operations since each project started

PROJECT	*EXPERT DISPATCH (Person)	*COUNTER- PART (Person)	*EQUIPMENT SUPPLY (¥Thousand)	DURATION
The China-Japan Friendship Hospital	146	212	363,430	81.11.19 - 92.10.21
Project on China Rehabilitation Research Center	139	36	267,526	86.11.25 - 93.11.24
China-Japan Medical Education Center Project	36	14	252,032	89.11.18 - 94.11.17
Polio Control Project	3	0	0	91.12. 4 - 96.12. 3

Grant Aid

CASE	EXPENSES (¥Million)	ACTIVITIES CONDUCTED BY JICA
Project for the Improvement of the Equipment for the Shanghai Sixth People's Hospital	1,608	Expediting of Execution

India

Type of Cooperation	Sector		Planning & Administration		Public Works & Utilities			Agriculture, Forestry & Fisheries				Mining & Industry		Commerce & Tourism		Human Resources Development		Social Welfare	Public Health & Medicine	Others	Expenses (Thousands)
	New operations in 1991	Continued from FY 1990	Development Planning	Public Administration	Public Works	Transportation	Social Infrastructure	Telecommunications & Broadcasting	Agriculture	Livestock Farming	Forestry	Fisheries	Mining	Manufacturing	Energy	Commerce & Trade	Tourism				
Acceptance of Trainees	Total		4	18		12	2	4	13		1	3	8	1	3		31		6	2	258,965
	New operations in 1991	Continued from FY 1990	4	18		12	2	4	13		1	3	8	1	3		31		6	2	
Dispatch of Experts	Total					4			2		1								13		
	Short-term	Continued from 1990				4			2		1								13		
	Long-term	Continued from 1990				1			2										2		
Dispatch of Survey Teams Members	Total		1			4			6										15		124,877
	New operations in 1991	Continued from FY 1990	1			4			6										15		
	Total		1			4			6										15		
Dispatch of Japan Overseas Cooperation Volunteers	Total					17			16				67						23		678,167
	New operations in 1991	Continued from FY 1990				17			16				67						23		
	Total					17			16				67						23		

ASIA

India

||||||| Public Works & Utilities |||||

Development Study

NAME OF DEVELOPMENT STUDY	EXECUTING AGENCY OF THE RECIPIENT
The Feasibility Study on the Transport Infrastructure Development Project, Calcutta	Transport Department of West Bengal Government

||||||| Agriculture, Forestry & Fisheries |||||

Equipment Supply

EQUIPMENT	EXPENSES (₹Thousand)	FACILITIES
Equipment for Genetic Research	20,497	Central Institute for Cotton Research

Project-type Technical Cooperation

\*Cumulative operations since each project started

PROJECT	*EXPERT DISPATCH (Person)	*COUNTER- PART (Person)	*EQUIPMENT SUPPLY (₹Thousand)	DURATION
Bivoltine Sericulture Technology Development Project	16	9	0	91. 6. 1 - 96. 5.31

Development Study

NAME OF DEVELOPMENT STUDY	EXECUTING AGENCY OF THE RECIPIENT
Feasibility Study on the Irrigation and Drainage Development of Sharda Canal CAD Project	Ministry of Water Resources

### Grant Aid

CASE	EXPENSES (\$Million)	ACTIVITIES CONDUCTED BY JICA
Increase of Food Production	600	Aptness Study of the Requested Equipment Expediting of Execution

### ||||||| Mining & Industry |||||

#### Development Study

NAME OF DEVELOPMENT STUDY	EXECUTING AGENCY OF THE RECIPIENT
The Pre-feasibility Study on Solvent Refined Coal Development Project	Ministry of Steel & Mines
Feasibility Study on HMT Restructuring and Development Program	Ministry of Industry

### ||||||| Human Resources Development |||||

### Grant Aid

CASE	EXPENSES (\$Million)	ACTIVITIES CONDUCTED BY JICA
The Project for Providing the Equipment for the Government College of Engineering, Pune	719	Basic Design Study

### ||||||| Public Health & Medicine |||||

#### Project-type Technical Cooperation

\*Cumulative operations since each project started

PROJECT	*EXPERT DISPATCH (Person)	*COUNTER- PART (Person)	*EQUIPMENT SUPPLY (\$Thousand)	DURATION
The Sanjai Gandhi Postgraduate Institute of Medical Science	21	11	19,842	90. 8. 1 - 95. 7.31