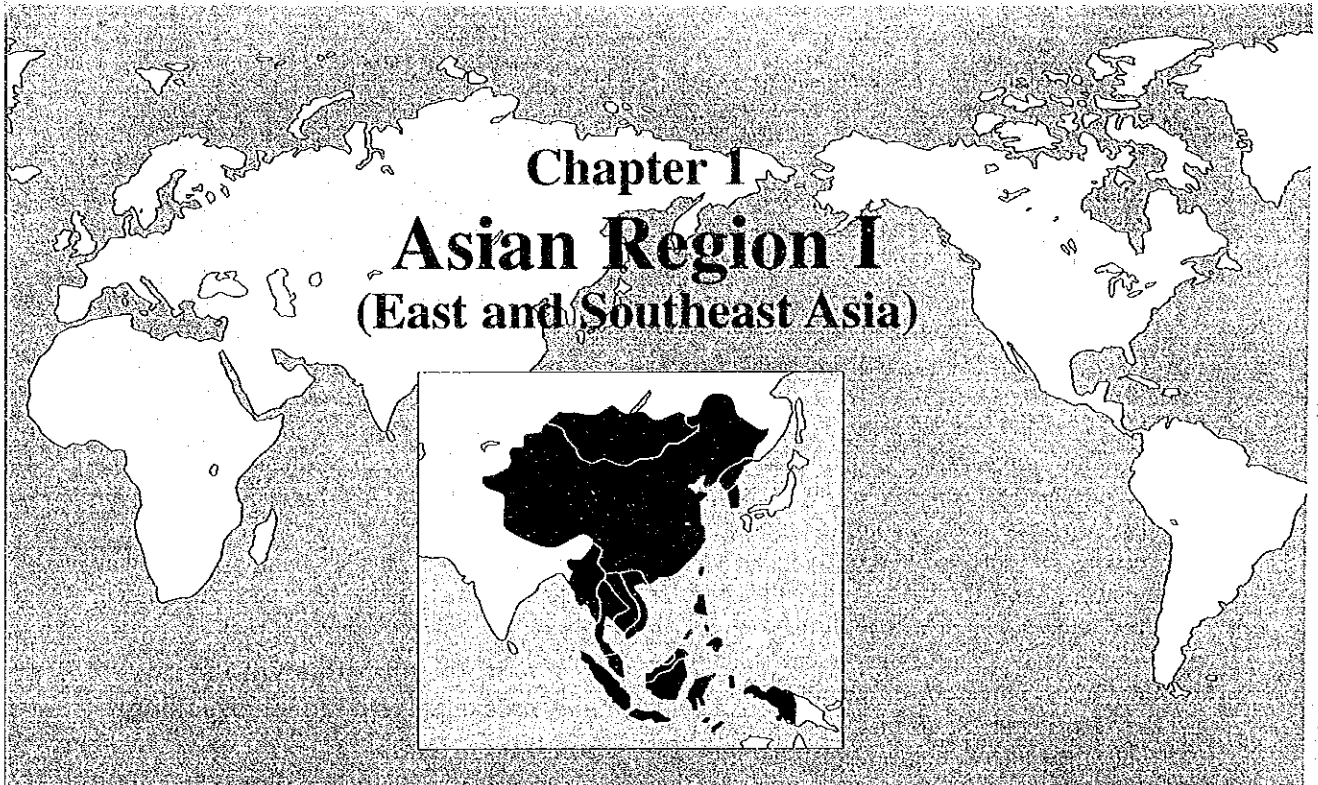


**Part 2**  
**Regional activities**

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**Population concentration in regions extending from the tropical to the subtropical zones**

East and Southeast Asia is a large region extending from eastern Hokkaido in the east to the Pamir plateau in the west and from the Timor Sea, south of Indonesia, in the south to the southern edge of Russia in the north.

JICA has put its aid activities in operation in China, Republic of Korea and Mongolia, on the eastern tip of the Eurasian continent, Vietnam, Laos, Cambodia, Thailand, Malaysia and Myanmar, on the Indochinese peninsula, and in the island nations of Singapore, the Philippines and Indonesia.

This region is the most populous region in the world containing China, with a population of 1.2 billion, one fifth of the world population, and Indonesia, the seventh most populous country with a population of 190 million.

Being such an extensive region, there is a wide range of climatic, topographic and other conditions, encompassing as it does, subarctic, temperate and tropical climates. While there are regions covered with evergreen and broadleaf trees, in the central continental region

lie the Gobi and Takla Makan deserts.

The people are also varied, with a religious diversity including countries with a majority of Muslims and countries where Buddhism is the state religion.

**Major changes in the region after the end of the Cold War**

Previously political tension existed between liberalist and socialist camps in this region. Following the end of the Cold War, however, a major change has taken place in the political and economic conditions of the countries and the relationships among them.

Specifically, of the Asian socialist states, China, Vietnam and Laos, although maintaining the political system of a single-party communist state, have introduced an economic system based on market principals and have been moving towards economic development. Mongolia and Cambodia have abolished the previous socialist political system and are working towards national reconstruction based on democracy and a market economy. Although the closed political system remains in Myanmar, the policy of an open economy is being promoted.

Accordingly, the relationships between the countries of the region can be understood as economic interrelationship rather than ideological confrontation. In present circumstances, there are movements towards cooperation and joint activities in all sectors and close relationships are being strengthened.

The joining of ASEAN by Vietnam in July 1995 was notable and Cambodia and Laos, who are now observers, will gain official membership into ASEAN in 1997. If Myanmar also realizes its membership, as anticipated, the current ASEAN will be expanded to 10 members (ASEAN 10) and the unification of the Southeast region will be further reinforced. Nevertheless, it is necessary to pay attention to the various influences on relationships among the East and Southeast Asian countries following China's nuclear test in May 1995 and the election of the presidential leader in Taiwan in March 1996.

#### **NIEs countries with rapid economic development**

As seen in the report entitled East Asian Miracle by the World Bank, East and Southeast Asia is the most economically active region. According to the data of The World Development Report issued in 1995 by the World Bank, while the average annual rate of economic growth of the whole world, including advanced countries, from 1980 to 1993 was 2.9%, it reached 7.8% in East Asia and Oceania.

The countries in the region may be divided into several groups according to their economic development.

First, South Korea and Singapore, known collectively as the Asian NIEs (newly industrializing economies)\* have achieved the most rapid economic take-off among the developing countries of the region by adopting economic development strategies of export-oriented industrialization, introduction of foreign investment and low-wage labor-intensive industries. In addition to these two countries, Brunei, which has a wealth of natural resources, has a level of GNP (or GDP) per

capita in line with that of advanced countries. As a result, in January 1996, Singapore and Brunei were removed from the ODA recipient list of DAC and graduated from being developing countries.

In recent years, however, because the ASEAN countries such as Thailand and Indonesia have been in rapid pursuit and the comparative advantage of low wages in the Asian NIEs has been lost, the NIEs have been moving towards conversion to service industries and knowledge and technology-based industries. This has borne fruit and they are continuing to show stable economic growth based on a widened economic base.

#### **The ASEAN countries who show economic growth closely rivalling the NIEs**

The ASEAN countries of Malaysia, Thailand and Indonesia have shown continuous economic development with a vigor which closely rivals the NIEs. Malaysia and Thailand, in particular, are said to be close to becoming NIEs themselves. In these countries, as in the previous NIEs, there has been massive export-oriented industrialization and introduction of foreign capital, against a background of capable, cheap and plentiful labor, and these have provided a driving force for economic development.

Due to the prolonged recession in the advanced countries, double-digit economic growth rates have not been achieved but economic growth has continued at the high annual rate of 7 to 8% for some years and this performance is expected to continue for some time.

The Philippines, which seemed to lag behind the other ASEAN countries, has directed its efforts toward building up the infrastructure against a background of political stability. As a result, its economic growth rate for 1995 recovered to 4.3%. The inflation rate also has stabilized at single-digit levels for the last three years and foreign investment is growing steadily since the IMF authorized a number of deregulations.

\* NIEs: The countries which have rapidly expanded their share in manufacturing and the trade of industrial goods under the policy of export-led industrialization during the 1960s and 1970s. South Korea, Singapore, Hong Kong and Taiwan are included among the Asian countries.

It is, however, necessary to pay attention to growth-induced distortions, such as differences in development levels between urban and rural areas, differences in people's incomes and environmental problems which are the strained down side of rapid economic growth in the ASEAN countries.

### **Countries intending to convert their economic systems**

Another group of countries, aiming to achieve economic take-off by scrapping central economic planning and introducing a market economic system, includes the three Indochinese countries, Mongolia, Myanmar and China.

Cambodia, Laos and Vietnam have a low GDP of slightly over 200 dollars per capita, reflecting their history of conflict. With the disintegration of the Soviet Union and the end of the Cold War, there has been a marked decrease in aid for these countries and they have begun to engage in national reconstruction and economic stimulation by restoring relations with the advanced countries of the West.

Vietnam decided in 1986 to adopt a policy of renovation (Doi Moi), the principal parts of which are agricultural reform such as agricultural cooperatives reform, price and exchange rate liberalization, economic liberalization such as the development of the private sector, and financial reform such as the reduction of subsidies, introduction of direct investment and trade liberalization.

Laos also decided in 1986 to adopt a "New Economic Mechanism" policy with the aim of converting from a self-sufficient economy to a market economy, under the slogan, "New Thoughts".

Such attempts at economic reform have been hailed as steadily producing results. Vietnam, in particular, against a background of the wealth of natural resources and population, has been highlighted as a promising investment market and foreign capital is rushing into the country since the lift of the American economic embargo in February 1994.

In Cambodia, the civil war was ended by the

signing of the Paris Peace Accord in October 1991. Subsequently, with the aid of United Nations Transitional Authority in Cambodia (UNTAC), a new constitution was promulgated in September 1993 proclaiming a constitutional monarchy, and the political situation has become much more stable. However, the long years of conflict have damaged the human resources, systems related to national management and the sector of infrastructure.

Mongolia, which has been engaged in economic reform since 1987, has made both a substantial shift toward democratization, with universal suffrage being implemented in 1990, and also introduced a comprehensive market economy system. However, due to the rapid reform of the economic system and the rapid reduction of aid from the former Council for Mutual Economic Assistance (COMECON) countries, it has experienced unprecedented economic hardship. Subsequently, it has moved towards recovery and there have been optimistic signs, such as the first positive growth rate since the reforms being recorded in 1994.

In February 1996, the 5th Consultative Group meeting for Mongolia was held in Tokyo, under the joint chairmanship of Japan and the World Bank. At this meeting, Mongolia was highly appraised for its efforts in economic management, and strategies were discussed for continuing economic reform by retaining the current growth.

In Myanmar, after the military seized power in 1988, the distinctive socialist economic policy known as the "Ne Win System" which was previously in force was abolished and moves towards a course of open economy were made. The implementation of policies such as privatization of state industries, promotion of private investment and liberalization of transactions have produced the basic economic conditions for recovery since 1992. The increase of investment from the ASEAN countries in search of cheap labor, in particular, has been a major driving force for economic stimulation.

In terms of politics, the house arrest of Aung San Suu Kyi was lifted in July 1995 and the relationship between the Karen and other minorities and the current administration has been ameliorated. These are signs of progress in democratization but it is necessary to pay attention to future developments.

China adopted policies of reform and opening up in 1979. Although experiencing some vicissitudes, China has shown rapid economic growth since 1992. The Chinese economy has been the most active economy in the East and Southeast Asian region and is increasingly influential.

On the other hand, China has problems with inflationary pressure due to economic overheating, large financial deficits, bottlenecks of energy/transport and so on, and deficits in nationalized industries. In addition, other problems have become evident such as the gap between the economically active coastal area, which has Special Economic Zones\* and absorbs the vigorous investment, and the inland area, which depends on traditional agriculture; the gap between the urban and farming areas; and the development-induced destruction of the environment.

While China has the largest population in the world, there has been no increase in cultivated acreage. It is necessary to pay attention to food production from now on. In the ninth five-year plan (1996-2000) adopted in March 1996, agricultural production was defined as the most essential topic and food production increase was aimed at 500 million tons although it is estimated that the aim will be difficult to achieve.

It can be assumed that if a serious food shortage occurs in China, the impact on the world (Japan being no exception) will be great.

### **JICA activities in East and Southeast Asia**

In 1995, \$4.19854 billion (39.8% of the total) of Japan's bilateral ODA was extended to East and Southeast Asia. Technical cooperation comprised \$1.15345 billion (33.4%), grant aid \$793.43 million (26.7%) and loans \$2.25165

billion (54.6%).

For JICA's activities alone, the regions accounted for ¥50.326 billion, 35% of the total, on the 1995 cost basis.

JICA activities in East and Southeast Asia rank highest whether considered in terms of form, expense or number of personnel. In terms of country-specific data, most of the leading recipient countries are located in this region. Furthermore, Japan is the largest donor to each of the countries so it is no exaggeration to describe East and Southeast Asia as JICA's most important region.

We have looked at the economic development of the countries in the region and JICA extends the following aid to each country as follows.

### **Main points of aid to the ASEAN countries**

It is important to promote aid to ensure that the current steady economic development of the ASEAN countries excluding Vietnam should continue. Emphasis is placed on cooperation linked to the provision and enhancement of infrastructure (including institutions), fostering and support of small- and medium-scale enterprises (supporting industries) to raise the standard of the industrial structure, improvement of scientific and technical research capabilities to support industrial development, personnel training capable of adapting to high-grade industry (in particular, promotion of science and mathematics in primary and middle education, substantial higher education and vocational training).

Another stress is placed on cooperation to promote trade and investment as a driving force for economic growth.

Specifically, project-type technical cooperation has been implemented towards the Malaysia External Trade Development Corporation since July 1994, targeting personnel training for the encouragement of export.

Thailand has adopted the protection and reinforcement of industrial property rights as

\* Special Economic Zones: zones adopting special policies aiming to encourage the promotion of the introduction of foreign capital and technology. Shenchuan and Zhuhai are representative examples.

# Cambodia

Towards improvement of maternal and child health in newly born Cambodia

## Maternal and Child Health Project

Personnel shortage is a serious problem in the field of maternal and child health. The training for nurses and midwives is urgently required.

### Strengthening function of maternal and child health center

The World Children White Paper 1995, published by UNICEF, points out that the conditions of maternal and child health in Cambodia mark the lowest level in the world. The death rate per annum during the delivering process is 500 women per 100,000 neonatal (in Japan only 11 women per 100,000) while in regard to babies under one year old, 115 babies out of 1,000 are neonatal (in Japan only 5 per 1,000). With regard to infants under five years old, 181 out of 1,000 die each year (in Japan only 6 out of 1,000) and delivery attended by midwives and doctors in Cambodia is 47% compared with 100% in Japan.

JICA has been supporting Cambodia, engaged in reconstruction and development at national level since the enforcement of a general election under the observation of the United Nations in 1993, and started a maternal and child health project in April 1995, targeting the improvement of the poor conditions of maternal and child health, as the first project-type technical cooperation after the resumption of aid.

In this project, it is a main aim to strengthen the function of the national maternal and child health center, an organ responsible for implementation of the national plan of maternal and child health in Cambodia (adopted in 1993). JICA is carrying out programs to improve the management capability of the center, strengthen training programs and to raise the level of prognosis and treatment in line with the construction of a new center (hospital).

The construction of a new center launched in December 1995 with Japan's grant aid is under way at a fast pace for completion in March 1997.



### In cooperation with other aid organizations

A project team set up an advisor's group for the national maternal and child health center and has been carrying out the program based on mutual assistance, keeping a close contact with organizations such as UNICEF, UNFPA, WHO and AUSAID as well as individual volunteers, such as midwives from the UK and Belgium, to avoid the overlap of activities.

In JICA's cooperation, the activities are developed, which focus on the training of medical care personnel mainly for safe pregnancy and delivery and neonatal care within the maternity protection program and on the reinforcement of treatment.

### Encouraged by the smile of a goddess-like nurse

Nevertheless, it has been only four years for Cambodia since the end of civil war, which lasted more than twenty years. The shortage of skilled personnel, mainly technicians, is a serious problem.

In this project, the dispatched experts take great care in teaching the nurses and midwives, who are the targets for training and technical transfer, to acquire fundamental knowledge such as the concept of hygiene causes, since they have not

received enough technical training or had the opportunity to attend auxiliary training.

Above all, as there are few people who can speak English as a means of communication, we started an English conversation lesson.

Although the project in Cambodia faces various difficulties, the Japanese side is making efforts, encouraged by the smile of the Cambodian nurses like the goddess Apsara in the engraving at Angkor Wat.

(JICA Cambodia Office)

### Maternal and Child Health Project

Project-type technical cooperation aimed to strengthen the function of the maternal and child health center by improving management capability of the maternal and child health center, enforcing training activities and raising the prognosis and medical treatment level with the aim of improving the conditions of maternal and child health in Cambodia. It has been carried out since April 1995 as a five-year plan.

one of the important policies in order to enhance the international competitiveness of domestic products. To support this, project-type technological cooperation was launched to promote the establishment of the Industrial Property Information Center in April 1995.

In Indonesia, a development study was launched in 1995 to offer basic encouragement policies to stimulate components supply industry, mainly in the fields of electricity, electronics and transport facilities.

In addition, the provision of economic infrastructure, to which Japan has devoted its energy for a long time has been an important issue of aid for the encouragement of industries. In the Philippines, the main road called Japan-Philippine Friendly Road was constructed but has since seriously deteriorated. Therefore, the development study, the Study on Pan-Philippines Highway Improvement Project (Mindanao Section) was launched in 1995 in order to adopt a detailed improvement plan for the road, including an extension of approximately 400 kilometers in the Mindanao section.

### **For sustainable economic development**

On the other hand, it jeopardizes the sustainability of economic development to leave various problems induced by the rapid economic growth in the ASEAN countries untouched. It can be said that the problems reflect the distortion of development. Therefore, it is essential to use aid to tackle such issues such as the adjustment of regional differences, village development to alleviate poverty, improvement of the urban sanitation and reinforcement of the systems for environmental preservation.

Based on this idea, JICA has been implementing project-type technical cooperation in order to train personnel for the environmental administration and to establish the system for environment monitoring in Indonesia and Thailand. In Malaysia, project-type technical cooperation, under the title "Project on Evaluation of and Analysis of

Hazardous Chemical Substances and Biological Treatment of Industrial Wastes", is under way with the aim of providing and streamlining a security management system.

In Thailand, there has been an extreme concentration of population in Bangkok, which has subsequently caused traffic congestion, water and air pollution and ground subsidence. JICA is cooperating to adopt a master plan for the comprehensive improvement of the urban environment with the aim of solving the problems and creating sound urban functions.

The results of the survey, which was launched in August 1995, will be summed up in the beginning of 1997 and the parties concerned show a great interest in the multi-dimensional approach towards the urban problems such as traffic, environment and the utilization of land.

As an example of the cooperation aimed at the mitigation of poverty, the development study on "Development of Agrarian Reform Communities in Marginal Areas" can be cited. In order to raise the living standards of poor tenant farmers, who amount to almost half the population, the Philippine government is promoting a comprehensive farmland reform plan. It is the aim of this study to make a model of development both to improve the agricultural productivity on the areas of poor farmland such as marginal areas, sloping ground and land without access to water and to promote the settlement of the farming population.

JICA also supports the Philippine government, which advocates social development and localization of the political power structure as its policy, by implementing development study on the Preparation of Provincial Water Supply, Sewerage and Sanitation Sector Plan in four provinces in Luzon. This development study is aimed at assisting local government bodies, who have promoted the provision plan in these sectors.

### **Support of "South-South Cooperation"**

The NIEs and ASEAN countries are not only



### Vietnam Lasting cooperation in a model hospital, shifting "soft" aspects of technology

#### The Cho Ray Hospital Project

##### ●● The history of cooperation with the Cho Ray Hospital

The Vietnamese call bikes Honda. In Ho Chi Minh City, the roads are overflowing with bikes. The Cho Ray Hospital rises in the Cholon district westwards of Ho Chi Minh City.

The Cho Ray Hospital was built in 1900 and has a long history. The reconstruction of the Hospital was started in 1972 and took three years to be completed by Japan's grant aid cooperation. It is a modern hospital of 11 stories and with about 1,000 beds. Technical cooperation has also been implemented mainly in cerebral surgery for almost ten years since 1966 and the Hospital is a pioneer for Japan's international medical cooperation.

However, Vietnam went through a difficult period after the unification of South and North Vietnam and the Cho Ray Hospital was devastated. Since a policy of Doi Moi (Renewal), adopted in 1986, worked well, the economy has recovered gradually and political stability also has been restored. Therefore, countries resumed aid since the early 1990s.

In response to a request for grant aid cooperation, the Japanese government extended aid, which included the supply of medical equipment and materials, to the Cho Ray Hospital, targeting the refurbishment of the buildings for three years since 1993.

##### ●● Targeting hospital management as well as clinical medicine

Cooperation in such "soft" aspects of technology became necessary as the provision of "hard" aspects of technology proceeded and in response to a request for technical cooperation made in 1993, project-type technical cooperation was started in 1995.

The planned term of this project is three years and the fields of cooperation are hospital management, cerebral surgery disease, gastrointestinal disease, circulatory disease, kidney trouble and intensive care. It has been agreed that a three-year cooperation will be implemented in hospital management and that the main sector to be addressed in cooperation will be set up every year in clinical medicine, adopting gastrointestinal disease in the first year, cerebral surgery disease in the second year and then circulatory disease.

In the recent medical cooperation with developing countries, hospital cooperation has decreased and the main stream of cooperation has shifted to primary health care. Without doubt, primary health care is important to achieve the goal that the WHO advocates to bring health to all people by the year 2000. However, the existence of a model hospital is essential in order to raise the medical care level of one

country and hospital cooperation is necessary to do this.

Nevertheless, in planning hospital cooperation, it is necessary that such cooperation corresponds to the economic conditions of individual countries and has to be effective and beneficial enough. In this respect, this project aims at an effective transfer of medical care technology by setting up hospital management in the field of cooperation as well.

##### ●● The improvement of medical care services in the southern area

In the field of clinical medicine, although it is a future subject to improve medical care services in southern Vietnam, the seminars on this issue are currently held as part of the project activities. In 1995 JICA held the seminar on gastrointestinal disease with the participation of medical personnel from 19 provinces in southern Vietnam and received a high reputation. JICA is planning the seminars in all sectors aimed at southern Vietnam.

A number of training courses, including the use of the microscope, are offered to the doctors at hospitals in-house.

It is anticipated that this type of medical training will provide the foundation for future activities beneficial to regional hospitals.

(JICA Vietnam Office)



Clinical medicine laboratory with equipment supplied by JICA. In this project, the training of staff in the hospital management section as well as of doctors and nurses is carried out in Japan.

##### The Cho Ray Hospital Project

Project-type technical cooperation. Its aim is to strengthen the function of the Cho Ray Hospital, which is the leading hospital in southern Vietnam, and to cooperate in hospital management, cerebral disease, gastrointestinal disease, circulatory disease, ICU and other sectors. The project has been implemented for three years since April 1995.

the recipient countries of aid but are also donor countries themselves and have adopted the stance of promoting "South-South Cooperation" in which they carry out cooperation with other less developed countries. Japan has expressed its support for this trend both domestically and internationally and signed Partnership Agreements with Singapore in January and Thailand in August 1994.

In these agreements, Japan and either Thailand or Singapore agree on a framework in which they bear the costs as equal partners for technical cooperation with other developing countries. Within this framework, JICA both works to supplement Third Country Training and to examine the joint dispatch of experts and volunteers (Japan Overseas Cooperation Volunteers) and other possibilities for joint action.

The cooperation in the establishment of the Thai International Training Center is a part of the support for Thailand's transition to donor status. The Department of Technical and Economic Cooperation under the Thai Prime Minister's Office has a plan, modelled on JICA's training program, to positively move ahead with training of personnel from the three Indochinese countries and Myanmar. JICA staff in their capacity as experts, were dispatched in March 1996 so as to introduce the training knowhow in the design, construction and management of the Training Center, which is the core organization.

### **Support for transition to a market economy**

Japan's ODA Charter shows concern for efforts to introduce a market economy to developing countries. In line with this policy, JICA has implemented cooperation to strengthen the administrative organization and implementation capacities necessary for the introduction of a market economy, and furthermore, cooperation in the provision of infrastructure and development of human resources to the Indochinese region, China and Mongolia.

In Mongolia, as part of the intellectual support for transition to a market economy, JICA has been cooperating in the study\* of "Economic Reform and Development" since 1994 and started cooperating in 1995 in adopting an improvement plan for agricultural cooperatives, known as the "Study on Strengthening of Agricultural Cooperatives", in order to establish the distribution system suitable for a market economy system.

Experts were dispatched to Myanmar to support the transfer to an open economy in 1995. JICA also carries out such activities as the supply of measles vaccine and materials for disaster relief from flood and fire. The activities are carried out so that the poor and socially vulnerable, who are subject to the turmoil induced by economic reform, can be the beneficiaries of aid.

In China, in addition to cooperation for economic infrastructure mainly in the coastal area, the aim is to promote a well-balanced cooperation with consideration of regional differences, cooperation for the development towards the inland with consideration of regional and sectoral differences, and cooperation in the field of environment, the core of which is exemplified by the Japan-China Friendship Environment Protection Center.

In Vietnam, as the results of a country aid study, produced in March 1995, were highly valued by the Vietnamese side, it was decided that JICA will continue to implement the development studies in supporting the entire medium- and long-term development plans.

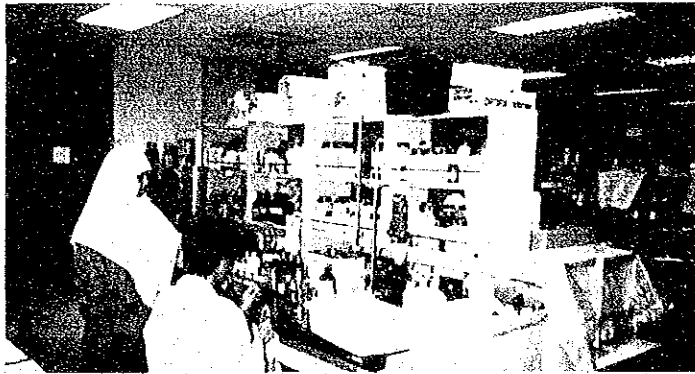
The Vietnamese communist party congress will be held in June 1996 and it is expected that propositions made in the development studies will be reflected in the content of a new five-year plan (1996-2000) which will be discussed at the party congress. Moreover, the Minister of Justice, Mr. Rock visited Japan in November 1995 and this visit became a good chance to discuss the implementation of cooperation in support of important policies for the establishment of legal systems based on the examples of the Western advanced countries,

\* Study cooperation: a form of dispatch of individual experts under JICA and a project that the researchers both of Japan and developing countries carry out as a joint study on the subjects relevant to social and economic development in developing countries.

# Indonesia

Environmental technical cooperation to protect people's health from pollution

## .....The Environmental Management Center Project



The water quality laboratory of the EMC.  
It is also the aim to train the staff with experience and knowledge.

● ●

### Environmental pollution progressing with economic development

The main street in Jakarta. The view, filled with huge buildings such as banks, hotels and department stores, is so modernized an urban view that nobody believes this is a developing country. However, contrary to this view, it is said that more than 20% of the urban population in the major cities in Indonesia live in slums, where no electricity, water and minimum toilet facilities are provided.

In the case of the Chiliun river, which runs through Jakarta, all the filthy water from households flows into this river due to the lack of sewerage facilities. There is no other means available to the local residents, who lack waste collection services, than dumping their rubbish into the rivers or the canals and they are now getting those services even less frequently. The industrial waste from the old and small plants and enterprises along the river is also poured into the river without being processed. At the lower course of the river, the water pollution has progressed to the extent that fish are dying.

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### The role and function of the Environmental Management Center

It is the Indonesia Environmental Management Center (EMC) that is

engaged in these kinds of environmental problems in Indonesia. The EMC functions as a technological center to immediately find pollutants discharged into the environment through environmental monitoring and inspection at plants. These services are necessary to protect the life and health of Indonesians from pollution.

Nevertheless, Indonesia has a large territory. The monitoring activities of the EMC cannot cover the whole of Indonesia. Therefore, it is necessary to put into full effect the monitoring function of many local laboratories. It is also an important role of the EMC to extend technical assistance to the local laboratories.

Moreover, for the Environmental Management Agency, which was only established in 1990, it is expected that the EMC will extend technological aid necessary for the effectuation of law and regulations on the environmental issues and will support the environmental administration.

JICA has dispatched a team of six members to the EMC in the project on the Indonesian Environmental Management Center. This project is to give instruction to the EMC staff, mainly the youth, on a wide range of technologies from the basis of techniques to analyze very small substances discharged into the environment to techniques of monitoring, planning, implementation, analysis, and preparation of reports, and further to techniques

necessary for becoming lecturers, instructors and demonstrators in order to train the staff of the local laboratories, with the aim of training them fully as environmental researchers.

● ●

### Keeping the same pace with other donor countries

As part of its technical cooperation activities, JICA publishes reports in English on the study of the current environmental conditions of the rivers in Jakarta and the sea area, on the research into air pollution and on the study of mercury in the Kapuas river in the western part of Kalimantan. The reports as well as publications have been used as important data for the reinforcement of the environmental administration of the Environmental Management Agency.

Various aid organizations are cooperating with the Environmental Management Agency, such as the World Bank, the Asia Development Bank, donor organizations of Australia, Germany, Canada and Overseas Economic Cooperation Funds of Japan. Cooperation is also given to local government bodies.

In order to achieve a successful cooperation in the field of the environment, donor countries and organizations are cooperating with each other in the promotion of activities. Among them, the JICA-supported EMC plays a leading role in technical fields as the core agency.

(JICA Indonesia Office)

▼

### The Environmental Management Center Project

Project-type technical cooperation in the establishment of the EMC and its management. Its aim is to improve the techniques and technology of the technicians in the field of the environmental study and training program, to put monitoring activities in full effect, to function as a reference laboratory and to improve the quality of the environment in Indonesia. The project has been implemented since January 1993 as a five-year plan.

and cooperation is expected to be started in 1996.

In addition to the implementation of the country-specific training course, the Economic Management, which especially targets the three Indochinese countries, another country specific training course, Judicial System, was started for Cambodia with the cooperation of the Japan Lawyers Association in 1995.

### **A Prioritized Approach to the Indochinese region**

The Indochinese region suffers badly from the after-effects of civil war, requiring improvement in social services, provision of infrastructure for the improvement in living conditions and human resources development as well as encouragement to transfer to a market economy. For example, the supply of equipment and materials for countermeasures against poliomyelitis and the establishment of an inoculation system with grant aid are implemented for the three Indochinese countries.

In addition, since an increase in agricultural production in which most of the population are engaged, is a precondition for economic development, much of the cooperation is concerned with improving agricultural and village development in accordance with the environment.

In order to identify outstanding projects in this field, the study team for the project formulation study on the Integrated Rural Socio-Economic Development Master Plan for the Key Area of the Central Region was dispatched in November 1995.

One of the international initiatives concerning the Indochinese region is the "Forum for the Comprehensive Development of Indochina" advocated by Japan. This forum, which treats the three Indochinese countries as a single region, was started with the aim of producing harmonized and efficient development of the region.

A cabinet meeting was held in Tokyo in February 1995 and a steady follow-up has been made by workshop committees in the two

agreed fields of infrastructure provision and human resources development and by private advisory groups in the field of trade and investment.

In April 1995, the "Cooperation Treaty for the Sustainable Development of the Mekong Basin" was signed by the three Indochinese countries and Thailand. This agreement stipulates the development and use of water and related resources and the protection of the environment and eco-system of the basin. It is expected that Myanmar and China will become signatories to this agreement and alliances between the countries surrounding the Mekong river are expected to become stronger in the future.

JICA intends to actively address the question of broad aid encompassing the whole Indochinese region.

### **Approaches to other problems**

There have been several other notable movements in the East and Southeast Asian region. For example, the Japanese government announced that it would actively cooperate under the Global Issues Initiative (GII) in the field of population and HIV/AIDS, with a budget of \$3 billion for the seven years from 1994 to 2000. Indonesia, the Philippines and Thailand (only for AIDS) are prioritized countries in this cooperation. JICA dispatched the project formulation study teams to Indonesia and Thailand in July and November 1995.

Among the projects identified and formulated, cooperation in the development of preventive measures against HIV/AIDS in the Philippines was started in July 1996 and under the grant aid program, the provision of equipment aimed at strengthening district health services in Sulawesi is under way.

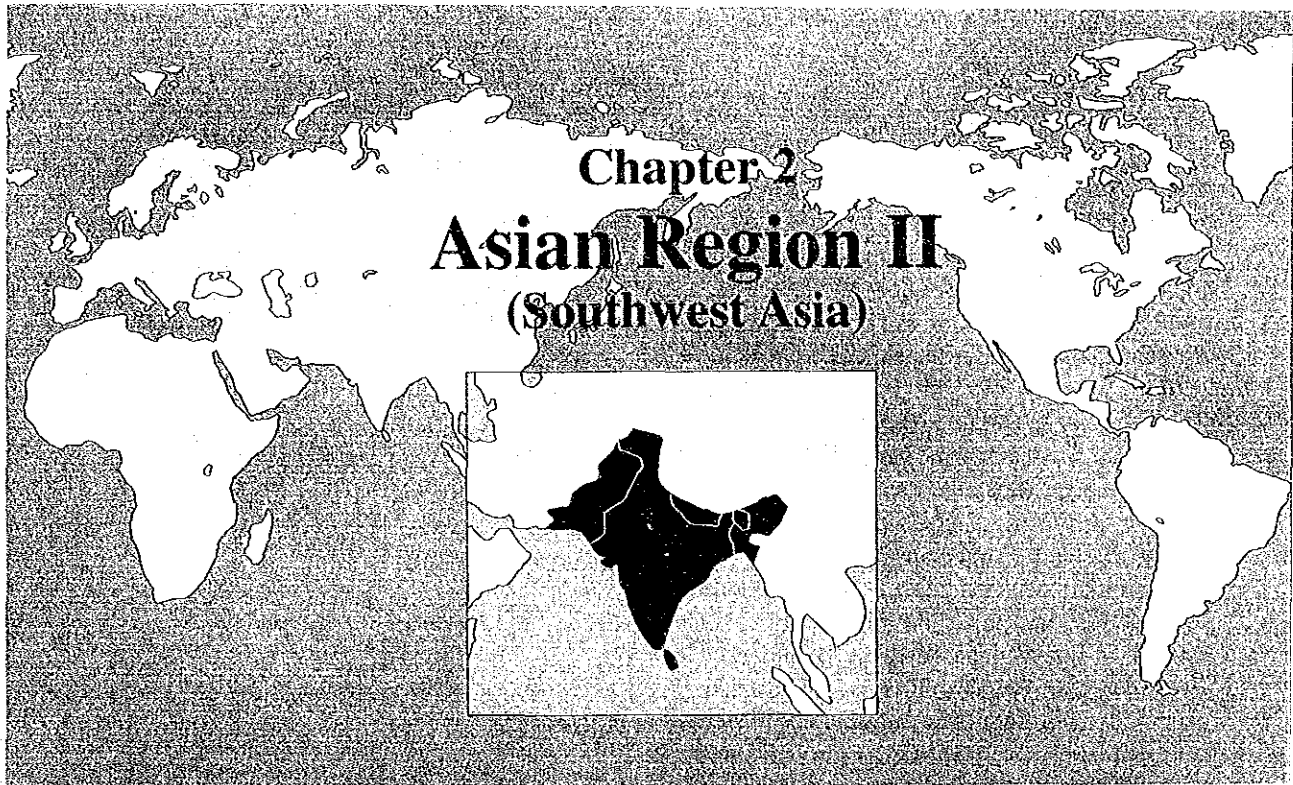
Also notable is the progress made in the economic cooperation plan, "Partners For Progress" (PFP), at the APEC high-level meeting held in Osaka in October 1995. PFP is a mechanism proposed by the then Minister of Foreign Affairs, Yohei Kono, at the APEC high-level meeting in Jakarta in October 1994. The

aim of PFP is to promote economic and technical cooperation based on the principles of mutual support and independence of APEC members and in recognition that trade/investment liberalization and economic and technical cooperation are "two wheels on the same axle" of development.

JICA, as a part of PFP, is preparing three Third Country Training Programs in 1996, which are "Standards and Conformity Assessments" hosted by Malaysia and "Industrial Property Rights" and "Competition Policy" hosted by Thailand.

It is important to establish friendly relations in the future in light of the historically close relations between Japan and the countries of East/Southeast Asia as well as the political and economic interdependence between them.

From this perspective, JICA is carrying out a program named "A Friendship Program for the 21st Century." This program aims to invite youth from Myanmar, China, Mongolia and South Korea as well as ASEAN countries to Japan and encourage them to foster friendships with their Japanese counterparts. In 1995, this program was extended to the three Indochinese countries and 148 participants from these countries visited Japan.



### **An area of great development needs**

The Southwest Asian region consists of Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka. Approximately 1.1 billion people, one fifth of the world population, lives here, with a vast diversity of races, religions, languages and customs. This diversity, combined with the region's sluggish economy and low income levels, is a cause of political and social problems.

It was in this context that the South Asian Association for Regional Cooperation (SAARC) was inaugurated in December 1985 with the aim of constructing technological and practical cooperative relations among the seven nations of the region, independent of political considerations.

As is clear from such data as the per-capita GNP of the countries (between \$160 and \$820 according to a 1995 World Bank Report), Southwest Asia, which contains four LLDCs (Bangladesh, Bhutan, the Maldives and Nepal), is one of the least affluent regions of the world, with great development needs.

Except for the Maldives, more than half of

the labor force of the countries continues to be engaged in agriculture and the people's economy is thus vulnerable to the weather. The trade structure consists of the export of agricultural products and primary products such as fiber, while machinery and other capital goods are imported. This trade structure is so fragile that it is easily affected by primary product price variations and most of the countries have a permanent trade deficit.

Like most countries which became newly independent after World War II, the Southwest Asian countries, desiring to achieve economic independence, initially protected their domestic industry under a policy of import substitution. The economic liberalization adopted by Sri Lanka in 1977, however, is now being followed by India, Pakistan, Bangladesh and Nepal through the active promotion of policies such as the encouragement of investment and exports and the relaxation of regulations.

### **Japanese cooperation with Southwest Asia**

Japan is an important donor nation for the Southwest Asian countries. In 1994 \$1.751

billion, 18.3% of total ODA, was extended to this region; for 1995 the figures were \$1.435 billion, 13.6%. In terms of the form of aid, in the 1960s more than 90% was in loans, principally to India and Pakistan. However, the proportion of grants (grant aid + technical cooperation) subsequently increased and the statistics on Japanese aid in 1995 show that 37% was grant aid, 11% was technical cooperation and 52% was in loans.

Taking into account the existence of the four LLDC countries, efforts were made to increase grant aid, especially in the fields of provision of economic infrastructure, agricultural development, health and medicine, housing conditions and human resources development. Bangladesh is the leading recipient country in the world in 1995.

Technical cooperation is implemented in all fields but accounts for only a small proportion of Japan's ODA. In recent years, Nepal, Sri Lanka and Bangladesh have been the principal recipients of technical cooperation.

### **Anti-poverty policies, BHN field and environmental protection**

Most of the Southwest Asian countries are actively introducing market economic principles and actively promoting development policies which stress the importance of a macroeconomic balance. However, the economic development of the region is generally stagnant, and the majority of the population continues to suffer from poverty. When promoting development policies, it is therefore necessary to take into account poverty alleviation measures, basic human needs and environmental protection to ensure sustainable development, in addition to providing the infrastructure for social and economic development.

Reflecting the economic and social development of the Southwest Asian region, Japan has given these countries the status of priority countries for aid. However, the countries of Southwest Asia generally have inadequate mechanisms for receiving aid and an inadequate ability to meet local costs\* and it

is necessary for Japan to work positively upon these countries to clearly establish the priority sectors and grasp the problems of implementation.

In the case of India, Bangladesh, Pakistan, Sri Lanka and Nepal, in recent years a large number of annual consultation missions on grant aid and technical cooperation have been dispatched both to have discussions with government officials and to make efforts to provide the most appropriate aid in the areas where the need is greatest for the economic and social development plan of the country, taking into account the actual conditions within the country.

JICA has set up aid study groups for each of these five countries and these are analyzing development needs and carrying out research on the orientation of future aid. On the basis of the findings of these research groups, the Japanese government is dispatching a general economic cooperation study team to have policy discussions with the recipient countries with a medium and long-term perspective.

Japan plans to develop cooperation in the field of population and HIV/AIDS under the Global Issue Initiative (GII), with a budget of \$3 billion for the seven years from 1994 to 2000. The identification and formulation of projects have been implemented in these areas in Southwest Asia.

### **Prioritized and effective cooperation matched to local conditions**

In the case of cooperation in India, the second country-specific aid study group was established in 1994, following that set up in 1988, and this provides analysis of development needs and the nature of future aid. A government-based General Study Team on Economic Cooperation was dispatched in late March 1995 and it was recognized that the priority of the cooperation offered by Japan to India should be in the fields of economic infrastructure, alleviation of poverty and environmental conservation.

The market-oriented economic reforms

\* Local costs: costs covered by recipient countries in project implementation and management, including land purchasing costs, personnel costs, material acceptance and transportation costs and recurrent costs (management and maintenance of facilities and materials and the expenditure for staff recruitment).

which began in India in 1991 have yielded considerable results in the last four years. However, there are major development needs including improvement in the living conditions of the impoverished lower strata and efforts to address environmental issues with the aim of ensuring sustainable growth. In such circumstances, it is anticipated that there will be an increase in technical cooperation and grant aid in the fields of BHN and the environment, where the record up to now has not necessarily been adequate.

At the end of February 1995, the annual consultation mission was dispatched to Nepal to take part in policy discussions with the Nepalese government. In these discussions, the Japanese side made it clear that its priority areas for cooperation with Nepal were to try to deal with BHN, the provision of basic infrastructure and the conservation of the environment including natural disasters. The problem for the future is how to link grant aid and technical cooperation organically so that cooperation can be implemented more effectively and efficiently than previously.

Also since 1994 an ambitious project has been moving ahead in the western region. This region is faced with major problems of forest depletion and the project aims at "reforestation promotion" by linking the work of the Japan Overseas Cooperation Volunteers and project-type technical cooperation, with a development study in order to carry out activities designed to preserve the forests through raising the living standards of the indigenous villagers.

Specifically, the Japan Overseas Cooperation Volunteers cooperate with local NGOs to study the development needs of villages and to prepare and implement a village development plan based on the needs of the residents themselves. Aid is extended for this purpose along with the "Community Development and Forest/Watershed Conservation Project," which is implemented as project-type technical cooperation. Moreover, in the development study on "Integrated Watershed Management in the Western Hills," research is being conducted into the natural conditions and social and

economic baselines, and a plan is being drawn up for the management of the basins of the rivers which flow through the region.

The plan drawn up in this study will offer some guidelines on land use for the above-mentioned "Community Development and Forest/Watershed Conservation Project."

In Pakistan, the Social Action Program (SAP) was prepared as the development plan for 1992-1995 and policies to enforce development in social sectors whose development has fallen behind will be pursued in the future. The main development fields for the SAP are: (1) primary education; (2) basic medical care; (3) improvement in nutrition; (4) improvement in village water supply and hygiene; (5) population and family planning.

Pakistan has tended to request that cooperation from Japan be prioritized according to social sector. In response, Japan has provided grant aid for the construction of woman's teacher training colleges and primary schools and other projects in the educational field.

Sri Lanka has high levels of education and income in comparison with other countries in the region and the conditions are favorable for technical cooperation. Sri Lanka is prioritizing the relatively underdeveloped states in the south for future development and, since 1994, JICA has been implementing the "Southern Area Development Plan Study" in order to prepare a master plan for overall regional development.



# Nepal Alleviating Forest Depletion through Public Participation Activities

## .....The Community Development and Forest/Watershed Conservation Project

### ● ● Venture to stop forest depletion

The hills of Nepal are laden with shelf-like rice paddies up to the top of the mountains. To those who live in this area, the landslides in the rainy season almost every year, floods, erosion and damaged land are serious problems that threaten their livelihood. It is also true that the destruction and depletion of the forest, which cause those problems, are induced by the poverty of the residents. In order to stop forest depletion, it is necessary to improve their living conditions.

Forest depletion is particularly seen in the western mountain area and both Kaski and Parbat counties and JICA's project-type technical cooperation, the Community Development and Forest/Watershed Conservation Project, has been carried out in these areas since July 1994.

This project aims to stop the excessive utilization of forest and subsequent forest depletion through the public participation in the development activities based on the needs for the improvement of living conditions. The project has a vision that the alleviation of forest depletion leads to the conservation of land and later, the restoration of devastated forest resources.

This project-type technical cooperation is implemented in cooperation with "A Cooperative Project to Make the City Greener" by the JOCV and the "Development Study on Integrated Watershed Management in the Western Hills". With the community development activities based on the needs from the local residents and their initiative, the aim is to contribute to the improvement of the natural environment and land productivity as well as that of living standards. Three projects cooperate with each other for a common purpose and the results are worthy of attention.

### ● ● Shared roles of three cooperative projects

The roles of project-type technical

cooperation, the Japan Overseas Cooperation Volunteer project and development studies are as follows.

In "A Cooperative Project to Make the City Greener" by the Japan Overseas Cooperation Volunteers, ten teams consisting of pairs of the Volunteers and local volunteers are deployed in the mountainous area and the local residents are expected to identify survival needs. The following support will be based on the results of these activities to plan, implement and manage a community development plan. It is aimed at popularizing the framework and method of all activities among the local residents by living with them. Furthermore, when implementing the community development activities, planned by the local residents, opinions are coordinated and technical support is provided.

In project-type technical cooperation, technical and fund support is given to the planning and implementation of the community development activities by the Japan Overseas Cooperation Volunteers in cooperation with the local administrative agencies. The experts dispatched in this project play a particularly essential role as technical advisors to the Japan Overseas Cooperation Volunteers and as assisting supporters for their team activities such as administrative coordination.

In development studies, the full-scale activities were launched in December 1995. From now on, the

long-term management plan of the river basin for appropriate land management and the improvement of the living of the residents will be adopted and basic information necessary for the future activities of above-mentioned two projects will be supplied.

This project is a new form of cooperation in that it incorporates the flexibility of the local NGO, which understands the needs of the local residents at first hand, and lends support to implement community development with the initiative of the residents while full consideration is given to the weak strata of society such as women, who have been kept out of the community development plan so far.

As this cooperative plan has just started, it needs some time to bear fruit in terms of forest and land conservation. However, if living standards can be raised with local residents taking the initiative and action, expectations are high for the continuous conservation of the environment.

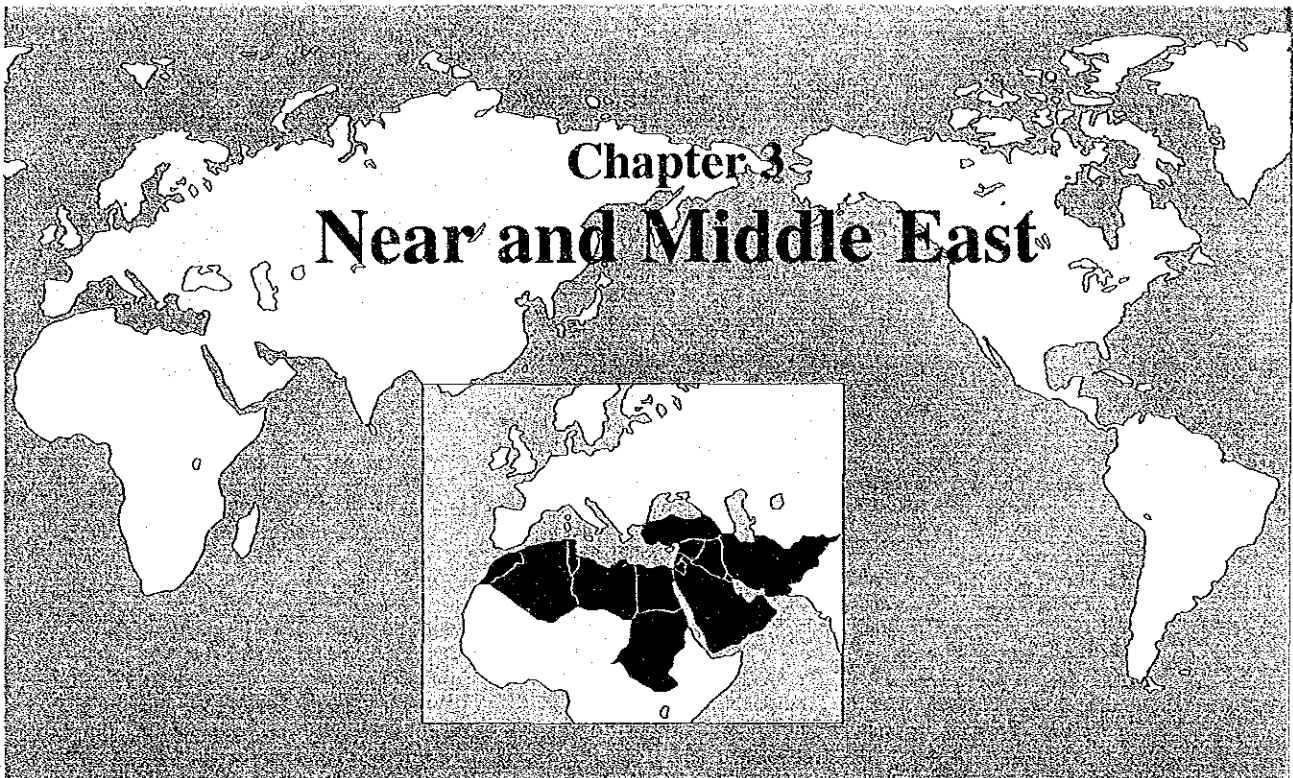
(JICA Nepal Office)

### ▼ Community Development and Forest/Watershed Conservation Plan

A project-type technical cooperation in both Kaski and Parbat provinces is envisaged in the mountainous area, aimed at alleviating forest depletion and forestry extension through a model community development project. The plan has been implemented since July 1994 as a five-year plan.



Alleviating forest depletion with public participation.....  
For this, the first step is the study on the needs for living conditions of the residents.



### **The crossroads of Asia, Africa and Europe**

The Near and Middle Eastern region, which stretches from Afghanistan in the east to Morocco in the west and from Sudan in the south to Turkey in the north, comprises 21 countries. This region, the crossroads of Asia, African and Europe, is not only in a geographically important position but also has 70% of the world's known oil reserves and accounts for 50% of the world's oil exports.

As Japan depends on imports of oil, 75% of which come from the Near and Middle East, this region has a major impact on the Japanese economy as well as on the world economy.

However, not all of the 21 countries are blessed with underground resources and there are major economic differences between the countries in the region. While there are countries which have both oil and natural gas, such as Saudi Arabia, Kuwait, the United Arab Emirates, Libya and Algeria, others, such as Sudan and Yemen are classified as LLDCs.

### **A mostly arid climate**

Climatically almost all the countries are of the arid type, but the Maghreb (Algeria, Tunisia

and Morocco) have a Mediterranean climate while Yemen has a highland climate. Since there is little rainfall in the arid region to ensure water, agriculture is difficult to develop. The countries lacking underground resources also have a harsh natural environment with little rain, which makes social and economic development all the more difficult.

In terms of ethnicity and race, there are seventeen Arab countries and the four non-Arab countries of Afghanistan, Iran, Turkey and Israel. Three globally influential religions - Islam, Judaism and Christianity - all originated in this region. The religious differences exacerbate political differences as seen in the confrontation over sacred Jerusalem between Israel, where Judaism is the national religion, and other countries, where Islam is the national religion.

It is also necessary to pay attention to the emergence of Islamic fundamentalism, as seen in Algeria. The political systems include republics such as Egypt and Iraq, as well as monarchies or emirates such as Saudi Arabia, Morocco, Jordan and the United Arab Emirates.

### **Advances in the peace process**

In addition, the Near and Middle East is confronted with problems in Palestine, Lebanon and Afghanistan, which have a great influence on the performance of the world economy and even on world peace and stability.

In the midst of these problems, there was a major development in the Palestinian problem. It was agreed between the Israeli government and the Palestine Liberation Organization (PLO) that Palestinian interim self-government (*preparatory self-rule*) would be granted to the partial areas of Gaza and the West Bank, which had been occupied by Israel since the third Middle Eastern conflict in 1967.

Following on from this, there was progress towards peace in the region, such as the signing of a peace treaty between the Jordanian and Israeli governments in October 1994. The international community is also making various efforts to support the peace process.

Syria and Lebanon are also interested parties in the peace process in the Middle East. The peace negotiations between Syria and Israel in particular are considered to be very influential on the peace process in the region and are expected to make further progress.

### **Japanese cooperation in the Near and Middle Eastern region**

Japanese bilateral cooperation in the Near and Middle Eastern region has made up about 10% of total bilateral cooperation since 1979. Following the outbreak of the Gulf Crisis, in 1991, bilateral cooperation within the region increased in terms of yen loans given as aid to the countries at the peripheries of the area, and at \$1.865 billion was equivalent to 20.4% of all bilateral aid, the highest level in history. In 1992 this was reduced to 4.3% and in 1995, it was \$721 million, equivalent to 6.8%.

The largest recipient country in the region is Egypt, which receives 33.7% of all bilateral cooperation in the Near and Middle East. Next came Jordan (22.5%) and Syria (17.0%). In 1995, JICA spent ¥13.9 billion, 9.6% of the total, on programs in the region.

### **Past records and priorities of JICA programs**

Since there is such political, economic and social diversity among the countries of the region, JICA has implemented its aid cooperation in accordance with conditions within individual countries, while placing priority both on a concern for the environment and on the effective use of resources.

For oil-rich countries such as Saudi Arabia and the United Arab Emirates, priority is given to aid (particularly cooperation for human resources development) with self-help efforts that enable these countries to free themselves from the oil-dependent monoculture economy. For lower middle-income countries such as Syria, priority is on the provision and expansion of social and economic infrastructure to support sustainable growth and for low-income countries such as Yemen, priority is on cooperation with concern for BHN including health and medical services.

Moreover, the promotion of South-South Cooperation in this region has included nine Third Country Training Programs: three courses (including electrical power training) in Jordan and six courses (including nursing training) in Egypt.

In September 1995, the then Prime Minister, Tomiichi Murayama visited five of the countries in the Middle East and Palestine (Gaza district) and expressed Japan's active support for progress in the Middle East peace process, which was highly praised by the parties concerned.

In relation to support for Palestine, it was announced that Japan would launch "direct support" for the Palestinian interim self-government which excludes the interference of any international organizations. Japan is now offering full support.

Since the agreement between Israel and Palestine in September 1993, the international community has started giving aid to Palestine in the context of support for the peace process between these two countries. Japan received 71 participants for training in 1994 and 52 in 1995

(adding 12 participants for training in Japan and 40 for the Third Country Training Program in Egypt and Jordan), via the United Nations Development Programme (UNDP) and UN Relief and Works Agency for Palestinian Refugees in the Near East (UNRWA). (The acceptance records for those programs since 1985 show about 300 people.)

In the five working groups on the environment, economic development, water resources, arms control and refugees, which were set up at the multi-national Middle East peace negotiations in 1992, Japan assumed the chairmanship of the environment group and the deputy chairmanship of the economic development, water resources and refugee groups and has since been working to actively contribute in these areas.

JICA, as part of the program of the economic development group, carried out the development study for the "Tourism Development Plan in Jordan" and held a Small and Medium Enterprises Development Seminar in January 1995.

As this region has hardly any reserves of water, JICA has also been implementing as part of the program of the water resources group a development study on "Brackish Groundwater Desalination" since October 1993 with the aim of utilizing large confirmed subterranean water resources in Jordan. In addition, the "Desalination Technology and Water Resources Management Seminar" was held with the cooperation of the water resources group.

As a result of the findings of the environment group, grant aid cooperation for the "Project for Oil Spill Combat in the Northern Aqaba Gulf" was executed in 1995.

In the context of modifications in aid standards regulated by the DAC, the following transitive measures are to be taken in the Near and Middle Eastern region. Kuwait, Qatar and the United Arab Emirates were transferred on 1 January 1996 from Part I to Part II in the aid recipient list as a result of a discussion on aid graduation standards at the DAC high-level meeting in May 1995. With this transference,

the Japanese government has decided to reduce the scale of technical cooperation by one third per year for the next three years as a transitive measure in its cooperation with Kuwait and other countries.

JICA studied the most effective way of granting aid to Jordan, a participant in the Middle East peace process, by inviting intellectuals and setting up a country-specific aid study group. The Ministry of Foreign Affairs also dispatched a general economic cooperation study team to Jordan in March 1996.

Future topics for cooperation in the Near and Middle East include the need for a policy review to consider future forms of cooperation with Palestine, which itself does not yet have all the functions of state, and forms of cooperation with peripheral countries such as Syria, Jordan and Lebanon in the course of the peace process.

# Syria

Volunteers engaged in sport promotion for disabled people

## .....Technical cooperation in the field of sport

Players exchanging shouts before training matches.



### ●● Remarkable activities of the Volunteers in sport

The dispatch of the Japan Overseas Cooperation Volunteers to Syria has a long history and the first Volunteers were dispatched to the Central Police School attached to the Ministry of Internal Affairs in 1970 to instruct in judo and karate. Since the volunteers' activity was started in sport, the sport volunteers have steadily produced successful results of cooperation in Syria.

Out of the total number of 243 Japan Overseas Cooperation Volunteers dispatched to Syria, 82 are sport volunteers and they have been giving instruction in a wide range of sports such as judo, karate, physical exercise, track and field, table tennis, volleyball, gymnastics, badminton, basketball, handball, aerobics, tennis, rhythmic gymnastics, swimming and sports medicine.

Although the volunteers have been currently dispatched in the eight sports, the emphasis has been on cooperation in sport for disabled people. It is estimated that there are many physically and mentally disabled people in Syria because of the influence of war (still in quasi-war state) and because of the Arabian marriage custom (a high

marriage ratio between cousins).

The Disabled People's Sport Association, which belongs to the General Sport League, mainly shows its enthusiastic involvement in these sport activities. Nevertheless, under the circumstances that the social infrastructure has not been fully provided for, it is difficult to budget enough resources in this field and the knowledge and experienced coaches of sport for the disabled people are lacking.

### ●● Plans to popularize wheelchair basketball

Under these circumstances, it was in 1990 that JICA started the dispatch of the sport volunteers for disabled people. Since then, five volunteers have had activities in the capital Damascus (3 volunteers), Aleppo (1) and Homos (1). The main activity has been to popularize wheelchair basketball and its instruction and a total of 75 wheelchairs for basketball have been provided over three terms.

The results of the activities are extensively acknowledged in that one Syrian coach participated in the training for sport instructors for disabled people, which was held in Japan in 1994 and the first national wheelchair basketball competition was held in 1995.

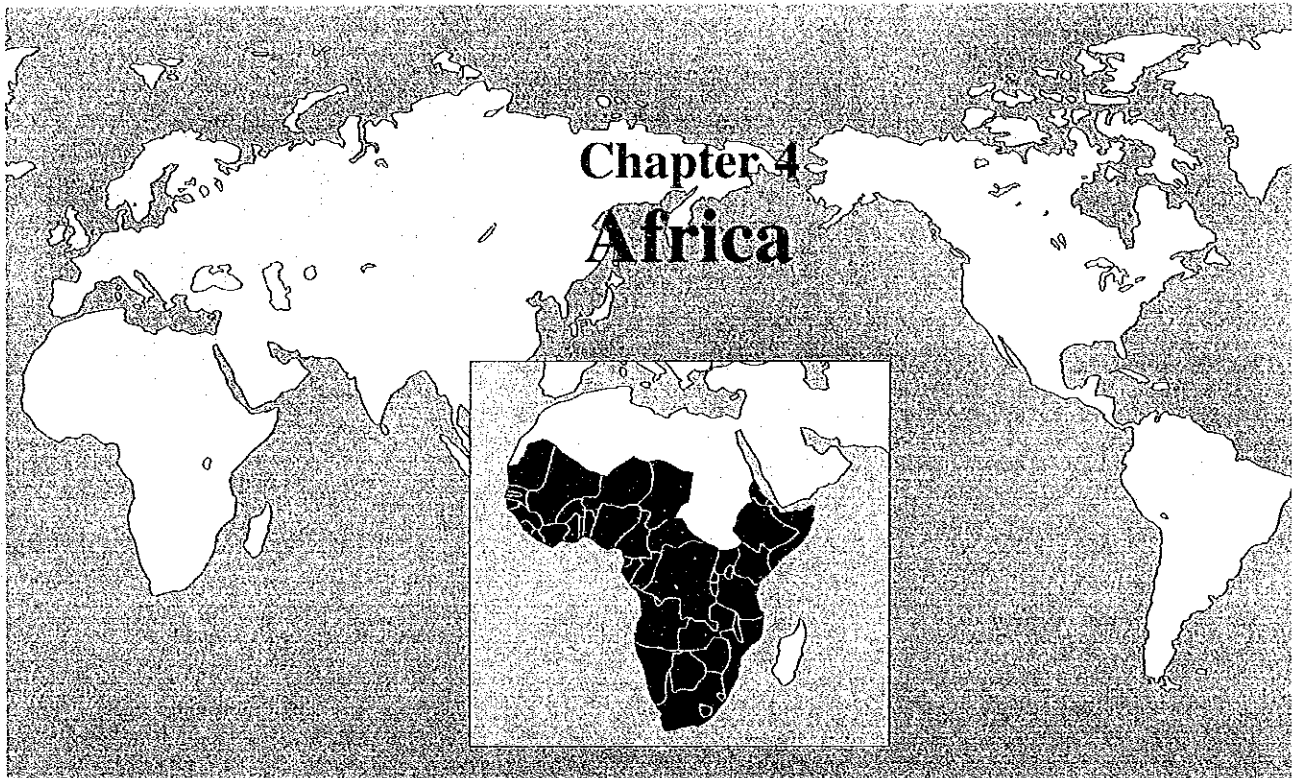
JICA's cooperation projects on sport for the disabled as well as in other fields represented by the Japan Overseas Cooperation Volunteers project, have got a high reputation within the General Sport League and its chairman appreciates Japan's technical cooperation on their occasions.

It seems that sport cooperation, focusing on human resources development, will be developed as a prioritized cooperation field in Syria.

(JICA Syria Office)

### ▼ Technical cooperation in the field of sport

An activity by the Japan Overseas Cooperation Volunteers is to aim to promote sport for disabled people. The idea is to let disabled people know pleasure and enjoyment of sport and experience the greatness of sport. Many sport instructions besides wheelchair basketball have been given.



### **Social and economic development faced with many difficulties**

The African region (sub-Saharan Africa excluding Sudan) is a large region with a total area of 21.78 million square kilometers that comprises 46 developing countries and the Republic of South Africa. The climate is extremely varied, with arid regions like the Sahara and Kalahari deserts and hot and humid tropical rain forest regions both occupying relatively large areas.

Although many of the African countries became independent in the 1960s, tribes with a common language and customs were divided under the rule of the Western Powers in the colonial period and this factor is thought to be a cause of tribal struggles and border confrontations since independence. It is still thought that ethnic and tribal problems formed a backdrop to the civil wars which have broken out in Rwanda, Burundi and Nigeria.

Many countries in the African region have inherited a monoculture structure, in which the economic base is a specific primary product, as a result of the agricultural policies of the

colonial period. Therefore, it is important to note that the economic structure of the state is fragile in that it is vulnerable to natural conditions, such as drought, and to fluctuations in the international markets.

Limited educational opportunities and the resulting shortage of human resources with which to build a future nation have meant that African countries have faced many difficulties in social and economic development since independence.

### **32 of the world's 48 LLDCs concentrated in Africa**

During the 1960s, when many countries gained independence, African countries benefited from an international economic environment which included stability in the international price of primary products for export, and could therefore achieve steady economic growth with aid from industrialized countries.

Subsequently, due to the drop in the price of primary products, the oil crisis, the failure of economic policies, unstable political bases and regional and civil wars, the growth is currently

# Ghana Plans to eradicate polio in Ghana remembered in connection with Hideyo Noguchi

## .....Third Country Training Program, Vaccinal Potency Testing and Polio Diagnosis Procedures

The Noguchi Memorial Institute established as an attached laboratory of the medical department of Ghana University.

### ●● Eradication of polio by the year 2000

The Noguchi Memorial Institute was established under Japan's aid in the capital of Accra in 1979 as a base for medical cooperation in the African region. In this institute, which was named after Dr. Hideyo Noguchi, who came to Ghana to research yellow fever, but died before he achieved his aims, a continuing technical cooperation has been implemented by the Japanese experts, mainly in basic medical research of all kinds of infectious diseases.

Nowadays, infectious diseases represented by yellow fever can be prevented thanks to the development of vaccines. However, there are still many children who cannot enjoy the benefits from this development due to the poor conditions of the medical treatment systems and poverty in developing countries. Therefore, the WHO and UNICEF are promoting an immunization expansion plan, targeting six infectious diseases, under the rubric, Vaccines for All Children.

Particularly, the movement of National Immunization Day, in which children under five years old are to be given vaccines, is developed all over the world with the aim of eradicating polio (infantile paralysis) from the world by the year 2000.

### ●● Third Country Training for medical personnel in the neighbouring countries

JICA adopted the Noguchi Memorial Institute as an operational agency and started Third Country Training in 1991 in order to improve the medical conditions in the African region in line with the support for the polio eradication plan by WHO.

The training course aims to improve the polio diagnosis procedures by medical personnel in



the neighbouring countries and to measure the potency of the vaccine against all kinds of infectious disease.

Some infectious diseases such as polio, yellow fever and measles can be prevented with effective vaccination. However, in tropical regions, the storage conditions of vaccine is poor and the original effect of vaccine tends to diminish. Therefore, the vaccine potency testing is a technique carried out in developing countries in this region.

There were 60 participants in total from the 12 neighbouring countries for the last 5 years in Third Country Training. Besides lectures and laboratory practices, the participants stayed with the experts dispatched from WHO and Japan for two weeks and exchanged opinions about the problems which they face on site in their home countries. The participants learned a lot and took the results back to their home countries and work sites as a most valuable experience.

### ●● The WHO and Multilateral-Bilateral Cooperation

This training was the first multilateral-bilateral cooperation \* as Third Country Training and many of the merits taken from the Multilateral-bilateral cooperation can be seen in all aspects. Namely,

the WHO paying for participation fees for participants from developing countries in addition to dispatching experts and supplying training materials.

This training course achieved the first aim and ended with the fifth training session held in March 1996. Although it was the first experience for the Noguchi Memorial Institute to accept participants from other countries, it has been engaged independently in the course management. Each participant in the training is expected to show a remarkable effort for the eradication of polio, like Hideyo Noguchi, but in their home countries.

(JICA Ghana Office)

### ▼ Vaccine Potency Testing and Polio Diagnosis Procedures

Third Country Training and immunization expansion plans promoted by WHO at the Noguchi Memorial Institute. This training aimed to strengthen laboratory functions in the African region, especially for the promotion of a polio eradication plan and was implemented from November 1991 as a five-year plan.

\* Multilateral-bilateral cooperation: to extend aid under the cooperation between aid donor countries and international organizations to enhance aid efficiency and effectiveness.

stagnant despite an increase in overall development aid from industrialized countries.

In the 1970s, many countries took on large loans to maintain their levels of income and investment. From the 1980s, however, the real GNP growth rate was negative and debts grew to vast sums until in the 1990s they were twenty-fold what they had been in the 1970s.

According to the standard set by DAC, 32 of the 48 LLDCs and 4 out of the 15 low-income countries in the world are concentrated in this region, giving some indication of the difficulties in social and economic development in Africa.

### **Support for self-help efforts by the international community**

The countries of Africa are currently facing a time of major change, both politically and economically.

In terms of politics, many countries had previously adopted a strong centralized government system, either a military junta or a single party dictatorship, under a charismatic leader, in order to maintain the unity of the state. With the collapse of the Soviet Union and the end of the Cold War, there has been an evident trend towards democratization and a transition from socialistic single-party dictatorship to a multi-party system.

Many countries have failed in their economic policies and abandoned the previous socialist economic policies. These countries have now liberalized and are adjusting their economic structure under the guidance of the World Bank and the IMF (economic structural adjustment means retrenchment finance, restriction of money supply, review of public utility charges and subsidies, devaluation of the currency and integration of the foreign exchange system, privatization of nationalized industries and reform of financial administration).

In response to the economic difficulties of the African countries, international organizations and the DAC countries have supported self-help efforts focused on structural adjustment, by setting up the African Fund and the Special

Program of Aid for Sub-Saharan Africa (SPA) under the International Development Association (IDA) and by executing the Structural Adjustment Facility (SAF) under the IMF.

### **Movements towards democratization in South Africa and state re-construction**

One major development in the African region was the abolition of apartheid in South Africa and the election of Nelson Mandela, chairman of the African National Congress (ANC), as the first black president in April 1994.

Since South Africa has overwhelming economic power in southern Africa, its return to the international community is of great significance for the future of the region. Based on a policy of support for self-help efforts for the black people who were the victims of apartheid, Japan has, since 1990, extended small-scale grant aid and the acceptance of participants for training through such United Nations organizations as the United Nations Educational and Training Program for Southern Africa (UNETPSA) and the United Nations South Africa Trust Fund.

In order to assist the Mandela administration in the task of national reconstruction after the abolition of apartheid, the Japanese government announced in July 1994 the South African aid policy of \$1.3 billion, which consists of ODA of approximately \$300 million (\$30 million in grant aid, \$20 million for technical cooperation and \$250 million for yen loans) and \$500 million in finance from the Export-Import Bank of Japan and \$500 million in trade guarantees for the following two years.

In order to put this public pledge into specific action, JICA has dispatched a Project Confirmation Study Team (in June 1994) and a project formulation study team (in January 1995) for health, water supply and drainage and hygiene and has made efforts to gain a precise understanding of aid needs in the areas which benefit the black strata and to identify and formulate outstanding projects.



# Republic of South Africa

Road for escape from Apartheid in dilemma between ideal and reality

## .....Study on the Expansion of the Capacity of Magalies Water

### ●● The rate of waterworks popularization, 98% in the white community and 27% in the black community

Although South Africa adopted a policy of Apartheid enforcing racial inequality for many years, a new provisional constitution came into effect in April 1994 and black people acquired the right to vote for the first time. In addition, the Mandela administration came into power in May of that year and has been promoting many reform plans aimed at creating a democratic state uniting all races.

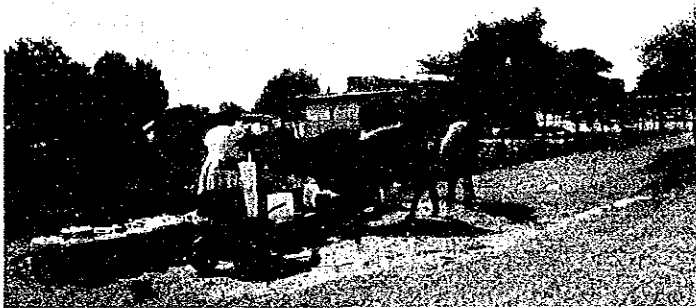
Under the Apartheid regime, while the privileged classes enjoyed a luxurious life, the needs of the black population were largely ignored, so that such basic needs as housing, electricity and a sanitary environment were not met. This includes the supply of clean water. It is estimated that the rate of availability of waterworks is 98% for white people and 27% for black people. The number of the population who cannot get clean drinking water is 17 million, approximately 40% of the total, of which 98% are black people.

### ●● Aims for expanding water supplies to black residential area

While huge amounts of clean water treated in water purification plants are available to some in South Africa, the reality is that an imbalance exists between those who do and those who do not have access to a minimum water supply. In order to improve this condition, the South African government has been planning to resume a water supply project aimed at expanding areas supplied with water to include black residential areas.

The Magalies Water Supply Corporation, which is in charge of widespread water supply in the capital Pretoria, is being targeted by

the plan. JICA has, since 1995, cooperated in adopting the plan for the improvement of water supplies, targeting those areas supplied by the Magalies Water Supply Corporation and this cooperation represents the first development study in the newly-born South Africa. ✓



Communal waterworks. It takes a long time to get water due to low water pressure.

In adopting the improvement plan, the aim in particular is both to improve the water supply system itself and to set up public organizations.

### ●● Systematization of the bodies involved in waterworks projects

The Waterworks Project in South Africa is complicated in that the government, the central and district governments, local residents, water companies, and the committees on local water all participate in the project, as a result of the complicated history of the country.

Although the central government has been striving to reorganize the structure of the project by creating three phases, there has been a wide gap between theory and practice due to factors complicated by the historical background and the different interests of the participants.

In addition, since local government bodies have not been well organized in many black

residential areas, the mechanism for supplying water to residents and collecting water charges has not been in practice even in receiving water supply from waterworks corporations. The residents also believe that drinking water should be supplied free of charge.

Therefore, it is necessary to raise awareness about waterworks projects among residents and to organize committees on local water which supply water to the lowest levels of the project.

The development study aims to hold workshops for a wide range of representatives of local organizations and to consider their opinions. In addition, JICA has plans to create public organizations as a pilot project and to raise points for consideration both before and after the implementation of the project.

### ▼ Study on the Expansion of the Capacity of Magalies Water

Development studies. The aim is to create a master plan focusing on the review of organizational and management structures as a result of the expansion of the waterworks areas in Magalies, north of the capital Pretoria (black residential areas), and of the investment plans. The project was implemented for twenty months from November 1995.

In addition to South Africa, other countries in the region such as Ethiopia, Malawi, Uganda and Madagascar have shown promising results in moving towards democratization and in Mozambique and Angola, which have suffered from prolonged civil war, peace treaties have been signed between the government and anti-government organizations. Each is building itself into a new nation. Nigeria and Zaire, however, are still experiencing difficulty in the process towards democratization.

Many countries face problems of political instability. In Rwanda, small-scale military conflicts have sporadically broken out between the current and former government, and in its neighboring country, Burundi, there is concern that the ethnic problem could develop into a large-scale military conflict.

Liberia and Sierra Leone are also politically unstable and this instability is blocking efforts for the social and economic development both of the advanced and developing countries in the region.

### **Japanese cooperation in the African region**

In the light of the current situations in Africa, Japan held a joint meeting, the International Conference on African Development, with the UN and other organizations in October 1993 and discussed the course of future development in Africa. Japan has made efforts to promote international and domestic understanding and support regarding the current situations in Africa and the necessity of aid.

At this meeting, the Japanese government announced that it would implement grant aid cooperation of \$250-300 million within the next three years for underground water development and the expansion of water supply as part of concrete support to the sub-Saharan African countries.

JICA has also been developing active cooperation within the framework of development studies and grant aid and it is considered that Japan can achieve the pledged aims without considerable difficulties.

In addition, as a follow-up of this meeting,

Japan held the "Asia-Africa Forum" co-sponsored by the UN and the Indonesian government in Indonesia in December 1994 and participated in the regional workshops held in Zimbabwe in July 1995, through which Japan has been promoting policy dialogue with the African and Asian countries.

### **Transition of bilateral cooperation to the African region**

Japan's bilateral cooperation in the African region in 1989 amounted to \$1.04 billion, 15.3% of total bilateral aid, \$790 million (11.4%) in 1990, \$860 million (10.1%) in 1992, \$970 million (11.8%) in 1993, \$1.14 billion (11.8%) in 1994 and \$1.33 billion (12.6%) in 1995. Thus, it represents an average share of around 10% of total bilateral aid.

The special characteristic of aid to Africa is that grant aid represents a much higher proportion than other forms of aid and in comparison with other recipient regions. The proportion of grant aid to Africa is 61.3%, compared with the global average of 28.2% (in 1995). If technical cooperation is added, the proportion represented by grant aid is 79.7%.

Yen loans have not been increased because the recipient countries lack the capacity to repay them and it is thought that the proportion of grant aid will grow despite problems of local cost and recurrent costs\*.

The largest recipient country in the region in 1995 was Kenya, which received 14.9% of the bilateral aid given to the region, with Tanzania (9.3%) and Ghana (9.2%) following.

### **Aiming at the promotion of "Africa-specific Development"**

It is necessary for aid to Africa to aim for "Africa-specific Development" by taking into account the diversity in the region. This perception led JICA to establish an "African Aid Study Group" consisting of scholars and experts, to examine the orientation of Japan's aid to Africa. The group's report, issued in February 1991, stressed the importance of aid in creating basic development plans, aid in the promotion of regional cooperation and aid

\* Recurrent cost: cost continuously necessary for the management and maintenance of constructed facilities and provided equipment and materials and for the recruitment of staff in development projects. The recipient countries cover these costs based on self-help efforts declared in Japan's ODA principles.

## Zambia Proceeding with the improvement of water supplies and hygiene with public participation

### .....Water Supply Project in Satellite Area of Lusaka

#### ●● Urgent need for the supply of clean water

In Lusaka, capital city of Zambia, the increase in the influx of population is a serious problem as in other African countries. George District is one of the residential areas where there is a concentration of low-income households represented by this portion of the population. Since a large number of residents use unhygienic water taken from wells which they dig themselves, due to the shortage and suspension of water supplies, cholera has prevailed and other problems have arisen. Therefore, it is a matter of urgency to improve the water supply and hygiene.

In response to this, Japan began grant aid cooperation in the form of the "Water Supply Project in Satellite Area of Lusaka" in 1993. Cooperation was planned over a total of four terms, of which the first two have been implemented and the construction of facilities for supplying clean water and other relevant purposes is progressing.

However, in order to retain a steady

supply of clean water, the construction of the facilities alone is not enough and problems cannot be solved without systems for operation, maintenance and management on financial and technological levels and the education of the local population about public sanitation.

#### ●● Creation of management of local waterworks

As a result of the lack of understanding among residents of the high cost of waterworks, payment rates of water charges have been low, and for this reason the collection of water charges was made as one of the most important items in this project. The George Office was established, which is in charge of the operation, maintenance and management of the local waterworks, and support was provided to organize the overall management as well as the construction of the facilities.

Young engineers responsible for administration in waterworks corporations attended training programs in Japan and have since demonstrated their leadership. In

addition, a project with public participation was implemented before construction began, aimed at instructing local residents and organizing the management system. Grass roots activity has taken place by setting up public committees on water to manage water supplies until water facilities could be properly established, along with sub-groups of 50-60 households each.

#### ●● Promoting public participation in cooperation with NGOs

The Overseas Development Administration (ODA) of the United Kingdom has collaborated with one of the U.K. NGOs, Care International and this cooperation has facilitated a great deal of training for local residents groups, as well as seminars and training programs for public organizations enabling them to become more effective.

It has become widely known among the residents of George District that waterworks have been constructed thanks to aid from Japan and many children, who did not know about Japan until quite recently, call JICA staff "Japanigi" as they drive through the district newly supplied with water.

Scenes of local residents delighted with their new water supplies are often shown in the local newspapers and on television and Zambia has requested that Japan implement the third term of the project as soon as possible.

(JICA Zambia Office)

People washing clothes around completed waterworks, filling the air with cheerful voices and shouts of joy.



#### Water Supply Project in Satellite Area of Lusaka

Grant aid aimed at constructing small scale waterworks and supplying relevant equipment to the George District of Lusaka. The project was launched in 1993 and the construction work for the second term was completed by 1995.

through projects of an appropriate scale. The following fields were identified as being of general importance:

- (1) Rural development
- (2) Nurturing of small and medium enterprises
- (3) Development of agricultural products and processed products to diversify exports
- (4) Improvement of the commercial distribution system
- (5) Provision of social and economic infrastructure
- (6) Human resources development
- (7) Health, medical care and population
- (8) Conservation of the natural environment

In order to gain an accurate understanding of the development needs of African countries, about which there is generally a lack of information, and in order to promote effective aid, JICA established a "Southern Africa Aid Study Group" consisting of scholars and experts in 1993. JICA summed up its proposals for the methods of Japan's long and medium-term engagement in prioritized development fields for the region.

In 1994, "Country specific Aid Study Groups" were established to deal with Ghana and Senegal and these are making proposals for future cooperation with these countries.

When extending aid to Africa, it is important to take into account the links between grant aid and technical cooperation, the difficulties of meeting local costs and WID. Simultaneously, the economic structural adjustment implemented by many countries under the direction of the IMF and the World Bank has involved a *diminution of the function of the public sector*, an increase in unemployment and reductions in public services. These have an impact on the weaker members of society and it is necessary that the implementation of cooperation should take account of these social aspects even if these are merely transitory effects in the first stages of economic structural adjustment.

### **Collaboration with industrialized countries and international organizations**

In order that future aid be given more effectively and efficiently in Africa and elsewhere, it has been even more important for Japan to work in concert with industrialized countries and international organizations. Japan-U.S. cooperation in the areas of population and HIV/AIDS is a good example of this. This cooperation is implemented as part of the approach of the Japan-U.S. common agenda. The prioritized African countries in the areas of population and HIV/AIDS on this agenda are Kenya, Ghana, Tanzania and Senegal. It was especially agreed that Japan and the United States would cooperate in Kenya and Ghana, and JICA has worked to identify and formulate specific projects for joint cooperation by the dispatch of project formulation specialists to Kenya.

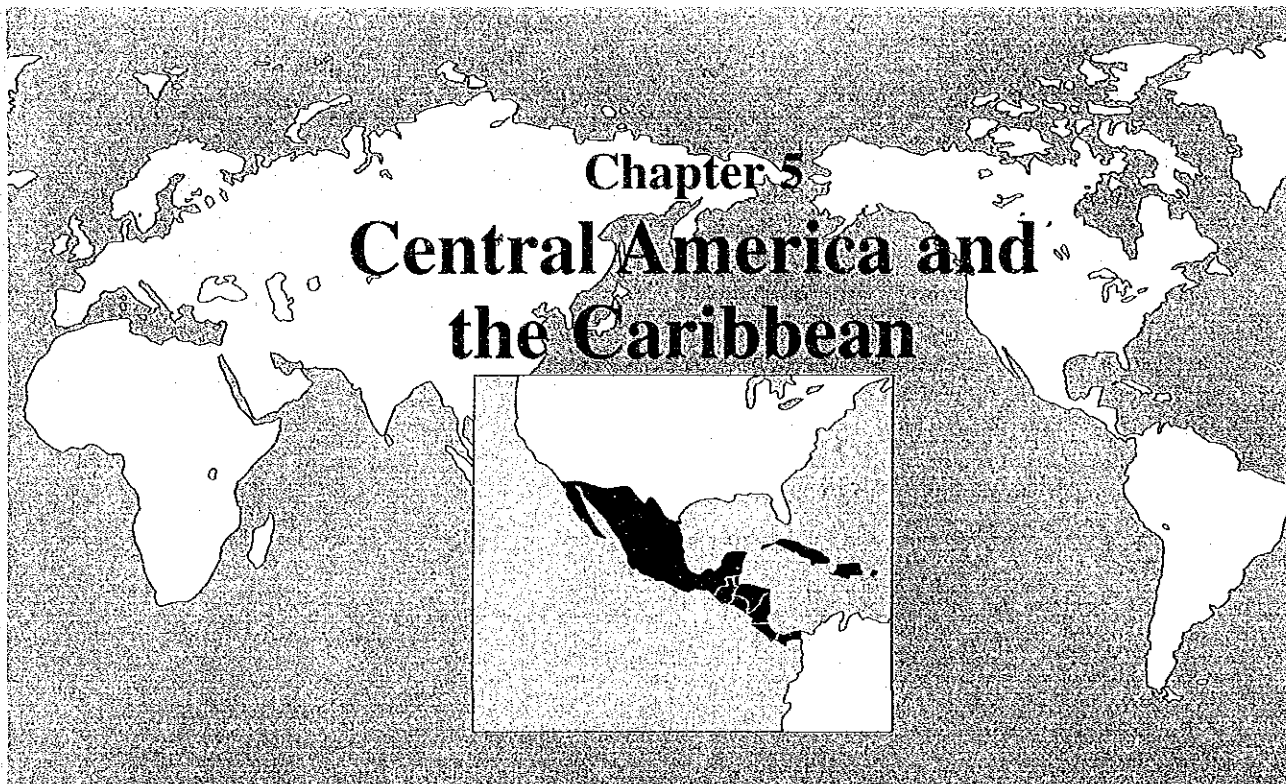
Further possibilities for joint work and cooperation in the African region are being examined, based on the mutual study of aid methods and knowhow with the Canadian International Development Agency (CIDA) and the Overseas Development Administration (ODA) of the United Kingdom.

A joint seminar on Southern Africa was held in Tokyo together with CIDA in March 1995. As a follow-up, a seminar was held in Zimbabwe in March 1996 and the possibilities for exchange of information and cooperation with CIDA are being examined. With ODA, the possibility of cooperation is being examined in the area of education in Kenya.

Many countries on the African continent are threatened by desertification. In signing the Desertification Treaty in 1994, Japan announced that it would join other advanced countries in giving assistance to developing countries engaged in preventing desertification. In keeping with this policy, JICA has dispatched project formulation specialists for the last two years to the "Sahara Club", which researches and coordinates the approach to anti-desertification by both the developed

donor countries and recipient countries.

Coordination with other advanced countries and aid agencies is especially effective in regions such as Africa, where Japan's aid experience and knowhow are relatively minimal. Therefore, it is considered necessary to promote this kind of coordination actively in the future. (As for the cooperation with other advanced countries and aid agencies, see "Collaboration with other aid agencies and international organizations", Part 1 Chapter 2.)



### **A region including comparatively high income countries**

The Central American and Caribbean region contains 21 countries, some of which are developing countries of relatively high income characterized as "semi-developed" countries. The region covers an area of 2.96 million square kilometers, about 2.2% of the total global surface and has a population of 147 million, 2.8% of the population of the world.

With its rich natural resources, this region has a wealth of primary products but secondary and tertiary industry lag behind, except in Mexico. Economically, many of the countries face the problems of cumulative debt and are in the process of reconstruction.

The 21 countries consist of 8 Central American countries and 13 Caribbean countries. Many of the countries in the region are small and there are 8 countries with an area of 10,000 kilometers or less and 9 with a population of less than half a million.

As for the income levels of the countries in 1995, the three countries of Haiti, Honduras and Nicaragua were identified as low-income countries with a per capita GNP of less than

750 dollars and four countries as lower-middle-income countries with the figure between 750 and 1,500. The rest of the countries, mainly the Bahamas and Barbados, are classified as upper-middle income countries of above 5,000 dollars per capita. Many of the Caribbean countries depend on tourism for extra income in addition to agricultural production.

### **An opportunity to develop democracy and improve public welfare**

There was a series of military juntas in this region in the 1960s. The civil war in Central America, which began in El Salvador and Nicaragua and lasted more than ten years from the late seventies, brought about the ruination of the lands and the rupture of the economies of the countries involved. From the beginning of the eighties, there has been a gradual transition to democratic rule and all the countries in the region are now under democratic government, except for Cuba.

Due to the long years of political and economic turbulence, however, the social infrastructure of many countries has not yet

improved and cooperation of other countries is vital if they are to overcome inefficiency and achieve economic independence. The Central American and Caribbean countries are currently favored by an opportunity to develop complete democracy and improve public welfare and many of them are promoting policies of economic liberalization.

As for the accumulated debts of the countries in this region, the debtor countries, with the support of the World Bank and the IMF, have adopted policies aimed at the removal of financial deficits, control of inflation, increase of exports and promotion of free trade. Consequently, an agreement on debt reduction was reached in 1992, based on the new debt strategy\* and the successful results can already be seen in Mexico and Costa Rica, where these have been applied. In addition, long-term support, such as debt re-scheduling through the Paris Club\*, has been given by creditor countries, international organizations and private banks.

### **Japanese cooperation in the Central American and Caribbean region**

In 1995, bilateral ODA of \$610 million was given by Japan to this region, representing 5.7% of total bilateral ODA. The income of the Central American and Caribbean nations is relatively high compared with other regions and there are relatively few countries receiving grant aid. As many of the countries receiving yen loans have enormous cumulative deficit and are the subjects of deferred debt, the amount of ODA to this region has fallen since 1983.

However, because of the end of the Central American conflicts and the great demand for money to restore the economy of each country, yen loans have increased since 1990 so that the downward trend in the amount of ODA has ceased.

The details of Japan's bilateral ODA to the Central American and Caribbean countries in 1995 are as follows: \$296 million (49.2%) for

yen loans, \$170 million (28.3%) for grant aid and \$135 million (22.5%) for technical cooperation.

While yen loans are used for economic infrastructure such as transportation and energy and social infrastructure such as the environment, grant aid is used in social infrastructure projects such as health care and education and economic infrastructure projects such as transport.

Technical cooperation is implemented in all forms such as acceptance of participants for training, dispatch of experts, development studies and project-type technical cooperation. The main areas of cooperation, based on a wide range of needs, are agriculture, health care, manufacturing, fishing, communications and broadcasting, mining, culture and education.

There are factors causing instability in some countries in which civil war has only recently ended, and it is necessary to give thorough consideration to security policies when carrying out technical cooperation in those countries. Since the Caribbean countries have relatively high income level per capita and have small-scale economies, and a short history of independence, there has been little Japanese cooperation to date. However, it is necessary to examine appropriate cooperation according to the economic scale of each country in the future.

### **Cooperation with Mexico, the largest country in the region**

Mexico, the country with the largest land area and population in Central America, has shown a solid improvement in its position in the international community, by the effectuation of the North American Free Trade Agreement (NAFTA) in January 1994 and its joining of the OECD in May 1994. Japan has actively provided aid for the development of the country, principally in the form of technical cooperation and yen loans.

From the point of view of effective implementation of cooperation in Central America, cooperation such as the on-going

\* New debt strategy: a framework for relieving debt spelled out at the G7 meeting, based on a proposal by the then Secretary of the Treasury of the United States, Mr. Brady. The strategy is aimed at reducing the private debt in middle-income countries on condition that a medium-term economic plan be implemented by the IMF and World Bank.

\* The Paris Club: the conference of principal creditor nations for negotiations on the official deferred debt on the condition that loans are agreed by the IMF.

Third Country Training, centered in Mexico as the largest country, is proving to be most effective.

### **Countries aiming at recovery from the devastation of civil war**

El Salvador and Nicaragua are now recovering from the ravages of prolonged civil war. Japan dispatched a general economic cooperation study team in December 1994 to hold policy discussions with governmental officials in both countries with a view to supporting democratization and economic reform.

It was agreed that prioritized areas would be those such as economic infrastructure relevant to the stimulation of the production sector, social development and the environment in El Salvador, and social development, poverty alleviation, social and economic infrastructure and the environment in Nicaragua.

One representative example of Japanese cooperation in Costa Rica, which boasts a high standard of education and social security as well as the most stable democracy, is the "Technical Instructor and Personnel Training Center for the Industrial Development of Central America", aimed at extending the effects of cooperation throughout the region as well as stimulating domestic industry.

Honduras, along with Nicaragua and Haiti, is backward in its development. Its development needs are great and Japanese cooperation is being implemented in a large number of sectors. This has led to a record number of the Japan Overseas Cooperation Volunteers being dispatched to this area. As a first attempt to carry out a development study in the field of health care in the world, the "Study on the Strategies and Plans for the Upgrading of Health Status" was conducted here.

Panama is the foremost destination for Japanese exports, representing more than a quarter of all exports to Latin America. The stability of this country, which has the Panama Canal within its territory, is of very great significance for the stability of the world and Japan is giving aid in various forms.

Jamaica, the central country in the Caribbean, has developed a closer relationship with Japan over the years and is the recipient of yen loans and technical cooperation.

When Japan carries out cooperation in the Central American and Caribbean region, which consists of many small countries, it has found that the most effective kind of projects are those that will bring benefits not only to the recipient country but also to the neighbouring countries of the region (for example, Third Country Training and relevant project-type technical cooperation). It is therefore necessary to make an effort to identify and formulate such projects.

In Haiti, following the return of the exiled President Aristide, there was a move toward democratic rule and Preval was elected as successor in the presidential election in December 1995. The USA and other western countries have cooperated with Haiti to support democratization. Similarly, Japan dispatched a project-formulation study team in March 1995 and has actively promoted support for democratization since October 1994 by consulting on the future direction of cooperation.



# Mexico Plans to train specialists sought after by the industrial world in the process of modernization

.....The National Actualization Center for the General Directorate for the Industrial Technological Education Project

### ●● Retraining the teaching staff of vocational training schools

Mexico recently became a signatory of NAFTA and a member of OECD. Mexico urgently needs to modernize its industry and has been promoting the liberalization of its economic policies. It is also essential for Mexico to acquire technological capacity and train technicians.

The DGETI has been set up within the Ministry of Education in Mexico to oversee vocational education. Approximately 420 vocational training schools have been established all over Mexico under DGETI and approximately 20,000 teaching staff are now instructing more than 400,000 students.

However, in order to catch up with the rapid pace of industrial development, it is necessary to retrain teaching staff themselves. To this end, the National Actualization Center for the General Directorate of the Industrial Technological Education Project (CNAD) was set up in September 1994 with cooperation from Japan.

### ●● Technological transfer of mechatronics (mechanics/electronics)

Currently, 7 dispatched Japanese

experts have been implementing technological transfer to 18 CNAD staff mainly in the field of mechatronics, which is regarded as pioneer technology. The unique characteristic of this project lies in the method of the training courses for teaching staff, which are led by CNAD staff, not by Japanese experts.

The training courses were started in November 1995 and 24 teaching staff participated in the first training course. The structure of the training course emphasises that education incorporates practices and experiments rather than the theory-centered approach seen in conventional training courses. After completing a one year course, trainees return to their original schools and teach subjects related to mechatronics.

Since mechatronics consists of an integrated technology made up of various components and advances at a rapid rate, the contents of training programs always have to be updated. In January 1996, the CNAD Committee for Future Planning was set up to discuss the effectiveness of full training programs that are offered on a limited term basis and in the manner in which knowledge is imparted and absorbed by trainees.

### ●● Joint Discussion at the CNAD committee on future vision

The CNAD Committee on Future Planning organized by CNAD staff and Japanese experts offers a forum where the subject of mechatronics training and teaching methods can be discussed and reviewed. The committee has been discussing an assignment plan for trainees after their completion of training courses, activities, and the future construction of facilities at which all of the 20,000 teaching staff of vocational education training schools can use CNAD.

Enthusiastic talks by the committee have been also held based on the current situations of industry and vocational education in order to train appropriate human resources for the industrial world in Mexico.

As of now, while technological transfer and the first training course have been implemented, the actual construction of a library, auditoriums, dining rooms and other facilities at CNAD is under way and will be completed by September 1996.

Japanese experts and their counterparts have been carrying out activities through highly motivated teamwork to make CNAD a prime model for the retraining of teaching staff in Latin America in the near future.

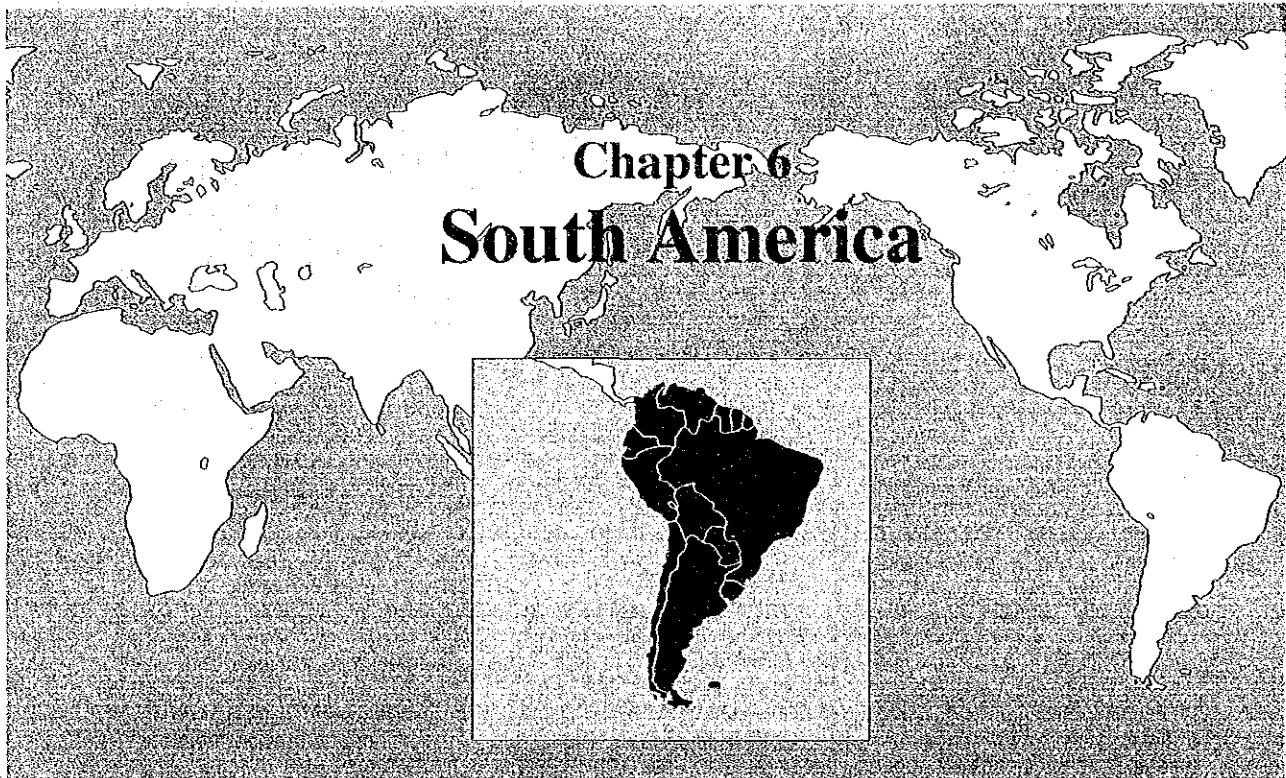
(JICA Mexico Office)



Japanese experts transferring technology to CNAD staff.

The National Actualization Center for the General Directorate for the Industrial Technological Education Project

Project-type technical cooperation. The Center is expected independently to train the teaching staff in technological education through training programs, allowing future personnel to utilize mechatronics successfully in the industrial world. The project has been implemented since September 1994 as a five-year plan.



### **A region of many large and medium-sized countries**

The South American region, which consists of 12 countries, has an area of 17.72 million square kilometers (approximately 13% of the total global surface) and a population of 310 million (approximately 6% of the world). There are many large and medium-sized countries and the region is characterized by large national land areas and a wealth of natural and human resources.

Japanese immigrants have lived in this region for many years and many Japanese immigrants, those of Japanese descendants and residents with Japanese citizenship, currently live in Brazil, Peru, Argentina, Paraguay and Bolivia. Since Japan established diplomatic relations with Peru in 1873, a close relationship has been maintained with this region, with a constant exchange of prominent people and the establishment of branches of Japanese firms.

Although successive military juntas have emerged in South America since the 1960s, moves towards democratic rule began in the early eighties and all the countries have now adopted democratic political systems.

However, it is still necessary to make efforts to establish firm democracy in the face of political instability in the region.

### **Towards debt reduction and economic independence**

The countries of South America, which include relatively industrialized countries such as Brazil and Argentina and which have relatively high income levels, are generally regarded as middle-income developing countries. However, with some exceptions, they have a poorly established social infrastructure due to long-lasting political and economic turbulence, and they find it difficult to achieve economic independence without cooperation from other countries.

Furthermore, those countries which borrowed capital from advanced countries and financial institutions (mainly private banks) to promote rapid modernization have suffered from a negative international balance of payment due to the drop in price of primary products and the increase of international interest rates and have found it difficult to repay those loans. They were, therefore, confronted

# Argentina

Seeking improvement measures to promote exports expansion and foreign investment

## .....The Study of Economic Development (II)

### ●● Argentina after a great transformation

Argentina, which is approximately eight times as large as Japan, is rich in natural resources and the vast Pampa plateau is graced with the most fertile soil in the world.

However, despite these favorable conditions, until recently, Argentina has been cited in economics textbooks as an example of failed development policies. In relation to inflation policies, in particular, three-digit inflation every year for fifteen years since 1976 has been a major obstacle to economic development.

Since 1991, however, the greatest obstacle to an anti-inflation measure has been successfully controlled and Argentina began its transformation by promoting liberalization, competition and the creation of the private sectors in order to join the advanced countries. The keys to this transformation are the rapid expansion of foreign exports and the promotion of foreign investment.

Argentina has been adopting concrete guidelines and accumulating information to enforce the policies, previously lacking, for promoting private enterprises engaged in production and trade.

### ●● The second phase of economic development studies

In the Study of Economic Development in the Argentine Republic by JICA under the late Mr. Saburo Okita, leader of the study

team from 1985 to 1986, important issues were addressed concerning the importance of medium and long-term policies, cooperation between public and private sectors, the role of the government and other issues. The proposals were well received by leaders in both sectors.

The Argentine government heeded the results of the study and requested the Japanese government to implement the Study of Economic Development (II) in order to learn more from Japan, which has become an investment giant abroad.

This second study suggested short-, medium- and long-term approaches to be taken by the private sector and effective support policies to be adopted by the government. This involves looking to East Asia including Japan, where Argentina has conducted considerable less economic exchanges in comparison with neighbouring Chile and Brazil.

In addition, besides looking at the export goods and investment environment in Argentina, JICA adopted approaches to collect and adjust basic information lacking in Argentina in terms of the market environment and trends in the East Asian region as a potential export and investment partner. This information has been used as a basis for improving the performance of the public and private sectors in Argentina.

### ●● New technical cooperation dealing with "soft" aspects of technology

Studies dealing with this kind of "soft" aspect belongs to a new field in JICA's technical cooperation. Compared to "hard" technological transfers, the knowledge transferred through this study tends to take a long time to be fully understood by the authorities of a counterpart country, take root, and appear as concrete results. Argentina, however, has responded swiftly to the results of the study with appropriate action.

The economy, which grew rapidly from 1991 to 1994 (average annual growth rate of 7.7%), faced a serious recession due to the currency crisis in Mexico in late 1994 (there was negative growth rate of 4.4% in 1995) and the expansion of exports and investment has become increasingly urgent and important.

The Argentine government adopted the operational plan based on this study, which was issued in June 1996. It is expected that the operational plan will include both policies to be actualized by Argentina itself and those necessitating international cooperation.

As Japan continues to develop its technical cooperation in Argentina in the future, the report is sure to become an important source of data and great influence.

(JICA Argentina Office)



### The Study of Economic Development (II)

Development studies. The aim is to analyze the current situation of development in the macroeconomic sector of Argentina, offer suggestions to maintain the economic growth of that country, analyze and offer conditions necessary to strengthen its relationships with East Asian countries.

Cattle at pasture. They may be soon exported to East Asian countries.

with many economic difficulties throughout the eighties.

It was under these circumstances that a debt reduction agreement based on the new debt strategy (the Brady Plan) was reached in almost all of the debtor countries in 1993. The structural adjustment policies, which were to curtail the governmental structure, restrain inflation, reform fiscal policy and state industries, improve the taxation system and promote free trade, were implemented under the guidance of the World Bank and the IMF, and thus the countries concerned have been making self-help efforts to reduce debt.

### **Movement towards a South American common market and economic integration**

From the beginning of the 1990s, there has been increased movement towards economic integration. The South American common market, MERCOSUR, is a representative example of this. Other countries have taken active steps toward joining the North American Free Trade Agreement (NAFTA) and Asia Pacific Economic Cooperation (APEC).

The countries characterized as medium-advanced countries such as Argentina, Brazil and Chile are showing signs of playing a role as donor countries in the Latin American region.

In South America, there is an urgent need for measures to counter the environmental problems caused by rapid economic growth. Air pollution in Santiago and forest destruction and river pollution in the Amazon basin are serious problems. JICA's cooperation has been necessary in combatting these problems.

The drug problem is just as serious as the environmental problems. Linked with terrorism and a black market economy, the drug problem is a factor which hinders the sound social and economic development of the South American countries. Since the drug problem is considered to be induced by the impoverishment of rural and mountain areas and income differences within society, it is necessary to make efforts to solve this problem in the context of regional development policies.

### **Japanese cooperation with South America**

In 1995, \$532 million of Japan's bilateral ODA, 5% of the total, was extended to the South American region. Since there are few countries that qualify for grant aid, and many of those which qualify for yen loans are the subjects of deferred debt due to chronic debt, bilateral ODA has decreased since 1983. In recent years, however, the mechanism for getting yen loans was improved by financial measures such as deferred debt introduced by the Paris Club (an association of the main creditor nations), and the decline in total ODA has stopped.

Yen loans are used mainly in the fields of agriculture and economic infrastructure such as transport, energy and communication and broadcasting and the record in 1995 was 27% of the total ODA to South America.

Grant aid was mainly directed to the fields of agriculture, health care and social infrastructure. Since South America has a close relationship with Japan through the fishing industry, and in consideration of a very important cultural heritage, much cooperation is implemented in the fields of fishing and culture. In 1995, grant aid to this region amounted to 28% of the total ODA.

As there is a great demand for technical cooperation in this region coupled with a high capacity to absorb technology, active technical cooperation is under way in various forms.

The main fields of cooperation are agriculture, transportation, health care, communications and broadcasting, mining and manufacturing, human resources development and culture. The proportion of the Japanese technical cooperation implemented for this region in 1995 was approximately 7%, second to the Asian region, and marked 44% of the total ODA to South America.

In recent years, there has been a trend towards increasing cooperation in relevant fields such as export promotion to acquire foreign currency and the environment.

The murder of three Japanese experts in Peru

# Brazil

JICA's first technological cooperation aimed at conserving the largest natural habitat on the earth

## .....The Brazilian Amazon Forest Research Project

### ●● Research in three fields and technological transfer

Recently, public awareness of environmental issues has arisen and forest conservation has drawn wider concern. The whole world is paying particular attention to the Amazon region mainly covering Brazil.

Under these circumstances, the Brazilian government requested technical cooperation from Japan aimed at conserving the Amazon tropical rain forests and improving management technology. In response, JICA began a three-year project-type technical cooperation, the "Brazilian Amazon Forest Research Project", in 1995.

This project aims to carry out research and technological transfer in remote sensing technology to observe forest conditions, in methods of natural forest management based on studies of forestry and wildlife, and in the restoration of devastated forests through seeding, plant-raising and soil analysis. The experts, dispatched over the short and long-term from the General Forest Research Institute and other agencies in Japan, have been engaged in this subject together with researchers from the National Amazon Research Institute, an operational agency in Brazil.

As of now, 4 Japanese experts under a project leader are working hard in the Amazon, which to them is a totally different natural environment.

### ●● Working with second generation Japanese-Brazilians

The National Amazon Research Institute is situated in Manaus in the Amazona state lying in the central part of the Amazon tropical forest. The Institute is staffed by second generation Japanese-Brazilian research workers and as the central agency of the Brazilian side, they have participated in the initial stage to

request cooperation and discussions with the Japanese study team before the launch of the project, and are responsible for the adjustment of various practical issues on the Brazilian side at the start of cooperation. They are currently acting as go-betweens for Japanese and Brazilians involved in the project.

Although Manaus has a population of approximately 1.6 million, its telecommunications network is poor and basic items such as telephones are lacking.

the "Green Hell" and a world where common sense does not prevail. This project is JICA's first cooperation in the conservation of the Amazon tropical rain forest and as such is being conducted with much trial and error.

It is hoped that the results of the research will go a long way towards conserving the largest natural habitat left on the earth, thereby maintaining the prosperity of human beings.

(JICA Brazil Office)



The Amazon tropical rain forest. Cooperation is in progress to conserve the forest.

Since research equipment breaks down due to frequent blackouts, research conditions are not favorable. The nature of the project means that much of the research has to be conducted outside, but the roads get muddy in the rainy season and research is often brought to a standstill.

### ●● Protecting the largest area of natural habitat on earth

It is in these unfavorable conditions that the Japanese experts and researchers from the Brazilian side have been struggling together to make progress in their research.

The Amazon is a large-scale and difficult research subject known as

### ▼ The Brazilian Amazon Forest Research Project

Project-type technical cooperation aimed at the sustainable management of tropical rain forests in the Amazon region and technical development for their conservation. The project has been implemented since June 1995 as a three-year plan. The activities include remote sensing, management of natural forests and restoration of devastated land.

by a terrorist group in July 1991 highlighted the need for full attention and consideration to be paid to security issues which emphasise the maxim of "safety first," when implementing technical cooperation in this region.

### **JICA's cooperation with the South American countries**

The main areas of JICA cooperation with the South American countries in 1995 were as follows:

In 1995, project confirmation studies were carried out in Brazil, Ecuador and Venezuela and consultations were held with governmental officials in those countries on the priority fields for development and aid.

Argentina is one of the highest income countries in the South American region and possesses advanced technology. A full development study on the "Economic Development Phase II" was conducted with the objective of providing policy advice on the future development of the Argentine economy through the expansion of direct investment and the encouragement of exports.

In the light of the importance of Brazil in the South American region and the presence of more descendants of Japanese immigrants than anywhere else in the world, Japan has actively supported this country, mainly through technical cooperation and yen loans. JICA's cooperation with Brazil in recent years has been under way in a wide range of fields such as the environment.

In 1995, as part of the initiative to redress regional disparities and eradicate poverty, a project-type technical cooperation, entitled "Public Health Development Project for Northeast Brazil in Pernambuco," was implemented with the aim of contributing to the development of Northeast Brazil, one of the most important areas in Brazil's development policy.

As for Bolivia, as one of the poorest countries in Central and South America and one with many Japanese descendants living in this country, Japan has implemented various forms of cooperation with the country to date.

In Ecuador, the main focus of development plans is an end to the oil-dependent economy. Chile has relatively high income levels and Japan has mainly carried out technical cooperation there. The prioritized fields confirmed at the discussion between a project confirmation study team and the members of the Chilean government in October 1994 were the reinforcement of the administrative systems for environmental measures; the improvement of productivity and quality to raise the international competitiveness of industries; the fulfilment of countermeasures against poverty mainly in urban and the southern area; provision of economic and social infrastructure; and the promotion of South-South Cooperation.

As in the case of Chile, Japan has mainly implemented technical cooperation in Colombia. The prioritized fields for future development and aid confirmed at the discussion between a project confirmation study team and the members of the Colombian government in September 1994 were to take countermeasures against the environmental problems, to provide primary education and basic medical care for social development and to improve productivity and quality to raise the international competitiveness of industries.

Taking into account the great need for development in Paraguay, as in Bolivia, and the country's relationship with Japan, seen in the presence of the many Japanese descendants, Japan has carried out various forms of cooperation in many fields. The prioritized fields for future development and aid confirmed at the discussion between a project confirmation study team and the members of the Paraguayan government in March 1995 were the provision of health and medical care and education for social development, the improvement of productivity in all industries, concern for the environment to ensure sustainable development and the provision of social and economic infrastructure.

In Peru, as in Paraguay and Bolivia, taking into account a great development need and the relationship through the presence of many Japanese descendants, Japan has implemented

# Bolivia

A Japanese speciality, rainbow trout aqua-culture, in Lake Titicaca

## .....The Fisheries Development Research Center Project

Rainbow trout caught in the lake after stocking.



### ●● Increase in demand for fresh-water fish

It takes 30 hours to fly, including many connecting flights, from Tokyo to the airport in Lapaz, the capital of Bolivia, which lies 4,000 meters above sea level right in the center of the Andes. The largest fresh-water lake in South America, Lake Titicaca, lies 120 kilometers horizontally away from the airport.

It was in June 1991 that JICA set up the Fisheries Development Research Center at the lakeside as a base for project-type technical cooperation and launched the aqua-culture of young rainbow trout and the technological transfer for fish stocking.

Since the land-locked nation of Bolivia is not traditionally a fish eating one, fish is relatively more expensive than meat and its consumption is low. In recent years, however, demand for fresh-water fish such as rainbow trout and peherel has been increasing due to health trends, mainly among the medium and high-income classes.

Therefore, the fishermen from the lakeside have become increasingly keen to farm rainbow trout and requests for technical instruction in acquiring young fish and aqua-culture have increased. Both the Japanese and Bolivian authorities have confirmed that all these trends have been developed along with the

aim of setting up the center.

### ●● Practical applications of aqua-culture of rainbow trout to improve living conditions

It is estimated that annual income per household in the agricultural areas of Bolivia is a few hundred dollars. The mortality rate among babies due to malnutrition is high and the improvement of living conditions is one of the most important policies for the government.

Given these conditions aqua-culture of rainbow trout, with high cash crop potential, has rapidly drawn the attention of fishermen as an effective measure to improve living conditions.

In order to meet their requests, the center has been striving to improve productivity and quality so that it can supply young fish to fishermen at a low price. The fishermen and center staff have been working together to stock the lakes with young fish and have been promoting the establishment of stocking techniques.

The aqua-culture of rainbow trout, described as a Japanese speciality, has been introduced in a form suitable to the natural environment in Bolivia and nowadays the fishermen have begun visiting the center to tell their success stories. Rainbow trout a few centimeters long grow up to dozens of

centimeters for sale in the richly-fed lakes within one or two years. It can be said that the project has reached the stage at which all involved staff are starting to see concrete results.

To ensure the continuing success of the program, center staff have been vigilant against indiscriminate fishing and protective of the natural environment.

### ●● A dream spreading over the Andes lakes

Land lying 3,000 - 5,000 meters above sea level is agriculturally restricted and here, the harsh living conditions of the farmers have not changed. In this sense, the impact of the aqua-culture technique on the improvement of living conditions is substantial.

There are approximately 100 groups of lakes filled with the thawed ice from the Andes. Lake Titicaca lies at their mouth, where rainbow trout breed and the livelihood of the farmers becomes ever more prosperous.... Bearing such a blueprint in mind, the center will continue its collaboration with the farmers and fishermen.

(JICA Bolivia Office)



Female farmers around Lake Titicaca.

### The Fisheries Development Research Center Project

Project-type technical cooperation. The project aims to strengthen the function of the center and to spread aqua-culture techniques through the steady production of young rainbow trout and the establishment of a basic aqua-culture technique by using feeding methods suitable for raising fish in a small lake environment.

various forms of cooperation in many fields. Since July 1991, when three JICA experts were murdered, no cooperation involving the long-term dispatch of experts has taken place and cooperation has centered on the acceptance of participants for training and the provision of equipment and materials. The prioritized fields for future development and aid confirmed at the discussion between a project confirmation study team and the members of the Peruvian government in September 1994 were active support for the poor, such as the improvement of education and basic medical care, personnel training and the provision of various institutions to take countermeasures against the environmental problems, and the provision of social and economic infrastructure.

With its high income level, Uruguay has mostly been the recipient of technical cooperation from Japan. The prioritized fields for future development and aid confirmed at the discussion between a project confirmation study team and the members of the Uruguayan government in October 1994 were the improvement in productivity and quality in the agricultural field, the fulfilment of countermeasures against environmental problems, the improvement of productivity and quality to encourage exports, policy making for small and medium enterprises and the improvement of the medical sector including anti-cancer policies.