



JAPAN INTERNATIONAL COOPERATION AGENCY

annual report  
1987

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annual report  
**1987**

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## FOREWORD

The "JICA Annual Report -- 1987" is a detailed report on the Japan International Cooperation Agency (JICA)'s activities conducted during fiscal 1986.

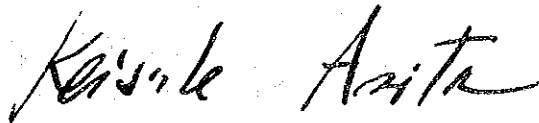
JICA's activities, encompassing government-based technical cooperation, grant aid, Japan Overseas Cooperation Volunteers (JOCV), development cooperation, emigration services and training of experts in various fields of technology, have continued to expand and diversify. JICA's budget for fiscal 1987 stands at more than ¥103.5 billion, which is four times larger than that for 1974, when JICA was established. The grant aid extended during fiscal 1987 is expected to exceed the ¥140 billion mark. This amount is approximately seven times larger than that for fiscal 1978 when grant aid programmes were added to JICA's responsibilities. In August this year the "Law Concerning Dispatch of Japan Disaster Relief Teams" came into effect. As a result, the dispatch of international emergency assistance teams to disaster-stricken countries has become a new function of JICA.

It goes without saying that such an expansion, both quantitative and qualitative, of JICA's international cooperation activities reflects Japan's efforts to increase and improve its Official Development Assistance (ODA), particularly, to meet developing nations' needs for "human resources development." As is often pointed out, however, the ratio of Japan's technical cooperation to its total ODA still remains very low -- about half the average of DAC member countries. We should bear this in mind and make efforts for its improvement. At a time when JICA's activities increasingly expand and diversify, it is a matter of urgent necessity for us to further strengthen our programme implementation system. We have taken various rationalization measures in realignment of personnel, structural reorganization, etc. Nevertheless, we find it imperative to increase our personnel in order to ensure effective implementation of our programmes. While it is fortunate that there has been a net increase in our personnel over the past two years, the need for a further increase is still being keenly felt.

JICA welcomes the recent designation by the Japanese Government of an "International Cooperation Day" and sincerely hopes that this event and the present annual report will serve for further deepening of public understanding of international cooperation.

October 1987

Keisuke Arita



President

Japan International Cooperation Agency





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## **Part I**

# **The Japan International Cooperation Agency and its Functions**

# The Japan International Cooperation Agency and its Functions

## 1. History and Functions

The Japan International Cooperation Agency (hereinafter referred to as "the Agency" or "JICA") was established on August 1, 1974 under the Japan International Cooperation Agency Law (Law No. 62, 1974) as an agency for government-based technical cooperation for developing countries and for administration of emigration services. At the time of its establishment, the Agency took over the functions of the then Overseas Technical Cooperation Agency, established in 1962 for the purpose of providing overseas technical cooperation, and those of the then Japan Emigration Service instituted in 1963. The Agency also absorbed all the functions of the Japan Overseas Agricultural Development Foundation and assumed new responsibilities including development cooperation and recruiting and training of qualified Japanese experts for technical cooperation.

The Agency performs its activities for international cooperation in accordance with the Japan International Cooperation Agency Law under the supervision of the Ministry of Foreign Affairs, the overall authorities, as well as of the Ministry of Agriculture, Forestry and Fisheries and the Ministry of International Trade and Industry, which are responsible for specific matters under their jurisdiction. For the smooth and efficient discharge of its duty for international cooperation, the Agency is striving to obtain a wide range of cooperation from the relevant government agencies, local public bodies and private organizations in Japan by keeping close contact with them and to act in concert with the governments of developing countries and the related international organizations.

The functions of the Agency fall under the following categories:

- (1) Government-based technical cooperation
- (2) Grant Aid programme
- (3) Dispatch of Japan Overseas Cooperation Volunteers (JOCV) members
- (4) Development cooperation programme (Investment in and financing of development projects)
- (5) Emigration services
- (6) Recruiting and training of qualified Japanese experts for technical cooperation

The fund required by the Agency for carrying out its technical cooperation activities is budgeted by the Japanese Government under its Official Development Assistance (ODA) Programme. The share of the Agency in the total expense for technical cooperation of the Government in calendar year 1986 was 62.1%.

## 2. Budget

The budget of the Agency consists of Grants, Investments and Funds in Trust. The amount of the original budget of the Agency for fiscal 1986 was ¥102,591 million, comprising ¥90,866 million for Grants, ¥4,852 million for Investments and ¥6,873 million for Funds in Trust.

The actual expenditure by the Agency in relation to technical cooperation in fiscal 1986 amounted to ¥79,036,923 thousand, including the expense brought forward from 1985. Fig. 2 shows the expenditure by programme and Fig. 3 shows its distribution by area.

Fig. 1 Expenditure of Japan's Technical Cooperation Programme (Calendar Year 1986)

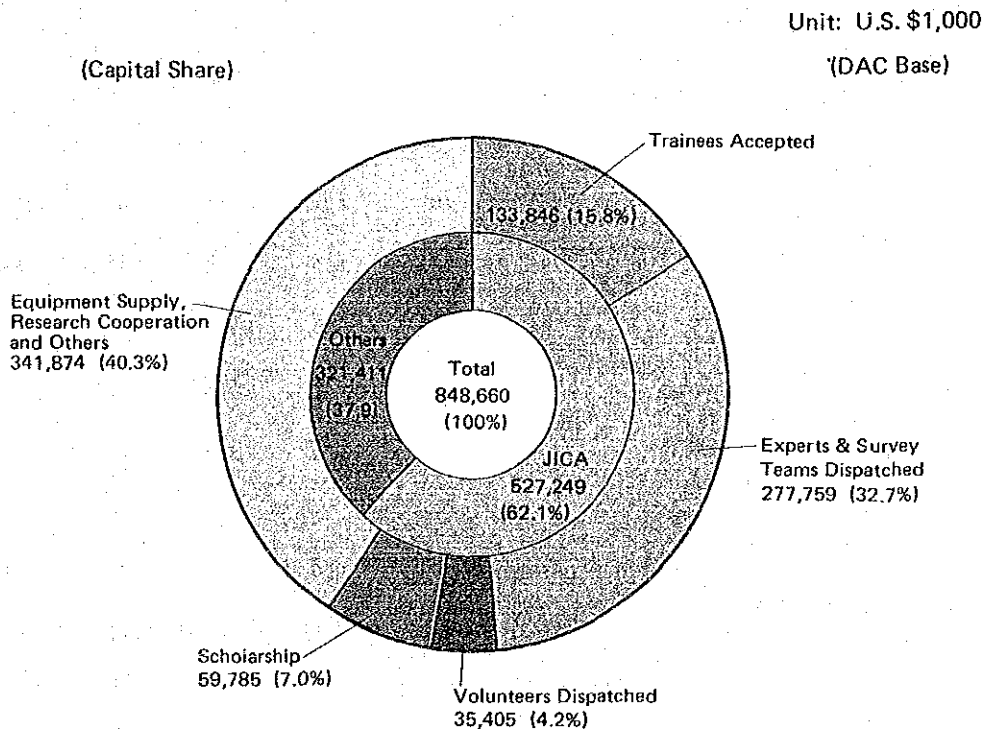


Table 1. Trends of JICA's Budget

(Unit: ¥ Million)

Expenses	Year					% compared with previous year
	1982	1983	1984	1985	1986	
I. Grants	66,079	71,875	77,734	84,271	90,866	107.8
1. Working Expenses	53,006	58,421	63,420	69,539	75,658	108.8
(1) Expenses for Overseas Trainees Accepted	8,466	9,692	10,462	11,667	12,653	108.5
(2) Expenses for Experts Dispatched	7,991	8,898	9,253	9,642	9,444	97.9
(3) Expenses for Development Surveys	12,308	13,190	13,958	13,450	14,388	107.0
(4) Expenses for Technical Cooperation Centres	4,632	5,018	5,446	6,222	7,388	118.7
(5) Expenses for Equipment Supply	1,339	1,432	1,481	1,518	1,823	120.1
(6) Expenses for Health and Medical Cooperation	3,652	3,769	3,927	4,134	4,013	97.1
(7) Expenses for Population and Family Planning	661	775	814	829	910	109.8
(8) Expenses for Agricultural and Forestry Development Cooperation	6,211	6,734	7,050	7,399	7,635	103.2
(9) Expenses for Experts' Welfare	334	376	416	460	478	103.9
(10) Expenses for Recruiting and Training Qualified Persons for Technical Cooperation	683	780	840	958	1,025	107.0
(11) Expenses for Development Cooperation	743	787	821	844	876	103.8
(12) Expenses for Industrial Development Cooperation	1,296	1,424	1,516	1,604	1,721	107.3
(13) Expenses for Grant Aid Cooperation	94	113	123	1,909	2,277	119.3
(14) Expenses for Japan Overseas Cooperation Volunteers	4,597	5,433	6,248	7,765	8,822	113.6
(15) Expenses for Youth Invitation	—	—	1,065	1,138	1,205	105.9
(16) Expenses for International Disaster Relief	—	—	—	—	1,000	—
(17) Others (adjustments)	—	—	—	—	—	—
2. Working Expenses for Emigration Service	1,910	1,992	2,000	2,066	2,158	104.5
3. Administrative Expenses	11,163	11,463	12,314	12,667	13,051	103.0

Expenses	Year					% compared with previous year
	1982	1983	1984	1985	1986	
II. Investments	5,068	5,118	4,651	4,324	4,852	112.2
1. Expenses for Facilities	3,418	3,268	2,621	2,174	2,602	119.7
2. Funds for Investment in and Financing of Development Projects	200	400	800	900	1,000	111.1
3. Funds for Investment and Financing for Emigrants	1,450	1,450	1,230	1,250	1,250	100.0
III. Funds in Trust	5,808	6,135	6,318	6,744	6,873	101.9
1. Funds in Trust for Surveys on Overseas Development	5,808	6,135	6,318	6,744	6,873	101.9
(1) Expenses for Surveys on Overseas Development	3,701	3,893	4,023	4,207	4,260	101.3
(2) Expenses for Basic Surveys on Resources Development Cooperation	2,107	2,242	2,296	2,536	2,613	103.0
2. Expenses for the Southeast Asian Fisheries Development Centre	—	—	—	—	—	—
Total	76,955	83,128	88,703	95,339	102,591	107.6

Table 2. Expenses of JICA by Type of Cooperation

Type of Cooperation	1982		1983		1984		1985		1986		Total (1954-1986)	
	Expense (\$Million)	Person	Expense (\$Million)	Person	Expense (\$Million)	Person	Expense (\$Million)	Person	Expense (\$Million)	Person	Expense (\$Million)	Person
1. Trainees	8,383 (13.9%)	3,858	9,469 (14.7%)	4,363	11,494 (16.1%)	5,165	12,779 (16.9%)	5,549	13,631 (17.2%)	6,015	107,555 (16.2%)	67,179
2. Experts	16,018 (26.5%)	1,470	16,842 (26.2%)	1,578	17,576 (24.5%)	1,774	19,033 (25.1%)	1,732	18,046 (22.9%)	1,979	166,947 (25.2%)	20,834
3. Survey Teams	19,219 (31.9%)	4,454	21,104 (32.8%)	4,914	21,592 (30.1%)	5,189	21,976 (29.0%)	5,179	24,505 (31.0%)	5,796	194,764 (29.4%)	48,977
4. Volunteers	3,609 (6.0%)	441	4,146 (6.4%)	521	4,657 (6.5%)	677	5,726 (7.6%)	825	6,104 (7.7%)	822	50,483 (7.6%)	7,248
5. Emigration	142 (0.2%)	357	153 (0.2%)	217	112 (0.2%)	137	118 (0.2%)	134	175 (0.2%)	176	1,702 (0.3%)	72,512
6. Equipment Supply	10,474 (17.4%)	-	10,071 (15.6%)	-	12,962 (18.1%)	-	12,392 (16.4%)	-	12,356 (15.6%)	-	117,259 (17.7%)	-
7. Others	2,469 (4.1%)	-	2,635 (4.1%)	-	3,218 (4.5%)	-	3,646 (4.8%)	-	4,221 (5.3%)	-	24,562 (3.6%)	-
Total	60,314 (100.0%)		64,420 (100.0%)		71,611 (100.0%)		75,670 (100.0%)		79,037 (100.0%)		663,273 (100.0%)	



Fig. 2 Expenses for JICA's Technical Cooperation by Programme in Fiscal 1986

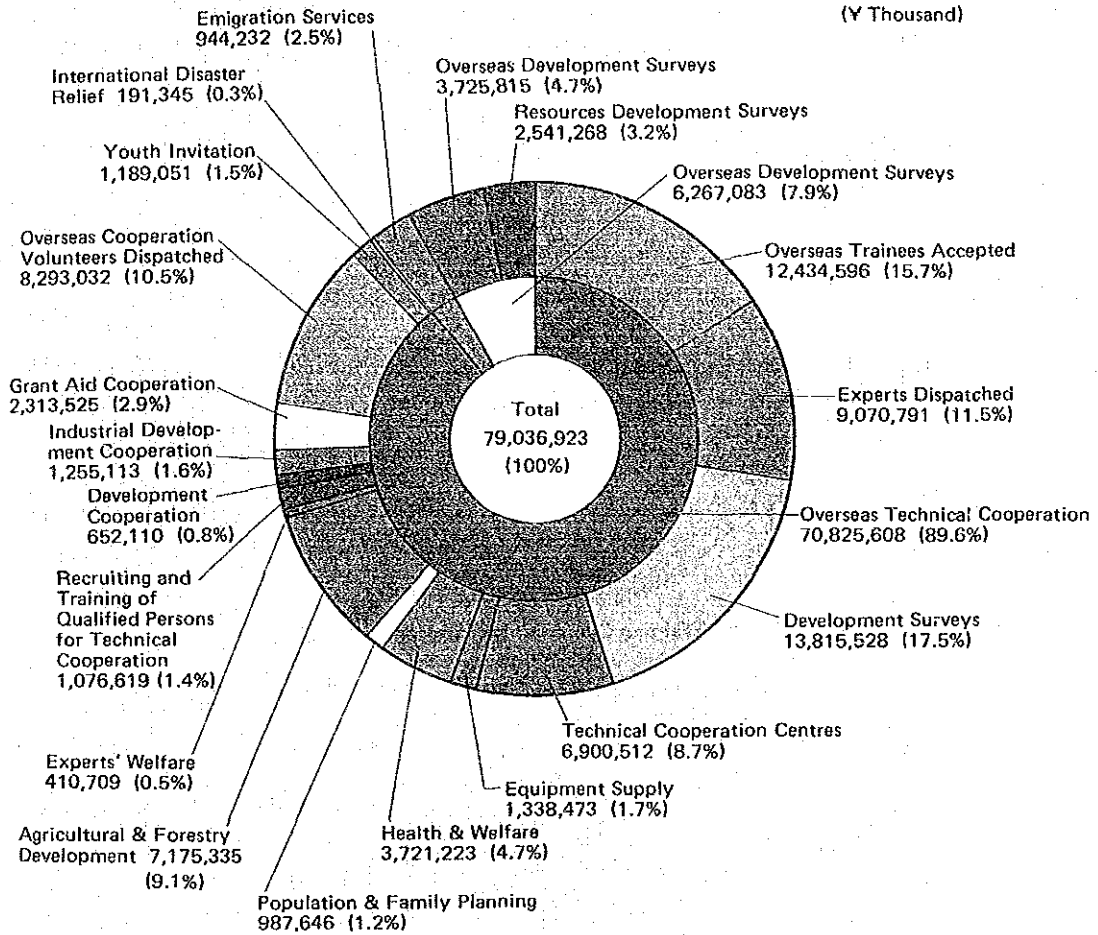
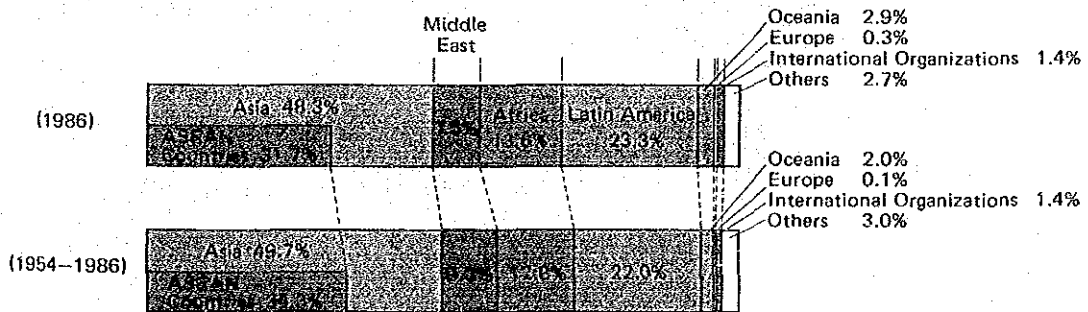


Fig. 3 Expenses for JICA's Technical Cooperation by Region in Fiscal 1986



### 3. Overview of the Operations in Fiscal 1986

Training for Overseas Trainees: the number of trainees accepted in fiscal 1986 was 6,714 including those in training from the preceding year on.

Expert Dispatch: in fiscal 1986, the number of experts who served abroad reached 3,046 including those in service from the preceding year on.

Survey Team Dispatch: the number of survey team members dispatched in fiscal 1986 was 6,004 including those in service from the preceding year on.

The Japan Overseas Cooperation Volunteers Programme: in fiscal 1986, 822 new volunteers were sent overseas, and the total number with those in service from the preceding year on reached 2,410.

Equipment Supply: in fiscal 1986, ¥12,356 million worth of equipment was granted.

Fig. 4 Training Classified by Programme (1986)

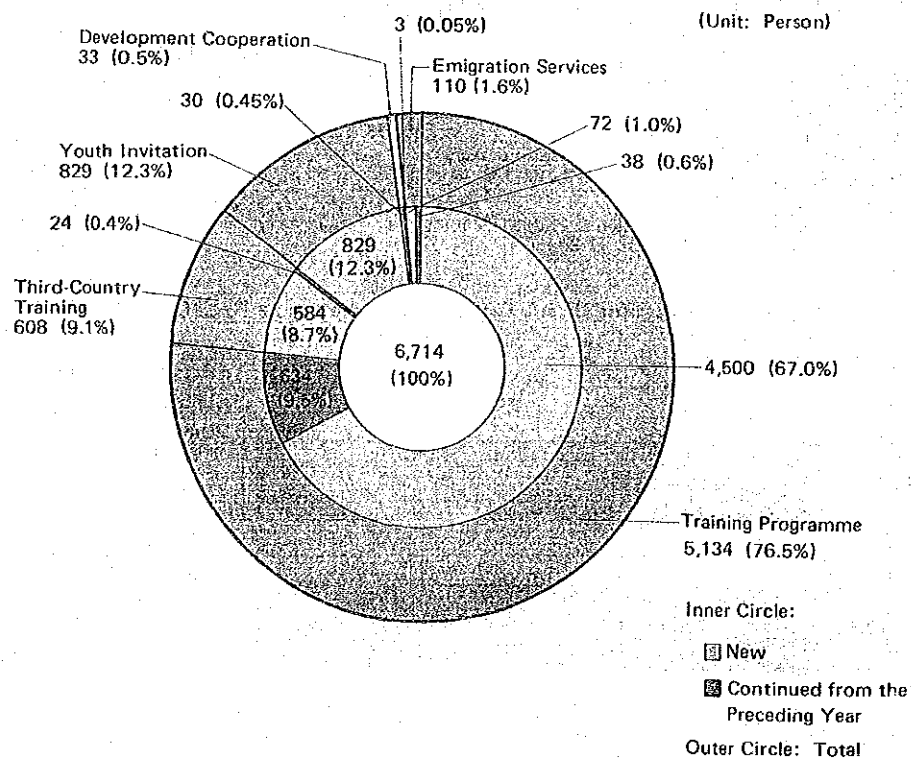


Fig. 5 Experts Dispatched by Programme (1986)

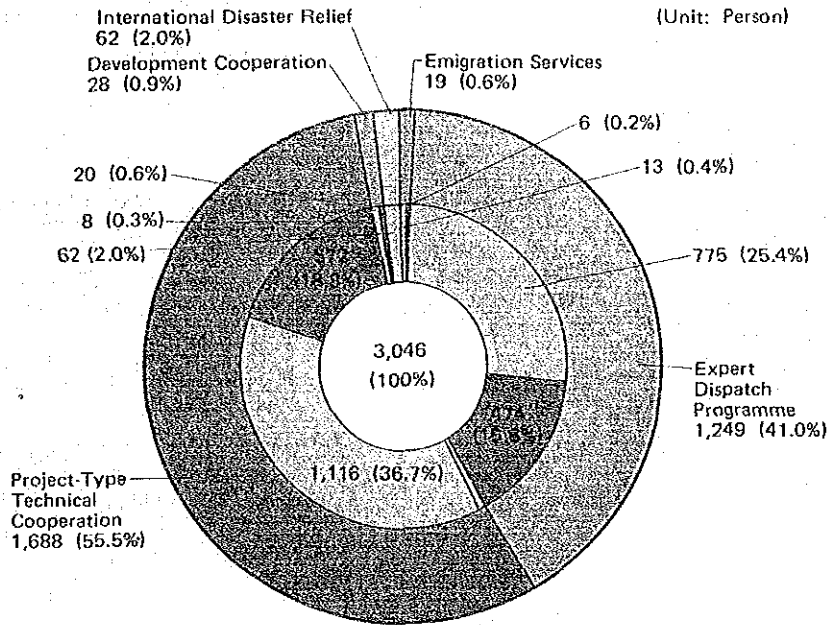


Fig. 6 Survey Teams Dispatched by Programme (1986)

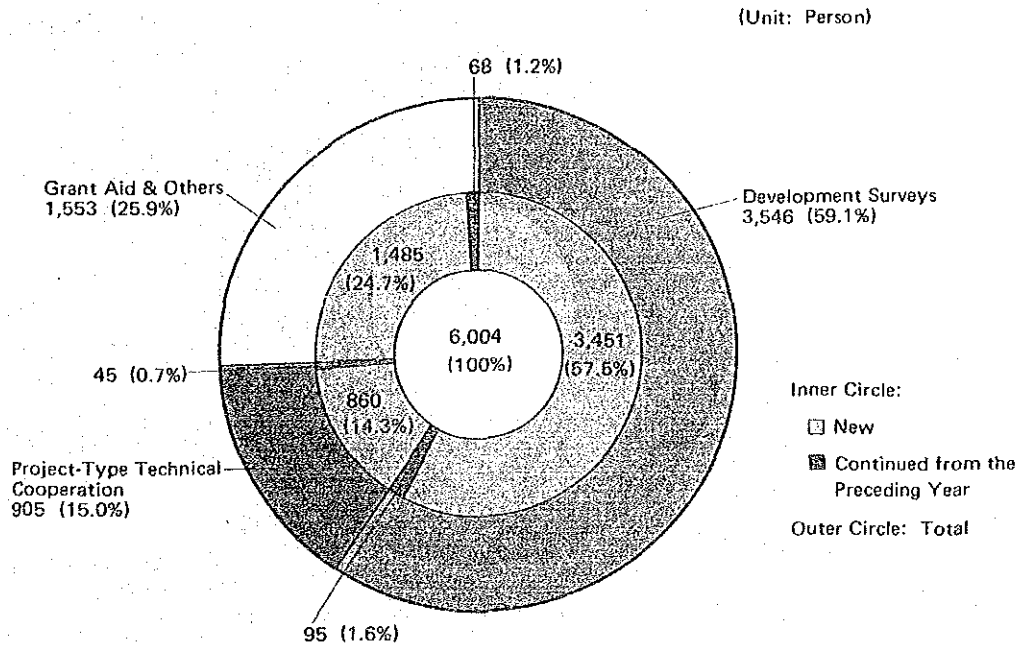


Fig. 7 Equipment Supply by Programme (1986)

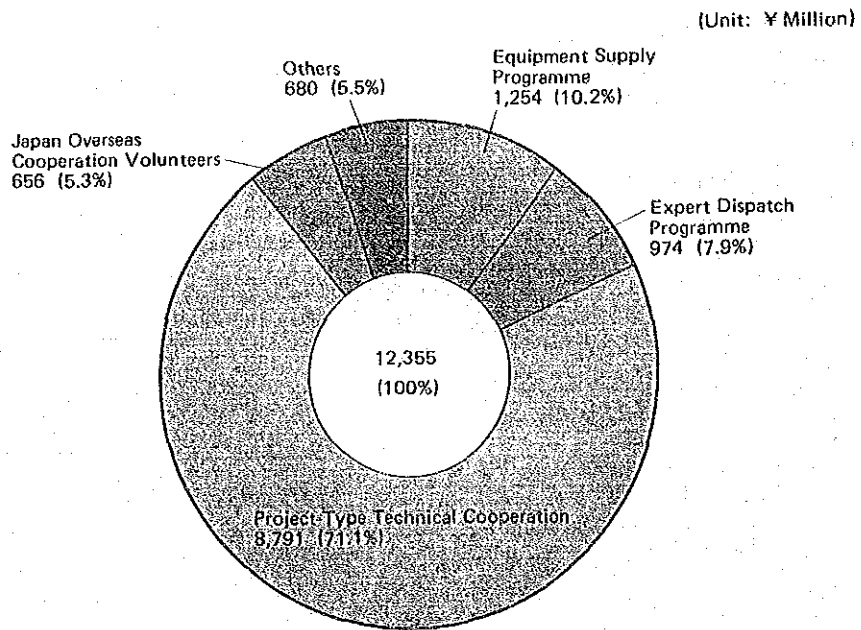
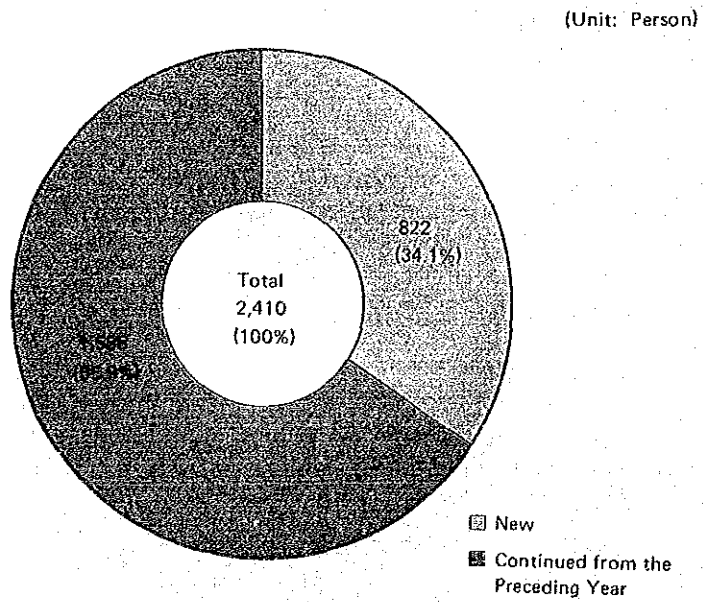


Fig. 8 Japan Overseas Cooperation Volunteers Programme (1986)



**Part II**

**Performance of  
Japan International Cooperation Agency  
in Fiscal 1986**

## Chapter 1.

# Government-Based Technical Cooperation

## Section 1. Training Programme

### 1. Outline

Japan has been providing courses for overseas trainees ever since it joined the Colombo Plan in 1954.

Two types of training are provided in Japan for them. One is Group Training, for which courses are organized according to the greatest common needs of developing countries. The number of courses of this type averages 200 each year. The other is Individual Training, for which courses are organized in accordance with specific requirements of a region or a country. The latter type includes the training of local counterparts of Japanese experts in Japan-assisted projects with a view to improving the efficiency of project implementation, as well as the training requested by United Nations and other international organizations. The trainees comprise mainly administrative officers, researchers and middle-level technicians from the public bodies and private sectors and are limited to those who have been recommended by the government concerned.

Curricula are prepared with due consideration given to the general needs of developing countries in the case of group training and to the specific needs in the case of individual training. Training is offered at ten centres operated by the Agency, and at other special training institutes with the cooperation of research and experiment stations of various government agencies, local bodies, universities, private enterprises, public corporations and others.

Besides training in Japan, JICA organizes training courses in other countries, contributing necessary funds. These are designed to provide training at the institutes abroad in collaboration with the host country for participants from neighbouring countries.

### 2. Performance in FY 1986

The number of trainees including project counterpart trainees accepted in fiscal 1986 was 6,714 (6,015\*), including those in training from the preceding year on, and the cumulative total accepted since 1954 has reached 67,179. Of the total number (6,714), 3,818 (56.9%) were from Asia, 1,297 (19.3%) from Latin

America, 580 (8.6%) from Africa, 529 (7.9%) from the Middle East, 249 (3.7%) from Oceania and Europe and 241 (3.6%) from international organizations. By country, 612 were from Thailand, 585 from Indonesia and 480 from the Philippines. Sector-wise, 1,541 (22.9%) were in public works and utilities, 1,230 (18.3%) in human resources development, and 1,173 (17.5%) in agriculture, forestry and fisheries. The performance of the training programme for participants in fiscal 1986 by country and sector is shown in the appendix.

Trainees from Malaysia have been accepted on the basis of her "Look East" policy. Malaysia is trying to learn the Japanese work ethic as well as technique and managerial skills. 132 trainees came to Japan in fiscal 1986 for a six-month training course. Various corporations received them so that they could learn the Japanese work ethic and attitude toward work in on-the-job training.

The Okinawa International Centre was set up in April 1985, under the ASEAN Human Resources Development Project launched in 1981. The Centre accepts trainees mainly from the ASEAN Countries, supporting the activities of human resources development centres in each of the ASEAN countries, and functions as a liaison office for these centres.

The Friendship Programme for the 21st Century aims at fostering friendly relationships between Japan and Asian and South Pacific countries with an eye to the 21st century. The Programme began in 1984 by inviting ASEAN youths to Japan annually for a period of five years, who will assume the responsibility of running their countries then, and offering them the opportunities to meet and exchange their views with the Japanese youths. In 1986 Burma, Fiji and Papua New Guinea joined the Programme. A total of 829 youths from six ASEAN countries, two countries from the South Pacific and Burma (youth leaders, working youths, civil servants, teachers, students and youths engaged in agriculture) participated in the programme in 1986.

- \* The number in parenthesis shows trainees newly accepted in FY 1986. Trainees are also accepted in the field of development cooperation and emigration.

**Fig. 1 Number of Trainees Accepted by Sector and Region (1986)**  
 (including those in training from the preceding year on)

(Unit: Person)

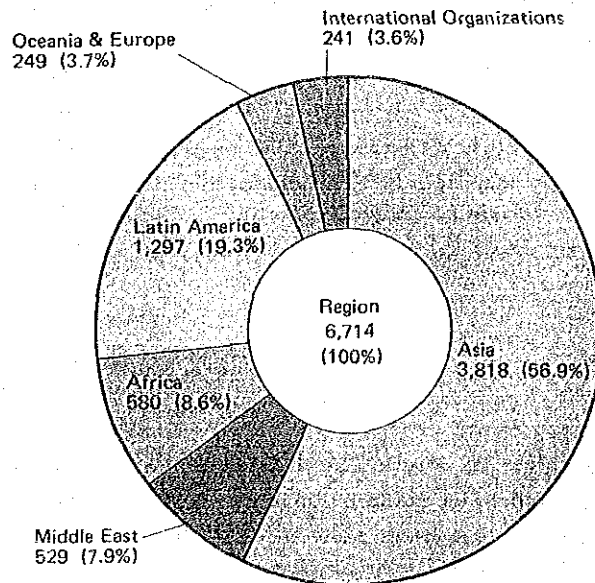
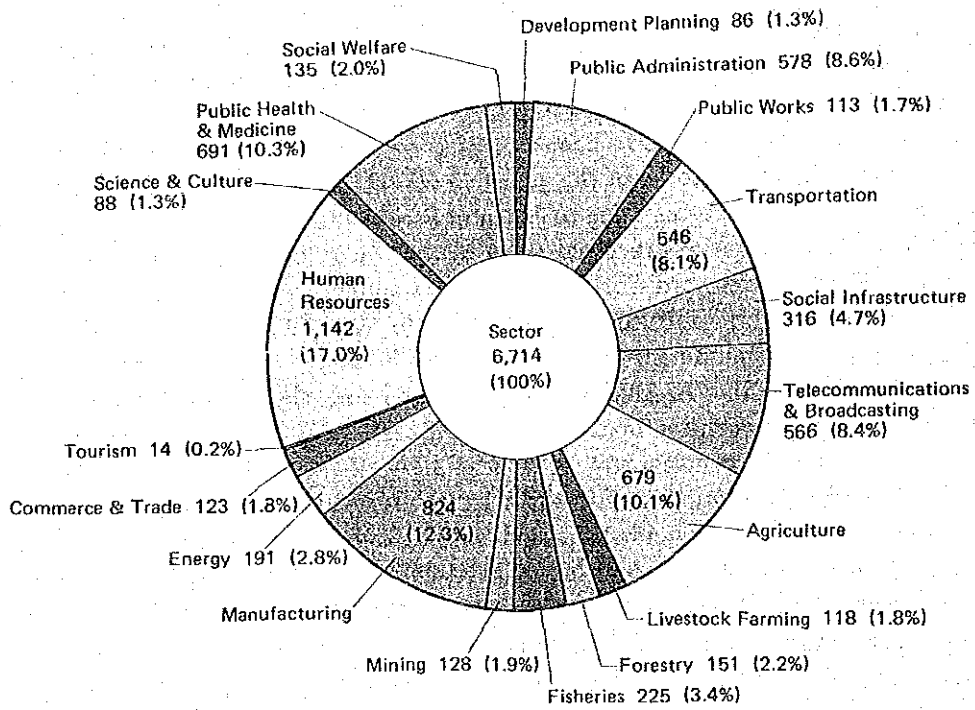
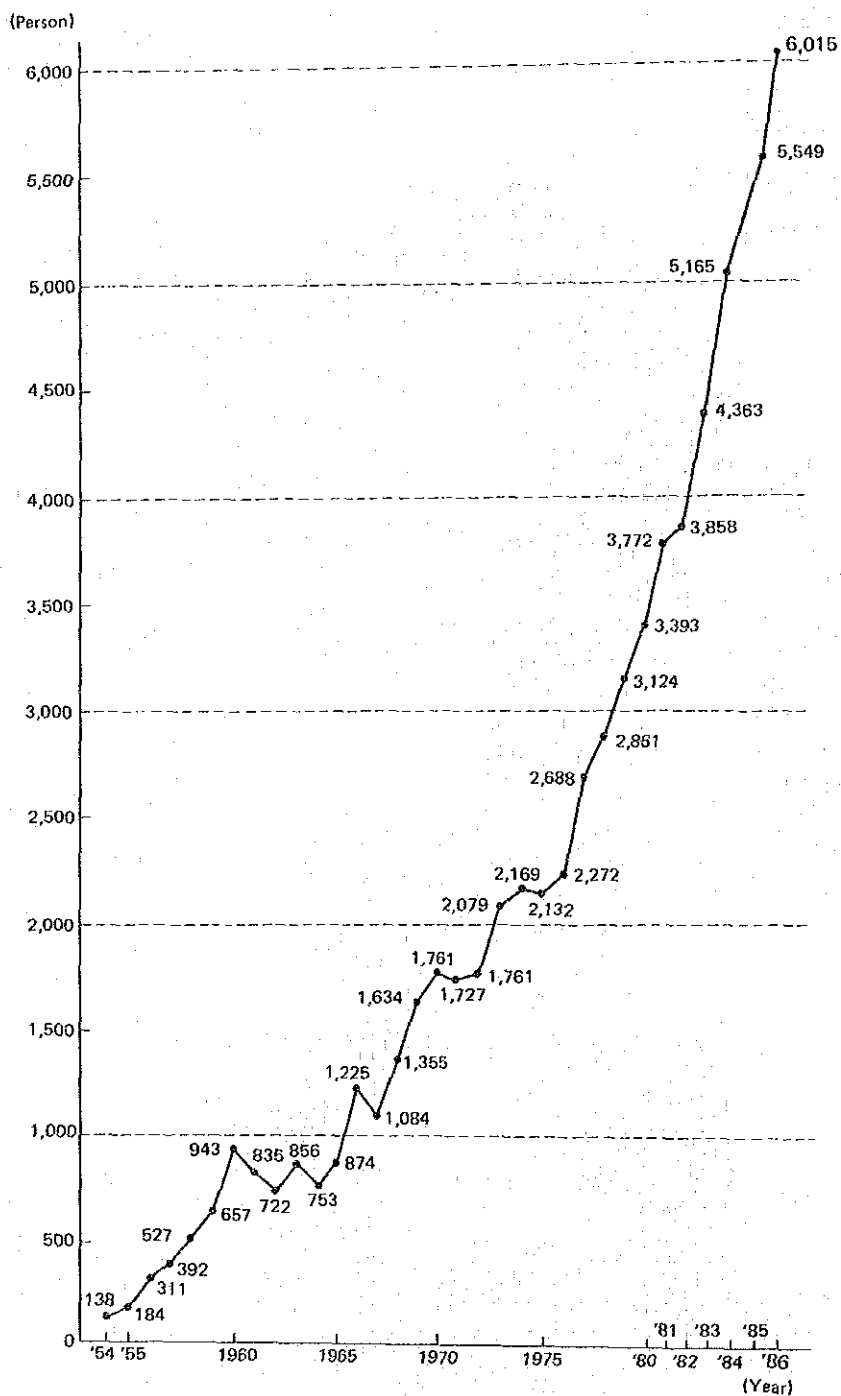






Fig. 3 Number of Trainees Accepted by Year (1954-1986)





Expert Dispatch Programme: a Japanese expert in Nepal instructing how to sew dresses. His efforts serve for creating a new job opportunity in the home manufacturing industry



## Section 2. Expert Dispatch Programme

### 1. Outline

The expert dispatch programme has expanded year by year since 28 experts were sent to Southeast Asia in fiscal 1955, with its cumulative total reaching 10,509 by the end of fiscal 1986.

The experts dispatched from Japan are assigned mainly to government agencies, research and experiment stations, construction works, academic institutions, or training institutes of recipient countries to engage in planning, survey and research, providing guidance and instructions, and giving advice for development projects.

In selecting experts or engineers for assignment abroad, the Agency requests the related government organizations to recommend qualified persons or picks up qualified persons from among the candidates registered with the Agency. Those who have been selected are given orientation on local conditions and other related matters and are trained in foreign languages and specific technology before their departure for the assigned country.

The number of the recipient countries of experts has increased extending from Asia to the Middle East, Africa, Latin America and Oceania. These experts also work in joint research centres where Japanese and local researchers work together on problems of development, in various international organizations including the Southeast Asia Fisheries Development Centre whose secretariat is located in the suburbs of Bangkok, Thailand, and in various other places.

Besides this programme, experts are also sent for Project-type Technical Cooperation Programme described in Section 4, Development Survey Programme described in Section 5 and Development Cooperation Programme (Investment in and Financing of Development Projects) described in Chapter 4, though the number of experts assigned under the last programme is rather small. These programmes will be discussed under respective sections and chapters.

### 2. Performance in 1986

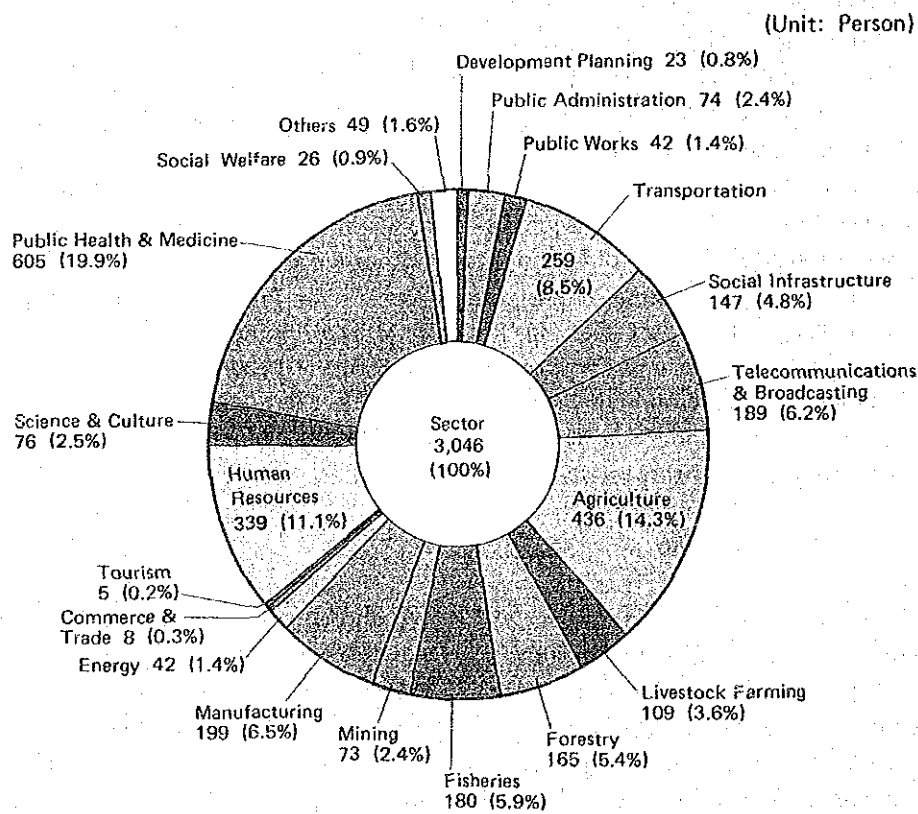
In 1986, the number of experts who served abroad reached 3,046 (1,979\*) and the cumulative total dispatched since 1953 has reached 20,834. By region, 1,725 (56.6%) experts were assigned to Asia, 620 (20.3%) to Latin America, 285 (9.4%) to Africa 197 (6.5%) to the Middle East, 94 (3.1%) to Oceania and Europe and 104 (3.4%) to international organizations. By country, 612 experts were assigned to Thailand, 585 to Indonesia, 480 to the Philippines and 353 to China. Sector-wise, public health and medicine accounted for 605 (19.9%) experts, agriculture 436

(14.3%) and human resources 339 (11.1%). Performance of the expert dispatch programme in fiscal 1986 by region, country and sector is shown in the appendix.

\* The number in parenthesis shows experts newly dispatched in FY 1986

In 1985 a new scientific and technological cooperation programme between Japan and ASEAN began in the fields of (i) biotechnology ii) microelectronics and (iii) material science through expert dispatch, acceptance of trainees, equipment supply and project-type technical cooperation. The Programme aims at promoting (a) research & development, (b) development of science and technology infrastructure and (c) technology transfer. In 1985-86, 27 trainees were accepted, 13 Japanese experts were dispatched and 8 Japanese missions visited the ASEAN countries to discuss the implementation of project-type cooperation.

Fig. 1 Number of Experts Dispatched by Sector and Region (1986)  
(including those in service from the preceding year on)



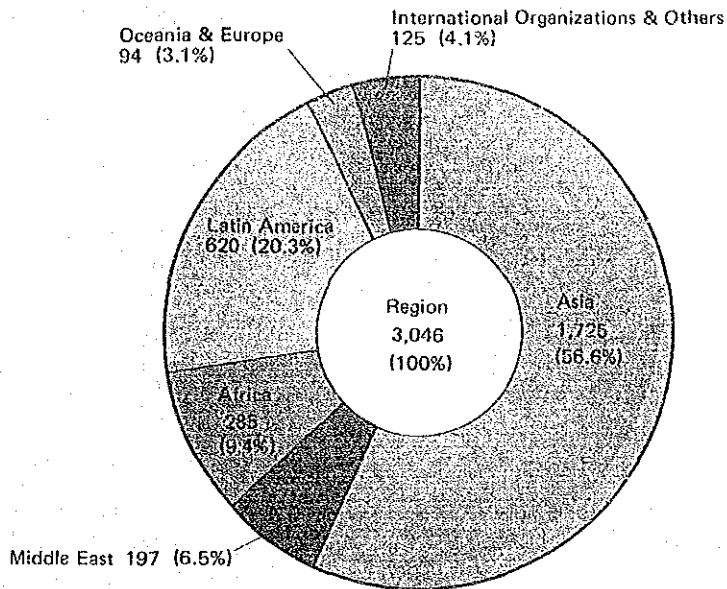
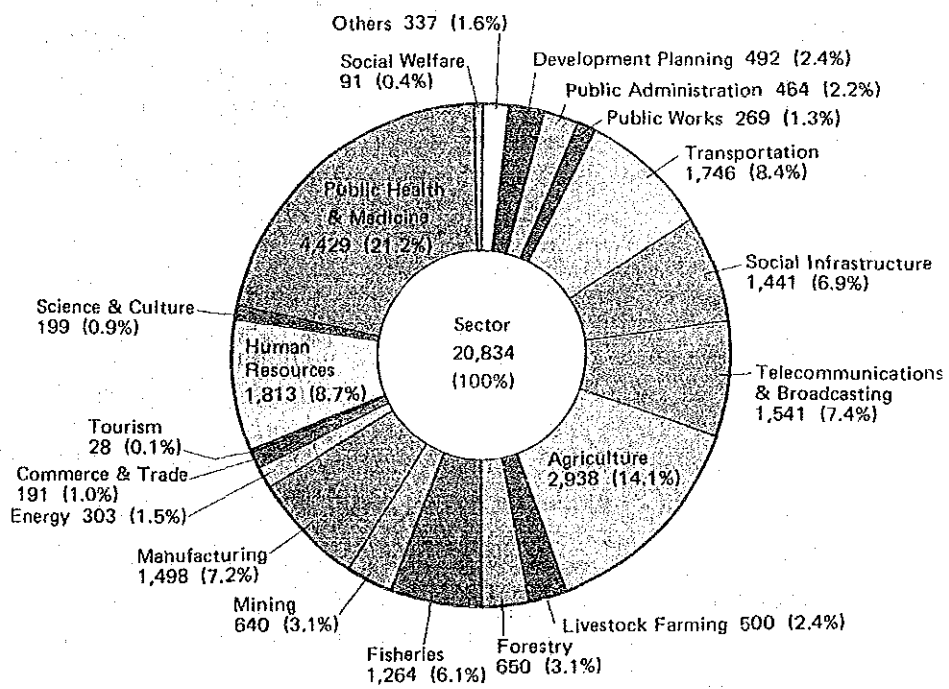


Fig. 2 Total Number of Experts Dispatched by Sector and Region (1955–1986)

(Unit: Person)



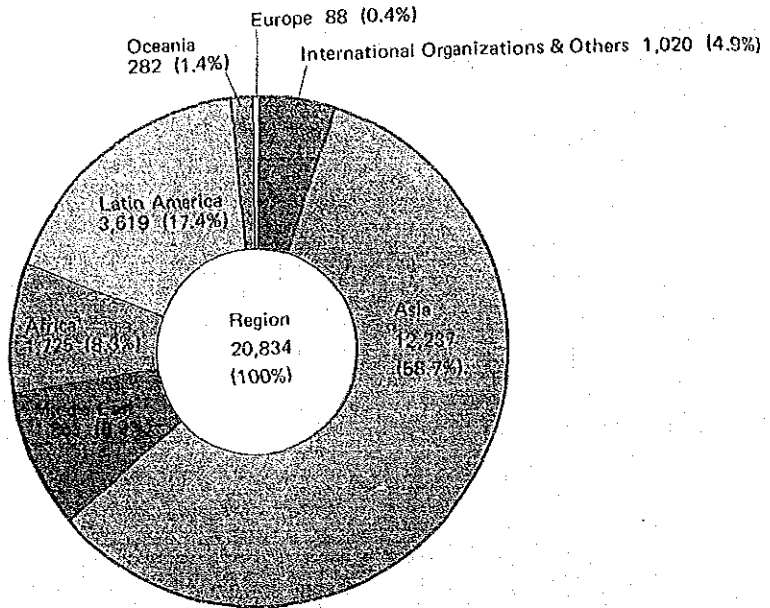
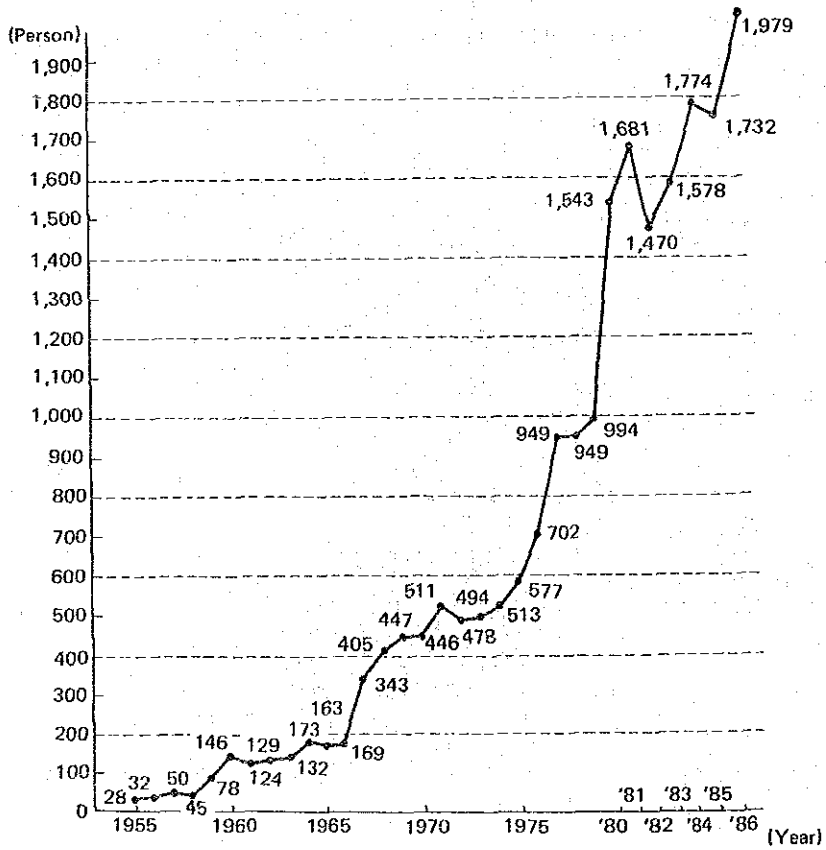


Fig. 3 Number of Experts Dispatched by Year (1955–1986)





### Section 3. Equipment Supply Programme

#### 1. Outline

The equipment supply programme was initiated in 1964 as part of Japan's technical cooperation. The objective of the programme is to contribute to the economic and social progress of developing countries through supply of needed equipment at the request of the countries which, though acquired certain levels of technical skills and experiences, cannot carry out training of personnel and transfer and dissemination of technology effectively, or cannot utilize the existing technology efficiently for lack of appropriate equipment.

Principal equipment for the purpose includes, (1) that which makes more effective the work of the assigned experts described in Section 2, (2) that needed by the counterparts of the country concerned to continue their services after Japanese experts left, and (3) that needed by the repatriated trainees for using effectively their knowledge and skill gained in Japan. The programme is designed to increase the effectiveness of technical cooperation through, so to speak, an organic combination of man and equipment.

The equipment supplied under this programme has a wide range including agricultural instruments and machines, machine tools, textile machines, fishing equipment, refrigerated vans for marine products, electronic microscopes and telecommunications and broadcasting equipment.

The supply of equipment by the Agency is done not only under this programme but also under the Project-type Technical Cooperation Programme described in Section 4 and Japan Overseas Cooperation Volunteers Programme described in Chapter 3, which will be discussed in detail later.

#### 2. Performance in 1986

In 1986, ¥1,187 million worth of equipment was supplied in a total of 58 cases. By region, Asia accounted for 12 cases amounting to ¥297 million (25.0%), the Middle East 7 cases amounting to ¥212 million (17.9%), Africa 17 cases amounting to ¥344 million (29.0%), Latin America 14 cases amounting to ¥266 million (22.4%), Oceania 8 cases amounting to ¥68 million (5.7%).

## Performance of Equipment Supply Programme in FY 1986

AREA COUNTRY	EQUIPMENT	EXPENSES (¥Thousand)	FACILITIES
<b>ASIA</b>			
Bangladesh	Broadcasting Equipment	19,330	Radio Bangladesh
China	Agricultural Antibiotic Analysis Equipment	37,919	Shanghai Pesticide Research Institute
Indonesia	Job Training Equipment	34,544	National Atomic Energy Agency
Korea	Environment Sample Analysis Equipment	46,430	Yonsei University
Malaysia	Job Training Equipment	32,250	Ministry of Manpower
	Agricultural Research Equipment	43,436	Ministry of Agriculture, Fisheries & Natural Resources
Sri Lanka	Medical Equipment	9,379	Ministry of Woman's Affairs & Teaching Hospital
Thailand	Labour Security/Health Education Equipment	22,866	National Institute for the Improvement of Working Conditions and Environment
	Equipment for Royal Library	16,114	Department of Technical and Economic Cooperation
Vietnam	Agricultural Extension equipment	1,480	Farmer's Training Centre
	Agricultural Research Equipment	28,175	University of Cantho
	Medical Equipment	4,680	Red Cross Ho Chi Minh City
<b>MIDDLE EAST</b>			
Egypt	Information Equipment	29,066	The Specialized National Councils
Jordan	Skill Training Equipment for the Physically Handicapped	47,497	Centre for Special Education
	Job Training Equipment	34,562	Wadi Seer Training Centre UNRWA
Syria	Broadcasting Equipment	38,677	Scientific Studies and Research Centre
	Air Pollution Monitoring Equipment	29,036	Environment Ataturk Bulvari
Turkey	Labour Security & Accident Prevention Equipment	31,780	Industrial Health and Safety Institute
	Computer System Equipment	1,177	Faculty of Veterinary Medicine Ankara

AREA COUNTRY	EQUIPMENT	EXPENSES (\$ Thousand)	FACILITIES
<b>AFRICA</b>			
Burkina Faso	Broadcasting Equipment	44,202	Ministry of Information and Culture
Comoros	Fisheries Training Equipment	13,485	Ministry of Industrial Development
Djibouti	Vaccination Van	8,240	Ministry of Public Welfare
Ethiopia	Harbour Work Equipment	5,100	Marine Transport Authority
Gabon	Broadcasting Equipment	32,510	Ministry of Information and Postal Services
Guinea	Fisheries Centre Equipment	20,045	Centre Motorization Project
Ivory Coast	Medical Equipment (for Third Country Training)	28,500	Treichville Hospital, Abidjan University
Malawi	Medical Equipment	26,284	Queen Elizabeth Central Hospital
Mauritius	Fisheries Research Equipment	5,386	Ministry of Agriculture, Fisheries & Natural Resources
Nigeria	Audio-Visual Training Equipment	36,415	Centre for Management Development
Senegal	Fisheries Training Equipment	18,577	National School of Maritime Formation
	Botanical Equipment	8,320	Ministry of Protection of Nature
Somalia	Marine Products Refrigerating Equipment	603	Ministry of Fisheries & Marine Resources
Tanzania	South-Shore Road Construction Equipment	55,575	Ministry of Communication and Works
	Crime Prevention Information Equipment	7,316	Ministry of Home Affairs
Zambia	Rice Farming Equipment	29,133	Department of Agriculture
	Wildlife Research Equipment	4,661	National Parks and Wildlife Service
<b>LATIN AMERICA</b>			
Argentina	Livestock Virus Research Equipment	47,200	University of La Plata
Bolivia	Job Training Equipment	31,972	National Vocational School
Brazil	Medical Equipment	24,165	Amazonia Hospital
Dominican Republic	Broadcasting Equipment	32,744	Radio Television Dominicana/Presidencia
	Medical Equipment	3,396	Ministry of Health
Ecuador	Ambulance	3,303	Ministry of Public Health-Vilcabamba Hospital
Guatemala	Repair Equipment	1,955	Guatemala-Teca Telecommunication Corporation

AREA COUNTRY	EQUIPMENT	EXPENSES (\$ Thousand)	FACILITIES
Honduras	Teaching Equipment	6,660	Ministry of Education
Mexico	Nuclear Magnetic Resonance Equipment	9,739	Research Institute of Sonora University
Panama	Cartographic Equipment	16,108	National Geographical Institute
	Telecommunications Equipment	33,738	Institute for Telecommunications
Paraguay	Agricultural Research Equipment	38,567	National Agronomic Research Institute (IAN)
	Bus for Student Council Activities	9,512	National University of Asuncion
St. Vincent	Ambulance	6,918	Ministry of Education and Health
<b>OCEANIA</b>			
Fiji	Telecommunications Equipment	4,242	Post & Telecommunications Department
Palau	Sea Turtle Culture Equipment	17,416	Micronesian Mariculture Demonstration Centre
	Disaster Prevention Equipment	4,771	Palau Disaster Control Office
Papua New Guinea	Materials Testing Equipment	15,725	Department of Works
Tonga	Science/Mathematics Teaching Equipment	10,850	Ministry of Education
	Environment Pollution Monitoring Equipment	2,220	Ministry of Agriculture, Forestry and Fisheries
Vanuatu	Agricultural Extension Equipment	8,685	Department of Agriculture
Western Samoa	Education Promotion Equipment	4,235	Department of Education

Fig. 1 Equipment Supply by Region (1986)

(Unit: ¥ Million)

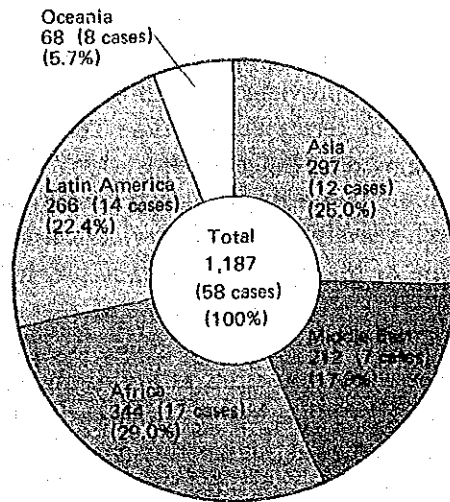
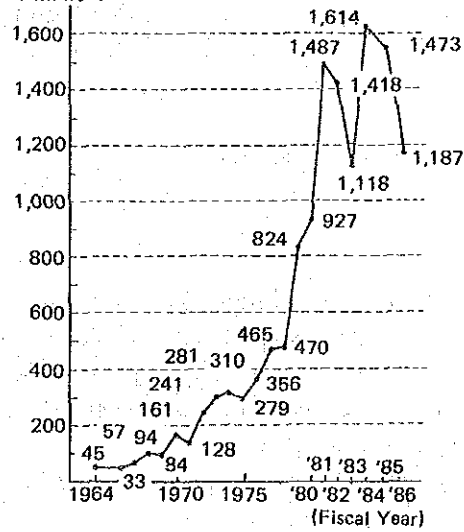


Fig. 2 Equipment Supply by Year

(Unit: ¥ Million)



## Section 4. Project-Type Technical Cooperation Programme

The form of technical cooperation includes "Acceptance of Trainees," "Dispatch of Experts" and "Supply of Equipment and Materials" as described in Sections 1 through 3. The Agency provides these three forms of technical cooperation singly or in combination. The term "Project-type Technical Cooperation" as used by the Agency means integrated technical cooperation from planning to implementation, which combines these three forms in a development project and is carried out systematically and comprehensively in the country concerned.

Under the programme of this type, the Agency provides technical cooperation through the dispatch of survey teams, assignment of experts, supply of equipment and materials and acceptance of counterparts related to planning of project, selection of project site, preliminary survey, preparations, implementation, and follow-up evaluation after completion of the project in order to insure effective cooperation.

The counterparts are accepted under the training programme described in Section 1.

In implementing such a project the recipient country provides land and buildings and manages the project, as a rule. There has been increasing cases in recent years in which construction of facilities for the project is also covered by grant aid provided by Japan. Through such an organic combination of technical and financial cooperation, a greater effect can be expected.

The Project-type Technical Cooperation being implemented by the Agency includes (1) Technical Cooperation Centre Programme, (2) Health and Medical Cooperation Programme, (3) Population and Family Planning Cooperation Programme, (4) Agricultural, Forestry and Fisheries Cooperation Programme and (5) Industrial Development Cooperation Programme.

### (1) Technical Cooperation Centre Programme

#### 1. Outline

Technical Cooperation Centres are designed to train and upgrade engineers and skilled workers whose services are essential for the socio-economic progress of developing countries and they can be broadly classified as follows:

- (1) Cooperation in the development of manpower resources aimed at upgrading engineers and skilled workers
- (2) Cooperation in research and development and in experimental works involving tests for practical application

- (3) Cooperation in development and improvement of production techniques
- (4) Cooperation in vocational training

However, some centres do not come under any of these categories but have multiple functions.

## 2. Performance in 1986

In 1986, this programme covered a total of 57 centres; centres (15) under preliminary survey, ongoing centres (36), aftercare services (3) and other services (3). (See the Performance of Technical Cooperation Centre Programme in Fiscal 1986).

Meanwhile, the Agency dispatched 59 survey teams and 526 experts to centres and accepted 180 counterparts from them. In addition, training materials worth 2,668 million yen were supplied as part of the programme.

## Performance of Technical Cooperation Centre Programme in Fiscal 1986

AREA COUNTRY	PROJECT	*Cumulative operations since each project started				DURATION
		*EXPERT DISPATCH (Person)	*EQUIPMENT SUPPLY (¥Thousand)	*COUNTER- PART (Person)		
ASIA						
China	The Enterprise Management Training Centre	42	204,096	19	83.10.11 ~ 88.10.10	
	The Beijing Telecommunications Training Centre	26	5,240	4	86. 2. 5 ~ 91. 2. 4	
Indonesia	The Sumatra Chemical Industry Training and Development Centre	35	276,710	17	81.11.19 ~ 29. 5.18	
	The Volcanic Sabo Technical Centre	52	408,802	18	82. 8.26 ~ 87. 8.25	
	The Centre for Vocational and Extension Service Training (ASEAN Human Resources Development Project)	32	99,721	57	83. 2.16 ~ 88. 2.15	
	The Radio & TV Broadcasting Training Centre	21	259,760	18	83.10.21 ~ 88.10.20	
	The Telephone Outside Plant Maintenance and Training Centre	10	6,260	6	86. 4. 1 ~ 90. 3.31	
	The Project on Characterization of Polymeric Materials				(86. 4 ~ 91. 3)	
Korea	The Industrial Technology Training Centre	13	367,879	5	86. 4.18 ~ 91. 4.17	
Malaysia	The Centre for Instructor and Advanced Skill Training (CIAST) (ASEAN Human Resources Development Project)	37	90,901	47	82. 8.20 ~ 87. 8.19	
	The National Computer Training Centre	25	367,561	8	85.11.13 ~ 90.11.12	
Pakistan	The Construction Machinery Training Centre	7	10,062	5	85. 4.29 ~ 90. 4.28	
Philippines	The Telecommunications Training Institute	26	524,722	21	81. 4. 2 ~ 86.10. 1	
	The Integrated Research and Training Centre, TUP	40	273,979	12	82.11. 3 ~ 87.11. 2	



AREA COUNTRY	PROJECT	*EXPERT DISPATCH (Person)	*EQUIPMENT SUPPLY (\$Thousand)	*COUNTER- PART (Person)	DURATION
Philippines	The Philippine Human Resources Development Centre, UL (ASEAN Human Resources Development Project)	64	130,577	77	82. 9. 9 ~ 87. 9. 8
Singapore	The National Maritime Polytechnic Training Centre	7	13,611	10	85. 6.13 ~ 89. 6.12
	The Japan-Singapore Institute of Software Technology (Phase II)	25	254,812	2	86. 1.13 ~ 91. 1.12
Thailand	The Productivity Development Project (ASEAN Human Resources Development Project)	133	6,319	132	83. 6.11 ~ 88. 6.10
	The Japan-Singapore Technical Institute	20	342,889	14	83. 6.29 ~ 88. 6.28
	The Primary Health Care Training Centre (ASEAN Human Resources Development Project)	51	79,896	24	82.10. 1 ~ 87. 9.30
	The Industrial Rehabilitation Centre	29	41,071	14	84. 2.23 ~ 89. 2.22
	The National Waterworks Technology Training Institute	15	45,995	7	85.12. 1 ~ 90.11.30
<b>MIDDLE EAST</b>					
Egypt	Textile Research and Development	8	200,650	8	80.11. 7 ~ 90. 3.31
	The Cairo Transport Authority Tramcar Training Centre	12	330,259	15	82. 6. 1 ~ 86. 6.12
Jordan	The Electric Power Training Centre	9	91,870	3	86. 3. 1 ~ 91. 2.28
Saudi Arabia	The Riyadh Electronic Technical Institute	7		1	74. 6.12 ~ up to operation

AREA COUNTRY	PROJECT	*EXPERT DISPATCH (Person)	*EQUIPMENT SUPPLY (¥Thousand)	*COUNTER- PART (Person)	DURATION
<b>AFRICA</b>					
Kenya	The Jomo Kenyatta College of Agriculture and Technology	110	465,849	93	80. 4.19 ~ 88. 4.18
Senegal	The Japan-Senegal Vocational Training Centre	16	74,851	21	84. 2. 4 ~ 89. 2. 3
<b>LATIN AMERICA</b>					
Argentina	The National Railway Training Centre	12	274,541	6	85.11.28 ~ 90.11.27
Bolivia	Institute for Mineral Ore, University of San Andres	31	283,388	12	82. 5.20 ~ 87. 5.19
Brazil	The Industrial Instrumentation Technology Centre of Espirito Santo/SENAI	11	231,166	6	85. 3. 6 ~ 90. 3. 5
Mexico	The Mexico-Japan Technological Education Centre The Port Hydraulic Centre	24 11	486,192 300,081	25 5	82. 4. 1 ~ 87. 3.31 84. 7. 1 ~ 88. 6.30
Panama	The Panama-Japan Vocational Training Centre	28	495,790	16	82. 8.26 ~ 89. 8.25
Peru	The SENATI South Zonal Vocational Training Centre	16	369,669	9	84. 5.31 ~ 89. 5.30
	The Japan-Peru Earthquake and Disaster Mitigation Research Centre	8	5,218	4	86. 6.26 ~ 91. 6.25

## (2) Health and Medical Cooperation Programme

### 1. Outline

This Programme is designed to offer medical cooperation to developing countries suffering from epidemic and endemic diseases through training of medical students, prevention and research of tropical diseases, and expansion and improvement of medical facilities. The programme also emphasizes the cooperation for the welfare of the citizens in these countries, through the improvement of public hygiene and environment.

### 2. Performance in 1986

In 1986, cooperation was offered to a total of 48 projects; projects (4) under preliminary survey, ongoing projects (32), aftercare services (6) and other services (1). (See the list of Performance of Health and Medical Cooperation Programme in Fiscal 1986).

Meanwhile, 36 survey teams were dispatched to the projects now under cooperation for the purpose of providing guidance and advice for project planning, including preliminary survey for the study of feasibility of cooperation in the future.

In addition, 421 experts were sent overseas and 110 counterparts were accepted. Equipment amounting to 1,444 million yen was supplied as part of this programme.

## Performance of Health and Medical Cooperation Programme in Fiscal 1986

AREA COUNTRY	PROJECT	*EXPERT DISPATCH (Person)	*EQUIPMENT SUPPLY (\$Thousand)	*COUNTER- PART (Person)	DURATION
*Cumulative operations since each project started					
<b>ASIA</b>					
Burma	Gastroenterology Services Improvement	19	109,970	14	84.11.1 ~ 88.10.31
	Research on Treatment of Infections Diseases of the Alimentary System	18	15,196	3	86.3.1 ~ 90.2.28
China	The China-Japan Friendship Hospital	84	55,348	148	81.11.19 ~ 89.10.21
India	The China Rehabilitation Research Centre	10		5	86.11.25 ~ 91.11.24
	Japanese Encephalitis Vaccine Production	28	92,506	13	82.3.12 ~ 87.3.11
Indonesia	Promotion of Health in North Sumatra	84	379,862	28	78.4.1 ~ 89.3.31
	Drug Quality Control	53	192,659	16	83.4.1 ~ 88.3.31
Korea	Maternal and Child Health	26	238,514	9	84.8.1 ~ 89.7.31
Nepal	Tribhuvan University Medical Education	64	326,457	19	80.6.20 ~ 88.6.19
Pakistan	The Children Hospital Islamabad	13		4	86.7.1 ~ 91.6.30
Philippines	The Institute for Tropical Medicine	40	350,845	18	80.10.17 ~ 88.3.31
	The Food and Drugs Laboratories Project	10		3	86.7.25 ~ 90.7.24
Sri Lanka	The Sri Jayewardenapura General Hospital	2	46,783	4	86.4.18 ~ 90.4.17
Thailand	The National Institute of Health	26	40,065	12	85.8.1 ~ 90.7.31
	Nursing Education	34	219,505	22	80.8.1 ~ 87.7.31
<b>MIDDLE EAST</b>					
Egypt	The Cairo University Pediatric Hospital	46	95,375	14	83.7.1 ~ 88.6.30
Sudan	The Khartoum Training Hospital	6	33,217	6	85.4.1 ~ 90.3.31
Yemen	Tuberculosis Control	15	118,004	6	83.9.1 ~ 88.8.31

AREA COUNTRY	PROJECT	*EXPERT DISPATCH (Person)	*EQUIPMENT SUPPLY (\$Thousand)	*COUNTER- PART (Person)	DURATION
<b>AFRICA</b>					
Ghana	The Noguchi Memorial Institute Project	5		3	86.10. 1 ~ 91. 9.30
Kenya	The Kenya Medical Research Institute	31	88,848	9	85. 5. 1 ~ 90. 4.30
Nigeria	Jos University Medical Research	43	172,915	9	82. 7. 2 ~ 87. 7. 1
Zambia	Faculty of Medicine, University of Zambia	28	247,471	23	80. 2.21 ~ 88. 2.20
<b>LATIN AMERICA</b>					
Argentina	The Gastroenterological Endoscopy Diagnosis and Research Centre	4	132,884	6	85. 4. 1 ~ 90. 3.31
Brazil	The Centre for Immunopathology of the Federal University of Pernambuco	19	295,887	9	84. 5.25 ~ 89. 5.24
Colombia	The Project on Research and Development of Diagnostic Technology on Malaria and Other Tropical Diseases	1	31,384	1	86.10. 1 ~ 89. 9.30
Ecuador	Research and Control of Gastroenteric Diseases	2	137,319	4	86. 1. 1 ~ 90.12.31
Paraguay	The Central Laboratory, the Ministry of Public Health and Welfare	30	318,301	21	80. 8.18 ~ 87. 8.17
Peru	Development of Community Mental Health Services	19	193,121	17	80. 5.20 ~ 87. 5.19
Uruguay	The Gastroenterology Project	16	158,149	11	84. 4. 1 ~ 89. 3.31
Venezuela	Gastrointestinal Tract Cancer Control	40	176,198	15	82. 4. 1 ~ 88. 3.31
<b>OCEANIA</b>					
Tonga	Japan-WHO Joint Technical Cooperation, the Health Laboratory	28	161,550	12	81.12.15 ~ 86.12.14
<b>EUROPE</b>					
Yugoslavia	Continuing Education for Primary Health Care	20	147,569	8	84.11.26 ~ 89.11.25

### (3) Population and Family Planning Cooperation Programme

#### 1. Outline

This programme, which had been part of the Health and Medical Cooperation Programme until 1979, was separated from the latter and established as a new technical cooperation programme in 1980 in order to contribute to the promotion of the family planning in developing countries.

#### 2. Performance in 1986

In 1986, cooperation was offered to a total of 7 projects; project (1) under preliminary survey and ongoing projects (6) as shown in the performance of population and family planning cooperation programme in FY 1986. Meanwhile, 41 experts were sent overseas and equipment amounting to 682 million yen was supplied.

Performance of Population and Family Planning Cooperation Programme in Fiscal 1986

\* Cumulative operations since each project started

AREA COUNTRY	PROJECT	*EXPERT DISPATCH (Person)	*EQUIPMENT SUPPLY (¥thousand)	*COUNTER- PART (Person)	DURATION
<b>ASIA</b>					
China	Family Planning	37	1,131,722	50	82.11.15 ~ 87.11.14
Nepal	Family Planning	7	1,080	2	85.10.7 ~ 90.10.6
Philippines	Family Planning	10	1,046,574	15	74.4.1 ~ 89.3.31
Thailand	Family Planning	19	1,040,584	17	74.4.1 ~ 89.3.31
<b>LATIN AMERICA</b>					
Colombia	Family Planning	12	154,947	2	85.11.8 ~ 90.11.17
Mexico	Promotion of Population Activities	36	216,302	8	84.7.4 ~ 88.9.30

#### (4) Agriculture, Forestry and Fisheries Development Cooperation Programme

##### 1. Outline

This programme is intended to provide assistance in agriculture, forestry and fisheries development of developing countries to contribute to increasing food production, improvement of farmers' income and living standards through the increase of productivity. The fields of cooperation cover rice cultivation, dry-field farming, livestock farming, forestry and fisheries. Forms of cooperation include: provision of technical guidance at agricultural extension centres and model extension farms of specific crops; provision of comprehensive guidance in the extension of advanced techniques at regional agricultural development centres to improve infrastructure for increased production and promotion of farmers' organizations in each designated project area; assistance in agricultural research and experiment for enhancing research and development capacity of recipient countries.

##### 2. Performance in 1986

In 1986, cooperation was extended to 77 agricultural, forestry and fisheries projects; a total of 565 experts were dispatched and agricultural vehicles, experiment and test equipment, chemicals and agricultural machines equivalent to 2,797 million yen were supplied.

Discussions were held and agreements were reached to offer cooperation on the following projects.



Performance of Agriculture, Forestry and Fisheries Development Cooperation Programme in Fiscal 1986

\*Cumulative operations since each project started

AREA COUNTRY	PROJECT	*EXPERT DISPATCH (Person)	*EQUIPMENT SUPPLY (¥Thousand)	*COUNTER- PART (Person)	DURATION
ASIA					
Bangladesh	The Institute of Postgraduate Studies in Agriculture	27	261,432	2	85. 7. 4 ~ 90. 7. 3
Brunei	The Forestry Research	9	50,425	3	85.10. 1 ~ 90. 9.30
Burma	The Central Agriculture Development Training Centre	17	253,801	8	83.10. 1 ~ 87. 9.30
China	The Sanjiangyuan Agricultural Research Centre	14	230,783	10	85. 9.20 ~ 90. 9.19
	The Shanghai Fish Processing Technique Develop- ment Centre	14	170,032	5	86. 1. 1 ~ 90.12.31
	The Integrated Wood Utilization Research Project	32	311,125	8	84.10.15 ~ 89.10.14
Indonesia	The Middle Level Agricultural Technician Training Project	36	462,107	42	79. 3.29 ~ 88. 3.31
	The Remote Sensing Engineering Project	41	456,988	22	80. 4. 1 ~ 87. 3.31
	The Plant Protection Project	40	345,400	22	80. 6.18 ~ 87. 3.31
	The Trial Plantation Project in Bunakat, South Sumatra	53	545,362	25	79. 4.12 ~ 88. 3.31
	The Construction Guidance Service Centre	47	311,725	21	81. 4. 1 ~ 88. 3.31
	The Tropical Rain Forest Research Project	17	152,996	4	84. 1. 1 ~ 89.12.31
	The Veterinary Drug Control Project	26	209,207	14	84. 4. 1 ~ 89. 3.31
	The Strengthening of Artificial Insemination Centre	5	44,748	3	86. 4. 1 ~ 91. 3.31
	The Strengthening of Pioneering Research for Palawjia Crop Production	18	1,003	3	86. 4. 1 ~ 91. 3.31

AREA COUNTRY	PROJECT	*EXPERT DISPATCH (Person)	*EQUIPMENT SUPPLY (*Thousand)	*COUNTER- PART (Person)	DURATION
Korea	The Agro-meteorological Disaster Research Project	42	356,110	19	82.10.1 ~ 87.9.30
Malaysia	Development of the Faculty of Fisheries and Marine Science, University of Agriculture, Malaysia	25	203,894	10	84.10.1 ~ 89.9.30
	The Forest Products Research Project	12	181,943	5	85.4.1 ~ 90.3.31
	The Malaysia ASEAN Poultry Disease Research and Training Project	4	14,768	4	86.4.17 ~ 91.4.16
	The Sabah Reafforestation Technical Development and Training Project	2			87.3.14 ~ 92.3.13
Nepal	The Horticultural Development Project	12	120,786	4	85.10.14 ~ 90.10.13
Philippines	The Afforestation Project of the Pantabangan Area	87	946,363	31	76.6.18 ~ 87.7.23
	The Bohol Agricultural Promotion Centre	23	292,466	13	83.2.2 ~ 88.2.1
Sri Lanka	The Integrated Agricultural Development Demonstration Project in the Mahaweli Area	14	245,760	4	85.2.11 ~ 90.2.10
Thailand	The National Weed Science Research Institute	31	345,396	17	80.4.18 ~ 87.3.31
	The Coastal Aquaculture Development Project	37	348,096	22	81.4.1 ~ 86.3.31
	Agricultural Extension and Agricultural Mechanization in Kasetsart University	42	295,980	23	81.7.1 ~ 87.3.31
	Research and Training in Reafforestation (Phase I & Phase II)	43	421,707	21	81.7.9 ~ 86.7.28
	The Agricultural Development Research Project in Northeast Thailand	30	144,699	10	83.12.20 ~ 88.12.19
	The Logging and Log Transport Training Project	20	358,353	14	83.10.1 ~ 88.9.30
	The Agricultural Cooperation Promotion Project	13	151,909	13	84.7.6 ~ 89.7.5
	The Irrigation Engineering Centre	22	117,266	7	85.4.1 ~ 90.3.31

AREA COUNTRY	PROJECT	*EXPERT DISPATCH (Person)	*EQUIPMENT SUPPLY (¥Thousand)	*COUNTER- PART (Person)	DURATION
Thailand	The National Animal Health and Production Institute Project	9	4,675	2	86.12. 9 ~ 91.12. 8
<b>MIDDLE EAST</b>					
Egypt	The Rice Mechanization Plant Project	43	384,545	24	81. 8.18 ~ 90. 3.17
Morocco	The Moroccan Fisheries Training Project	3		1	87. 1.19 ~ 92. 1.18
<b>AFRICA</b>					
Kenya	The Horticultural Development Project	6	36,399	4	85.12. 4 ~ 90.12. 3
	The Nursery Training and Technical Development Project for Social Forestry	13	80,310	3	85.11.26 ~ 87.11.25
Tanzania	The Kilimanjaro Agricultural Development Project	12	47,509	3	86. 3.13 ~ 91. 3.12
Zambia	The Veterinary Education Project, University of Zambia	21	141,538	2	85. 1.22 ~ 90. 1.21
<b>LATIN AMERICA</b>					
Argentina	The National Fisheries School Project	19	165,755	12	84. 4. 1 ~ 89. 3.31
Chile	The Aquaculture Project	45	573,258	16	79.10. 2 ~ 87.10. 1
	The Coastal Fisheries Training and Extension Project	11	338,172	7	83. 4. 1 ~ 88. 3.31
Honduras	The Agricultural Development Training Centre	18	237,246	12	83. 7. 1 ~ 88. 6.30
Mexico	The Animal Health Centre Project	57	444,054	20	81. 6. 1 ~ 87. 5.31
Paraguay	The Agriculture Development Project in the Southern Paraguay	53	523,300	39	79. 3.16 ~ 88. 3.15

AREA COUNTRY	PROJECT	*EXPERT DISPATCH (Person)	*EQUIPMENT SUPPLY (¥Thousand)	*COUNTER- PART (Person)	DURATION
Paraguay	The Forestry Development Project in the Southern Paraguay	32	426,794	21	79. 3.16 ~ 87. 3.15
	The Animal Reproduction Improvement Project	36	316,192	17	82.12. 3 ~ 87.12. 2
Peru	The Vegetable Cultivation Technique Centre Project	8	27,480	1	86. 4. 7 ~ 91. 4. 6
	The Fruit-Trees Research Project	3	17,737	2	86. 7.28 ~ 91. 7.27
OCEANIA					
Fiji	Aquaculture Research and Development	28	238,994	7	81.11.18 ~ 87. 3.31
	The Improvement of Rice Cultivation Technology	11	149,242	5	85. 4.18 ~ 90. 4.17

## (5) Industrial Development Cooperation Programme

### 1. Outline

This Programme is aimed at the effective utilization of locally available natural and human resources in developing countries for the development of mining and manufacturing industries to expand employment opportunities.

In order to promote the development of local industries in developing countries, not only the transfer of manufacturing technology but also the transfer of production-related techniques such as production control, business management, distribution and marketing and development of human resources, as well as the enhancement of research and development capability are equally important.

The Industrial Development Cooperation Programme was initiated in 1978 through reorganization of the former Primary Commodities Development Cooperation Programme.

### 2. Performance in 1986

In 1986, cooperation was offered to a total of 21 projects. For these projects, equipment and materials worth 444 million yen were supplied, and a total of 116 experts were dispatched.

## Performance of Industrial Development Cooperation Programme in Fiscal 1986

\*Cumulative operations since each project started

AREA COUNTRY	PROJECT	*EXPERT DISPATCH (Person)	*EQUIPMENT SUPPLY (*Thousand)	*COUNTER- PART (Person)	DURATION
ASIA					
China	The Meat Food Research Centre	17	80,092	15	85. 4.10 ~ 90. 4. 9
	The Mining Research Centre for Non-Ferrous Metals	8		2	87. 3. 1 ~ 91. 2.28
	The Education System for Chinese Patent Information Retrieval System Development	4		6	86.11. 1 ~ 90.10.31
Indonesia	The Biomass Energy Research and Development Centre	34	107,840	14	82.10.22 ~ 86.10.21
Korea	The Prevention of Coal Mine Accident	24	175,090	10	84. 3. 6 ~ 88. 3. 5
Philippines	The Trade Training Centre	5		10	87. 2.23 ~ 91. 2.22
Sri Lanka	The Appropriate Technology Research and Development Centre	30	129,136	14	82. 1. 7 ~ 87. 3.31
Thailand	The Trade Training Centre	20	9,213	15	83. 9. 5 ~ 87. 9. 4
	The Metal-Working and Machinery Industries Development Institute (MIDI)	5		5	86.10. 1 ~ 90. 9.30
	The Maize Quality Improvement Research Centre	2			86.12.15 ~ 91.12.14
AFRICA					
Tanzania	The Kilimanjaro Industrial Development Centre	45	242,135	16	78. 9.13 ~ 88. 3.12
LATIN AMERICA					
Brazil	Small and Medium Scale Industry Development in Parana State	21	305,704	21	80.10. 2 ~ 86.10. 1
Mexico	The Project on the Recovery of Valuable Minerals from Unutilized Pyrite-Rich Polymetallic Ores	8	188,525	3	86. 2.18 ~ 90. 2.17
Paraguay	Wholesale Marketing System Improvement	14	244,377	14	81.12. 7 ~ 87.12. 6
Peru	The Treatment Process of Copper Oxide Mineral	10	409,985	6	83. 7. 1 ~ 88. 6.30

## (6) International Disaster Relief Programme

### 1. Outline

Japan's overseas disaster relief programme was inaugurated in 1982 with the set-up of JMTDR (Japan Medical Team for Disaster Relief). JMTDR-related activities include dispatch of the medical relief team to disaster-stricken countries, recruitment of the team members, studies regarding international disaster relief activities and preparation of relief goods.

With the Mexican earthquake and the Colombian volcanic eruption in 1985 as a momentum, a need was indicated for more general emergency relief services and the new International Disaster Relief Team has been set up, comprising four main branches:

1. the Japan Rescue Team for Disaster Relief (JRTDR) with the Fire Defence Agency as the main constituent,
2. the Japan Medical Team for Disaster Relief (JMTDR), operated by a group of doctors and nurses,
3. a team whose members all have experience of working for the Japan Overseas Cooperation Volunteers (JOCV OB's),
4. a team of rehabilitation and reconstruction experts.

Administration and logistic backup services are provided by the International Disaster Relief Operation HQ set up at JICA.

### 2. Performance in 1986

In 1986, a total of 44 experts were dispatched to the disaster areas in Solomon Is. (cyclone), Cameroon (volcanic poisonous gas), the Philippines (typhoon), El Salvador (earthquake), Cook Is. (cyclone), Vanuatu (cyclone), and Ecuador (earthquake, flood).

## Section 5. Development Survey Programme

### 1. Outline

This programme is intended to offer consultancy services through dispatch of teams composed of experts in field surveys and office work for development projects of public nature in developing countries.

Promotion of comprehensive regional development projects and other development projects in the public sector bears closely upon the socioeconomic progress of developing countries, and it has often been the case that these countries lack the sufficient number of experts with high level of technology and wide experience to make the necessary judgement in the planning of such projects and capable personnel who, under the instruction of experts, can coordinate and organize the project planning. There are also many cases where the system, under which the engineers responsible for project planning work in union, is inadequate. Accordingly, the Japanese government is frequently requested by these countries to cooperate in the planning of such comprehensive regional development projects or individual projects. To comply with such requests, the Agency conducts development surveys as part of its technical cooperation. By phase, the development surveys can be broadly classified as follows:

- (1) Surveys for formulating Master Plans
- (2) Surveys for drawing Maps and Marine Charts
- (3) Preliminary Surveys
- (4) Feasibility Studies
- (5) Surveys directly related to Financial Cooperation
- (6) Surveys directly related to Grant Aid Programme
- (7) Surveys for Detailed Designs
- (8) Basic Surveys for Resources Development Cooperation
- (9) Surveys for Aftercare Services
- (10) Surveys for Resources in Forestry and Fisheries
- (11) Surveys for Project Finding, Evaluation, Follow-up, etc.

Besides the Development Survey Programme, survey teams are also sent for Project-type Technical Cooperation, Development Cooperation, Grant Aid Cooperation, Training Programme, Recruiting and Training Experts, JOCV Programme, etc.

### 2. Performance in 1986

The total number of survey team members dispatched in FY 1986 including

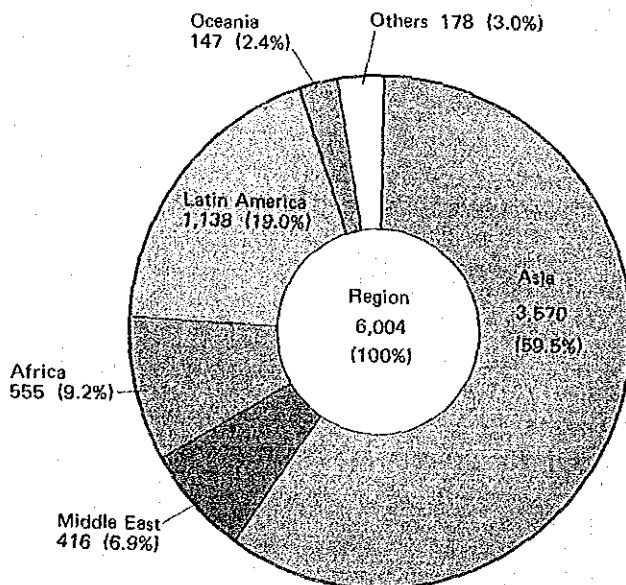
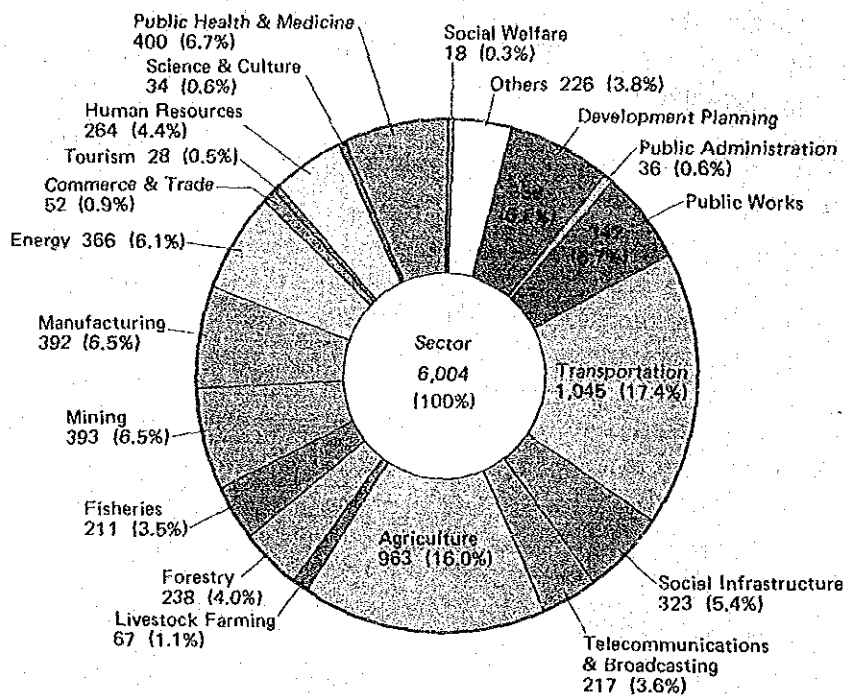


those in service from the preceding year on has reached 6,004 (5,796\*), the performance of which is shown by sector and region in the Fig. 1. Of the figure 6,004 above, 2,570 experts or 316 teams were dispatched under the development survey programme, bringing the cumulative number of development survey team members since 1952 to 25,909, the performance of which is shown by sector and region in the Fig. 2. The development survey projects are listed by country in page 54 on.

- \* The number in parenthesis shows survey team members newly dispatched in FY 1986.

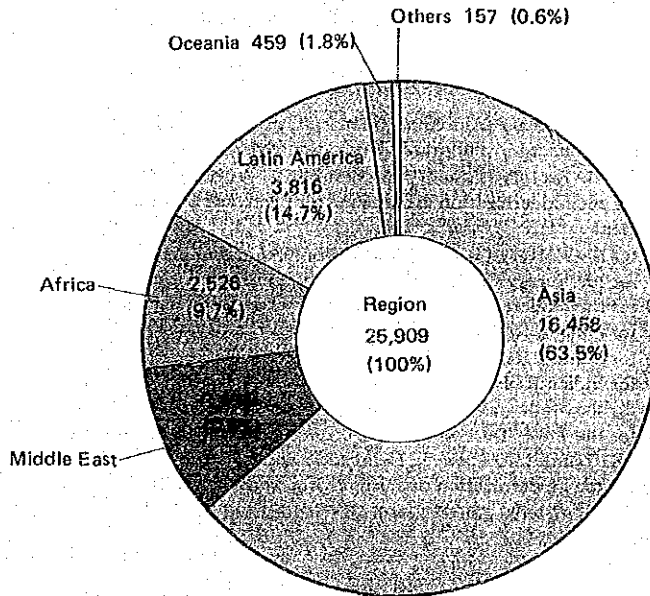
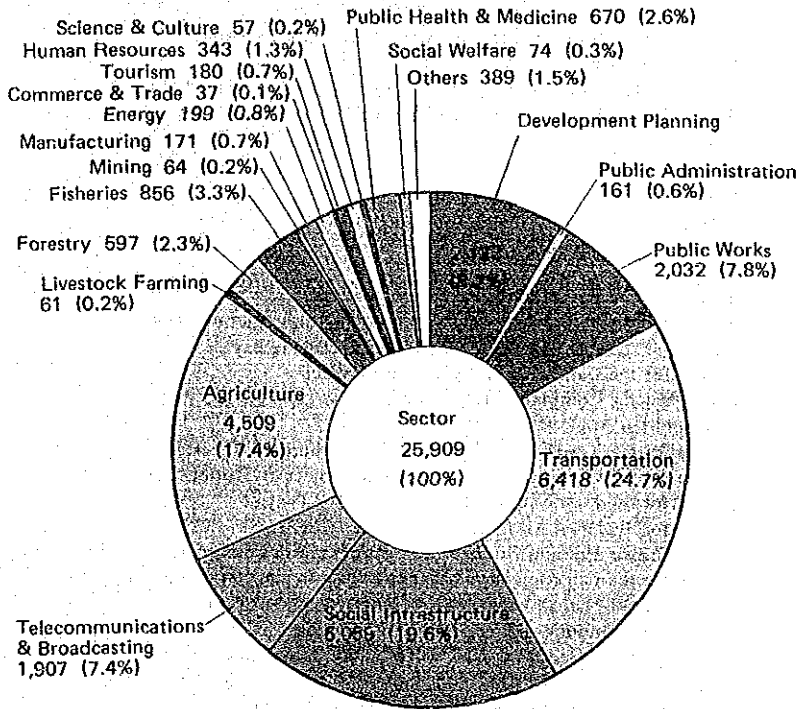
**Fig. 1 Number of Survey Team Members Dispatched by Sector and Region (1986)**  
 (including those in service from the preceding year on)

(Unit: Person)



**Fig. 2 Cumulative Number of Development Survey Team Members Dispatched by Sector and Region (1957-1986)**

(Unit: Person)



AREA COUNTRY	NAME OF DEVELOPMENT SURVEY	CLASSIFIED NO.
ASIA		
Bangladesh	Survey for the Development Project of Dhaka Port	1, 4
	Survey for the Storm Water Drainage System Improvement Project in Dhaka City	3, 4
Bhutan	Survey for the Rajshahi Irrigation & Drainage Development Project	3
	Survey for the Lhuntch-Mongar Integrated Agricultural Development Project	3
Burma	Survey for the Track Telecommunication and Signalling Improvement Project	4
	Survey for the Irrawaddy River Bridge Construction Project	4
China	Survey for the Establishment of Zinc Smelter and Slag Fuming Plant	3
	Survey for the Subway Project of Shanghai	4
	Survey for the Shanghai-Nanjing Expressway Construction Project	4
	Survey for the Port Development Project in Dapeng Bay	4
	Survey for the Dalian Port Development Project	3, 4
	Survey for the Comprehensive Urban Transportation in the Beijing Metropolitan Area	1, 3
	Survey for the Kouhokou-River Bridge Construction Project	3, 4
	Survey for the Groundwater Development Project in Tianjin City	1
	Survey for the Kannonkaku Dam Construction Project	3, 4
	Survey for Shanghai Air Pollution Control	1
	Survey for the Hokkou Hirakyo Multipurpose Dam Construction Project	4
	Survey for the Irrigation Development Project in Northern Hubei	3
	Survey for the Hainan Island Integrated Development Plan	1
	Survey for Economic and Technical Cooperation	11
	Survey for the Factory (Steel) Modernization Programme	4
	Survey for the Factory (Heavy Machinery) Modernization Programme	4
	Survey for the Factory (Glass) Modernization Programme	4
	Survey for the Factory (Piston) Modernization Programme	4
	Survey for the Factory (Electric Cable) Modernization Programme	4
	Survey for the Factory (Fefei Chemical Works) Modernization Programme	3, 4
	Survey for the Modernization Programme for Xiang Yang Bearing Plant	3, 4
	Survey for the Factory (Aluminium) Modernization Programme	3, 4
	Survey for the Factory (Pump) Modernization Programme	3, 4
	Survey for the Factory (Foundry) Modernization Programme	3, 4
	Survey for the Modernization Programme for Shenyang Griding Wheels Plant	3, 4
	Survey for the Factory (Tractor) Modernization Programme	3, 4
	Survey for the Energy Conservation Promotion Project	4
Survey for the Modernization Programme for Kousei Copper Mine	3, 4	
Survey for Mineral Resources Exploration	8	
Survey for Mineral Resources Exploration	8	
India	Survey for Indian Railways	11
	Survey for the Modernization of Rolling Stock Workshop	3, 4
	Survey for the Track Telecommunication and Signalling Improvement Plan on the Trunk Line between Delhi and Kanpur	3, 4
Indonesia	Survey for the Modernization of Burnpor Iron & Steel Works	4
	Survey for the Arterial Road System Development in the Jakarta Metropolitan Area	1

AREA COUNTRY	NAME OF DEVELOPMENT SURVEY	CLASSIFIED NO.	
Indonesia	Survey for the Development Plan of the Port of Semarang	1, 4	
	Survey for the Airport Development Project in Central Java and Jogjakarta	1, 4	
	Survey for the Development of Telecommunication System	1	
	Survey for the Surabaya-Banjarmasin Submarine Cable Project	4	
	Survey for the Solid Waste Management System Improvement Project in Jakarta City	1, 4	
	Survey for the Regional Development Project in the Western Part of Java	1, 3, 4	
	Survey for the Future Demand of Inter-island Traffic	3, 4	
	Survey for the Disaster Prevention Project in the Southeastern Slope of Mt. Galunggung	3	
	Survey for the Flood Control Plan of the Upper Citarum Basin	3	
	Survey for the Kalimantan-Sulawesi Submarine Cable System	3	
	Survey for the Trans-Sumatra Terrestrial Digital Transmission System	3, 4	
	Survey for the Master Plan for the Development of Maritime Search and Rescue and Prevention of Marine Accidents	1, 3	
	Survey for the Multiplication and Distribution of Improved Soybean Seed and Seed Potato	11	
	Survey for the Renovation of Medari Fabric Factory	4	
	Survey for the Development of Linkage-type Industries	4	
	Survey for the National Iron and Steel Development for the Second Generation	4	
	Survey for the Electric Power System Development Programme in Central Sumatra	4	
	Survey for the Cipasang Hydroelectric Power Development Project	4	
	Survey for the Ranau Hydroelectric Power Development Project	4	
	Survey for the Effective Utilization of Banko Coal	4	
	Survey for the Upgrading of Dayeuhkolot Workshop	3	
	Survey for the Ayung Hydroelectric Power Development Project	3, 4	
	Survey for the Kerinci Geothermal Development Project	3, 4	
	Survey for Mineral Resources Exploration	8	
	Malaysia	Survey for Kelang Valley Transportation	1
		Survey for the Kuantan-Kota Kinabalu Submarine Cable Project	4
		Survey for the Tanjong Karang Irrigation Development and Management Project	4
		Survey for the Computerized Area Traffic Control System in Penang	4
		Survey for the Comprehensive National Tourism Development Plan	1, 3, 4
		Survey for Flood Control of the Klang River Basin	1, 3
		Survey for Klang Valley Transportation	3
		Survey for the City Gas Distribution System in Klang Valley Area	4
		Survey for the Tenon Pangi Hydroelectric Power Development Project	4
Survey for the Sarawak Small Scale Hydroelectric Power Development Project		4	
Survey for the Lebir Dam Project		3, 4	
Nepal	Survey for Mineral Resources Exploration	8	
	Survey for the Shindhuli Road Construction Project	3, 4	
	Survey for the Development Plan of Television Network	1, 3	
	Survey for Integrated Rural Development in Lumbini	3	
	Survey for the Establishment of Integrated Textile Mill	4	
	Survey for the Arun-3 Hydroelectric Power Development Project	4	

AREA COUNTRY	NAME OF DEVELOPMENT SURVEY	CLASSIFIED NO.
Pakistan	Survey for the Paddy/Rice Handling and Processing Improvement Project	1
	Survey for the Master Plan on Baluchistan Irrigation	1
	Survey for Water Resources Development Potential in the Capital Area	1, 3, 4
	Survey for the National Transport Plan	3, 4, 9
Philippines	Survey for the Upper Kurang Irrigation Development Project	3
	Survey for Mineral Resources Exploration	8
	Survey for the Manila South Port Rehabilitation Project	1, 4
	Survey for the Graphic Information Base Project of the National Capital Region	2
	Survey for the Road Improvement on the Maharlika Highway	4
	Survey for the Master Plan Study on Cagayan River Basin Water Resources Development	1
	Survey for the Municipal Water Supply Project	1, 4
	Survey for the Improvement Project of the Operation and Maintenance of Magat River Integrated Irrigation	1
	Survey for the Preparation of Forest Information in the Wide Area and Forest Management Planning	1, 4
	Survey for the Philippine Rural Road Network Development Project	3
	Survey for the Metro-Manila Flood Control Plan	3
	Survey for the Integrated Agricultural Rural Development Project in Western Samar	1, 3, 4
	Survey for the Highland Rural Agricultural Integrated Development Pilot Project	1, 3
	Survey for Marinduque Integrated Agricultural Development	1, 3
	Survey for the Improvement of Operation & Maintenance in the Pumping Irrigation Systems	3
	Survey for the Consolidated Master Plan for Fish Transport System and Other Fisheries Support System	3
	Survey for Economic and Technical Cooperation (Agriculture)	11
	Survey for Economic and Technical Cooperation (Energy, Industry)	11
	Survey for Economic and Technical Cooperation (Transportation, Telecommunication)	11
	Survey for Economic and Technical Cooperation (Social Welfare)	11
Survey for the Caliraya Dam Rehabilitation Project	4	
Survey for the Hydropower Potential in Luzon	4	
Survey for the Plant (Island Cement) Renovation		
Survey for the Angat Dam Rehabilitation Project	3	
Survey for the Binga Dam Rehabilitation Project	3	
Survey for the Ambuklao Dam Rehabilitation Project	3	
Survey for the Calaca No. 1 Coal-Fired Power Plant Rehabilitation Project	3, 4	
Survey for Mineral Resources Exploration	8	
Singapore	Survey for the Plant Renovation Project of the Sentosa Earth Station	4
	Survey for the Urban Transport Improvement Plan	3
Sri Lanka	Survey for the Integrated Rural Development Project for the Gampaha District	1
Thailand	Survey for the Upper Kotmale Hydroelectric Power Development Project	4
	Survey for the Dredging Plant Development Project	4
	Survey for the Railway Yard Improvement Project	4
	Survey for the Effective Port Management and Operation System	4

AREA COUNTRY	NAME OF DEVELOPMENT SURVEY	CLASSIFIED NO.
Thailand	Survey for Road Improvement, Rehabilitation and Traffic Safety in Bangkok	4
	Survey for the New Krung Thep Bridge Construction and the Thonburi Road Extension Project	4
	Survey for the Topographic Mapping Project of the Bangkok Metropolitan Area	2
	Survey for the Flood Forecasting System in the Chao Phraya River Basin	3, 4
	Survey for Provincial Water Supply Projects	1, 4
	Survey for the Bang Nara Irrigation and Drainage Project (Phase II)	4
	Survey for the Water Management System and Monitoring Programme in the Chao Phraya River Basin	1, 3, 4
	Survey for the Aerial Photography and Forest Management Plan in the Encroached National Reserve Forest	4
	Survey for the Regional Truck Terminals Project	3, 4
	Survey for Potential Tourism Area Development for the Southern Region	1, 3
	Survey for Road Development in the Central Region	1, 3
	Survey for the Integrated Rural Development Plan for Agricultural Land Conservation in the East of Thailand	3
	Survey for the Agricultural Water Development Project of the Chanthaburi River Basin	3
	Survey for Economic Cooperation	11
	Survey for the Distribution System Dispatching Centre Project	4
	Survey for the Nam Yuam River Basin Hydroelectric Power Development Project	1
	Survey for the San Kanpaeng Geothermal Development Project	4
	Survey for Mineral Resources Exploration	8
	Survey for the Industrial Standard and Testing Development Programme	3, 4
	Survey for the Quality Management Planning for Samuth Prakan Province	3
Survey for the Effective Use of Industrial Water	3	
Survey for Resources Exploration	8	
Bangladesh, China, Indonesia, Malaysia, Pakistan, Philippines, Singapore, Thailand	Survey for Project Identification in Economic and Technical Cooperation	11
Bangladesh, Pakistan	Survey for Project Identification in Economic and Technical Cooperation	11
India, Nepal	Survey for Economic and Technical Cooperation (Evaluation)	11
Malaysia, Thailand	Survey for Project Formulation in Industry Development	11

AREA COUNTRY	NAME OF DEVELOPMENT SURVEY	CLASSIFIED NO.
Malaysia, Thailand	Survey for Economic and Technical Cooperation (Evaluation)	11
Bangladesh, Nepal, Sri Lanka	Survey for Economic and Technical Cooperation (Evaluation)	11
Indonesia, Thailand	Survey for Project Finding in Hydroelectric Power Development	3
Indonesia, Malaysia, Philippines, Singapore, Thailand	Survey for Project Identification in Mining, Industry and Power Development	3
<b>MIDDLE EAST</b>		
Egypt	Survey for the Development Plan of the Suez Bay Coastal Area	1, 4
	Survey for Greater Cairo Transportation	3
	Survey for the New Television Centre at 6th October City	4
	Survey for the Sharqiya Sewerage System	3
	Survey for the Integrated Rural Development Plan in North Sinai	1, 3
Iran	Survey for the Expansion Project of the Dikheila Integrated Steel Mill	3, 4
	Survey for the Caspian Sea Coastal Area Agricultural Development Project	1
Iraq	Survey for Baghdad City Urban Transport Improvement	4
Jordan	Survey for the Hydrogeological and Water Use Study of the Mujib Watershed	1
	Survey for the Integrated Regional Development Plan for the Karak Region	1
Morocco	Survey for the Development Project of the Elevated Type Urban Transport System in Casablanca	4
	Survey for the Oujda Province Groundwater/Rural Development Project	4
Oman	Survey for the Wadi Jizi Agricultural Development Project	7
	Survey for the Groundwater-used Agriculture Development Project in the Nejd Region	3
Qatar	Survey for the Drainage Improvement Plan, Doha City	4
Saudi Arabia	Survey for the Technical Cooperation for Sea Water Desalination Technology	4
Tunisia	Survey for the Topographic Mapping Project	2
Turkey	Survey for Forest Management in the Basin of River Medjerdh	3
	Survey for the Corch River Hydroelectric Power Development Project	4
	Survey for the Geothermal Development Project	4
Yemen	Survey for Mineral Resources Exploration	8
	Survey for Urban Transport	3



AREA COUNTRY	NAME OF DEVELOPMENT SURVEY	CLASSIFIED NO.
<b>AFRICA</b>		
Cameroon	Survey for the Bigon Agricultural Development Project	4
Ivory Coast	Survey for the Bon River Valley Agricultural Development Project	3
	Survey for Project Formulation in Africa	11
Kenya	Survey for the Integrated Regional Development Master Plan for the Lake Basin Victoria Area	1
	Survey for the Mwea Irrigation Development Project	4
	Survey for the Nairobi By-pass Construction Project	3, 4
	Survey for the Mapping Project in the South Coast of Kenya	3
Madagascar	Survey for Agricultural Development in Fianarantsoa	3
Malawi	Survey for Mineral Resources Exploration	8
Niger	Survey for the Hydro-agricultural Development Project of the Ouna-Kouanza Basin	3
	Survey for Project Formulation	11
Senegal	Survey for the Small Scale Rural Development Project	4
	Survey for Project Formulation in Economic and Technical Cooperation	11
Tanzania	Survey for Expanded Afforestation Work	3, 4
	Survey for the Hai and Rombo Districts Groundwater-used Agricultural Development Plan	3
	Survey for Small Scale Hydropower Development in Kilimanjaro	3
Zaire	Survey for the Comprehensive Transport System Development between Kinshasa and Banana	1
	Survey for the Kimbanseke New Railway Construction Project	3, 4
Zambia	Survey for Agricultural Fields	11
	Survey for the Briquettes Development Project	4
	Survey for the Establishment of Phosphate Fertilizer Plant	3, 4
	Survey for Mineral Resources Exploration	8
Zimbabwe	Survey for the Medium-sized Dam Project in the Province of Maschingo	3
	Survey for Mineral Resources Exploration	8
Ghana, Kenya, Madagascar	Survey for Project Identification in Economic and Technical Cooperation	11
Ivory Coast, Niger	Survey for Project Identification in Economic and Technical Cooperation	11
Mozambique, Tanzania, Zambia, Zimbabwe	Survey for Project Identification in Southern Africa	11
<b>LATIN AMERICA</b>		
Argentina	Survey for the Development Plan for Telecommunication and Broadcasting Network in the Province of Mendoza	4
	Survey for the Amplification of Inspection and Repairing Workshop for the Electric Rolling Stock	4

AREA COUNTRY	NAME OF DEVELOPMENT SURVEY	CLASSIFIED NO.
Argentina	Survey for the Irrigation and Drainage Project in the Adjacent Area to the Yacyreta Dam	1, 3, 4
	Survey for Economic Development	1
	Survey for the Industrial Energy Conservation Programme	3
	Survey for Geothermal Development Project	3
Bolivia	Survey for Mineral Resources Exploration	8
	Survey for the Road Improvement between San Borja and Trinidad	4
	Survey for the El Alto Airport Modernization Project	1, 3, 4
	Survey for Groundwater Development in the El Alto District in La Paz City	3, 4
Brazil	Survey for Mineral Resources Exploration	8
	Survey for the Itajai River Basin Flood Control Project	1, 4
	Survey for Mineral Resources Exploration	8
Chile	Survey for the Development Plan for the Valparaiso Port and the San Antonio Port	1, 4
	Survey for the Tololo Pampa Area Groundwater-used Agricultural Development Project	4
	Survey for the Mapocho River Basin Agricultural Development Project	4
	Survey for the Modernization of the Codelco's Factories	4
Colombia	Survey for Mineral Resources Exploration	8
	Survey for the Urban Development of the Central District Barranquilla	4
	Survey for the Small-scale Irrigation Project on Slope Areas	4
	Survey for the Integrated Agricultural Development Project in Quindio	1, 3, 4
	Survey for the Northern Tolima Agricultural Reconstruction Project	3
Costa Rica	Survey for the Atrato Hydroelectric Power Development Project	1, 4
	Survey for Mineral Resources Exploration	8
	Survey for the Caldera Port Maintenance Project	4
	Survey for the Fisheries Resources of the Coast of Costa Rica	10
Dominican Republic	Survey for Limon Integrated Agricultural Development Project	1, 3, 4
	Survey for the Development Project of the Port of San Pedro de Macoris	1, 4
Ecuador	Survey for the Aguacate-Guayabo Agricultural Development Project	4
	Survey for Project Follow-up in Mining Development	11
	Survey for the Guayaquil City Urban Transportation Plan	4
Guatemala	Survey for Forest Inventory in the Northeastern Region	10
	Survey for the Chespi Hydroelectric Power Development Project	4
	Survey for the Groundwater Development Project in Guatemala City	4
	Survey for the Development Project of Santo Tomas de Costilla	3
Jamaica	Survey for the Monjas Irrigation Project	3
	Survey for the Modernization and Expansion of the Rio Cobre Irrigation Scheme	4
Mexico	Survey for the Repair Dockyard of Lazaro Cardenas	3, 4
	Survey for the Air Pollution Control Plan in the Federal District	1, 3
	Survey for La Primavera Geothermal Development Project	4
Panama	Survey for Mineral Resources Exploration	8
	Survey for Alternatives to the Panama Canal	3
	Survey for the Corredor Sur Development Project in the Panama Metropolitan Area	4
	Survey for the Coal-Fired Power Plant Project	4

AREA COUNTRY	NAME OF DEVELOPMENT SURVEY	CLASSIFIED NO.
Paraguay	Survey for Urban Transport in the Asuncion Metropolitan Area	1
	Survey for the Storm Drainage System Improvement Project in Asuncion City	1, 4
	Survey for the Principal Grain Production Increase Project in the Central Area of Itapua	1
	Survey for the Water Pollution Control Plan for the Lake Ypacarai and its Basin	3
	Survey for Fertilizer Production Plant	4
Peru	Survey for the Development Project of Lima International Airport	1, 4
	Survey for the Topographic Mapping Project	2
	Survey for the Disaster Prevention Project in the Rimac River Basin	1, 3, 4
	Survey for Mineral Resources Exploration	8
Uruguay	Survey for the Establishment of Tree Plantation and Utilization of Timber	1
Argentina, Peru	Survey for Economic and Technical Cooperation (Evaluation)	11
Brazil, Mexico, Panama	Survey for Economic and Technical Cooperation (Evaluation)	11
<b>OCEANIA</b>		
Papua New Guinea	Survey for Detailed Design of the Bercina Malalaua Road	3, 7
	Survey for Project Identification	11
Western Samoa	Survey for the Development of Ports	1, 3, 4
Fiji, Tuvalu	Survey for the Fisheries Resources	10
Fiji, Kiribati, Vanuatu, Western Samoa	Survey for Project Identification	11
Fiji, Tonga, Western Samoa	Survey for Economic and Technical Cooperation	11
Cook Islands, Kiribati, Tuvalu	Survey for Mineral Resources Exploration in the South Pacific Offshore area	8
<b>UNSPECIFIED</b>		
Malaysia, Pakistan, Thailand, Egypt, Guyana, Mexico	Survey for Project Identification in Mining and Industry	

AREA COUNTRY	NAME OF DEVELOPMENT SURVEY	CLASSIFIED NO.
Egypt, Oman, Kenya, Tanzania	Survey for Project Follow-up in Mining and Industry	
Morocco, Kenya, Thailand	Survey for Project Follow-up in Mineral Resources Exploration	
China, Mali, Malawi, Niger, Mexico, Bolivia, Papua New Guinea	Survey for Project Identification in Mineral Resources Exploration	

## Chapter 2.

### Grant Aid Programme

#### 1. Outline

The programme is aimed at facilitating Japan's grant aid cooperation to developing countries *in accordance with international agreements.*

The grant aid cooperation is one form of extending financial assistance without repaying obligation. This category includes general grant aid, fisheries grant aid, food assistance, assistance for increased food production, etc. Of these, the Agency deals with general grant aid, fisheries grant aid and assistance for increased food production which are closely related to technical cooperation.

The general grant aid is to offer funds needed to improve or expand the facilities such as technical cooperation centres, hospitals, schools, research institutes and others, while the fisheries assistance is intended to help improve or expand fisheries training facilities including training boats.

The facilities closely related to technical cooperation include vocational training centres and others which are needed for the realization of technical cooperation, facilities to be improved according to the basic design made by Japanese survey teams and facilities used for technology transfer from Japan through dispatch of Japanese experts overseas and acceptance of overseas trainees.

Aid for increased food production is extended to solve the food shortage problem by furnishing funds to the developing countries for the purchase of fertilizers, agricultural chemicals and equipment and thus supporting their self-reliant efforts to increase their food production.

*Major activities of the Agency under this cooperation programme are:*

(1) basic design study as part of technical cooperation through dispatch of survey teams to examine and assess the technical and economic viability of the project, to make general layout and design and to estimate cost of the project; (2) liaison, consultation and good offices in regard to the contracts concluded between a developing country and a Japanese private enterprise, including study of specifications of facilities and equipment to be offered from Japan and examination of the contents of contracts; (3) liaison, consultation and arrangements with local or Japanese banks of banking agreements, examination of the contents of contracts, and studies and surveys (on-the-spot surveys and investigation of the progress of activities) so as to facilitate grant aid.

## 2. Performance in 1986

The Agency provided grant aid for 184 overseas projects, as listed below:

AREA COUNTRY	CASE	EXPENSES (¥ Million)	
<b>ASIA</b>			
Bangladesh	Equipment Supply for the Improvement of Medical Equipment for the Institute of Cardiovascular Diseases	303	
	Construction of the Food Grain Storage	1,104	
	Equipment Supply for the Improvement of Water Supply System in New District Towns	1,580	
	Construction of the Meghna Bridge	1,195	
	Equipment Supply for the Replacement of Weather Surveillance Radars	636	
	Equipment Supply for the Replacement of Medium-Wave Transmitter	373	
	Equipment Supply for the Improvement of the Fire Fighting and Rescue Equipment	250	
	Material and Equipment Supply for the Increase of Food Production	1,200	
	Burma	Construction of the Youth Training Centre	1,834
		Construction of the Irrigation Technology Centre	2,429
Material and Equipment Supply for the Increase of Food Production		2,500	
Bhutan	Construction of Roads and Bridges	1,488	
	Material and Equipment Supply for the Increase of Food Production (Under the Farm Land Development Project)	200	
China	Equipment Supply for the Agricultural Development	666	
	Equipment Supply for the Establishment of Rehabilitation Research Centre for the Physically Disabled	2,020	
	Equipment Supply for the Establishment of Changchun Purification Facilities	1,465	
	Construction of the Japan-China Youth Centre	1,960	
	Material and Equipment Supply for the Increase of Food Production	500	
	Equipment Supply for the Improvement of Medical Equipment for the China-Japan Friendship Hospital	574	
	Equipment Supply for the Improvement of Research Equipment of the Beijing Vegetable Research Centre	342	
India	Equipment Supply for the Improvement of Medical Equipment for the Sanjay Gandhi Post Graduate Institute	1,973	
	Material and Equipment Supply for the Increase of Food Production	600	
Indonesia	Material Supply for the Pest and Disease Forecasting and Control Project	1,230	
	Construction of the Electronic Engineering Polytechnic Institute	1,895	
	Equipment Supply for the Improvement of the Volcanic Sabo Technical Centre	963	

AREA COUNTRY	CASE	EXPENSES (¥Million)	
Indonesia	Material and Equipment Supply for the Increase of Food Production	2,400	
	Equipment Supply for the Development of Urban Fire Prevention and Fire Fighting System	498	
	Equipment Supply for the Improvement of Ujung Pandang Rating School	474	
	Equipment Supply for Expansion of the Tropical Rain Forest Research Centre	235	
Laos	Equipment Supply for Rehabilitation of Substations in the Vientiane Area	513	
	Material and Equipment Supply for the Increase of Food Production	400	
Malaysia	Equipment Supply for the the THA NGON Rehabilitation and Rural Development	642	
	Construction of the ASEAN Poultry Disease Research and Training Centre	873	
Maldives	Equipment Supply for the Telecommunications Development Project	965	
Nepal	Equipment Supply for the Rural Telecommunications Network Improvement Project	2,245	
	Equipment Supply for the Reinforcement of Power Distribution Network in Kathmandu Valley	490	
	Construction of the Food Storage	1,120	
Pakistan	Material and Equipment Supply for the Increase of Food Production	2,100	
	Equipment Supply for the Improvement Project for Research Equipment of H.E.J. Research Institute of Chemistry, University of Karachi	1,238	
	Construction of the High Voltage and Short Circuit Testing Laboratory	106	
	Material and Equipment Supply for the Increase of Food Production	2,700	
	Equipment Supply for the Upgrading Project for Pakistan Marine Academy	510	
	Equipment Supply for the Improvement of Medical Services for Sind Arid Zone	842	
	Equipment Supply for the Improvement Project for Educational Equipment of Mehran University of Engineering and Technology	1,282	
	Equipment Supply for the Improvement of Roads in Frontier Areas	1,346	
	Philippines	Equipment Supply for the Establishment of the Food and Drug Laboratories	417
		Equipment Supply for the Establishment of the Occupational Safety and Health Centre	1,969
Construction of the Trade Training Centre		2,432	
Equipment Supply for Development of Out-of-School Youth and Young Adults		392	
Equipment Supply for the Upgrading Medical Equipment of the Philippine Children's Hospital		343	
	Equipment Supply for the Expansion of the Motor Vehicle Inspection System	583	

AREA COUNTRY	CASE	EXPENSES (¥ Million)
Philippines	Material and Equipment Supply for the Increase of Food Production	2,900
	Equipment Supply for the Environmental and Hygienic Improvement in Metropolitan Manila	850
Sri Lanka	Equipment Supply for the Establishment of the Pharmaceutical Formulation Centre of Essential Drugs	704
	Equipment Supply for the Establishment of the National Youth Centre	1,806
	Equipment Supply for the Establishment of the Central Store for Medical Supplies and Equipment	1,343
	Material and Equipment Supply for the Increase of Food Production	2,800
	Equipment Supply for the Establishment of the Plant Genetic Resources Centre	973
	Equipment Supply for the Improvement of Drinking Water Supply	670
	Equipment Supply for the Improvement of the Institute of Fundamental Studies	877
Thailand	Construction of the Social Education and Cultural Centre	2,322
	Equipment Supply for the Expansion of King Mongkut's Institute of Technology	712
	Construction of National Waterworks Technology Training Institute	621
	Equipment Supply for the Establishment of the Metal-Working and Machinery Industries Development Institute	1,911
	Equipment Supply for the Establishment of the Centre for Maize Quality Improvement	680
	Equipment Supply for the Establishment of the Educational and Public Services Broadcasting Station Channel II	2,062
	Equipment Supply for the Malaria Control Programme	467
	Material and Equipment Supply for the Increase of Food Production	3,200
<b>MIDDLE EAST</b>		
Egypt	Construction of the Education and Culture Centre	2,966
	Equipment Supply for the Establishment Project of the Construction Equipment Training Centre	471
	Equipment Supply for the Expansion Project of Cairo University Pediatric Hospital	134
	Material and Equipment Supply for the Increase of Food Production	500
North Yemen	Material and Equipment Supply for the Increase of Food Production	500
	Equipment Supply for the Rural Water Supply Project	319
Morocco	Material and Equipment Supply for the Increase of Food Production	300
	Equipment Supply for the Expansion of the Institute of Technologies of Marine Fishery in Agadir	641
	Equipment Supply for the Construction of Dams	550
Sudan	Equipment Supply for the Establishment of the Telecommunications Network in the Gezira Area	2,952

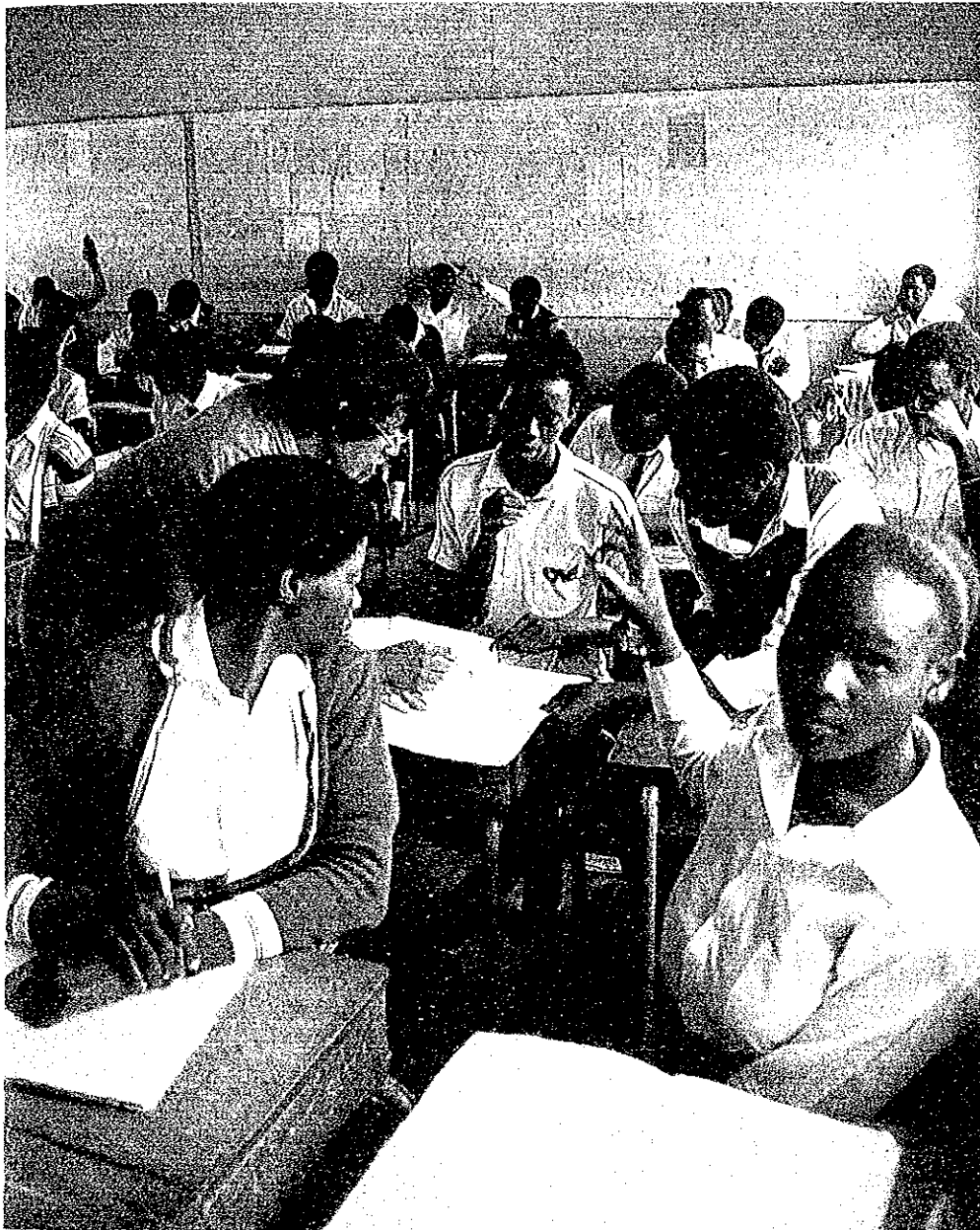


AREA COUNTRY	CASE	EXPENSES (¥ Million)
Sudan	Equipment Supply for the Water Supply Project in Kassala Province	646
	Construction Project of Food Grain Warehouses	991
	Material and Equipment Supply for the Increase of Food Production	1,200
AFRICA		
Benin	Material and Equipment Supply for the Increase of Food Production	200
Burkina Faso	Equipment Supply for the Road Improvement	330
	Material and Equipment Supply for the Increase of Food Production	200
Burundi	Equipment Supply for the Water Supply for Agriculture	406
	Construction of Garage for Bus	489
	Material and Equipment Supply for the Increase of Food Production	250
Cape Verde	Equipment Supply for the Development of Equipments for Marine Wireless Communication	310
Central Africa	Material and Equipment Supply for the Increase of Food Production	250
	Equipment Supply for the Road Improvement	4,936
Djibouti	Equipment Supply for the Road Improvement	297
Ethiopia	Material and Equipment Supply for the Increase of Food Production	650
	Equipment Supply for the Trans-Gambia Ferry Replacement	530
Ghana	Equipment Supply for the Rural Water Supply Project	889
	Material and Equipment Supply for the Increase of Food Production	400
	Equipment Supply for the Rehabilitation Project of Telecommunications External Line Plant in Accra	683
Guinea	Material and Equipment Supply for the Increase of Food Production	300
	Equipment Supply for the Improvement of Electric Power Supply to the Conakry City	635
Ginea-Bissau	Material and Equipment Supply for the Increase of Food Production	150
Ivory Coast	Material and Equipment Supply for the Increase of Food Production	250
	Equipment Supply for the Improvement of Medical Instruments in the University Medical Facility of Treichville	492
	Construction of the Nursery Training Centre for Social Forestry	714
Kenya	Construction of the NYS Engineering Institute	1,574
	Material and Equipment Supply for the Increase of Food Production	800
	Material and Equipment Supply for the Increase of Food Production	200
Lesotho	Material and Equipment Supply for the Increase of Food Production	200
Liberia	Equipment Supply for the Expansion Project for the Educational Television Broadcasting Network	858
	Material and Equipment Supply for the Increase of Food Production	200

AREA COUNTRY	CASE	EXPENSES (¥ Million)
Madagascar	Material and Equipment Supply for the Increase of Food Production	300
	Equipment Supply for the Urban Roads Improvement	398
Malawi	Equipment Supply for the Development of Petty Fishery	487
	Material and Equipment Supply for the Increase of Food Production	350
Mali	Equipment Supply for the Development of Agriculture in Baguiné	550
	Material and Equipment Supply for the Increase of Food Production	300
Mauritania	Material and Equipment Supply for the Increase of Food Production	350
Mauritius	Construction Project of the Marine Shrimp Culture Experimental Station	849
Mozambique	Equipment Supply for the Quelimane Fishing Port Improvement Project	1,196
	Material and Equipment Supply for the Increase of Food Production	900
Niger	Construction of Storehouses of Cereals	840
	Material and Equipment Supply for the Increase of Food Production	600
	Equipment Supply for the Intensification of Urban Traffic Facilities	660
Nigeria	Material and Equipment Supply for the Increase of Food Production	250
	Equipment Supply for the Improvement Project for the Facilities of Nigerian Institute for Oceanography and Marine Research	1,000
Rwanda	Equipment Supply for the Utilization of Subterranean Water in the East Part of Rwanda	400
	Material and Equipment Supply for the Increase of Food Production	300
Senegal	Equipment Supply for the Improvement of National Routes	353
	Material and Equipment Supply for the Increase of Food Production	600
	Construction of Broadcasting Station (Radio and TV)	900
	Equipment Supply for the Improvement of the System of Disposal of Waste Materials	750
Seychelles	Equipment Supply for the Coastal Fisheries Development Project	350
Sierra Leone	Equipment Supply for the Rural Water Supply Project	450
Somalia	Equipment Supply for the Rehabilitation of the Mogadishu Water Supply Facilities	151
	Equipment Supply for the Ground Water Development Project in Lower Shabelli	631
	Material and Equipment Supply for the Increase of Food Production	300
Tanzania	Equipment Supply for the Rehabilitation, Maintenance and Construction of Roads	286
	Equipment Supply for the Reinforcement of Electric Power Distribution Network in Dar es Salaam	1,320

AREA COUNTRY	CASE	EXPENSES (¥ Million)
Tanzania	Material and Equipment Supply for the Increase of Food Production	800
	Equipment Supply for the Development Project for Medium Wave Radio Broadcasting Network	864
	Equipment Supply for the Agricultural Transportation Reinforcement Project	400
Togo	Equipment Supply for the Malaria Control Programme	500
	Equipment Supply for the Utilization of Subterranean Water	150
	Material and Equipment Supply for the Increase of Food Production	200
Uganda	Material and Equipment Supply for the Increase of Food Production	200
Zaire	Equipment Supply for the Improvement of Equipment in the Medical Facilities of the University of Kinshasa	750
	Material and Equipment Supply for the Increase of Food Production	700
	Equipment Supply for the Road Improvement in the Area of Shiba	583
Zambia	Construction of a Junior Secondary School at Meheba Refugee Settlement	139
	Equipment Supply for the Improvement Project of Lusaka Water Supply System	928
	Material and Equipment Supply for the Increase of Food Production	800
	Equipment Supply for Agricultural Land Development	623
	Equipment Supply for the Human Resources Development Project	750
Zimbabwe	Material and Equipment Supply for the Increase of Food Production	200
	Material and Equipment Supply for the Increase of Food Production	200
	Equipment Supply for the Rehabilitation Project of Rural Road Network	267
<b>LATIN AMERICA</b>		
Bolivia	Construction of the Pisciculture Development Centre	805
	Material and Equipment Supply for the Increase of Food Production	700
	Equipment Supply for the Improvement of Medical Equipment	710
	Equipment Supply for the Rehabilitation, Maintenance and Improvement of Roads	510
Chile	Material and Equipment Supply for the Increase of Food Production	200
	Construction of the Puerto Montt Petty Fishery Complex	756
Dominican Republic	Material and Equipment Supply for the Increase of Food Production	300
El Salvador	Equipment Supply for the National Emergency and Reconstruction	270
Haiti	Equipment Supply for the Extinction of Malarial Fever	300

AREA COUNTRY	CASE	EXPENSES (¥ Million)
Haiti	Material and Equipment Supply for the Increase of Food Production	500
Honduras	Equipment Supply for the Road Improvement	300
	Equipment Supply for the Model of Agricultural Community Integral Development	826
Paraguay	Material and Equipment Supply for the Increase of Food Production	600
	Material and Equipment Supply for the Increase of Food Production	200
	Construction of the Paraguayan-Japanese Centre for Development of Human Resources	935
Peru	Material and Equipment Supply for the Increase of Food Production	500
	Equipment Supply for the Improvement of Potable Water Supply and Sewerage Installation in Chosica City	1,040
	Construction of the Paita Fishery Training Centre	1,241
	Material and Equipment Supply for the Increase of Food Production	200
<b>OCEANIA</b>		
Fiji	Equipment Supply for the Lautoka Fishing Port Improvement Project	1,312
Kiribati	Construction of the Batio-Bairiki Causeway and Fisheries Channel	189
Marshall	Equipment Supply for the Improvement Project of Water Supply System of Majuro Atoll	403
Micronesia	Equipment Supply for the Yap Fishing Harbour Preparation Project	624
Papua New Guinea	Equipment Supply for the Improvement of Radio Broadcasting Stations	794
Solomon Islands	Equipment Supply for the Medical Equipment Supply Project	524
	Construction of the Malaria Training and Research Centre	623
Tonga	Equipment Supply for the Improvement of Roads	205
	Construction of the Preparation and Extension Centre for Handicraft/Cultural Resource	516
Vanautu	Construction of Regional Commercial Centre	396
Western Samoa	Construction of Terminal Facilities of Faleolo International Airport	449
	Material and Equipment Supply for the Increase of Food Production	200



*Japan Overseas Cooperation Volunteers Programme: a JOCV member teaching mathematics at a secondary school in Zambia*



## Chapter 3.

### Japan Overseas Cooperation Volunteers Programme (JOCV)

#### 1. Outline

This programme is designed to promote and assist the cooperation extended by Japanese young people for the socio-economic progress of developing countries.

The young volunteers participating in this programme undergo training to acquire techniques and skills required by developing countries and are charged with a mission to cooperate in their nation-building.

The characteristics of the JOCV Programme are that these Japanese young people are sent in order to deepen mutual understanding through personal contacts with the peoples of developing countries and cooperate with local people in nation-building that these countries seek through economic and social development.

Based on the requests made by developing countries, the Agency, in cooperation with prefectural governments and private organizations, publicly recruits volunteers twice a year and give them a four-month preassignment training. After this, the volunteers are sent to developing countries for assignment.

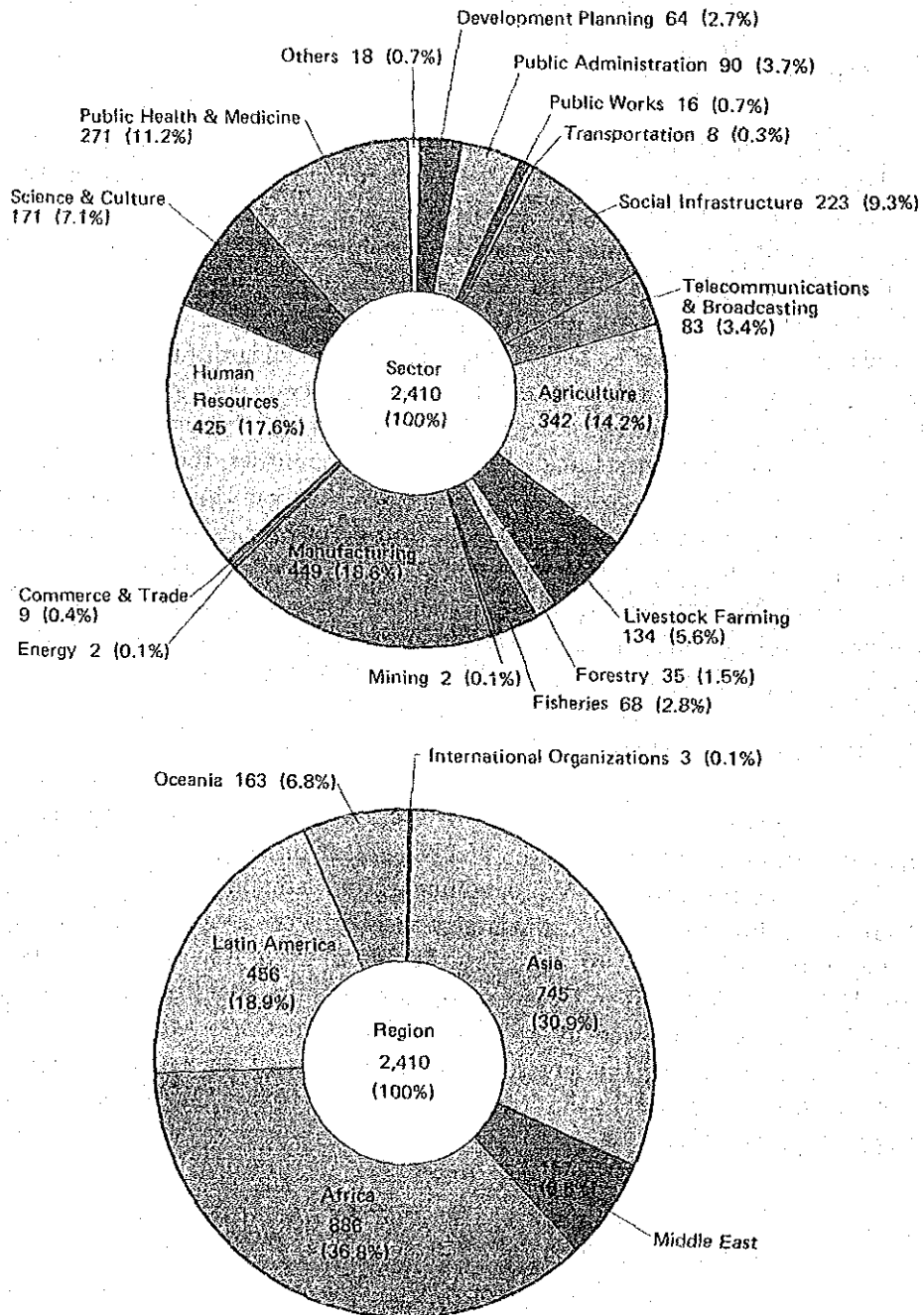
The sector covered by this programme has a wide range and includes agriculture, forestry and fisheries, civil engineering and construction, health and hygiene, mining and manufacturing, education, sports, and other fields.

#### 2. Performance in 1986

There were 822 volunteers sent overseas in 1986, bringing the total to 2,410 including those in service from the preceding year on. The cumulative number has reached 7,248 since the JOCV programme was initiated in 1965. Of the total figure 2,410 for 1986, 886 (36.8%), the largest number, were assigned to Africa. This was followed by 745 (30.9%) to Asia, 456 (18.9%) to Latin America, 157 (6.5%) to the Middle East, 163 (6.8%) to Oceania. By country, the largest number, 174 were assigned to Kenya, followed by 156 to the Philippines and 146 to Malawi. In the distribution by sector, the largest ratio was accounted for by manufacturing with 449 (18.6%), followed by human resources with 425 (17.6%), agriculture with 342 (14.2%).

**Fig. 1 Number of Japan Overseas Cooperation Volunteers Dispatched by Sector and Region (1986) (including those in service from the preceding year on)**

(Unit: Person)





**Fig. 2 Total Number of Japan Overseas Cooperation Volunteers Dispatched by Sector and Region (1956-1986)**

(Unit: Person)

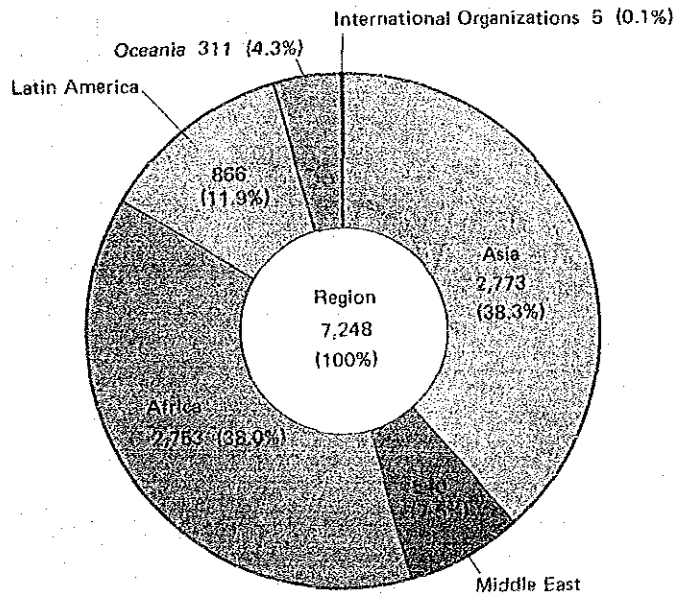
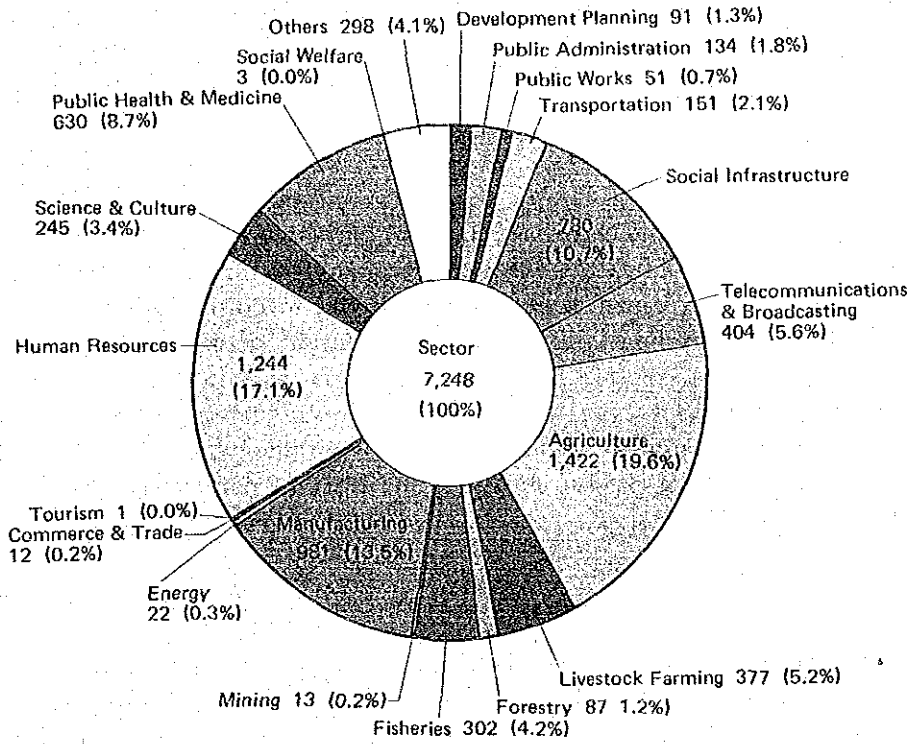
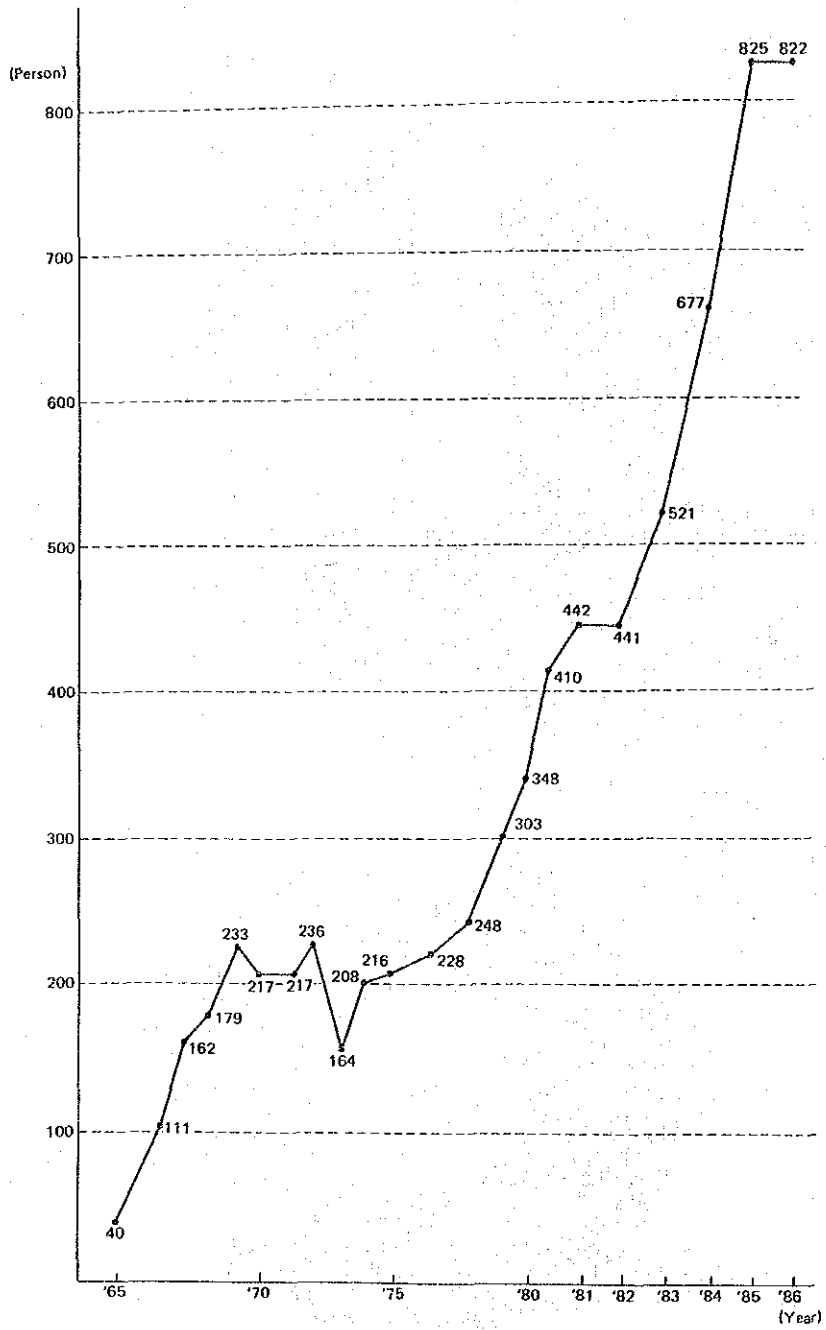


Fig. 3 Number of Japan Overseas Cooperation Volunteers Dispatched by Year



## Chapter 4.

### Development Cooperation Programme

#### (Investment in and Financing of Development Projects)

##### 1. Outline

The Agency offers long-term, low-interest loans to Japanese corporations (including foreign corporations financed by Japanese firms) which require funds for improvement and expansion of facilities and for experimental projects in developing countries to promote social development, agricultural and forestry development and mining and manufacturing activities.

Such funds are used in projects which do not pay on commercial basis, e.g. improvement of related facilities, bridges and other infrastructure facilities and experimental projects such as cultivation of new crops, development of mining resources and mining activities which are risky.

##### 2. Performance in 1986

During fiscal 1986, the Agency consented to give 1,200.9 million yen for 7 experimental projects. The loans totaled 1,354.6 million yen for 30 projects. On a contract basis, loans for the expansion of facilities reached 33 million yen and those for experimental projects 1,321.6 million yen. Basic surveys and technical guidance conducted during fiscal 1986 were as follows:

Basic surveys	
Basic surveys related to facilities .....	2
Basic surveys related to experimental projects .....	15
Technical guidance	
Dispatch of experts .....	35
Acceptance of overseas trainees .....	25

## Chapter 5.

### Emigration Services

#### 1. Outline

Emigration of Japanese people dates back to 1868 when about 150 persons went to Hawaii. Since then, the number of emigrants to North and Latin America increased steadily. Emigration was suspended after the outbreak of World War II but was resumed after the war, and the first postwar emigrants left Japan for Brazil in 1952.

Japanese emigrants' activities in their new countries have been diversified from agricultural to industrial fields. In the future, emigration connected with economic cooperation and technical assistance projects may be expected.

The agency is carrying out the following activities to further promote the emigration of Japanese people:

- (1) Diffusion of information and guidance on overseas emigration
- (2) Various types of training and study meeting for those wishing to emigrate
- (3) Improvement of living environment in the countries where the Japanese are emigrating
- (4) Guidance and counselling to the prospective emigrants in such fields as agricultural management, technical services and financial aids

#### 2. Performance in 1986

During fiscal 1986, 91 Japanese emigrated to four Latin American countries – Brazil, Paraguay, Argentina and Bolivia. Qualification certificates for the emigration to Canada were issued to 18 persons. Australia accepted 37 persons.

Consultations about overseas emigration totaled 3,946 cases during fiscal 1986 (606 cases for Latin America, 2,093 cases for North America and Australia, and 1,247 for other destinations). Subjects of consultation cover a wide range, including the latest information on social conditions of the destination countries and the type of emigration.

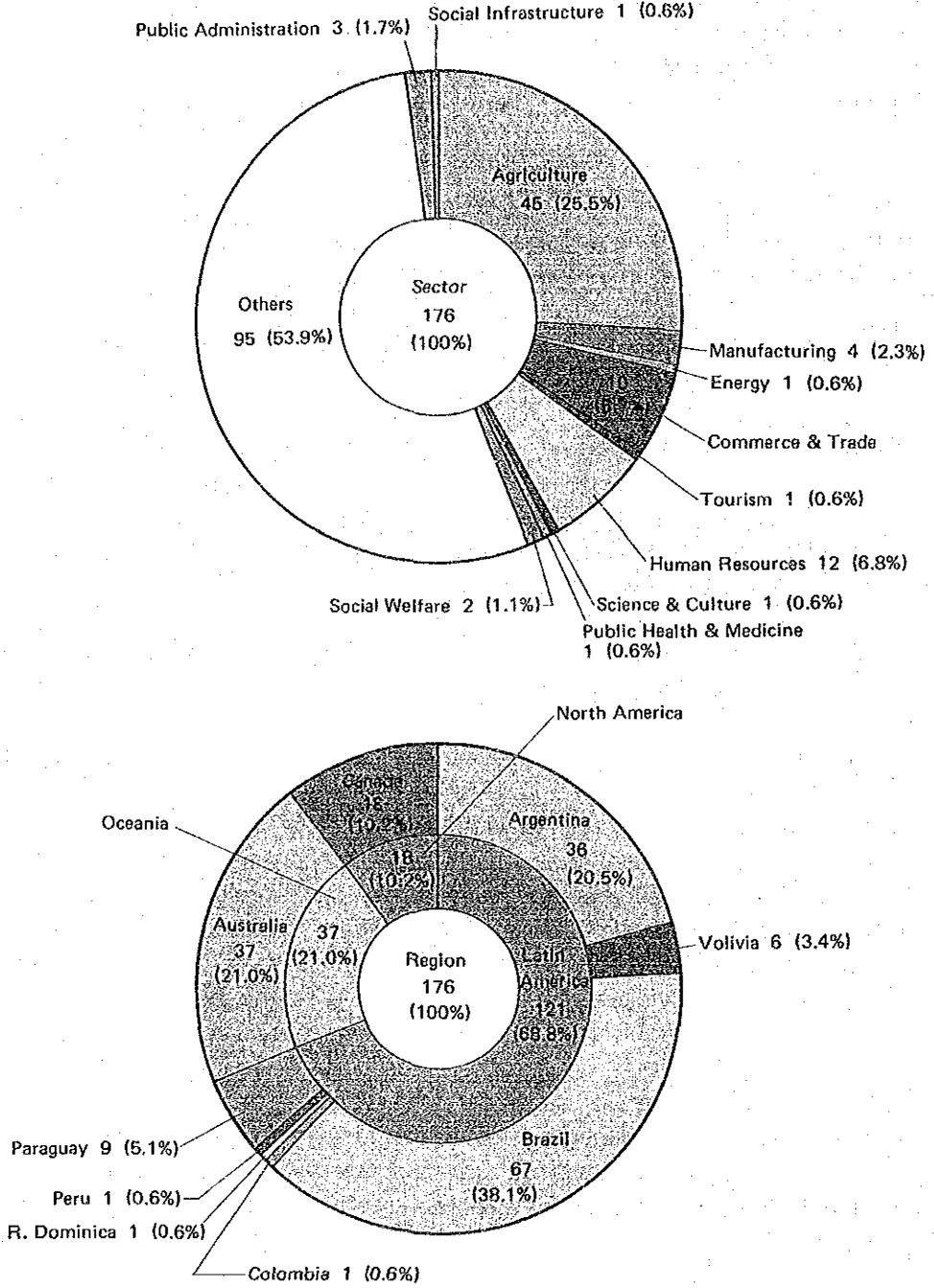
As for the assistance to Japanese emigrants abroad, the Agency extended financial aids to them for improvement of medical services, which are the basis for stabilization of their lives, for educational facilities, for construction of roads and for electricity supply for settlements. Loans were also provided for agricultural management.

The Overseas Development Youth Programme: This programme was initiated in 1985 for the purpose of recruiting skilled young Japanese who are interested in overseas emigration and providing them with an opportunity to live and work in South America for three years before deciding to or not to live there permanently.

During fiscal 1986, 29 young Japanese dispatched to 6 countries: Brazil 15, Argentina 5, Bolivia 3, Paraguay 4, Peru 1 and Dominican Republic 1.

Fig. 1 Emigration by Sector and Region (1986)

(Unit: Person)



## Chapter 6.

# Recruiting and Training of Qualified Japanese Experts for Technical Cooperation

### 1. Outline

While there are many capable persons in technical fields in Japan, the present employment system is hampering the recruitment of qualified experts for assignment to overseas technical cooperation activities. To improve this situation, the Agency has adopted the Experts Registration System and the Experts Pooling System which are aimed at pooling experts who have returned to Japan after completion of their overseas assignments or other experts who have expressed their intention to be dispatched abroad. For the smooth recruitment of qualified persons, the Agency has also adopted the Domestic Wage Supplement System for local public bodies and private enterprises which are cooperative in releasing their employees for overseas assignment.

To further improve the quality of experts, the Agency conducts pre-departure training courses in foreign languages and in technical fields, and medium-term training courses in Japan and abroad, which provide extensive training on foreign languages and specialized techniques for experts to be assigned overseas in the near future, and also long-term training courses at well-known research institutes or universities in foreign countries to train highly qualified technical experts who will seek their career in technical cooperation.

The Agency established the Institute for International Cooperation as an affiliated organ in Oct. 1983. The Institute recruits and trains Japanese experts who will seek their career in technical cooperation. It also gathers information on the experiences and performances of Japanese experts in cooperation activities and on the basis of it, studies effective methods of technology transfer to developing countries.

### 2. Performance in 1986

In fiscal 1986 the institute recruited 5 career experts as development specialists who will be involved in JICA's cooperation activities throughout their careers.

This programme was conducted as follows:

**Orientation and Training Programmes in 1986**

<b>Programmes</b>	<b>Participants</b>
Pre-Departure Orientation Programme	777
Individual Language Training Programme	14
Technical Training Programme	81
Medium-term Training Programme	120
Overseas Training Programme	23
Special Technical Training Programme	7
Comprehensive Training Programme	73
International Cooperation Seminar	1,214
<b>Total</b>	<b>2,309 Persons</b>