

The OECD/DAC's New Development Strategy

**Report of the Issue-wise Study Committee
for Japan's Official Development Assistance**

vol. 2 Sectoral Studies

March 1998

**The Issue-wise Study Committee for
Japan's Official Development Assistance on
the "DAC's New Development Strategy (NDS)"**

**Organized by
Japan International Cooperation Agency**

This report is based on the discussion and findings of the Issue-wise Study Committee for Japan's Official Development Assistance on the "DAC's New Development Strategy (NDS)" organized by the Japan International Cooperation Agency (JICA). The views expressed in the report are those of the members of the Study Committee and do not necessarily reflect those of JICA and its affiliated organizations.

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First Printing March 1998

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Volume 2 Sectoral Studies

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Volume 4 Country Data (46 countries) (Japanese only)

Abbreviations

ADB	Asian Development Bank
ASEAN	Association of South East Asian Nations
BHN	Basic Human Needs
CAS	Country Assistance Strategy
CIDA	Canada International Development Agency
DAC	Development Assistance Committee
DANIDA	Danish International Development Agency
DfID	Department for International Development
EU	European Union
GDP	Gross Domestic Products
GNP	Gross National Products
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
ILO	International Labor Organisation
IMF	International Monetary Fund
JOCV	Japan Overseas Cooperation Volunteer
L/A	Loan Agreement
LLDC	Least Less Developed Countries
NDS	The DAC's New Development Strategy
NGO	Non-Governmental Organisation
NIEs	Newly Industrializing Economies
ODA	Official Development Assistance
ODA	Overseras Development Administration
OECD	Organisation for Economic Co-operation and Development
OECF	The Overseas Economic Co-operation Fund
PVO	Private Voluntary Organization
SIDA	Sweidish International Development Authority
Sida	Swedish International Development Co-operation Agency
SIP	Sector Investment Programme
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization
WID	Women in Development

Poverty

CPM	Capability Poverty Measure
DA	Development Assistance
ESF	Economic Support Fund
HDI	Human Development Index
HPI	Human Poverty Index
PREM	Poverty Reduction and Economic Management
PTI	Program of Targeted Interventions
PWG	Poverty Working Group
SHD	Sustainable Human Development

Education

ADEA	Association for the Development of Education in Africa
EFA	Education for All
ESIP	Education Sector Investment Program
IIEP	International Institute for Educational Planning
WCEFA	World Conference on Education for All

Health Care

AIDS	Acquired Immunodeficiency Syndrome
ARI	Acute Respiratory Infections
BHU	Basic Health Unit
DALYs	Disability Adjusted Life Years
EPI	Expanded Programme on Immunization
GII	Global Issues Initiative on Population and AIDS
GOBI	Growth Monitoring, Oral Rehydration Salt, Breast Feeding and Immunization
HIV	Human Immunodeficiency Virus
IEC	Information, Education and Communication
IMR	Infant Mortality Rate
MMR	Maternal Mortality Rate
NMR	Neonatal Mortality Rate
PHC	Primary Health Care
PMC	Primary Medical Care
RHC	Rural Health Center
STD	Sexually Transmitted Diseases
TFR	Total Fertility Rate
U5MR	Under 5 Mortality Rate

The Environment

CDE	Capacity Development in Environment
EMAS	Eco-Management and Audit Scheme
FSC	Forest Stewardship Council
GEF	Global Environmental Facility
GREEN	Global Remedy for the Environment and Energy Use
ISD	Initiatives for Sustainable Development towards the 21st Century
ITTO	International Tropical Timber Organization
LEAP	Local Environment Action Plan
MP	Montreal Protocol
NEAP	National Environment Action Plan
UNCED	United Nations Conference on Environment and Development
WWF	World Wildlife Fund

1. Poverty Issues in the DAC's New Development Strategy

1.1 Extreme Poverty

DAC sets the most important goal as “a reduction by one-half in the proportion of people living in extreme poverty by 2015” in its report - *Shaping the 21st Century: The Contribution of Development Co-operation* (hereinafter called 'the DAC's New Development Strategy (NDS)'). The assumed standard for extreme poverty (set by the World Bank) is an annual income of \$370 (about 1 dollar per day). According to this standard, 1.3 billion people (30% of the population of developing countries) are in extreme poverty, and its number is increasing ⁽¹⁾.

Eighty six nations are taken up in the World Bank's *World Development Report 1990: Poverty*. This report sets the poverty line in the poorest nations (12 countries, including Somalia and India) at an annual income of \$275 per capita (based on the real purchasing power parity (PPP) price in 1985); however, the poverty line for low-income countries is an annual income of \$370 per capita (Indonesia, Bangladesh, Nepal, Kenya, Tanzania, Morocco, the Philippines, and Pakistan). Therefore, it is considered appropriate to set the poverty line of low-income countries in the range of from \$275 to \$370 per person a year ⁽²⁾. Such different standards for the poverty line (or country-specific poverty lines) may occur because the 'real poverty line' has a tendency to get higher as national income rises.

The World Bank report defines an annual income of \$275 or less as the threshold of 'extreme (absolute) poverty', and one of less than \$370 as '(absolute) poverty'. However the NDS defines extreme poverty as an annual income of less than \$370, that differs from the World Bank's definition.

1.2 Setting of Goals by Each Nation

The NDS emphasizes that it would be insufficient to only reduce by half the proportion of poor people worldwide, and that the objective must be pursued country by country, aiming at substantial progress in all countries ⁽³⁾.

Regardless of whether the definition of extreme poverty is an annual income of \$275 or \$370 per capita, the purpose of the definition is for international comparison to estimate the number of poor people in the world. Actually, the poverty line varies among nations, and the real definition of 'poverty' should be considered the 'state in which, in a given society, a "reasonable minimum" level of material welfare is not achieved'. It is therefore necessary to employ an (absolute) poverty line suitable to that particular country in order to obtain the poverty profile of a given country, instead of an international comparison. The basic premise of this study committee is that detailed handling is needed for each developing country, in embodying the NDS. As such, it is more appropriate to employ the poverty line adopted by each developing country.

The NDS does not necessarily set “a reduction by one-half in the proportion of people living in extreme poverty by 2015” as the goal to be achieved in each country. Rather, emphasis is placed on pursuing the objective country by country, aiming at substantial

(1) OECD; DAC(1996) p. 9.

(2) World Bank (1990) pp. 25-27.

(3) OECD; DAC (1996) p. 10.

progress in all countries. The expression 'substantial progress' leaves considerable room for interpretation, compared with "a reduction by one-half in the proportion of people living in extreme poverty by 2015." Considering various social conditions regarding the poor (differences between urban and rural areas, and due to gender or ethnic groups, etc.) in each country, as will be mentioned later, the expression 'substantial progress' toward poverty reduction is more appropriate than "reduction by one-half" of the number of poor people. Mechanical application of the goal of "reducing poverty" by half to every developing country, without considering each country's actual state, should be avoided.

1.3 Comprehensive Approach toward Development

For a development strategy to succeed, the NDS proposes integrating a number of key elements, such as "a sound and stable policy frame, emphasis on social development, enhanced participation by the local population and notably by women, good governance in the widest sense, policies and practices that are environmentally sustainable, and better means preventing and resolving conflict and fostering reconciliation."

The NDS also states that a development strategy must draw on "the resources, energies, and commitment of institutions and individuals in government at all levels, in the private sector, and in NGOs -- in developing and industrialized countries and in international organizations." Commitment by all of these levels is a comprehensive approach. The NDS is significant in that goals regarding poverty should be set in this comprehensive approach.

2. Poverty-related Points at Issue: Major Discussions

2.1 Relation between Market and Development

In developing countries, 'market failure' is a universal phenomenon, but this does not necessarily justify government intervention, because the government fails too.

In the 1950s, the dominant early development economics was based on the idea that markets in developing countries universally fail ⁽⁴⁾. As such, a socialistic economic system based on government planning was pursued for achieving economic development. But, today it is clear that such systems did not fully work. It is unrealistic to assume 'omnipotent governments' or 'selfless governments' that devote themselves to promoting national welfare.

On the other hand, the neo-classical approach, which has become dominant in development economics since the 1970s, advocates that it is more effective to utilise the market mechanism to achieve economic development. This is based on the view that 'market works' even in the developing countries as it does in the industrialised countries. The experiences of Asian NIEs such as Taiwan and Korea ⁽⁵⁾ were given as such examples. At present, however, it is known that not only the market mechanism but also the governments' active intervention have contributed to achieving successful industrialization ⁽⁶⁾.

Recent discussions have clarified the importance of the adjustment between roles of the market and the government, to achieve economic development. Their respective roles should also be emphasized in understanding poverty issues. The issue, in other words, is how to form governments that supplement and promote market function, instead of control and substitute the market function ⁽⁷⁾.

Jean Drèze and Amartya Sen advocated that poverty cannot be solved without public action, and they presented two types of strategies to alleviate poverty as successful examples ⁽⁸⁾: "growth-mediated security" strategy, and "support-led security" strategy. Security here means the elimination of unstable living (people's security). They cite Hong Kong, Singapore, Korea, and Kuwait as prime examples of poverty alleviation by the former method, and Sri Lanka, China, Costa Rica, and Kerala State of India as examples of the latter method. The former method has conventionally been known as the 'trickle-down' theory. However, Drèze and Sen emphasize that, although trickle-down is a consequence of growth, it is only realized through public measures by a government's efforts to convert growth into benefits for the poor. Based on this view, they focused on the following points ⁽⁹⁾.

- (1) The difference between growth-mediated security strategy and support-led security strategy does not indicate the difference between a government's active intervention and non-intervention. In growth-mediated security strategy, a government is often very active in spreading the results of growth, and it plays a decisive role in promoting growth.

⁽⁴⁾ Rosenstein-Rodan (1943); Esho (1997) Chapter 1.

⁽⁵⁾ Esho (1990) Chapter 1.

⁽⁶⁾ Amsden (1989); Wade (1990).

⁽⁷⁾ World Bank (1993); Aoki, Kim, and Okuno-Fujiwara (1997); Esho (1997) Chapter 4.

⁽⁸⁾ Drèze and Sen (1989) Ch. 10.

⁽⁹⁾ *ibid.* pp. 187-188.

- (2) Also, the contrast of the two strategies does not mean the difference between supply by the market versus supply by the government. People can benefit from overall prosperity through both increased incomes and wide-ranging public supply. In the countries that achieved high growth but failed to connect it to social supply, almost no improvement is observed in people's quality of life.
- (3) Additionally, the contrast of the two strategies does not indicate the dilemma between achieving higher growth and satisfying basic needs. Growth-mediated security aims at satisfying basic needs, while support-led security does not mean abandoning the goal of achieving economic growth. The two differ in that support-led-security countries gave large-scale public support to secure a certain level of basic capability before they achieve higher growth.
- (4) A growth-mediated security strategy is by no means the strategy for 'opulence without purpose' - namely, imprudent economic expansion. Firstly, the impact on the quality of life by the increased prosperity largely depends on the income distribution. Secondly, in many cases, the difference lies in the way they expand the employment opportunities; where a growth-mediated security strategy succeeded, the government played a significant role in promoting full employment.
- (5) Study on case the cases of a support-led security strategy showed that public support programs can work, even if a nation is very poor in terms of per capita GNP; that is, human deprivation can be overcome and the quality of life improved, in a short time. Support-led security is more effective in this point.
- (6) The above, however, do not necessarily mean that support-led security is superior overall to growth-mediated security. Growth-mediated security has merits that it will establish a physical base for future progress, and it can eradicate malnutrition and acute human deprivation. For a growth-mediated security strategy to succeed, the growth must be participatory (wide creation of rewarding employment), and the major benefits of economic growth must be channeled into public supply. This means that public support (in particular, public supply) is the common factor in both growth-mediated security and support-led security -- the two differ in terms of timing and order.

Drèze and Sen state that a mutually exclusive approach of choosing either the government or the market is ineffective for addressing the issue of economic development and poverty eradication. Poverty alleviation requires forming a societal design that can utilize respective features.

2.2 Development of Human Resources and Poverty

The important role of human resources investment in order to achieve economic development has been well recognized through respective studies by Gary Becker and Theodore Schultz⁽¹⁰⁾. Their view is that spending for education and health is more than ordinary consumption -- it should be considered as the investment which will bring income for a long time in the future. They emphasized that investing in education and health will improve

⁽¹⁰⁾ Becker (1975); Schultz (1961) (1988); Psacharopoulos (1988). Regarding the relation between nutrition, and economic growth and income distribution, refer to Behrman (1996); Dasgupta (1991); Dasgupta and Ray (1986); Dasgupta and Ray (1987).

people's knowledge and skill, consequently, it will enhance labor productivity, and will lead to economic growth.

If the economic value of education (rate of return of investment in education) can be measured by using cost-benefit analysis, the rate of return can be compared with that of other substitute investments. Then it would be possible to obtain both more rational spending selection standards on the individual level and wider selection standards for development investment on the national economy level.

On the individual level, many studies have confirmed that people's average incomes increase in according with the number of years of education they receive, in both industrialized and developing countries. Investment in education brings not only higher personal income but also higher social rate of return. This is important for a nation's economic development.

Paul Schultz obtained the following conclusion after measuring the private rate of return and the social rate of return of primary, secondary, and higher education in 46 countries (excluding socialist nations) (Table 2.1) ⁽¹¹⁾.

Table 2.1 Private Rate of Return and Social Rate of Return (%) of Education: Average Value

Region	Social rate of return			Private rate of return		
	Primary education	Secondary education	Higher education	Primary education	Secondary education	Higher education
Africa	27 (12)	19 (12)	14 (12)	45 (9)	28 (9)	33 (9)
Asia	18 (9)	14 (11)	12 (11)	34 (5)	15 (8)	18 (18)
Latin America	35 (8)	19 (8)	16 (8)	61 (5)	28 (5)	26 (5)
High-income nations	13 (6)	10 (15)	8 (15)	19 (17)	12 (14)	11 (15)

Note: Parentheses show the numbers of nations.

Source: T.P. Schultz (1988) p. 575

- (1) The social rate of return gets smaller as economic growth and the school education level proceed. Within a given country, the higher the school education level is, the smaller the social rate of return is. The social rates of return (15-30%) of Africa and Latin America are almost double those of high-income countries (8-13%).
- (2) The private rates of return in low-income regions are often double their respective social rates of return. The exception is Asian countries, in which the social rates of return of secondary and higher education are just slightly above the private rates of return, because of the small proportion of government subsidy in private expenses. On the contrary, in African and Latin American nations, vast government subsidies are paid for secondary education and higher education.

⁽¹¹⁾ T.P. Schultz (1988).

Schultz concludes that its policy implication from the above calculation is the direct subsidy toward primary education, followed by secondary education as the decline of the social marginal rate of return of human resources investment can be observed.

Empirical study pursuing “micro-economic relation between education and development” has progressed, showing a strong correlation among educational level, productivity, and earnings. But problems remain regarding means to increase investment in human capital.

Means to improve human capital include (i) health facilities and service, (ii) on-the-job training (OJT), (iii) school education, and (iv) adult education, and the following items should be clarified in further discussing education.

First, which type of human capital is most important, in which phase of development? Second, What type of education should be emphasized? and how much? and how fast? Third, What percentages of national income should be directed toward educational expenditures? and, How much spending should be appropriated to what kind of education system? In particular, priority between occupational education / technical training / adult education and school education, as well as priority among primary education, secondary education, and higher education, have not been well clarified. Though there is a very basic plan according to developmental stage, such as to first start with primary education, optimal human capital investment can largely vary according to the situation of each country.

Taking Sri Lanka as an example, the nation has a high life expectancy and a high literacy rate, compared with developing countries with similar levels of per-capita income, but its unemployment rate is high and per-capita income is low. Though people’s basic needs are satisfied, transformation of the nation’s industrial structure remains unrealized ⁽¹²⁾ . This study committee’s report on Zimbabwe shows similar problems. These cases demonstrate that each society has not fully utilized its achieved educational level.

On the contrary, East Asian nations experienced cycling high growth, low-level inequality, and educational attainment. Cumulative relations can be seen such as education contributing to economic growth and a reduced level of inequality, as well as economic growth and a reduced level of inequality stimulating spending on education ⁽¹³⁾ .

From the past studies on the relation between education and development, poverty alleviation by educational attainment largely depends on the development strategy, the initial conditions and the development stage of the country concerned, and we have to give more considerations for these factors.

2.3 Unemployment, Employment, and Poverty

It is well known that poverty and unemployment are closely related. In 1969 the International Labor Organization (ILO) established the World Employment Program and began activities aimed at explaining poverty issues as being an employment problem, and it advocated an employment-oriented development strategy, saying that increasing employment opportunities and productive labor is the most effective way to improve people’s income and living standards ⁽¹⁴⁾ .

⁽¹²⁾ Aturupane, Glewwe, and Isenman (1994).

⁽¹³⁾ Birdsall and Sabot (1995); Birdsall and Londono (1997).

⁽¹⁴⁾ Esho (1997) Chapter 3.

In the 1970s, an ILO mission went to seven developing countries (Columbia, Ceylon, Kenya, Iran, the Philippines, the Dominican Republic, and Sudan) to implement its employment-oriented development strategy. The *Kenya Report* is its representative outcome ⁽¹⁵⁾. In the report the ILO shifted its emphasis from the unemployment problem to relations among employment, poverty, and income distribution, underlying concerns on both the informal sector and the population movement from rural to urban areas.

The Report stated that the major problem in Kenya is not one of unemployment but one of employment; in other words, besides unemployment, another serious problem is unproductive employment in that people work hard but they cannot earn even a minimum income. The *Kenya Report* called these people 'the working poor'.

Based on the findings, the Report strongly sought a change of development strategy, and suggested "expansion of productive employment, eradication of poverty, reduction of extreme inequality, and equal distribution of growth benefits" as the purposes of the new strategy. Specifically, the following were suggested: (i) continual expansion of the economy, (ii) a wider sharing of benefits from economic growth, (iii) promotion of national economic integration, and (iv) efforts to combat extreme inequality and disparity among regions, social classes, and individuals. ILO strongly advocated adopting a 'redistribution from growth' strategy, which required continued growth and investment to create productive employment. ILO predicted the transfer of income to the working poor from the ones in the top rank, resulting in a more equal distribution.

The ILO report was not alone in emphasizing the necessity of a development strategy that would promote employment, for the poverty eradication. This proposition became commonly accepted view in the field of development economic from the 1970s onwards ⁽¹⁶⁾. A particular well-known example is Asian NIEs' success in eradicating poverty through promoting employment without deteriorating income distribution, through the adoption of a labor-intensive, export-oriented development strategy ⁽¹⁷⁾.

2.4 Income Distribution and Poverty

As to the relation between economic growth and income distribution, Simon Kuznets's study is a starting point ⁽¹⁸⁾. His idea, known as Kuznets's inverted-U-shape hypothesis, is clear and concise. This hypothesis assumes that increased inequality can be observed in the initial phase of economic growth or in the first stage from a pre-industrialized society to an industrialized society; followed by the stable phase, and later the degree of inequality reduces. The empirical data were drawn from the experiences of the U.S., the U.K., and Germany.

After that, many empirical studies regarding the relation between economic growth and income distribution were produced ⁽¹⁹⁾. Among them, an especially large influence resulted from the World Bank's study on *Redistribution with Growth* ⁽²⁰⁾. This study came up to conclusions such as (i) socialist countries have the highest degree of overall equality in

⁽¹⁵⁾ ILO (1972).

⁽¹⁶⁾ Deolalikar (1995).

⁽¹⁷⁾ Adelman (1974); Adelman and Robinson (1978); Rao (1978); Sen (1981b).

⁽¹⁸⁾ Kuznets (1955).

⁽¹⁹⁾ Cline (1975); Fields (1994).

⁽²⁰⁾ Chenery et al. (1974); Ahluwalia (1976).

terms of income distribution, (ii) industrialized countries can be equally divided into low-level-inequality cases and medium-level-inequality cases, and (iii) developing countries have much higher degrees of relative inequality than industrialized countries. This World Bank's empirical study reinforced Kuznets's hypothesis. On the other hand it emphasized that the relation between economic growth and income distribution cannot be fully explained from per-capita income, and that various variables, such as structural change, education, and population transfer were also influential.

However, all of the empirical studies regarding economic growth and income distribution were cross-sectional analysis, because the available statistics were insufficient for time series analysis. With this method, it is difficult to say that Kuznets's hypothesis, which says "as economic growth progresses, income distribution will first worsen but later improve," has been fully proved, regardless of the reasoning put forward. Cross-sectional analysis basically is to indicate an average relation, and it has a weakness in not reflecting respective nations' characteristics. At least, Kuznets's hypothesis is not 'an iron rule' that equally applies to any nation. The results of an empirical study for each nation, concerning relation between economic growth and income distribution, indicate considerably different patterns according to nations ⁽²¹⁾.

Recent studies have rather posed doubt on the validity of Kuznets's inverted U-shape hypothesis. Anand and Kanbur introduced a completely different conclusion, by questioning the demonstration method Ahluwalia adopted and the database he used ⁽²²⁾. Ravallion also concluded that there is no systematic relation between the Gini coefficient and per-capita consumption, through organizing 36 countries' living standards indexes during the 1980s ⁽²³⁾. Deininger's and Squire's studies, which newly organized 682 income distribution data of 108 countries from an integrated viewpoint, concluded that Kuznets's hypothesis was not applicable to almost 90 % of the nations in terms of time-series-wise ⁽²⁴⁾.

At any rate, the relation between economic growth and income distribution does not have only one feature, and the state of income distribution cannot be explained only by the size of income. The influence of growth on distribution can vary greatly, depending on the kind of policy the government takes. Also, it can be speculated that the states of asset distribution, education, health and hygiene, political systems, etc., in the early stage of economic development, will greatly affect the state of income distribution in the subsequent process of economic development.

Furthermore, growth accompanied by extreme inequality of income distribution is a negative factor for eradicating poverty. A development strategy that enables shared growth is required.

2.5 Gender and Poverty

In the 1980s, six large international conferences regarding the environment, human rights, population, social development, women, and human habitat were held one after another, as fora to discuss global issues. At every conference, the relation between socio-cultural issues and social development, and the gender issue, have been clarified.

⁽²¹⁾ Bigsten (1987).

⁽²²⁾ Anand & Kanbur (1993).

⁽²³⁾ Ravallion (1995).

⁽²⁴⁾ Deininger and Squire (1996).

In the strategy target and actions in the Platform for Action adopted at the Beijing World Conference on Women (1995), 12 important items were presented toward the achievement of gender equality and sustainable development. From the beginning, importance of the women and poverty issue was emphasized. Poverty is a complex and multi-sided issue attributable to both domestic and international ranges, and the change of the world economy and globalization affect social development in every nation. And it is pointed out that one strong tendency is that women are becoming poorer. Therefore, it is stipulated that application of gender analysis in extensive policies and projects is important in a poverty reduction strategy. Also, the Platform for Action presents strategic objectives as follows: (a) to review, adopt, and maintain macroeconomic policies and development strategies that address the needs and the efforts of women in poverty, (b) to revise laws and administrative practices to ensure women's equal rights and access to economic resources, (c) to provide women with access to savings and credit mechanisms and institutions, and (d) to develop gender-based methodologies and conduct research to address the feminization of poverty. Furthermore, it is said that sustainable development is possible only through improving the economic, social, political, legal and cultural status of women, and that success of a poverty reduction program should be based on integrating the gender perspective ('gender planning') in general policies relating to all spheres of society, as well as the implementation of positive measures with adequate institutional and financial support at all levels. In this way, in positioning an overall poverty policy in the macro-development strategy, it is important to integrate gender planning in poverty reduction programs.

In conventional analysis, the poor have been analyzed with 'household' as a basic unit of a social economy, in terms of income, so inequality inside a household has not been considered. This is a problem of inequality between genders, among ages, and blood relations, regarding distribution of resources and benefits inside a household (the power to decide spending, land ownership, opportunities to receive education, etc.). Additionally, low evaluation toward 'unpaid labor', which is not included in monetary evaluation, such as household work, raising children, and caring for the elderly, is also a factor producing the wage gap between men and women, which has invited women's relative poverty.

If the target of a poverty project is expansion of an individual's basic capability, as Amartya Sen advocated, it is important to enable individuals to fairly expand basic capability. It is necessary to adopt a method to enable people who are in a socioeconomically disadvantageous position to be at the same starting line. For that purpose, it is not good enough to eliminate the gap just by providing goods and services the government or the state considers necessary. As the NDS advocated, the 'capacity from below' must be expanded.

In the *Human Development Report 1997* of the UNDP, which addresses poverty issues, six priority areas were presented regarding poverty reduction strategy. As the starting point, empowerment of both poor men and women was presented. It is stated clearly that, especially for women's empowerment, equality between genders is essential, as well as for poverty eradication. Furthermore, it is said that tackling gender equality constructively in every phase of socioeconomic development will result in strengthening of every action field related to poverty reduction. It is even warned that, if poverty reduction strategies fail to empower women, they will fail to empower the entire society, and poverty reduction will not be achievable.

2.6 Structural Adjustment and Poverty

In the 1980s, many developing countries came to suffer from the 'trilemma' of a balance-of-payments deficit, a budget deficit, and accelerated inflation. Toward developing countries that fell under such a macro-imbalance, the IMF and the World Bank respectively established a new form of financing called 'structural adjustment loans', and they began to take joint steps to challenge the problems. Structural adjustment loan is a financing system that obliges recipient countries to practice structural adjustment programs. A structural adjustment program is to press reform in both demand and supply aspects, and the idea is based on the approach of neoclassical economics. Specifically, the program consists of lowering the exchange rate, raising the interest rate, measures to reduce the budget deficit, for the purpose of restricting the total demand; and reforms of various systems on the supply side. The latter reforms include such measures as liberalization of the trading system and capital, liberalization of financial regulations, abolition of price controls, and administrative and financial reforms, for the purpose of shifting from an economic system based on quantity control to an economic system based on price.

Because implementation of a structural adjustment program is accompanied by reduction of fiscal spending (especially various subsidies), it resulted in reduction of the social sector budget in the majority of developing countries. Also, the rapid market liberalization measures brought results that were disadvantageous to the poor ⁽²⁵⁾. In response to this situation, the United Nations Children's Fund (UNICEF) appealed the necessity of "adjustment with a human face" ⁽²⁶⁾.

In response to the criticism by UNICEF, the World Bank's structural adjustment program incorporated anti-poverty programs or financing to the social sector. In the World Bank's *World Development Report 1990*, the following four points were indicated as lessons for adjustment to be desired in the 1990s ⁽²⁷⁾.

- (i) A combination of efficient implementation of basic policy (change in relative price to be advantageous especially for agriculture) and efforts to appropriately lower consumption can often help many poor people.
- (ii) It is also similarly necessary to change the type of public expenditure to be directed for goods and service that are consumed by the poor, and to transfer the target to such goods and service.
- (iii) An increase of capital inflow can also reduce the impact of adjustment toward the poor. This is especially true in Latin America, East Europe, and Sub-Saharan African countries.
- (iv) Without sound economic policy, however, an increase of capital inflow ends up just being a temporary consolation. In order to protect the poor, there is no substitute for the actions of developing countries themselves.

⁽²⁵⁾ As to the influence of implementation of structural adjustment programs on poverty and income distribution, refer to Bourguignon, de Melo, and Morrison (1991); Demery and Addison (1987); Demery and Squire (1996); Helleiner (1987); Group 24 (1987); Huan and Nicholas (1987); Jayarajah, Branson and Sen (1996); Stewart (1991)(1995).

⁽²⁶⁾ Cornia, Jolly, and Stewart (eds.) (1987); Jolly (1991).

⁽²⁷⁾ World Bank (1990) p. 120.

3. Considerations in Applying the DAC's New Development Strategy

3.1 Development Strategies and Poverty Alleviation

In discussing developing countries' poverty issues, two different levels of discussions have always been conducted: national-economy-level poverty and individual-level poverty; in other words, macro-level poverty and micro-level poverty.

First, there is macro-level poverty problems, such as why an economic gap continually exists between rich countries and poor countries, or why some countries succeeded in development while others failed. On the other hand, there is micro-level poverty problems, such as why poverty (absolute poverty) does not disappear in developing countries. One major issue in understanding poverty is how a micro (individual economic entity) approach should be related to a macro (national economy) approach.

For poverty alleviation to succeed, it is necessary to avoid a dichotomous thinking, such as looking at the market versus the nation, or the economic infrastructure development versus the social sector, or large-scale projects versus small-scale projects, or putting a priority on growth versus on distribution. In order to succeed in eradicating poverty, every political measure and tool must be utilized, and they must be mutually supplementary. The poor do not live a life separate from the society. No matter what kind of policy or project it is, the influence reaches the entire society. What is important is whether or not a poverty project is integrated fully in the development strategy.

In the World Bank's report *Redistribution with Growth*, announced in 1974, emphasized that "the necessity of designing an entire program or political package, instead of an individual project package, in order to address the poor group problem". And toward "planning focused on poverty", "radical re-organization of development strategy" was advocated. This is the strategy that "means redistribution of benefits from growth, instead of meaning giving up growth as a purpose." Also, as a basic approach to improve welfare of the low-income group, four points were indicated: (i) to maximize the growth of GNP, by improving savings and more efficient resources distribution, while spreading benefits to all groups of the society, (ii) to direct investment toward the poor group, such as in the form of access to education and credit, and various public facilities, (iii) to redistribute income (or consumption), through the financial system or direct distribution of consumption goods, and (iv) to transfer the existing assets to the poor group by land reform. And special emphasis was placed in directing public investment to improve poor people's production abilities and income ⁽²⁸⁾.

The World Bank's *World Development Report 1990: Poverty*, stated as follows: "Rapid and politically sustainable progress on poverty has been achieved by pursuing a strategy that has two equally important elements. The first element is to promote productive use of poor people's most abundant asset -- labor. The second is to provide basic social services to the poor. The two elements are mutually reinforcing -- one without the other is not sufficient." The Report further stated, "even if this basic two-part strategy is adopted, many of the world's poor will continue to experience severe deprivation. Therefore, general measures for poverty reduction require transfer of expenditures with focused targets and a safety nets program, as supplements to basic strategy" ⁽²⁹⁾.

⁽²⁸⁾ Chenery et al. (1974) pp. 48-49.

⁽²⁹⁾ World Bank (1990) p. 3.

Based on this statement, the World Bank's report *Poverty Reduction and the World Bank*, which was announced in 1996, states that the three mainstay factors of the "strategy to reduce poverty" are (1) broad-based economic growth, (2) developing human capital, and (3) social safety nets for vulnerable groups. (1) "broad-based economic growth" includes (a) providing a framework necessary for growth with an extensive basis (labor-intensive growth, rural development projects, etc.), (b) securing access to key assets (especially land and credit), (c) increasing productivity of the poor (basic education, basic health, agricultural extension, vocational training), (d) making the market function for the poor (abolishment of excessive government intervention toward small enterprises, construction of a rural area infrastructure), and (e) eliminating discrimination toward the poor ⁽³⁰⁾.

Also, as lessons learned from the World Bank's poverty reduction strategy in the past five years, the following six points are presented ⁽³¹⁾.

- (i) Growth plays a decisive role in combating poverty.
- (ii) Analysis by nations in the form of poverty assessment can greatly contribute to understanding of respective nations' poverty issues and improvement of poverty alleviation.
- (iii) Poverty assessments, country assistance strategies, dialogue with governments of recipient countries, and follow-up analysis to ensure cohesive and comprehensive poverty reduction strategy, are necessary.
- (iv) It is necessary to establish effective poverty monitoring systems.
- (v) It is necessary to improve the method of measuring the "on-the-ground" impact of the World Bank's poverty assistance.
- (vi) In order to maximize the effectiveness of the donors' assistance in poverty, the government's commitment, availability of institutional capacity, and people's participation are essential.

Recent studies have been clarifying that growth that would enhance the efficiency of resources distribution is advantageous also for the poor. Growth and justice are not necessarily in a trade-off relation, but they can be fully compatible depending on the development strategy.

Poverty reduction requires measures from both macro and micro aspects. Or, a direct route and an indirect route for poverty eradication need to be closely associated. This having been pointed out, the followings are points regarding direct-route poverty projects for poverty eradication.

3.2 The Goals of Poverty Alleviation Projects

In the 1970s, 'satisfaction of basic needs (BN)' began to be emphasized as the major purpose of poverty alleviation projects. Satisfaction of BN began to be known as the main purpose of development, at the ILO's World Conference on Employment in 1976. This conference defined BN as the "minimum living standards the society should set for the poorest class of people." Specifically, BN has the following four points ⁽³²⁾.

⁽³⁰⁾ World Bank (1996).

⁽³¹⁾ *ibid.*

⁽³²⁾ ILO (1976) p.7.

- (i) To satisfy certain minimum requirements for a family's private consumption: sufficient food, housing, clothing, and certain facilities and service necessary for a household.
- (ii) To satisfy basic service provided by the society for the society: safe drinking water, sanitation, public transportation, health service, and educational service.
- (iii) To guarantee fully rewarding work to individuals who have the ability and will to work.
- (iv) To satisfy higher-quality needs: sufficiency of a healthy, humane, and satisfying environment, and people's participation in the process of making decisions that affect their living and individual freedom.

It was suggested that the nations that participated in the conference should achieve these targets by 2000. Also, it was commented that "a development project should include achievement of an absolute basic needs level, as a clear target," and "achievement of an absolute basic needs level should be positioned in the wider framework, which is the securing of human rights."

From early 1978, the World Bank also adopted the concept of basic needs, and the idea of assistance for basic needs came to be dominant in the field of international development⁽³³⁾. The five sectors of nutrition, health, education, water, public hygiene, and housing were conventionally covered as the target fields of the World Bank's basic needs loans⁽³⁴⁾.

Differently from a basic needs approach, Amartya Sen considered the definition of development, based on the concept of 'capabilities'. His idea is that poverty is a situation in which individuals' basic capabilities are deficient, and development means to expand individuals' capabilities⁽³⁵⁾. It is a trial to shift from a commodity-oriented approach, including not only the neo-classical school but also the basic needs school, which limited the meaning of development to satisfaction of goods and service, to a human-oriented approach that questions the meaning of individuals' quality of life or well-being. He criticised that to regard basic needs as "satisfaction of a certain minimum of basic goods" could be connected to fetishism of goods⁽³⁶⁾.

In a similar vein with Amartya Sen's capability concept, 'human development' is defined as the "process of enlarging people's choices" in the UNDP's *Human Development Report 1990*⁽³⁷⁾. According to the UNDP, the most critical things in the "process of enlarging people's choices," are to lead a long and healthy life, to be educated (or to acquire knowledge), and to enjoy a decent standard of living. And as additional choices, political freedom, guarantee of human rights, and self-respect are presented.

The *Human Development Report* attempted to prepare a Human Development Index (HDI), in order to grasp the state of human development. This is an index which combines "three factors essential for human living: longevity, knowledge, and a decent standard of living". Specifically, "life expectancy at birth" is used as an indicator of longevity, with the "adult literacy rate" used as an indicator of knowledge, and the "logarithmic value of real

(33) As to the idea of "basic needs," refer to Hicks (1979); Hicks and Streeten (1979); Streeten (1980) (1984); Streeten and Burki (1978).

(34) Burki and Haq (1981); Streeten et al. (1981) Ch. 6

(35) Sen (1988).

(36) Sen (1990) p. 47.

(37) UNDP(1990) p. 1.

GDP per capita by purchasing power parity” used as an indicator of decent standard of living, and the HDI is a complex index that simply averages these three indicators ⁽³⁸⁾ .

Furthermore, the HDI was supplemented with the concept of the Capability Poverty Measure (CPM) in the *Human Development Report 1996*, and with the Human Poverty Index (HPI) in 1997 ⁽³⁹⁾ . The CPM is explained as a “reflection of the percentage of people who lack basic, or minimally essential, human capabilities.” It is an averaged index of the following three measurements: (i) the capability to be well-nourished and healthy – represented by the proportion of children under five who are underweight, (ii) the capability for healthy reproduction – represented by the proportion of births unattended by trained health personnel, and (iii) the capability to be educated and knowledgeable – represented by the female illiteracy rate. On the other hand, the HPI is an index that reflects (i) the percentage of people expected to die before age 40, (ii) the adult illiteracy rate, and (iii) a decent standard of living (this is represented by a composite of three variables: the respective percentages of people with access to health services and to safe water, and the percentage of malnourished children under five). The HDI is focused on progress of the entire society, while the HPI is an index that addresses the situation and progress of the poorest people in the society (people who are in a state of deprivation).

The view shown in BN, the HDI, the CPM, or the HPI indicates that poverty is a complex phenomenon that cannot be fully measured only by the income level (‘income poverty’). Therefore, poverty alleviation need a cross-sectoral, multi-dimensional, and comprehensive approach ⁽⁴⁰⁾ .

3.3 Problems in Measuring Poverty

The target beneficiary of poverty projects is the poor. Then, how are the poor identified?

The definition of ‘poverty’ adopted in the DAC’s report is the “situation in which a physical welfare standard that is assumed as a ‘reasonable minimum’ according to the standard in a society, cannot be achieved in the society concerned.” This is called a living standard approach, or so-called ‘income poverty’. Being assumed from this definition of ‘poverty’, the poverty line is identified as the consumption level of (or real income level to realize) various goods such as foods, below which life will be threatened. The poor is therefore defined as individuals or households who do not reach this poverty line ⁽⁴¹⁾ .

After the poverty line is identified, there is a problem of ‘measurement of poverty’. Conventionally, three types of measurement methods are used ⁽⁴²⁾ .

The first method is usage of a Headcount Index of Poverty. This is the method to count the population below the poverty line, or the method to calculate the ratio of population below the poverty line in the total population (expressed as the poor population index = H). It is an index that shows the prevalence of poverty. This method, however, cannot indicate the degree of poverty (or depth of poverty) of people below the poverty line, or the size of inequality among poor people (or the severity of poverty).

⁽³⁸⁾ Criticism from many fields is increasing toward the *Human Development Report*, in particular the HDI. Anand and Ravallion (1993); Hopkins (1991); McGillivray (1991); Rao (1991); Srinivasan (1994).

⁽³⁹⁾ UNDP (1996); (1997).

⁽⁴⁰⁾ Griffin and Knight (1989); Griffin and McKinley (1994); Streeten (1994).

⁽⁴¹⁾ Lipton and Ravallion (1995) pp. 2532-2583.

⁽⁴²⁾ Ravallion (1992); Esho / Yamazaki (1998) Chapter 3.

The second type of measurement method is to use the Poverty Gap Index. This is to measure the Depth of Poverty (PG). Both the distance from the poverty line and the number of poor people are considered. Expressing the total population as n , the living standard index of people below the poverty line as y_i , and the poverty line as z , the expression is as follows: $PG = (1/n) \sum_{i=1}^y \{(z-y_i) / z\}$. Also, what is actually often used in measuring the poverty gap is the Income Gap Ratio (I), which addresses the average amount of income shortage of people below the poverty line. Using μ as the average income of the poor, the equation will be $I=1-\mu/z=PG/H$. However, it is not possible to measure the inequality among the poor (the severity of poverty) by either the poverty gap or the income gap.

The third method is to use the Squared Poverty Gap Index (Foster-Greer-Thorbeck's measure). This aims to measure inequality among poor people by calculating a Squared Poverty Gap (SPG).

However, in grasping income poverty, there are many difficulties in practice:

- (1) There may be no sufficient reliable data. For example, there may be no census statistics that will be the basis of poverty statistics, or no household consumption survey, and even if there are, they may be inadequate.
- (2) Even if data is obtained, there is an issue related to data processing, such as if a poverty line that accurately reflects the actual state can be depicted or if an accurate poverty profile can be obtained. In addition, regarding how poverty should be defined, or how the poverty line should be set, there is a problem that some arbitrariness cannot be avoided. Depending on the definition of poverty, its range, depth, and severity will vary, and the judgment standards in determining poverty countermeasure will be greatly different⁽⁴³⁾.
- (3) In order to introduce more proper policy judgment, it is necessary to prepare a poverty profile. Preparation of a poverty profile enables more accurate evaluation of the influence of a policy on the poor. The poverty profile shows how different poverty is among the social sub-groups (between cities and rural areas, or by form of employment). The poverty profile is effective in evaluating how patterns of economic change according to sectors and regions affect overall poverty. However, it is difficult to prepare a reliable poverty profile; the different poverty lines need to be set for different sub-groups in order to measure living expenses that reflect the actual state according to each region or each form of employment.
- (4) Even if the poverty line can be ascertained, there is a problem in determining if there is a significant difference in living standards of people from above and below the poverty line.
- (5) The living-standard (income poverty) approach to seek the poverty line is premised on the idea that poverty can be measured typically by the consumption level (or income level). However, if poverty is considered to be essentially a multidimensional and complex phenomenon, as the UNDP asserts, it means that there is a limit to the approach itself that targets people below the poverty line as the poor.

⁽⁴³⁾ Glewwe and Garg (1990); Ravallion (1992a).

The NDS emphasizes that “the objective must be pursued country by country, and substantial progress must be sought in all countries,” regarding setting of the goal of reducing poverty by half. Actual states of poverty can greatly vary among countries. In evaluating a poverty project, to make reducing the number of people below the poverty line the only standard, can result in a large distortion in evaluation itself. The number of people below the poverty line is an important index, but it is not a final one. In the case of Sri Lanka, for instance, Indian Tamil laborers who work at tea plantations engage in plantation labor usually as entire families. They are wage laborers, and their educational level is relatively low and their health and hygiene needs are not fully satisfied. They apparently form the poor class in Sri Lanka society, but they are not regarded as the poor class if the poverty line is depicted based on the income level.

Poor people are sometimes concentrated in some specific social groups (minority tribes, minority races, outcasts, etc.), some occupational groups, some regions, and women. Such concentration is frequently closely related to social discrimination. It may be possible to specify groups in which the poor are concentrated, by fully considering each nation’s social and historical factors. It is essential for study on poverty to accurately grasp country-specific social factors on poverty (ethnicity, tribe groups, cast groups, etc.), religious background, regional gap, and gender gap.

3.4 Various Types of Poverty Projects and Targeting

In order to alleviate poverty, market incentive alone is insufficient, and it is needless to say that public policy is of prime importance. However, it does not mean that government intervention can be immediately justified. Efficiency of a project cannot be ignored just because it is a poverty project. To make a poverty project successful, a governance design for enhancing the project efficiency or the way the incentives are given has great importance. High morality itself is a necessary condition, but not an adequate one. How can we limit the beneficiary of a poverty project only to the poor? Or, what form of poverty project can achieve greater efficacy with small administrative cost?

The representative poverty projects are as follows.

- (a) Credit programs for the poor
- (b) Employment generation programs
- (c) Land reforms
- (d) Agricultural growth and technology
- (e) Health and education programs
- (f) Food supply and food subsidy
- (g) Measures for urban poverty class

Which measure is the most effective will vary depending on each nation’s specific situation. No matter which measure will be taken, however, participation of the beneficiary is essential for a poverty project to achieve full efficacy with efficient targeting. From the viewpoint of project governance, it is known to be more effective to decentralize power, to local administrative organizations, because this will result in utilization of field-based knowledge, and promotion of participation of the beneficiary class ⁽⁴⁴⁾.

⁽⁴⁴⁾ Bardhan (1996).

'Self-selecting' is also known as a method of efficient targeting. It is a method to create an incentive which encourages the participation of only the poor. The *World Development Report 1990* states that "self-selecting programs, which excludes the nonpoor by offering benefits that are of interest only to the poor, are another promising approach".

Moreover, it notes that "to be truly cost-effective, interventions must not be merely well targeted but also carefully designed to meet the specific needs of poor people", and "successful programs have usually involved the poor both at the design stage and during implementation"⁽⁴⁵⁾.

3.5 Project Monitoring

In monitoring a poverty project, there are three points which need to be considered. These are:

1) A systematic approach is necessary. Poverty reduction can be achieved only by considering many aspects such as the initial conditions of each developing country and the selection of a development strategy, in a matured international assistance framework. In other words, individual poverty projects monitoring is insufficient. Monitoring how the poverty project is integrated into the recipient country's development strategy or its planned budget has a great importance. DAC's goal of poverty reduction by half until 2015 will be difficult to achieve without macro-economy balance, improved economic infrastructure, an efficient economic system (or reform towards it) and capacity building for project implementation.

Having taken account of above points, in evaluating a poverty project (especially a large scale project), it is also necessary to go beyond a targeted region or a proposed policy goal and to have a social impact assessment. This could be applied into other kinds of project, including economic and social infrastructure projects.

2) It must be recognized that poverty eradication cannot be achieved just by accumulating individual poverty projects. This means that each individual poverty project is highly complementary in another way. For example, meeting a need such as satisfaction of primary health care will be insufficient. Both satisfaction of primary health care and foods supply must be achieved since there is a strong complementary relation among health care, nutrition and education. In monitoring a poverty project, the mutual impacts between poverty projects in different fields has to be considered.

3) A comprehensive approach, emphasized in the DAC's report, must be monitored. The NDS states "the necessity of resources, energy, and commitment of institutions and individuals in government at all levels, in the private sector, and in NGOs -- in developing and industrialized countries and international organizations." In other words, partnerships and ownership themselves, which are mentioned in the NDS, must be monitored.

⁽⁴⁵⁾ World Bank (1990) p. 4.

4. Aid Trends (Poverty)

4.1 Japan's Aid Trends and Characteristics in Poverty Alleviation

4.1.1 Japan's ODA trends

Up to 1996, Japan had been the top donor country in the world for six consecutive years. The net disbursement for 1995 amounted to \$14.49 billion (approximately 24.4% of the total disbursement by 21 DAC member countries). Although it plunged by 35 % to \$9.44 billion in 1996 (approximately 17.1% of the total), Japan's ODA continues to play a significant role in international assistance to developing countries.

Comparing Japan's assistance to that of other countries, there are several characteristics of note. One of them is that the percentage of bilateral loans (yen loans) is relatively high (28.9% of the net disbursement of the ODA). Accordingly, the share for the grant element of the total ODA in the 1994-95 average remain about 10% below average of DAC member countries, being 82.3% (DAC average 92.1 %). However, the conditions for the grant element has been remarkably relaxed, compared with the grant element in 1985 (73.6%).

The distribution of Japan's bilateral ODA by sector in 1996 is as follows: 20.9% for social infrastructure and service; 40.7% for economic infrastructure and service; and 17.5% for the production sector. Apparently, the category of economic infrastructure and service accounts for the largest share. Moreover, among the items in that category, transport and storage (such as roads, railways, ports and warehouses) and energy (such as power plants) constitute high percentages of 24.28% and 12.4% of the total, respectively (Table 4.1). When Japan's ODA in 1994 is compared to that of major DAC member countries (Table 4.2), it reconfirms that Japan's ODA consists of a high percentage of assistance in the area of economic infrastructure. For, instance, the economic infrastructure for that year accounts for 42.1% of the total as opposed to the DAC average of 21.2 %, whereas the social infrastructure only accounts for 23.6%, which is lower than the DAC average of 27.3%. But if compared with previous data, the percentage of the social infrastructure in Japan's total bilateral ODA surged largely from 12.3% in 1991. Moreover, the percentage of ODA allocated to Basic Human Needs (BHN), the category which is underscored in Japan's ODA Charter, amounted to 35.7% in 1996 from 24.3% in 1987, about one third of the total (Table 4.1).

It is inappropriate to say that assistance in the areas of social infrastructure (education, health care, water supply, sanitation, etc.) and BHN is equal to poverty alleviation. However, it can be said that such assistance is closer to the poor in the sense that the poor will directly benefit through it in the short-term. In this regard, Japan has recently been increasing its assistance in social infrastructure and BHN, which are thought to constitute more direct assistance to the poor. It is expected that this trend will intensify the momentum of the NDS.

Table 4.1 Sectoral Distribution of Bilateral ODA (1996)

(on a commitment basis, unit: million , %)

Type of aid	Sector of destination	Grant aid	Technical cooperation	Total grants	Loans	Total (share, %)
I. Social infrastructure & services		580.78	1,215.24	1,796.02	1,651.57	3,477.59 (20.9)
1. Education		152.78	746.60	899.36	30.50	929.88 (5.6)
2. Health		166.66	143.59	310.25	109.33	419.58 (2.5)
3. Population programs		17.51	17.42	34.93	-	34.93 (0.2)
4. Water supply and sanitation		186.52	76.81	263.33	1,541.74	1,806.07 (10.8)
5. Public Administration		-	113.85	113.85	-	113.83 (0.7)
6. Other social infrastructure		57.31	116.96	174.27	-	174.27 (1.0)
II. Economic infrastructure and services		376.83	287.25	664.08	6,122.55	6,786.63 (40.7)
1. Transport		257.09	118.41	375.50	3,657.37	4,032.87 (24.2)
2. Communications		84.42	41.93	126.35	320.24	446.59 (2.7)
3. Energy		35.32	45.39	80.71	1,981.98	2,065.69 (12.4)
4. Banks and financial services		-	8.70	8.70	104.89	113.59 (0.7)
5. Commercial and other economic services		-	72.80	72.80	55.07	127.87 (0.8)
III. Production sectors		434.41	638.09	1,072.50	1,832.49	2,924.99 (17.5)
1. Agriculture, forestry, and fisheries		434.41	377.95	812.36	1,574.89	2,387.25 (14.3)
1) Agriculture		342.41	-	342.41	1,421.78	1,764.19 (10.6)
2) Forestry		15.62	-	15.62	153.11	168.73 (1.0)
3) Fisheries		76.38	-	76.38	-	76.38 (0.5)
2. Mining and manufacturing		-	233.09	223.09	277.60	500.68 (3.0)
1) Manufacturing		-	-	-	276.38	276.38 (1.7)
2) Mining		-	-	-	1.21	1.21 (0.0)
3) Construction		-	-	-	-	- (-)
3. Trade and tourism		-	37.05	37.05	-	37.05 (0.2)
1) Trade		-	-	-	-	- (-)
2) Tourism		-	-	-	-	- (-)
IV. Multisector assistance		43.18	74.31	117.49	701.82	819.31 (4.9)
1. Environmental conservation		13.19	60.19	73.38	598.64	672.02 (4.0)
2. Women in development (WID)		19.41	0.06	19.50	-	19.50 (0.1)
3. Other multisector categories		10.55	14.05	24.60	103.18	127.78 (0.8)
Sub total		1,435.20				14,008.50 (84.0)
V. Commodity assistance / general program assistance		29.41	0.00	29.41	276.50	305.91 (1.8)
1. Assistance in structural adjustment in coordination with the World Bank / IMF		-	-	-	129.42	129.42 (0.8)
2. Food aid designed to promote development		29.41	-	29.41	-	29.41 (0.2)
3. Other program assistance		-	-	-	147.08	147.08 (0.9)
VI. Debt relief		589.19	-	589.19	263.32	854.71 (5.1)
VII. Disaster relief		57.85	6.27	64.12	-	64.12 (0.4)
VIII. Administrative and similar costs		334.41	1,104.10	1,438.51	-	1,438.51 (8.6)
1. Administrative expenses		-	706.67	706.67	-	706.67 (4.2)
2. NGO assistance		19.21	249.70	268.91	-	268.91 (1.6)
3. Unspecified		315.20	147.73	462.93	-	462.93 (2.8)
Total		2,446.06	3,325.25	5,771.31	10,900.45	16,671.75 (100.0)
BHN (I + III, I + VII)		1,102.45	1,599.46	2,701.91	3,256.46	5,958.37 (35.7)

Note: (1) Grants to aid structural adjustment efforts (non-project grants) as well as Grant Assistance for Grassroots Projects, and expenses for refugee assistance, are classified in "VIII. 3. Unspecified" of grant aid.
(2) Administrative expenses include raising costs awareness.
(3) NGO assistance includes that to private international institutions.
(4) As the figures on the table are rounded off, they do not necessarily add up to the totals.
(5) Figures in this table include aid for East Europe and countries that graduated from ODA recipient status.

Source: The Ministry of Foreign Affairs (1997). p. 142,

Table 4.2 Breakdown of DAC Countries' Bilateral ODA by Sector (1994)

(commitment base, unit: %)

Sector / Country	Japan	USA	UK	France	Germany	Italy	Canada	Australia	Sweden	DAC average
Social infrastructure share	23.6	29.9	26.0	33.1	36.9	6.9	17.1	34.5	31.5	27.3
Economic infrastructure share	42.1	15.5	11.9	6.1	20.1	9.3	13.6	22.8	11.5	21.2
Agricultural sector share (excluding food assistance)	9.8	5.7	8.0	5.1	5.8	1.6	3.6	6.6	10.5	7.5
Share of manufacturing and other production sectors	7.5	7.8	5.2	8.5	6.1	1.0	10.1	2.1	6.9	7.4
Food assistance share	0.4	14.1	4.5	0.5	1.9	4.6	7.6	2.1	–	3.5
Share of program assistance, etc.	16.5	27.2	44.4	46.6	29.1	76.5	48.1	32.0	39.6	33.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

- Note: (1) "Share of manufacturing and other production sectors" includes multi-sector.
(2) The total of all the sectors may not agree with the total due to rounding to the nearest whole number.
(3) Excluding assistance to East Europe

Source: The Ministry of Foreign Affairs (1997). p. 239

Table 4.3 Geographical Distribution of Bilateral ODA

(net disbursement basis: million dollars)

Region / Year	1980	1990	1993	1994	1995	1996
Asia	1,383 (70.5)	4,117 (59.3)	4,861 (59.5)	5,544 (57.3)	5,745 (54.4)	4,145 (49.6)
Northeast Asia	82 (4.2)		1,447 (17.7)	1,505 (15.5)	1,606 (15.2)	869 (10.4)
Southeast Asia (ASEAN)	861 (43.9)	4,117 (59.3)	2,440 (29.9)	2,223 (23.0)	2,592 (24.6)	1,858 (22.2)
Southwest Asia	703 (35.8)	835 (12.0)	2,258 (27.7)	1,684 (19.5)	2,229 (21.1)	1,694 (20.3)
Central Asia	435 (22.2)	2,379 (34.3)	959 (11.7)	1,758 (18.2)	1,435 (13.6)	1,320 (15.8)
Caucasus	–	2,299 (33.1)	3 (0.0)	49 (0.5)	67 (0.6)	80 (0.9)
Others	–	898 (12.9)	–	0 (0.0)	0 (0.0)	0 (0.0)
Others	5 (0.3)	–	13 (0.2)	9 (0.1)	44 (0.4)	18 (0.2)
Middle East	204 (10.4)	–	522 (6.4)	751 (7.8)	721 (6.8)	561 (6.7)
Africa	223 (11.4)	4 (0.1)	966 (11.8)	1,444 (11.8)	1,333 (12.6)	1,067 (12.8)
Latin America	118 (6.0)	705 (10.2)	737 (9.0)	832 (8.6)	1,142 (10.8)	986 (11.8)
Oceania	12 (0.6)	792 (11.4)	138 (1.7)	127 (1.3)	160 (1.5)	198 (2.4)
Europe	–2 (–)	561 (8.1)	124 (1.5)	135 (1.4)	153 (1.5)	200 (2.4)
East Europe	–	114 (1.6)	120 (1.5)	121 (1.2)	138 (1.3)	130 (1.6)
Unspecified	23 (1.2)	158 (2.3)	816 (10.0)	1,148 (11.9)	1,303 (12.3)	1,200 (14.4)
Total	1,961 (110.0)	6,940 (110.0)	8,164 (100.0)	9,680 (100.0)	10,557 (100.0)	8,356 (110.0)

- Note: (1) Certain data were listed as "unspecified" because they could not be assigned to a single regional category: such aid includes survey teams sent to multiple regions, administrative expenses and costs of raising public awareness of development issues.
(2) Five countries in Central Asia, and three countries in Caucasus, have become eligible for ODA since 1993 and 1994, respectively.
(3) Data in parentheses are the percentage of the respective totals.
(4) Due to rounding of individual items, percentages do not necessarily total 100%.

Source: The Ministry of Foreign Affairs (1997). p. 135

The geographical distribution of Japan's bilateral ODA in 1996 is as follows: 49.6% for Asia, 12.8% for Africa, and 11.8% for Latin America. The focus continues to be Asia. However, compared with data in 1980 (70.5% for Asia, 11.4% for Africa, and 6% for Latin America), assistance to areas outside of Asia has been increasing (Table 4.3). Assistance to LLDC reached its peak of 18.8% in 1987, then fell to 11.2% in 1991 and 1992, but resurged to 14.4% in 1996 ⁽⁴⁶⁾.

Looking at the descriptions related to poverty in Japan's ODA Charter, the basic recognition is stated at the beginning of 1. "Basic Philosophy" as follows: "many people are still suffering from famine and poverty in developing countries. From a humanitarian viewpoint, the international community can ill afford to ignore this fact." Section (1) "Regions" of Chapter 3. "Priority", states, "due consideration will be paid in particular to Least-Developed Countries (LLDC)," while Asian continues to be primary region. Sub-section (b) "BHN" of section (2), mentions that "to help people suffering from famine and poverty, refugees and others, Japan will provide assistance to the basic human needs (BHN) sector and emergency humanitarian aid." Furthermore, Chapter 4. "Measures for the Effective Implementation of ODA", declares that (14) "consideration will be given to redressing the gap between the rich and the poor and the gap among various regions in developing countries." Thus Japan clarifies its basic stance to make much of poverty alleviation in its ODA charter. As its approach, Chapter 1 "Basic Philosophy" reads, "Japan attaches central importance to support for the self-help efforts of developing countries toward economic take-off. It will therefore implement its ODA to help ensure efficient and fair distribution of resources and 'good governance' in developing countries, through developing a wide range of human resources and socioeconomic infrastructure, including domestic systems, and through meeting basic human needs (BHN), thereby promoting sound economic development of the recipient countries." As such, developing countries' own self-help efforts are regarded as the important factor. As to "efficient and fair resource distribution and good governance", the Japanese government is focused more on the indirect support of creating an enable environment thorough assistance in social and economic development for recipient countries.

4.1.2 JICA's efforts

1) Recommendations by the Aid Study Group on Poverty and Subsequent Efforts

JICA held meetings of the Aid Study Group on Poverty in 1989, and compiled recommendations on the following six points.

- (1) Fulfillment of poverty alleviation assistance.
- (2) Strengthening of both domestic and overseas implementation systems of anti-poverty measures (institutional efforts in Japan, assigning of poverty alleviation program coordinators to overseas offices, and diversification of nationalities, institutions, and composition of aid-related people, etc.).
- (3) Expansion of the grant aid budget, focusing on the BHN sector, and expansion of "participatory program for poverty alleviation" (relaxation of restrictions in its institution and budget).
- (4) Project formulation and implementation by a learning process approach (strengthening of the functions and roles of overseas offices, participation of socio-economists

⁽⁴⁶⁾ The Ministry of Foreign Affairs, Economic Cooperation Bureau (ed.) (1997), p. 172.

and frequent dialogues with local people, maximum coordination and collaboration with other aid agencies and groups).

- (5) Compiling sector- and country-specific priority areas for poverty alleviation, which will result in sustainable development.
- (6) Training of experts, and promoting joint research and study in Japan and developing countries.

Moreover, the Environment, WID, and other Global Issues Division was established in 1991. This division is in charge of poverty issues, as well as the global environment issues and WID.

The follow-up state as of 1997 for each recommendation by the Aid Study Group on Poverty is as follows:

(1) Fulfillment of poverty alleviation

- It is difficult to present JICA's outstanding results in this area. However, although DAC has not yet defined what can be 'anti-poverty measures', we can give some examples of 'direct anti-poverty measures' such as the Philippine Rural Livelihood Generation Project' (see section 3)). These programs have focused on poverty alleviation and they have been designed and implemented since 1990. Moreover, the budget has been given to the new program called the Community Empowerment Programs (see section 4)) from 1997. This program is expected to enable to benefit the local people more directly by collaborating with local NGOs.

(2) Strengthening of both domestic and overseas implementation systems

- In Japan, the above-noted division of the Environment, WID, and Other Global Issues, which is in charge of poverty, global environment and WID issues, was established. In addition, a poverty/ social welfare unit was set up unofficially in the Social Development Cooperation Department. This unit has been accumulating knowledge and information on poverty alleviation programs, and at the same time, conducting effective planning, implementation and monitoring of poverty alleviation programs by utilizing collected knowledge and information. Although no poverty alleviation program coordinator has yet been assigned to overseas offices, 'overseas survey specialists' (technical experts who are familiar with local situations in detail regardless of their nationalities) have been appointed to overseas offices since 1991. They collect and analyze technical information, including poverty-related information, mainly from the field surveys. Moreover, 'project formulation specialist' system started in 1988. In this system, specialists in various fields, including in the field of poverty alleviation, are dispatched to overseas offices for one year or less in principle. They seek and research the local needs, and consequently, contribute for good project formulation.

(3) Expansion of the grant aid budget

- The share of grant aid budget in Japan's ODA has been increasing (the share of grant aid budget in net disbursement of Japan's bilateral ODA has increased to 28.7% in 1996 from 14.1% in 1987). In relation to "participatory programs for poverty alleviation", poverty alleviation programs such as noted in section 3) have been implemented. In Nepal, an elementary school was constructed with the participation of local people by using construction materials provided through Japan's granted aid.

(4) Project formulation and implementation by a learning process approach

– JICA has started careful social survey and interviewing for seeking local needs during the preparation phase. JICA has also begun to collaborate with NGOs to make an enabling project that induces positive participation among local people. Such projects are presented in section 3). Moreover, a new budget has been allotted to so-called grassroots support expense for project-type technical cooperation since 1995. It is set up for the purpose of extending the achievement to the grassroots level around the project area by collaborating with local NGOs and local governments. Aid coordination and collaboration with other aid agencies and organizations are becoming active in the field of global issues such as poverty alleviation.

(5) Compiling sector- and country-specific priority areas for poverty alleviation

– JICA compiles the guidelines for the country-specific assistance implementation though they are not specified in the field of poverty alleviation. They are based on the political, economical and social situation in each recipient country, development plan of its government, aid trends among other donor agencies, and previous Japan's aid activities.

(6) Training of experts

– training of Japanese experts on “development and poverty” (five-week domestic training, two-week overseas training, and three-week language training as optional) has started at the Institute for International Cooperation of JICA since 1991. For a joint research and study with aid-related persons in developing countries, JICA has conducted ‘rural development experiment’ with the cooperation of Kyoto University at the Bangladesh Academy of Rural Development. Likewise, JICA supports regional development studies at Sokoine Agricultural University in Tanzania, again with the cooperation of Kyoto University.

2) Promotion of social and WID consideration

The above-noted Environment, WID, and Other Global Issues Division compiled the *Guidebook for Poverty Issues* in 1993. It aims at integrating the recommendations by the Study Group on Poverty into JICA's activities. There are three points that need to be considered in JICA's tackling of poverty issues. These are:

- (1) to specify the target groups
- (2) to implement social analysis
- (3) to promote people's participation

This concept of “considerations for the poor”, coupled with the preceding idea of “WID considerations” (devices at each stage of planning, implementation and evaluation in order to secure project benefits to reach women and facilitate women's participation in development), evolved into the idea of “social and WID consideration” (considerations for socially disadvantaged groups such as the poor, women, and minorities) in 1995. It aims at securing the benefits and participation of socially disadvantaged groups with a concern that poverty and social disparities derive from social factors such as gender, ethnicity, religion, and possession of productive resources. This concept is based on the recognition that donors have to give special consideration/ intervention in order to secure the benefits and participation of socially disadvantaged groups in the project's activities.

3) Implementation of direct poverty alleviation projects

The major poverty alleviation projects by JICA since 1990 are as follows (Table 4.4.):

Table 4.4 Outline of JICA's Major Poverty alleviation Projects

Country / Project name Cooperation period Local implementation organization	Project outline
<p>The Philippines The Rural Livelihood Generation Project (1991 - 1996) Philippine Human Resources Development Center (PHRDC)</p>	<p>In order to contribute to improving incomes of the poor, which belong to the bottom 30% of Philippine people, this project started with the target of developing a poverty alleviation approach / model project that can be extensively conducted in local areas, and of fostering PHRDC into the organization that implements poverty alleviation.</p> <p>As to specific cooperation, there are three major activities, as follows:</p> <p>(i) As to the livelihood improvement field, to select a model region respectively in the three local areas of Mindanao, Luzon, and Visayas, and conduct a survey of people's requests in each region. Then, to form a livelihood generation project that reflects their needs, and promotes their participation, and put it into practice step by step,</p> <p>(ii) As development of audiovisual teaching materials, to produce videos, posters, pamphlets, comic books, and radio programs, and promote education of local people and expansion of a related network, by using these materials.</p> <p>(iii) As to the fishery cultivation field, to develop and propagate cultivation of oysters, grouper, etc.</p>
<p>Indonesia The Integrated Agricultural and Rural Development Project in Southeast Sulawesi Province (1991-1997) Ministry of Agriculture and Provincial Government of Southeast Sulawesi</p>	<p>In Kendari prefecture of this province, this project started for the purpose of promoting improvement of land productivity, diversification of agriculture, improvement of farmers' income, and activation of rural areas, as well as strengthening capabilities of local administrative staff and core farmers who will play leading roles in sustainable agricultural practice and rural development.</p> <p>Cooperation activities were conducted centered on the five pillars of (i) determination of the integrated agricultural and rural development project, (ii) development of an agricultural and rural infrastructure, (iii) demonstration of agricultural skill (rice paddy farming and dry field farming), (iv) strengthening of farmers' organizations, and (v) training of local administrative staff and core farmers.</p>
<p>Nepal The Community Development and Forest/ Watershed Conservation Project (1994 - 1999) Ministry of Forests and Soil Preservation</p>	<p>The project target is to reduce loss of forests and other natural resources, and expand forest regions, through improvement of living standards of villages through government support and people' voluntary activities, and development of model village promotion activities, with special consideration toward poverty and women, in the mountain areas of Kaski county and Parbat county. This project was started in cooperation with Greenery Promotion Project (1994-1999) by JOCVs and the Integrated Watershed Management in the Western Hills (1995-1997) of the development study program.</p> <p>Specifically, ten teams of monitor promoters (M/P), which consist of three people: one JOCV member and one local NGO representative, together with one staff member of the soil preservation office, provide indirect support of people's voluntary rural development/ forests preservation activities. These M/P teams receive indirect support from experts of such projects as basin management and WID, and individual specialists (greenery promotion), and survey on more expansive regions is conducted through the development study program.</p>
<p>Indonesia The Project on Strengthening Sulawesi Rural Community Development to Support Poverty Alleviation Programs (1997- 2002) The Directorate General of Rural Community Development of the Indonesian Ministry of Home Affairs and the South Sulawesi State's Village Development Bureau (PMD)</p>	<p>With the project to reduce to half the people in absolute poverty in Indonesia, this project started with the target of improving the PMD's and community organizations' capacity of planning, implementation, and management and administration in rural development. Planned cooperation activities are (i) support for the preparation and implementation of rural development projects in targeted villages, (ii) improvement and implementation of existing training systems, and (iii) development and introduction of participatory methods.</p> <p>Another expected role is to put into practice the results of two studies: "poverty issues and their measures: importance of the regional society and nurturing its social abilities," and "usage of social abilities in development assistance projects," which were conducted from 1994 to 1996, and feeding back the results of the practice. As an NGO representative, one expert from the Karaimo Exchange Foundation participates in this project.</p>

4) Community empowerment program

This is a new program aimed at directly benefiting people at the grassroots level in developing countries for the improvement of their livelihood and welfare. In 1997, the new budget for this program was allocated in response to the 'Japanese Initiative for a Caring World', which was proposed by then Prime Minister Hashimoto at the Lyon Summit in 1996. In this program, JICA's overseas offices plan and implement model projects that directly benefit the poor in collaboration with local NGOs. Seven areas of activities are targeted: (i) community development; (ii) the elderly, disabled and child welfare support; (iii) health and hygiene improvement; (iv) women's empowerment; (v) improvement of the living environment; (vi) capacity building; and (vii) promotion of local industries. As of fiscal year 1997, four projects, including the participatory family planning project in Bangladesh, have been adopted.

5) Social impact assessment in project evaluation

JICA has the following five items for evaluation: (i) efficiency; (ii) effectiveness; (iii) impact; (iv) relevance, and (v) sustainability⁽⁴⁷⁾. It will be necessary to plan and prospect, and to monitor and evaluate how a project can generate positive impacts while avoiding negative impacts for the socially disadvantaged groups, including the poor and women. Consequently, these efforts will lead to good planning and implementation of poverty alleviation projects and effective integration of social and WID consideration into overall projects.

These efforts have been made for project-type technical cooperation. JICA plans and prospects, and monitors and evaluates the effects of technology transfer to the counterparts and counterpart organizations. However, social impact assessment on local people is difficult as survey has extensive targets and it is time-consuming among other evaluation items. To standardize social impact assessment methods and its implementation is one of the great challenges for encouraging poverty alleviation.

4.1.3 OECF's Efforts

1) OECF's basic recognition toward poverty alleviation

OECF considers it difficult to alleviate poverty without economic growth in developing countries, and that it is important to keep a balance in support between economic infrastructure activities and social development activities⁽⁴⁸⁾.

2) OECF's role in the poverty issue

In 1996, OECF compiled the *Medium-Term Prospects for OECF Operations Report* in collaboration with the well-informed people. It presented the perspectives on the desired assistance to developing countries in response to the prospected increase and diversification of assistance needs in these countries up to 2010. In the report, poverty is regarded as one of the important issues that OECF will need to address in the future. Poverty is closely related to some global issues (the environment, energy and foods) that have been long-time development issues but recently attracting greater attention. A new approach that clarifies

⁽⁴⁷⁾ JICA (1991)

⁽⁴⁸⁾ OECF has not defined social development with a clear standard, but it is considered extensively to include such concepts related to human security as the social service sector (living environment (water supply and sewerage, wastes disposal, etc.), health, education, etc.), rural development, and micro-credit.

their mutual and causal relations will be essential. Moreover, OECF points out the following items to be strengthened in order to review conventional OECF operations toward poverty as well as to play various roles in the future:

- 1) Intellectual cooperation
- 2) Expansion of direct support (support focusing on the poor)
- 3) Response to the regional disparity
- 4) Support of women in developing countries
- 5) Introduction of comprehensive social assessment to evaluate project impact on poverty and women in development.

3) Response to various needs

As a consequence from above, OECF has made the following efforts to identify various needs as well as to link those needs to its actual yen loan support. OECF aims to further such efforts in the future in the context of *Medium-Term Prospects*.

a. To promote dialogue with developing countries

OECF support does not remain only at loan support upon request from developing countries. It has also made an attempt for poverty alleviation with dialogue, concerning mid-term development strategies in recipient countries. For example, OECF tries to identify the new development needs of recipient countries from target-specific surveys. These surveys include survey on minority groups and community development survey and are not restricted to conventional sector classification.

Moreover, OECF has started the projects that consider the structural linkage between the global issues and poverty. It supports the projects that tackle these issues with a holistic approach (e.g. mountain region poverty reduction project in Peru, Table 4.5. Concessional interest rate was applied for this project).

b. Organizational reform

The Environment and Social Development Division, which was established in 1993, has been promoting social development projects (including poverty alleviation projects) whilst paying attention to social aspect of projects. Specifically, the Division holds meetings with its Advisory Committee on WID/ social development in collaboration with the outside well-informed people. It has also been conducting the studies on the optimal WID considerations in yen loan operations (such as research on WID consideration by other donors and model project implementation).

In October 1997, this Environment and Social Development Division has transformed into the Environment and Social Development Office. OECF aimed at improving its institutional system in order to respond more flexibly in development projects in terms of environment conservation and social development.

c. To conduct survey

The Research Institute of Development Assistance (RIDA) has conducted various studies related to poverty alleviation. In 1997 for example, it studied on "Social investment Fund = Fonds de Inversion Social (FIS) in Latin America", and "Rural Development Administration for Poverty Eradication in Malaysia".

d. To respond to various poverty issues

OECF has exchanged opinions regarding the poverty issues in Sub-Saharan African countries at Special Programme of Assistance for Low-Income Debt-Distressed countries in Sub-Saharan Africa (SPA) meetings and social policy working groups. In addition, it is actually participating in some other international conferences, such as the DAC and the Consultative Group to Assist the Poorest (CGAP), so that social development projects at OECF will be further promoted for yen loans.

Regarding micro-credit, international conferences on micro-credit are conducted with attendance of many donors and NGOs, and while its importance has become internationally recognized, OECF is also following up the discussion with strong interest. In 1996, in order to grasp the actual state of the poor at the Grameen Bank in Bangladesh, for which OECF had given financial support and the effect this bank had on the poor, a baseline survey was conducted by contracting outside experts and an NGO.

4) Examples of OECF projects directly targeting poverty alleviation

The projects especially targeting poor regions and poor people among the recent OECF projects are listed in Table 4.5⁽⁴⁹⁾. In the table, the cases listed as “reduction of regional disparity” are to improve living conditions and welfare, by developing social infrastructure of the area where the poor live. “A provision of basic human needs (BHN) of the poor” is to serve or to improve the quality of BHN, such as health, nutrition, family planning, and education for the poor. “Direct support” is to assist in increasing the income of the poor by enhancing productivity of their various assets (labor, livestock, skills, etc.) using means such as credit grants, training, and improvement of the land ownership system.

⁽⁴⁹⁾ The divisions of projects are in accordance with the three divisions targeting the poor regions, and the poor people, which are stipulated in the World Bank's Operational Directive 4.15 “Poverty Reduction.”

Table 4.5 Examples of Projects Directly Targeting Poverty Reduction by OECF

Project name (country name, date and amount of commitment)	Project outline
Reduction of Regional Disparity (Development, such as of social infrastructure in poverty class residence area)	
Rural Development (poverty eradication) Project Malaysia Concluded in March 1990, 9,310 million yen	The purpose is to improve the living standard of the low-income class concentrated in rural areas, through development of small-scale infrastructure, fostering of local industries, such as small-scale rubber farming, and provision of social service, such as education.
Social Investment Fund Project Guatemala December 1995, 3,110 million yen	To promote development of local socioeconomic infrastructure and improvement of social service through the Social Investment Fund = Fondo de Inversion Social (FIS). FIS aims to establish a regional socioeconomic development system through project planning and formulation by the beneficiaries themselves.
Mountainous Region Poverty Reduction Project Peru November 1997, 5,090 million yen	To contribute to poverty reduction in the mountain region, through productivity improvement by developing a rural area infrastructure, such as afforestation for preservation of soil and forests, and construction of small-scale irrigation facilities with participation of local people. To conduct rural development with a unit of the small basin, by limiting the target to the extremely poor region in particular.
Provision of BHN to the Poor (Grant or quality improvement of BHN, such as health, nutrition, family planning, and education toward the poor)	
Community Health Center Improvement Project Indonesia November 1994, 1,640 million yen	To realize extension service by strengthening health centers in the five provinces on Sumatra Island, namely North Sumatra, Jambi, Bengkulu, South Sumatra, and Lampung. To conduct support of regional health activities (maternal and child health, prevention activities, and health education).
Balochistan Middle Level Education Project Pakistan March 1997, 3,920 million yen	To aim at dissemination of basic education in the especially poor region where women have low status. The activity is support for school buildings, facilities for female teachers, furniture, equipments, and training of teachers.
Direct Support (improvement of productivity of the poor) (To aim to increase the income of the poor by enhancing productivity of various assets (labor, livestock techniques, etc.) of the poor, by such means as credit grants, training, and improvement of the land ownership system).	
Rural Development Credit Program by the Grameen Bank October 1995, 2,980 million yen	Fund support toward Bangladesh's special bank (Grameen Bank) that provides micro-credit toward the poor farmers who mostly have no land and cannot get financing from an ordinary bank. This bank is also helpful in improving women's economic and social position, as over 90% of its borrowers are women.
Manipur, Madhya Pradesh Sericulture Project November 1997, E/N, 6,170 million yen	This project aims to create employment and improve the living standard by systematically introducing sericulture, which brings a relative high income more easily than agricultural activities, mainly targeting the poor, minority tribes, and designated castes.

4.2 Trends among Major Aid Organizations

4.2.1 World Bank

World Bank

We would like to introduce the World Bank's recent efforts in poverty alleviation while referring to the *World Bank Annual Report 1997* (for the previous efforts, see section 3.1).

In 1997 the World Bank conducted a drastic organizational structure reform, and established the Poverty Reduction and Economic Management (PREM) network. The newly constituted Poverty Sector Board within PREM has become responsible for ensuring that poverty alleviation remains at the core of the Bank's operational and research activities and that maximum efforts are directed toward poverty reduction in developing regions.

The Program of Targeted Interventions (PTI) was also actively implemented. In fiscal 1997, \$4.09 billion, or about 29% of World Bank investment lending, was allotted to PTI. For International Development Association (IDA) countries, the share of PTI in IDA investment and financing amounted to 53%.

The World Bank explains that "a project is included in the PTI if it has a specific mechanism for targeting the poor and/or if the proportion of poor people among its beneficiaries is significantly larger than the proportion of the poor in the total population". Specifically, PTI projects aim at benefiting the most vulnerable, such as poorly developed regions, low-income regions, farmers without land, immigrants, refugees, unskilled labors, mentally or physically handicapped people, minority races, women, and children under age five ⁽⁵⁰⁾.

As to poverty assessment, 93 assessments, covering about 90% of the world's poor have been completed. The findings of these assessments constitute an important input into the design of Country Assistance Strategy (CAS). Also, regarding the impact that Bank activities have on the living of the poor, efforts are under way to assess trends in poverty by encouraging nationally representative household surveys. Presently, data on household incomes and expenditures in 73 countries have been obtained. The World Bank, UNICEF, and the UNDP have been working in partnership to improve poverty monitoring methods, since 1995.

As to NGO participation, 46% of the operation approved in fiscal 1997 involved NGOs in some form. Also, in order to further NGO contributions for Bank-supported development activities at the field level, NGO liaison staff have been appointed to 72 resident missions.

The World Bank's loans in 1997 by region are shown in Fig. 4.1, and those by sector are in Fig. 4.2. According to regions, loans to Europe and Central Asia, East Asia and Pacific, and Latin America and the Caribbean account for 76% of the total, those to South Asia account for 10.5%, and those to Sub-Saharan Africa account for 9.1%. According to sectors, the rates for the transportation and the agriculture sector are respectively 19%, the highest, followed by 11% for multi-sectors, and 10% for electricity and energy.

⁽⁵⁰⁾ World Bank (1996) p. 112.

Figure 4.1 Projects Approved for the World Bank and IDA Assistance by Region, Fiscal Year 1997

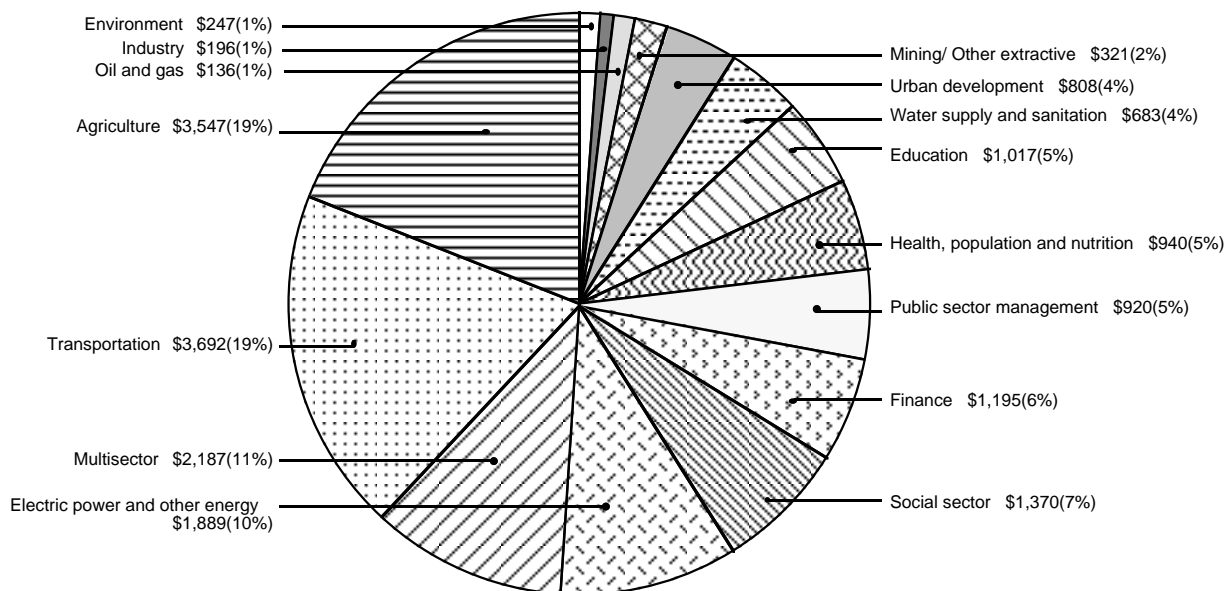
(million U.S. dollars)



Source: World Bank (1997). p.118

Figure 4.2 Trends in IBRD and IDA Lending, Fiscal Year 1997

(million U.S. dollars)



Source: World Bank (1997). p117

4.2.2 The United Nations Development Programme (UNDP)

The UNDP is the core fund grant organization for technical cooperation activities in the United Nations system and it has permanently stationed offices in 134 developing countries. Through its expansive network, it has carried out over 6,000 development projects in 175 nations and regions, in cooperation with respective countries' governments, other multilateral organizations, NGOs, etc. The UNDP, has presented Sustainable Human Development (SHD) as the basic principle of development since 1994. The UNDP has determined the five fields of poverty eradication, promotion of employment, women's empowerment, securing of good governance, and environmental preservation as the priority fields in development. Poverty eradication in particular is regarded as the most important subject, and 90% of UNDP's core funding is allotted to nations with per-capita national incomes of \$750 or less⁽⁵¹⁾.

The UNDP focused on 'poverty and human development' in the Human Development Report 1997. In this report, the new concept of 'human poverty' was presented in addition to the conventionally used 'income poverty'. (The human poverty index measures deprivation in basic human development. The variables used are the percentage of people expected to die before age 40, the percentage of adults who are illiterate, and overall economic provisioning in terms of the percentage of people without access to health services and safe water, and the percentage of underweight children under five.)

Fig. 4.3 and Fig. 4.4 show the regional and sectoral distribution of the UNDP's trust fund and programs in the 1994/5 annual report, respectively. By region, Africa accounts for 40.0% of the total, and Asia and the Pacific account for 19.9%. By sector, the fields of natural resources, energy, and the environment account for 42.5% of the total.

4.2.3 The U.S.A.

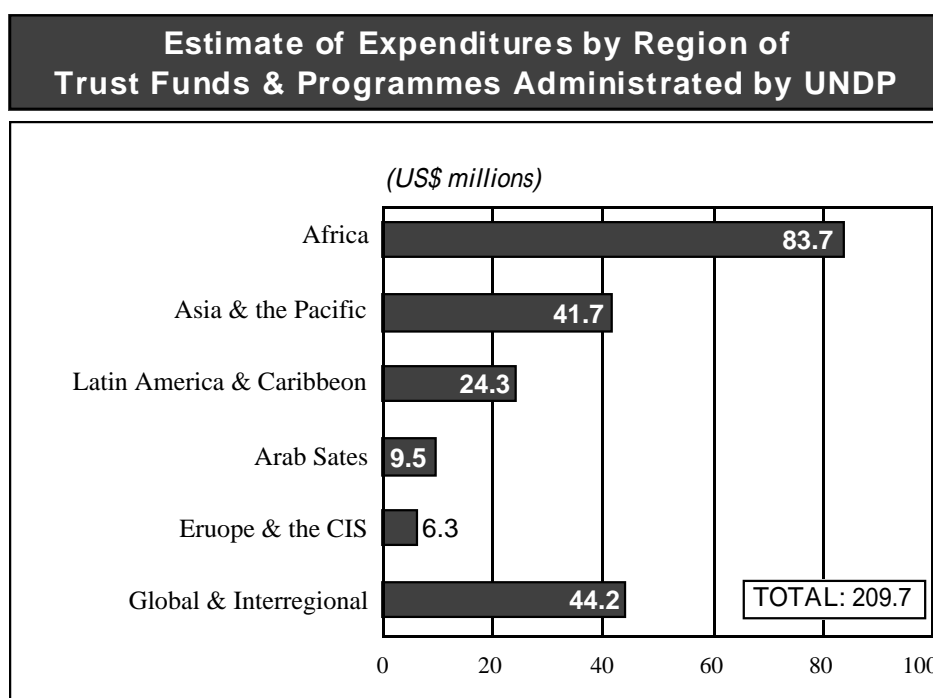
The Clinton administration, which was formed in 1993, started to establish a new assistance policy in response to the international situation after the East-West Cold War. It set sustainable development as a basic goal of its development strategy, and chose following five areas as priorities: (i) to cope with environmental issues; (ii) to foster democracy; (iii) to stabilize population and secure primary health care; (iv) to support economic growth; and (v) to extend humanitarian assistance.

The U.S. announced a 'New Partnership Initiative' at the social development summit in March 1995. This initiative was set to enable sustainable development by focusing on the grassroots level. It aims at strengthening the capacity of civil society, including private enterprises, local governments and NGOs in the recipient countries, while keeping balance with public policies at the central governments.

The 1996 budget for expenditure for overseas activities (which includes the majority of the overseas assistance budget) decreased by 11% from the previous year, to about \$12.1 billion. (afterward, the budget for assistance to Bosnia was added, totaling \$12.38 billion) The 1997 budget is \$12.31 billion, almost the same level as in 1996. As such, budgetary trend continues to be severe.

⁽⁵¹⁾ The Ministry of Foreign Affairs (1997), p. 276.

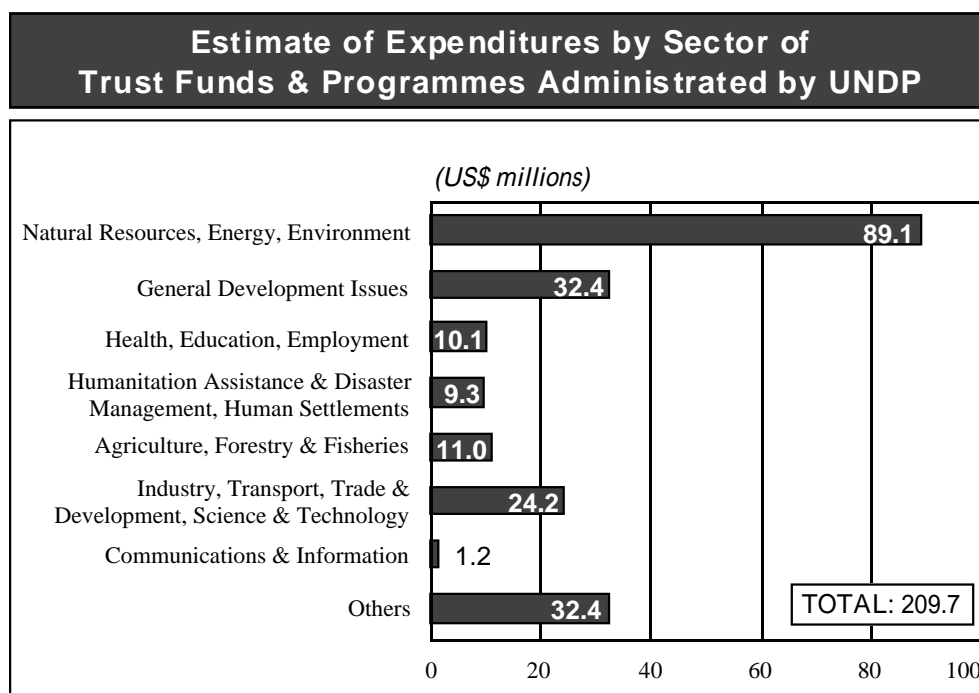
Figure 4.3 Estimate of Expenditures by Region of Trust Funds and Programs Administered by UNDP



*Includes cost-sharing and government cash counterpart contributions. * Includes UNDP Trust Fund for Programme of Assistance to the Palestinian People.

Source: UNDP (1995). p. 35

Figure 4.4 Estimate of Expenditures by Sector of Trust Funds and Programs Administered by UNDP



*Includes cost-sharing and government cash counterpart contributions.

Source: UNDP (1995). p.35

The U.S. bilateral aid can be mainly classified into Development Assistance (DA), Economic Support Funds (ESF), and Food Assistance. DA aims at medium- and long-term economic development in developing countries by providing mainly technical cooperation for projects to improve the living conditions of the poor in particular. It accounts for about 30% of its bilateral assistance. On the other hand, ESF is extended from political and security perspectives, accounting for about 30 to 40% of its bilateral assistance. Regarding the distribution of its bilateral assistance by sector, the BHN sector increased to 52.5% of the total in 1994 (from 29.4% in 1992), and the category of economic infrastructure and service only accounts for 15.5%⁽⁵²⁾. In the U.S., NGOs that promote development cooperation are generally called Private Voluntary Organizations (PVO). PVOs in the U.S. have a long history, and they made great contributions in response to needs of post-war restoration and recovery following both World War I and II. Afterwards, PVOs expanded their activity targets and had focused on emergency assistance and rescuing of refugees until the mid-1960s. From the 1960s to the 1970s, PVOs expanded both in number and areas of their activity. In the areas of their activities, the focus had shifted to development cooperation for poverty alleviation in developing countries, and the weight of the activities shifted from short-term rescue activities to systematic, long-term development cooperation. The US government regards PVOs' contribution to the overseas assistance programs conducted by USAID is very large, and it considers PVOs to be an essential part of U.S. development cooperation. In 1992, 14.3% of ODA funds were allotted to U.S. PVOs that are registered in the USAID. Taking account of the subsidies received by NGOs in developing countries, 20 - 25% of the ODA funds were allotted to PVOs⁽⁵³⁾.

4.2.4 The U.K.

The British government announced its basic principle for assistance, composed of seven priorities, to support developing countries to realize sustainable economic and social development. These priorities include: (i) to support economic reform; (ii) to improve productivity; (iii) to support Good Government; (iv) to help the poor; (v) to develop human resources including population and education issues; (vi) to advance women's status; and (vii) to cope with environmental problems. It has put forward the idea of Good Government especially since 1990. The criteria for Good Government are: (i) to introduce a market economy; (ii) to keep military expenditure at an appropriate level; (iii) to adopt a multiple political party system/ democracy; and (iv) to respect human rights⁽⁵⁴⁾.

Poverty reduction is the core of the UK's assistance programs. In 1991, a guideline on 'Aid and Poverty Reduction' was published. The British Overseas Development Administration (ODA) put priority on assistance to low-income countries, but it does not regard that provision of assistance itself is equal to a poverty reduction program. British ODA tried to formulate a strategy which suits each country's own situation in collaboration with other donors. It promotes research and studies on the poverty, such as who is poor and why they are poor. Moreover, it aims at poverty alleviation by influencing the public policies toward the poor as well as setting the goal for inputs⁽⁵⁵⁾.

⁽⁵²⁾ The Ministry of Foreign Affairs (1997), p. 247.

⁽⁵³⁾ The Japanese Trade Union Confederation (1995).

⁽⁵⁴⁾ The Ministry of Foreign Affairs (1997) p. 253.

⁽⁵⁵⁾ ODA was advanced to the independent ministry (Department for International Development: DfID) by the political reform in May 1997.

It is determined that four-fifths of British assistance is appropriated to countries with per-capita annual incomes of \$750 or less as the assistance distribution standards. Actually, in FY1995/96, 81% of bilateral assistance was concentrated in low-income nations, and weight is placed especially on LLDC, especially Sub-Saharan Africa. Another characteristic is that assistance for British Commonwealth nations accounts for a high rate of 43.8%, due to its past colonial rule. The total net disbursement of UK assistance amounts \$3,185 billion. All of assistance is, in principle, by grants (among which, the share of technical cooperation is about 50%).

Looking at the distribution of bilateral assistance by sector, the BHN sector accounted for 53.3%, which is more than half, in FY1994, and the share of the category of the economic infrastructure and service was only 11.9%.

In the UK there are many NGOs (about 130) that have a long history and firm organizational bases, and 12.8% of bilateral assistance in FY1995/96 was conducted through these NGOs.

4.2.5 Canada

Canada's assistance goal is "to support sustainable development in developing countries, in order to reduce poverty and contribute to enhancement of the world's security and prosperity." In February 1995, Canada announced a new ODA policy: 'Canada in the World', to replace the assistance policy titled 'Sharing Our Future', which was established in 1988. In this new policy, such recognition as follows is emphasized: "Assistance is a means of diplomatic policy, and it must contribute to Canada's national targets (1. Canada's prosperity and employment, 2. international security, 3. projection of Canada's values and culture)." As such, there is a stronger tendency to try to link assistance with economic and commercial profit than in the past. As far as the content of their ODA policy is concerned, however, the political and economic tone in Canada's assistance is relatively weak, and the assistance idea of focusing on the poorest countries has remained basically unchanged even today.

The six emphasized items in 'Canada in the World' are as follows.

(i) BHN:

To support efforts to provide primary health care, basic education, family planning, nutrition, water and sanitation, and shelter. Canada will commit 25% of its ODA to BHN (presently 20% or lower).

(ii) WID/GE (women in development / gender equality):

To support the full participation of women as equal partners in the sustainable development of their societies.

(iii) Infrastructure services:

To help developing countries to deliver environmentally-sound infrastructure services (electrification and communications in rural areas), with an emphasis on poorer groups and capacity building.

(iv) Human rights, democracy, good governance:

To increase respect for human rights, including children's rights; to promote democracy and better governance; and to strengthen both civil society and the security of the individuals.

(v) Private sector development:

To promote sustained and equitable economic growth by supporting private sector development, especially the organizations that are active in a small-scale business field that will result in increasing incomes, in developing countries.

(vi) The environment:

To help developing countries to protect their environment, and to contribute to addressing global and regional environmental issues.

In the new policy, poverty reduction is positioned at one rank higher as Canada ODA's final target, instead of just one item among the priority items of assistance. In this background, there is a recognition that poverty alleviation cannot be achieved by considering poverty as a singular assistance item; rather it can only be achieved by taking an integrated approach that combines assistance programs for multiple items, as was established in the new policy.

Also, it is determined, as a standard for assistance distribution, that 50% of the total should be allotted to LLDC in Africa, Asia, and Latin America.

Regarding collaboration with NGOs, many of Canada's NGOs started as branches of U.S. and British NGOs, and developed since then. NGOs' major activity fields have diversified, from regional development, food production, health and hygiene, and human resources development, to development education. These activities have been conducted in almost 100 nations and regions. Generally, NGOs have established a good network each other as well as with the federal government. The Canadian government regards NGO activities as important and approximately 330 NGOs received direct and indirect fund support from the NGO division of CIDA in fiscal 1993. About 9.6% of the ODA budget in fiscal 1993 was allocated to voluntary sector support including NGOs.

CIDA (Canadian International Development Agency) is the assistance implementation agency and its action for poverty reduction is as follows:

(i) To adopt an agency-wide definition of poverty reduction

CIDA defines poverty reduction as "a sustained decrease in the number of poor and the extent of their deprivation. This requires that the root causes and structural factors of poverty be addressed". Specifically, CIDA focuses on improving the social, economic and environmental conditions of the poor and their access to decision making.

(ii) To integrate poverty profiles and reduction strategies into country or regional policy framework

(iii) To make programming at CIDA consistent with the goal of poverty reduction programs or projects

(iv) To concentrate on areas where CIDA has a comparative advantage

Also, CIDA established a Poverty Working Group (PWG) in the Economic Development and Poverty Reduction (EDPR) Division of the Policy Branch. The PWG conducts evaluation of internal functions to determine a policy inside the CIDA, and it prepares periodic reports outlining achievements and progress in implementation related to a new poverty policy.

4.2.6 Sweden

The basic principle of assistance in Sweden is solidarity with people who are suffering from poverty in the world, based on the positive neutrality policy since the Napoleonic War in 1814. Sweden therefore aims to contribute to the achievement of world peace, prosperity, and true democracy through assistance. The purpose of assistance was stipulated, by a resolution of the Diet in 1978, to be promotion, in developing countries, of the five items of (i) economic growth, (ii) economic and social equality, (iii) economic and political independence, (iv) democratic development, and (v) environmental protection, which was added in 1988. The main content of each item is as follows.

- (i) Economic growth: to develop agriculture and industries, and improve economic power.
- (ii) Economic and social equality: to improve the living conditions of the poorest countries to reduce social and economic inequality as the first step. It means to ensure to improve the school enrollment ratio, access to medical service as well as to reduce differences between the rich and the poor.
- (iii) Economic and political independence: to help to ensure that countries can make their own decisions on their economies and policies and create conditions necessary for national self-determination.
- (iv) Democratic development: to help to ensure that people are given greater opportunities to influence development locally, regionally and nationally.
- (v) Environmental protection: to promote the sustainable use of natural resources and protection of the environment.

The history of Sweden's NGOs started in the early 20th century, and the nation has achieved such unique development as respective political parties having cooperative relations with non-governmental organizations, such as churches, consumer co-ops, and labor unions. In 1952, 40 NGOs formed a Committee for Technical Assistance to Less-Developed Countries, and this is the predecessor of the Swedish International Development Authority (SIDA)⁽⁵⁶⁾. The role of NGOs have recently been put forward for more effective assistance. NGOs have a lot of experiences in grass-roots level assistance in developing countries and they play an active part in the field that promotes a democratic society including organizing labor unions. SIDA strengthened its collaboration with NGOs such as setting a NGO division. The activity of the NGO division of SIDA is NGO support such as providing grants from development cooperation budget to Swedish NGOs based on general conditions and guidelines.

Up to the early 1980s, SIDA examined NGOs' programs and project proposals, and directly concluded agreements with about 200 NGOs. In 1983, however, SIDA changed this system and it concluded two-year comprehensive agreements respectively with 14 organizations that have jurisdiction over NGOs (umbrella organizations). SIDA has supported a total of about 600 NGOs through this agreement, from large-scale organizations specializing in development, to small development cooperation study organizations, consisting of

⁽⁵⁶⁾ Later SIDA was integrated with other four aid-related agencies and became Swedish International Development Cooperation Agency (Sida) in July 1995.

several people. Among the SIDA's assistance, assistance through NGOs represents about 10%, and this assistance amount increased to 958 million SEK in FY1994/95. In addition, SIDA has recently been regarding collaboration with both other international NGOs from industrialized countries and local NGOs in recipient countries as vital in implementing assistance.

The majority of Sweden's bilateral ODA is allotted to LLDC (in 1994, Sweden's distribution rate was 41%, while the DAC average was 28%). In order to search for a future approach toward poverty reduction based on the past experience, SIDA started a poverty reduction task force. The task force report *Promoting Sustainable Livelihoods* states that the key to successful poverty reduction is to analyze every aspect of poverty (gender, age, racial characteristics, class, employment, etc.), and to fully understand poverty and its causes from these analyses.

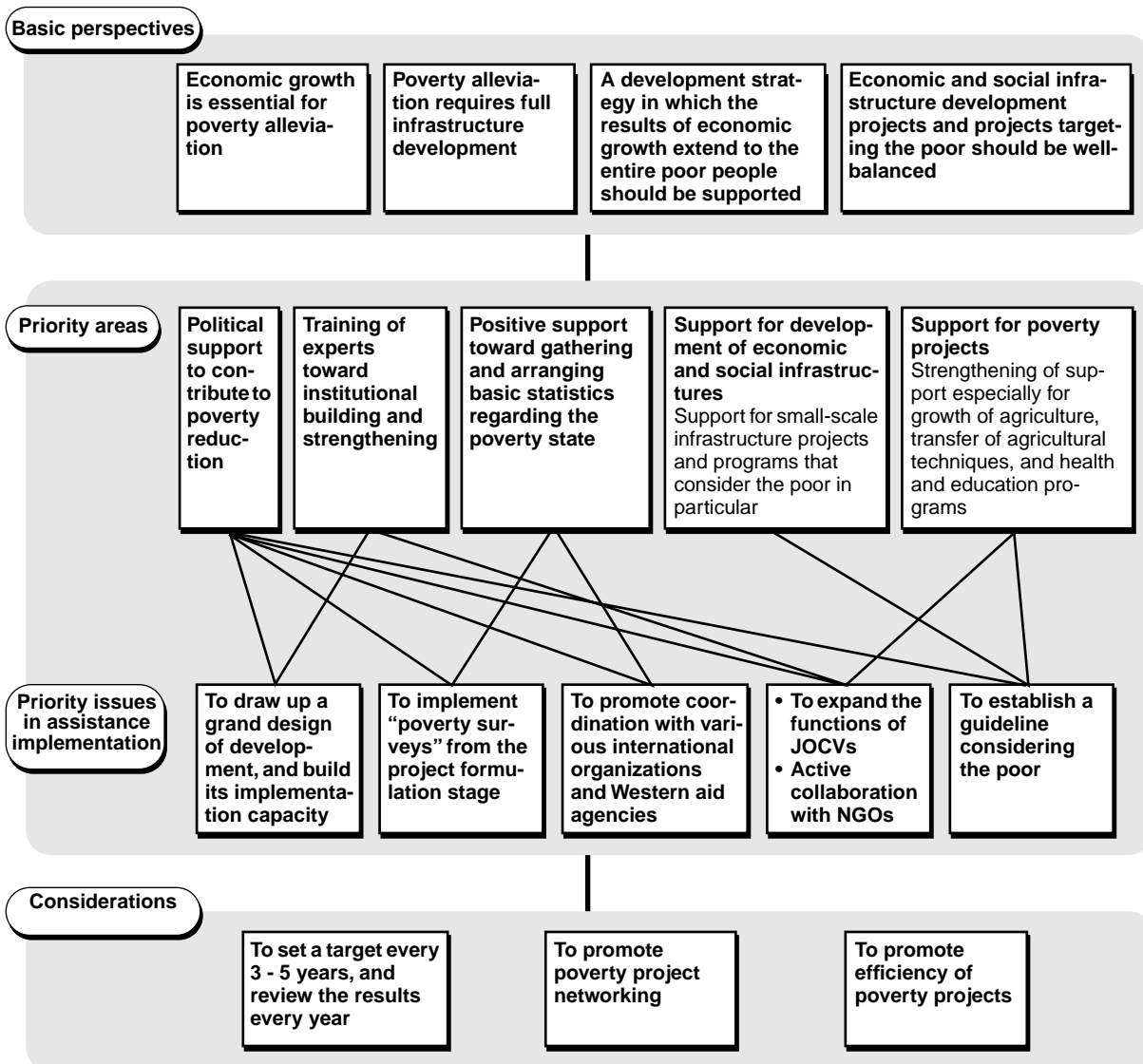
The report presented the following fields which SIDA needs to support as follows.

- Good governance, democratization, and human rights
- Gender sensitive strategy for poverty alleviation
- A sustainable and fair system to provide funds to public service, such as health and education, with tax system reform prospect
- A strategy for labor-intensive development and sustainable livelihood improvement
- Gender strategy to improve health and to reduce social inequality in the health sector
- Sufficient development related to institutional capacity building and sustainable livelihood improvement
- Integration of environmental policy and environmental strategy for poverty alleviation
- Prevention of difficulty for handicapped people and promotion of their sustainable livelihood improvement

The report advocates strengthening of the relation between international-level poverty reduction and donor support, as well as donor cooperation in the following aspects:

- To promote a policy framework with commitment, accompanied by action, to achieve poverty reduction, thereby promoting the World Bank's country assistance strategy.
- To adjust the support approach in accordance with recipient countries' commitments toward poverty reduction.
- To discuss poverty evaluation at CG meetings, to make consistency and collaboration.
- To promote participation of citizen representatives in poverty evaluation.

5. Framework for Japan's Assistance for the Implementation of the DAC's New Development Strategy (Poverty)



5.1 Basic Perspectives

Japan's ODA is generally composed of yen loans, with the focus on economic and social infrastructure construction. There is no doubt that this form of assistance greatly contributed to Asian countries' economic development and poverty reduction, together with direct investment, technology transfer, and closer trade relations. Japan needs to further this experience with confidence. However, it is also true that Japan's conventional type of yen loan is now at a turning point. Japan recently made serious budget deficit, increased untied yen loans, and promoted the privatization of infrastructure sector in developing countries, while yen exchange rate raised. In the future, Japan should contribute to construction of infrastructure in developing countries with not only the ODA loans but also various public and private routes. Development of economic and social infrastructures is an essential prerequisite not only for economic development but also for poverty alleviation. Without adequate development of infrastructure, poverty cannot be alleviated. Therefore it needs to avoid an inappropriate dichotomy, such as 'infrastructure construction versus the social sector' or 'growth versus distribution'. Without economic growth, poverty cannot be alleviated.

However, economic growth is one essential prerequisite for poverty elimination, but not an adequate condition. In addition, costs like environmental problems that can be caused by economic growth under distorted social, economic, and political structures of developing countries, may strain the socially vulnerable groups and the poor, resulting in further worsening of poverty. It is necessary to support a development strategy in which the results of economic growth will extend also to the poor without creating inequality of income distribution. Also, in order to correct distortion that can be caused by economic growth, poverty projects targeting the poor should be implemented.

The implementation of economic and social infrastructure development projects and projects targeting the poor must be well-balanced and mutually related. In other words, it is vital to see how these projects are systematically incorporated in a development strategy.

5.2 Priority Areas and Issues

The priority areas in Japan's assistance toward poverty reduction are the following four items.

- (i) Policy support to contribute to poverty reduction
- (ii) Support for development of economic and social infrastructures
- (iii) Support for poverty projects
- (iv) Training of experts toward institutional building and strengthening

Among these, Japan has cumulative experiences regarding (ii) "support for development of economic and social infrastructures" and (iv) "training of experts toward institutional building and strengthening." These projects and programs need to be continued and strengthened by clarifying the perspective of poverty reduction.

As to (ii) support for development of economic and social infrastructures, OECF has accumulated assistance experiences for small-scale infrastructure development. In addition, Japanese aid agencies have come to give consideration to environmental issues and WID. Also in the future, it is necessary to promote small-scale infrastructure projects and programs, by adding the viewpoint of consideration toward the poor.

On the other hand, as to (i) “policy support to contribute to poverty reduction,” Japanese aid agencies do not have enough know-how. For the time being, Japan should improve its own policy support capacity, while cooperating with multilateral organizations and Western aid organizations.

Also, as mentioned earlier, (iii) “poverty projects” include the following major programs:

- (a) Credit programs for the poor
- (b) Employment generation programs
- (c) Implementation of land reform
- (d) Agricultural growth and transfer of agricultural technology
- (e) Health and education programs
- (f) Foods supply and foods subsidies
- (g) Measures for the urban poor

Japan needs to clarify its strong areas in which the country can contribute to the issue of poverty reduction in developing countries, from the above-mentioned list. In that process, it will be necessary to strengthen aid coordination with various multilateral organizations and other donors. Moreover, positive cooperation and participation of JOCVs and various NGOs will be essential for the implementation of poverty alleviation projects. Furthermore, it is known that local people’s positive participation from the project formulation stage and the promotion of decentralization are effective for the implementation of any kinds of projects and programs.

Judging from the Japan’s past assistance projects and programs, Japan has a comparative advantage in the area of (d) “agricultural growth and transfer of agricultural technology”. Japan has also cumulative experiences in the area of (e) “health and education programs”. Therefore, Japan should focus on these two areas in terms of both loan and grant aid for the time being. In addition, considering from the achievements made so far, it will be effective to largely expand the function of JOCVs especially in the areas of poverty alleviation.

Furthermore, in the future, it is necessary to obligate poverty surveys from the project formation stage as an essential part of the project cycle. These steady efforts will lead to enhanced capacity for (i) policy support to contribute to poverty reduction.

In order to achieve the target of reduction of poverty by half, recipient countries must meet some prerequisite conditions. A country with political instability and security matters should clarify and put priority on the resolutions of domestic discord and the peace building as the first step toward poverty alleviation. The case of Cambodia illustrates this point. Secondly, basic data on the state of poverty must be prepared. Japan should extend its support for countries without sufficient statistics for the improvement of their statistics. When the poor can be found in specific social groups, occupations, and regions and women, it is necessary to actively support research and study that try to clarify those causes. In these cases, it is desirable to form an interdisciplinary survey team including statisticians and economists as main researchers. Japan also needs to further its relations with various multilateral organizations accompanied with cumulative experiences in this field.

Table 5.1 is a summary of the priority areas in assistance for poverty reduction.

Table 5.1 Priority Areas and Issues in Assistance for Poverty Reduction

-
- (1) Policy support to contribute to poverty reduction. Promotion of coordination with various multilateral organizations and Western aid organizations.
 - (2) Support toward development of economic and social infrastructures. Strengthened support especially toward small-scale infrastructure projects and programs targeted at the poor.
 - (3) Support for poverty projects. Strengthened support especially toward agricultural growth, transfer of agricultural technology, and health and education programs.
 - (4) Training of experts toward institutional building and strengthening.
 - (5) Large expansion of the functions of JOCVs, and active collaboration with NGOs.
 - (6) Implementation of poverty surveys from the project formulation stage.
 - (7) Active support toward preparing basic statistics regarding poverty states.
-

5.3 Challenges and Considerations

5.3.1 Setting Short- and Medium-term Objectives

DAC's setting of a target of "poverty reduction by half, by 2015" is too long-term and lacks a specific image. It will be more practical to set short- and medium-term objectives (3 - 5 years) and annual review.

5.3.2 Establishing Guideline 'Considerations for the Poor'

As mentioned in the section 5.1, construction of economic infrastructure is one essential prerequisite for poverty elimination, but it alone is not sufficient. Additionally, there is a possibility that the cost, such as of environmental problems that can be caused by infrastructure construction, may induce negative impacts on the vulnerable people, resulting in further worsening of poverty. Therefore, it is necessary to implement a project that fully considers the impact on the poor. It is desired to set up a guideline of 'considerations for the poor' as soon as possible by aid agencies in accordance with the considerations for the environment and WID. In 1993, JICA produced *Guidebook for Poverty Issues* as the results of the meetings of the Aid Study Committee on Poverty in 1989, and the basic idea is readily established. This guideline must be embodied as soon as possible.

5.3.3 Drawing up a Grand Design for Development and its Implementation Capacity Building

What is most needed for achievement of the DAC's target of reduction of poverty by half is to draw up a grand design for development by developing countries themselves that link construction of economic infrastructure to poverty alleviation and build its implementation capacity (ownership). This is crucial point to realize the target of reduction of poverty by half in applying the idea of partnership as well.

In order to embody the concepts of partnership and ownership for poverty reduction by half, enhanced policy dialogue with the governments of developing countries is not enough. To satisfy basic conditions for "drawing up a grand design for development and its implementation capacity building" requires a more-involved constant organizations. It should be composed of both donors and recipient countries that consistently conduct deliberations

from the policy and project formulation stage to their follow-ups, monitoring and post-evaluations.

5.3.4 Promoting Poverty Projects and Its Networking

JICA and OECF have 'substantial' experiences toward poverty alleviation in developing countries. However, there are only few projects clearly targeting the poor and no post-evaluations from the perspectives of poverty alleviation. Additionally, individual projects are not necessarily clearly incorporated in a development strategy of a recipient country. Therefore, it is necessary to create a project database from the viewpoint of poverty reduction as individual projects are closely related. It is desired, in the future, that JICA and OECF will promote such studies and collect and reconstruct data.

5.3.5 Improving Poverty Project Efficiency

Project efficiency should be promoted in implementing poverty alleviation projects. It is insufficient just to increase the distribution of assistance funds to poverty projects and the social sector. It is strongly desired to research and study the methodology that enhance the project efficiency based on the past experiences of poverty alleviation projects by various multilateral organizations and other donors. Studies on targeting and implementation system in poverty alleviation projects and desirable participatory development are most important.

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1. Education: Basic Issues

1.1 Education and Educational Development

Dewey states in “Democracy and Education” (his main work in pedagogy) that “the primary ineluctable facts of the birth and death of each one of the constituent members in a social group determine the necessity of education” ⁽¹⁾, and that “not only does social life demand teaching and learning for its own permanence, but the very process of living together educates.” ⁽²⁾ Education is vital for the continuation of human society while the existence of a society produces educational activities. It is possible to say that human beings always learn and teach from their birth till death. Educational humanism in the modern age calls for individuals to develop their own possibilities through education and to participate in a society in a given social conditions.

Education is conducted not only at school but also anyplace in a society (home, workplace, etc.), and at any time (throughout life). The focal education in the context of international cooperation is education that is conducted based on law. This is classified into so-called school education or public education (regular school education) and non-formal education (irregular education) such as adult literacy education.

The origin of the idea of systematic education conducted by a nation based on law, which is public education, dates back to the French Revolution. Condorcet’s idea on education (“public education is society’s duty toward the nation”) has given great influence up to the present age ⁽³⁾. Condorcet appealed that a public education system supported by public expenditure is needed for every person to develop his or her possibilities without being influenced by religion or political power. However, it was not until the second half of the 19th century that public education systems became established, as national compulsory education systems, in European countries. Prevalence of education was considered to be an important pillar of modernization, and public education systems became established in all nations. Modernization is promoted in the three aspects of politics, economy, and social culture, but it is important to keep a balance among the three ⁽⁴⁾. It has been pointed out that, socio-cultural development including education was relatively delayed in Japan’s process of modernization ⁽⁵⁾. Therefore, in Japan the content of education in public education has relatively been biased toward the realization of national purposes rather than the formation of citizens. Bertrand Russell pointed out that the purpose of prewar Japanese education was “produce citizens who shall be developed to the state through the training of their passions and useful to it through the knowledge they have acquired” ⁽⁶⁾. This is not peculiar only to Japan; rather such a tendency is “prominent among all the great powers” ⁽⁷⁾. Furthermore, well-balanced modernization including education, is an important issue in not only former powers but also developing countries that have newly achieved independence.

In rapidly modernized developing countries, public education systems were arranged immediately after independence. Although there are various distortions noted by Russel,

(1) John Dewey (1916) (translated by Matsuno, 1994). p. 13.

(2) *Ibid.* p. 18.

(3) Condorcet (1971) (translated by Matsushima). p. 9.

(4) Tominaga, K. (1990a).

(5) Tominaga, K. (1990b).

(6) Russell (1926) p. 50.

(7) *Ibid* p. 50.

the system and contents of modern public education is more or less universalistic since it was produced from the process of formation of a civil society. Consequently, extending public education has generated contradictions against indigenous culture and traditional values in each country. Konma pointed out the complicated nature of educational policy in developing countries, saying that young African nations that achieved independence while keeping their former colonial borders “adopted Western-style education as the best means, not only to compensate for the negative heritage from the colonial period but also to create new values of a nation-state by substantially integrating the entire nation”⁽⁸⁾. In a sense, spreading of public education can be said to have been a fight against traditional values and social systems. This aspect underlies many current educational issues (such as languages for education and girls’ education).

Though containing such issues, educational development was tackled as an urgent and important issue in developing countries that newly became independent. As seen in Table 1.1, gross enrollment ratio of primary education increased from 44% to 67% in the 20 years from 1965 to 1985 in low-income nations. Considering the population increase rate, especially the increased number of children of school age during the same period, the 20th century can be called the century of education.

It is true that education has an aspect of developing human resources as the basis of industrial development and economic growth, but education itself has peculiar value. Prevalence of education is the nation’s duty, and the people have a right to receive education.

Table 1.1 Gross Enrollment Ratio and Women’s Enrollment Ratio (1965-85)

	Unit: %				
Country income level	1965	1970	1975	1980	1985
<u>Low (excluding China and India)</u>					
Gross enrollment ratio	44.1	47.9	61.7	67.0	67.3
Females (%)	38	41	42	42	43
<u>China and India</u>					
Gross enrollment ratio	94	85	106	101	110
Females (%)	38	42	42	43	43
<u>Lower middle</u>					
Gross enrollment ratio	73.8	79.7	84.7	99.7	100.9
Females (%)	44	45	45	46	47
<u>Upper middle</u>					
Gross enrollment ratio	95.4	105.5	98.3	102.4	103.3
Females (%)	47	48	47	48	48
<u>High</u>					
Gross enrollment ratio	104.0	103.5	101.2	101.1	101.2
Females (%)	48	49	49	49	49

Source: Lockheed et al. (1991). p. 27.

⁽⁸⁾ Konma, T. (1992). p. 161.

1.2 Educational Development: A Success or Failure?

There are two different views on educational development in developing countries. One view is that “education was the sector that progressed the most, together with health, hygiene and medical care, looking back on the past 30 or 40 years. Among many developments, education is the field that developed and progressed the most after the area of health”⁽⁹⁾. Education economists, mainly ones in the World Bank, emphasize that expansion of education, especially basic education, can bring wide-ranging economic benefits, and support of the basic education sector should be further expanded⁽¹⁰⁾. Both in the social private return rate regarding educational investment, primary education showed the highest rates in Sub-Saharan Africa and Asia (Table 1.2). The standpoint of these economists is that further spreading of education will be the basis for solving the problems in developing countries.

Table 1.2 Social Return Rate and Private Return Rate by Region and Level of Schooling

Unit: %

Region	Social			Private		
	Primary	Secondary	Higher	Primary	Secondary	Higher
Low-and middle-income countries						
Sub-Saharan Africa	24.3	18.2	11.2	41.3	26.6	27.8
Asia	19.9	13.3	11.7	39.0	18.9	19.9
Europe, Middle East, and North Africa	15.5	11.2	10.6	17.4	15.9	21.7
Latin America and the Caribbean	17.9	12.8	12.3	26.2	16.8	19.7
OECD countries	n.a.	10.2	8.7	n.a.	12.4	12.3

n.a.: Not applicable.

Source: World Bank (1995). p. 22.

The other view of educational development in developing countries, in contrast with the above, is that it failed. Though several hundred billion dollars have been spent in educational costs in developing regions over the past 30 years, “average citizens’ difficulties were not improved at all.” Though it may not be right to blame this on a failure of public education, “we must recognize that many of the early claims made on behalf of the unfettered quantitative expansion of educational opportunities – that it would accelerate economic growth, that it would raise levels of living especially the poor, that it would generate widespread and equal employment opportunities for all, that it would acculturate diverse ethnic or tribal groups, and that it would encourage ‘modern’ attitudes – have been shown to be greatly exaggerated and, in many instances, simply false”⁽¹¹⁾. If this is the case, we need to answer the following questions in discussing educational development and education assistance: Does education really accelerate economic growth? Do people’s living standards improve through prevalence of education? Are equal employment opportunities created by education? Can diverse ethnic and tribal groups be harmonized by education?

⁽⁹⁾ Toyota, T. (1995). p. 11.

⁽¹⁰⁾ For example, Psacharopoulos, G. (1993).

⁽¹¹⁾ Todaro, M. (1997). p. 379.

Such criticism can correspond to the following questions in the context of the NDS: Is it true that “the attainment of basic literacy and numeracy skills is the most significant factor in reducing poverty and increasing participation by individuals in the economic, political, and cultural life of their societies,” which is presented as a reason for the spreading of primary education by 2015? Can elimination of the gender gap in primary and secondary education by 2005 be a “measure of both fairness and efficiency”? The answers to these questions from the viewpoint of educational development are as follows:

Can education really accelerate economic growth? If economic growth means reduction of people’s poverty and improving people’s welfare, the concept must contain prevalence of education. Also, education in itself has its own value, and it must be promoted regardless of its possibility of resulting in economic growth. It can be considered, therefore, that the question of choosing either economy or education itself is meaningless.

Can prevalence of education improve people’s living standards? Does improvement of living standards only mean materialistic affluence? Improvement of living as a human being, which is prosperity of living, should include some learning or intellectual improvement, and prevalence of education is part of improvement of living. Therefore, improvement of living standards without education is not realistic, even if it is possible in theory.

Can wide and equal employment opportunities be created through education? and Is harmonization of different races and tribes possible by education? Regarding these two questions, it is necessary to consider the relation between education and society. The educational system is determined by the three-power relationship of politics (government), society (family), and economy (enterprise) (see Fig. 1.1 and Fig. 1.2). The education system has a function to reflect the social structure and strengthen and reproduce the society and its economic structure. This is because, as Dewey indicated, education is “a transformation of the quality of experience till it partakes in the interests, purposes, and ideas current in the social group”⁽¹²⁾, and “the way in which a social group brings up its immature members into its own social form”⁽¹³⁾. This is natural in terms of the continuity of a society. However, changes in politics, economy and society affect education as politics, economy and society regulate the education system. At the same time, changes in education reform its society although there is inevitable conservative aspects in education. Education and society have a complementary or two-way relation, which is expressed as “education is produced by the society, but the results of education affect the society, which furthermore influences education”⁽¹⁴⁾.

It is not fair to draw conclusions on the success or failure of educational development, or on the inappropriateness of education investment, based on the tendency in education system to fix social inequality. The reason for the tendency the education system in developing countries to strongly fix inequality is that education reflects inequality in politics, economy and society. Therefore, education itself cannot be judged as inappropriate. It is also improper to disregard the efforts in educational development in developing countries, as satisfactory social development cannot be found in these countries. It can be noted that ‘a failure in educational development’ can induce the realization of the necessity of education reform but it cannot be a reason to criticize educational development as being excessive.

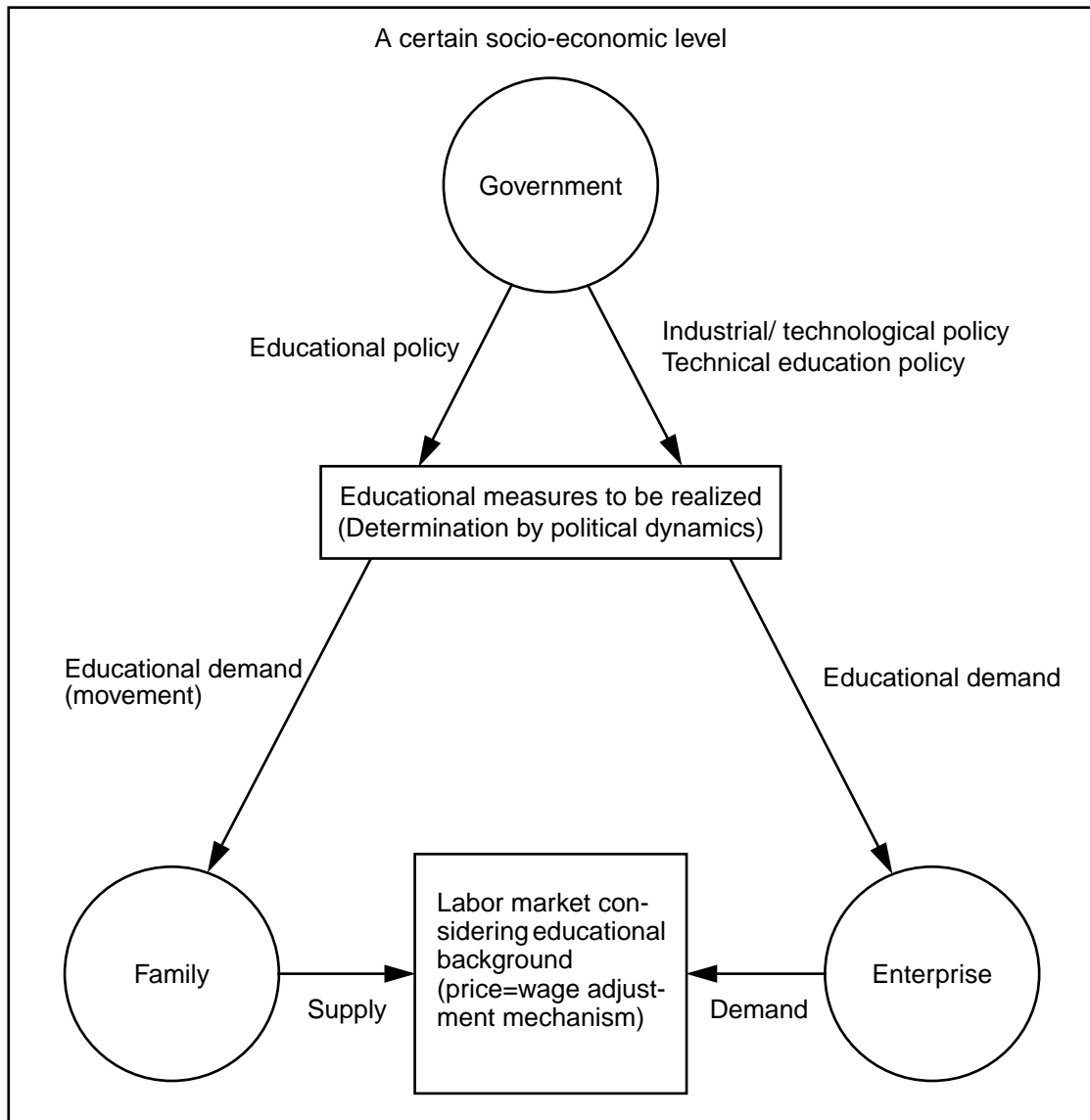
(12) Dewey, J. (1916). p. 26.

(13) *Ibid.* p. 25.

(14) Utsumi, S. (1995). p. 55.

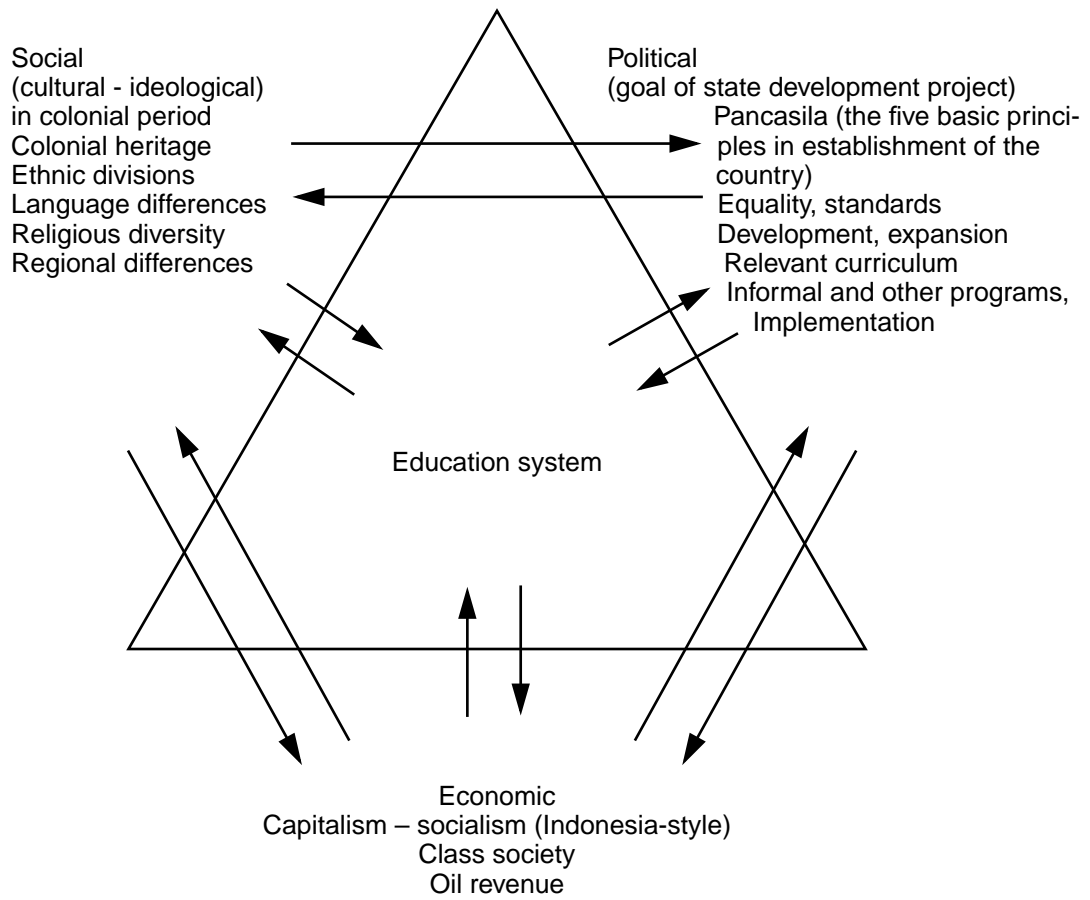
However, the above statement does not mean that unconditional approval is given to the importance of basic literacy and the role of education in promoting justice and fairness, which are presented as the reason for the goal of the NDS. The role of educational policy and educational development in the economy and society changes, due to various factors such as regional characteristics, the levels of economic development, and historical and cultural conditions, and at the same time, the influence education receives varies.

Figure 1.1 Mutual Relation among the Three Entities Involved in Educational Development



Source: Yonemura, A. (1986). p. 12.

Figure 1.2 Dialectical Model of Indonesian Education



Source: Fagerlind et al. (1989). p. 235.

2. Current Education Issues in Developing Countries

It is not until the second half of the 20th century that we can think that it is possible to achieve the challenges in educational humanism: to provide education to equip every child to make the most of his/her possibility and to participate in a society. No more people can read, write and calculate than now. This is an asset of mankind and a historical achievement that must be maintained and promoted.

After World War II, the nations that became independent one after another made great efforts in educational development. It is because education under their previous ruling governments was extremely limited: it was only education toward the aims of Christian missionaries or fostering of government officials, and so-called national education was not conducted. The primary education enrollment ratio and literacy rate increased at the rate of about 10% in 10 years, from the 1960s to the 1970s. The primary school enrollment ratio, which was about 65% in 1965, exceeded 80% in the middle of the 1980s (from 44% to 67% in low-income countries). These numbers can be highly evaluated, considering the high population increase rate in developing countries.

However, many developing countries had suffered from economic difficulties since the 1980s. Most countries in South Asia, Latin America and Africa had accepted 'structural adjustment programme' by the IMF and the World Bank. Especially in Africa, 31 countries are still in a critical state and need the World Bank's 'special program of assistance for low-income debted-distressed countries in Sub-Saharan Africa'. The population increase rate is also high with its continuous inflow to cities. Some countries are politically unstable, and some are experiencing civil war. Such an economically, socially, and politically difficult situation is casting a shadow on educational development, such as decreases of educational budgets and retarded enrollment ratios.

Developing countries still have many issues in education. Education will be different according to its development stage and its type of society in each region and country. Though issues differ according to regions and nations, the following points can be presented.

2.1 Stalled Primary Education Enrollment Ratios

In 1990, the primary education enrollment ratio in overall developing countries reached approximately 80%, except for low-income countries. However, the unstable socio-economic conditions have resulted in retarded primary education enrollment rates in the educational aspect. Especially in Sub-Saharan Africa, the enrollment increase rate has slowed down, the enrollment ratio is decreasing in some countries. As the cause of such slowing or decreasing, the following three points can be considered. First, it takes more efforts when primary education prevails and its rate exceeds 80%, as the newly enrolling class becomes mainly socially marginal groups. Second, economic crises and structural adjustment policies resulted in reduction of public spending on education, and a decline of school construction decreased its growth quantitatively. Third, there is an increase in children who cannot go to school due to the increase of the poor and the increase in education expenditure to be paid by parents by charging school fees.

The first cause is a problem that is imminent in educational development, but the second and the third are external factors in education. With regard to assistance, they are

issues related to social rescue funds, so-called safety nets programs, and related to educational administration and finances. Exhaustion of social capital due to an economic crisis weakens a community, and management of primary schools supported by communities is greatly affected.

2.2 Declines on the Quality of Education

The second educational problem in developing countries is the decline in its quality. In many countries the educational budget is reduced due to a financial crisis and structural adjustment policies, resulting in sluggish school construction and fewer teachers. Because school construction and facility expansion are not conducted in accordance with the increasing number of children, the educational environment becomes deteriorated such as overcrowding of students and shortages of desks, chairs, textbooks, and teaching materials. Moreover, in-service teachers' salaries have reduced and there are fewer opportunities for teachers to take training. This has blocked teachers' intellectual improvement and lowered their social status.

Looking at the share of educational budgets in GNP, it hardly changed in low-income countries from 1965 to 1985. In other countries it increased by 1%. On the other hand, the educational cost per primary school student (unit cost) increased in most countries. It almost doubled, especially in high-income countries, while it decreased from \$40.7 to \$30.9 in low-income countries. The unit cost ratio of low-income countries versus high-income countries is 1: 50, which means the educational cost per primary school student in poor countries is only 1/50th of that in high-income countries. Such a low unit cost in the poorest countries has a decisive influence on the quality of education.

Table 2.1 Median Public Expenditure on Education, Selected Years, 1965-85

(Unit: percentage to GNP, %)

Country income level	1965	1970	1975	1980	1985
Low	2.7	3.2	2.8	3.1	3.2
Lower middle	3.0	3.4	3.6	4.5	3.9
Upper middle	3.2	3.4	3.5	3.7	4.3
High	4.3	5.1	6.3	5.8	5.8

Source: Lockheed et al. (1991). p. 33.

Table 2.2 Median Public Recurrent Expenditure per Primary Student, Selected Years, 1965 - 85

(Unit: converted to 1985 U.S. dollars))

Country income level	1965	1970	1975	1980	1985
Low	40.0	38.7	40.7	29.4	30.9
Lower middle	72.5	71.3	81.6	75.5	101.7
Upper middle	194.3	197.9	258.9	255.7	296.6
High	824.5	841.7	1117.6	1382.8	1551.4
Ratio of low-income country versus high-income country	1 : 20	1 : 22	1 : 27	1 : 47	1 : 50

Source: Lockheed et al. (1991). p. 33.

2.3 Constraints on the Development of Secondary and Higher Education

The share of assistance in secondary and higher education has decreased, as multilateral organizations and donor nations focused on basic education since the mid-1980s. Support from European countries, which used to give much education assistance to African nations, has considerably decreased in the area of secondary and higher education, while the World Bank has been increasing assistance in the education sector.

On the other hand, Southeast Asia (Thailand, Indonesia, etc.) which emphasized basic education, especially primary education, in educational budgets have a serious shortage of engineers with the progress of industrialization, and constrain their development. In every Southeast Asian country, the ratio of educational investment in GNP is 1-2%, lower than that in industrialized countries (5-6%) and other developing countries. The attitude to emphasize basic education can be highly evaluated in the early stage of modernization, but the history of educational development in advanced countries has shown that it is necessary to promote secondary and higher education in parallel with industrial development, since progress in industrialization requires well-balanced educational development based on the needs of industry and projected demands for human resources.

The World Bank analyses that, in developing countries, secondary and higher education are too expensive and students are treated too favorably, in comparison with primary education. Comparing educational costs between some developing countries and industrialized countries, the higher education cost per student in industrialized countries is 17.6 times the cost for primary education, while the comparable figure in developing countries is 87.9 times. Moreover, the income of higher-education graduates in developing countries is only 6.4 times that of people who do not receive higher education. In this regard Todaro pointed out: "the wide disparity between relative earnings and relative costs of higher versus primary education implies that in the past, LDC governments may have unwisely invested too much in higher education" ⁽¹⁵⁾.

However, the cost of higher education in developing countries cannot be compared only in terms of cost per student. Pursuing higher education is not yet widespread in developing countries and the cost of training teachers and technical facilities in these countries

⁽¹⁵⁾ Todaro, M. (1997).

becomes higher than in industrialized countries. This shows that higher education in developing countries is in the progressing stage, as was the case in England in the 19th century and in Japan in the Meiji era. We should judge carefully if excessive investment in higher education exists; detailed evaluation should be conducted considering the states of progress of educational development in respective nations and regions.

2.4 Challenges in Culturally and Linguistically Diverse Societies

Regardless of development level, almost every nation is a multi-ethnic country, which consists several ethnic groups and languages. Many developing countries, after becoming independent, adopt a national curriculum in public education aimed at national integration. Presently there is an increasing recognition of the need for basic education that respects different cultures and languages of the different ethnic groups that make up a nation. Implementing education that respects different languages and cultures requires reform in education, such as research and study of the constituent languages, reviewing of language policies and mass media policies, training of multiple-language teachers, and development of new curricula.

2.5 Local Needs and the Educational Curricula

Although most people in developing countries are farmers, curriculums are not premised on rural life, and they are far from people's educational needs ⁽¹⁶⁾. Current primary education is based on the so-called 3Rs (reading, writing, and arithmetic), irrespective of countries and regions. However, it lacks education in other areas that people in agricultural villages need, such as education to improve household living (various skills, house-keeping, home repairs, etc.), education to improve the community (specific presentation of local and national administration systems), and vocational education (skills needed for specific occupations). It is pointed out that the curriculums that do not address the practical needs of rural people keeps people away from school, resulting in increased regional disparity.

It will be very difficult to keep the curriculum contents at primary education close to regional features. Because current basic education has already contained many subjects such as history, social studies, moral education and science in addition to 3R's, there is little space to include various skills needed for daily life and specific occupations. Skills and techniques that are closely related to everyday life have so far been handled at the level of the home and regional community, and it is not possible to incorporate all of these subjects into school education. It will be necessary, in studying educational measures and curricula, to take account of the respective roles of school, community, and family.

2.6 Gender Disparity

Gender disparities in the primary education enrollment ratios and in the literacy rate, are remarkable in South Asia and Africa. As to secondary or higher education, gender disparity is widely seen in many countries. Gender disparity is derived not only from economic reasons but also from the influence of traditional social rules and the sense of values. For

⁽¹⁶⁾ Coombs, P.H, and Manzoor, A. (1974).

example, in the Islamic sphere and in indigenous society, there are strong differences in roles according to gender, limiting women's educational opportunities. Also, it is pointed out that danger involved in commuting to school, as well as an inadequate school environment, such as absence of toilet facilities for females, make their school attendance difficult.

At the secondary education level, difficulty in commuting due to uneven location of secondary education schools, which are concentrated in urban areas, and early marriage of young women contribute to gender disparity in addition to economic and social aspects.

2.7 The Diploma Disease

An overemphasis on educational background, so-called the 'diploma disease', which is the tendency of going to school for the sake of acquiring diplomas, rather than learning something at school, can be seen in almost any country. More overemphasis on the taking diploma and its destructive influence can be found when a country starts its development efforts at late in the world history.⁽¹⁷⁾ It is an unavoidable fact that higher education is a prerequisite for getting a better occupation, as long as one of the functions of school in a society is to train people for occupations. Therefore, people come to select schools to achieve a better educational background. One of the reasons for the late-development effect in the diploma disease is that there is no other condition in developing countries that affects selection of occupations besides school background.

European countries have a system to select an occupation while progressing through several stages in accordance with the school system. In developing countries, however, modern sectors are limited and there is no existing system for occupation selection, and the diploma disease is considered to be more serious.

It is difficult to find a substantial solution to the diploma disease, but several measures can be considered such as starting employment at a younger age and developing a high-level education program for working adults or using aptitude tests as entrance requirements for school. Also, in developing countries, the fee for higher education is relatively low, and students with excellent grades do not have to pay school fees or receive scholarships. As such, a very high private return rate of higher education is considered to be another reason for the diploma disease.

2.8 Characteristics of Educational Issues by Region

Educational issues according to regions are diversified, and it is difficult to generalize the situations of respective regions. Therefore, it is expected to accumulate country- and region-specific studies. In order to obtain an overall perspective, urgent educational issues and assistance needs classified by regions can be summarized as follows.

[East Asia and Southeast Asia]

- Primary education has already become widespread, and secondary and higher education are to be expanded. Also, they are trying to make lower- secondary education compulsory.
- A shortage of engineers accompanying industrial development has constrained its further development, and the demand for vocational education and higher education

⁽¹⁷⁾ Dore (1976) (translated by Hiromichi Matsui (1990)).

is increasing. Also, universities, including private schools, are becoming popular and their numbers have increased.

- There are strong assistance needs in the areas of secondary and higher school construction, quality improvement of teachers, higher education and research.

[South Asia]

- Prevalence of primary education is delayed, and many adults are illiterate. Basic education is an urgent issue, including expansion of primary education for girls.
- Strong needs are in improvement of education infrastructure, such as school construction, teachers' training and development of teaching materials and textbooks.

[Middle East]

- Qualitative improvement of secondary education and technical education is an issue.
- There is a strong need for technical cooperation aiming at qualitative improvement of education, such as education methods, development of teaching materials, and laboratory facilities.

[Africa]

- Prevalence of basic education is delayed. An issue is the prevalence of education in rural areas, and of the urban poor, women, and handicapped people.
- Strongly needed are school construction, educational materials, and teachers training.
- Assistance is needed in formulating educational development programs and educational finances, due to the current financial difficulties.

[Latin America]

- Primary education has prevailed, but there are many school dropouts and repeaters.
- Education for vulnerable people (the poor, indigenous people, women, handicapped people, etc.) is an issue.
- Cooperation is needed for non-formal education for dropouts and quality improvement of teachers.

[East Europe]

- The education level is high. Reform of technical education and higher education is needed.
- Strongly needed are training of experts for market-economy management and in the area of industrial education.

Educational issues are characterized by diversity due to the influence of not only economic development and financial conditions but also its politics, history, culture, ethnicity, religion, and language, in each country. It is necessary to have detailed studies on education and flexible measures for respective regions, nations and local areas.

3. Aid Trends (Education)

International cooperation in the education sector began in the 1960s. At first the main targets were higher education or secondary technical education. This was because training of experts was urgently needed for modernization, and demand for assistance from developing countries was strong in this area, due to the large establishment cost and management cost needed for secondary technical education and higher education. Japan has been passive in providing assistance in basic education, because of strong criticism against its colonial education during the time of militarism before and during World War II. In addition, Japan has spread basic education domestically since the Meiji era based on self-help efforts, without receiving overseas support.

3.1 The World Conference on Education for All and Subsequent Efforts

The World Conference on Education for All (WCEFA) held in Thailand in 1990 presented widely how serious the present states of education in developing countries were, and the importance of assistance in education became well recognized. The declaration adopted at this conference strongly appealed the need for each country and aid agencies to take action toward solving both qualitative and quantitative educational issues in developing countries. Further, education is a basic issue that interrelates with such problems as the environment, population, health, and poverty. In other words, education is a sector that must always be considered when discussing any issue.

The WCEFA had an impact in presenting 'Education for All (EFA)' as a specific political target, in contrast with past international conferences for prevalence of education, which made only idealistic declarations. Following the WCEFA, most developing countries conducted simulations of spreading basic education with supports by various organizations, and they made action plans based on statistical information and cost calculations. This means that the concept of prevalence of education has become a policy issue from just an idea. Many national development plans have come to include specific numerical goals in their education programs.

3.2 Japan's Aid Trends

3.2.1 Outline

Following the WCEFA, JICA conducted the *Study on Assistance for Development and Education* (Chairman, Mr. Tsuneo Iida) from 1992 to 1994, and the following three recommendations were presented regarding Japan's assistance in education:

- (1) To increase education assistance, including vocational training, to about 15% of the entire Japan ODA, by 2000.
- (2) To place the greatest emphasis on assistance in basic education.
- (3) To provide the education assistance that a recipient country needs most, by carefully evaluating each nation's stage of educational development, not concentrating only on basic education.

The monetary amount in Japan's educational assistance has increased according to the increase in Japan's entire ODA. The distribution of education assistance in its entire bilateral ODA has also increased. In 1995, the share increased to 8.86%, but declined to 5-6% in 1996 (Table 3.1). The idea of raising the share of education assistance to about 15% is considered appropriate based on the international trend, but that figure remains far from the actual state.

Let's look at each type of assistance for educational cooperation. In technical cooperation, education assistance accounts for over 20% of overall operations. Japan has focused on basic education since 1990 in addition to higher education and vocational training. On the other hand, Japan does not concentrate on only basic education in more progressing countries such as ASEAN countries as their needs for education assistance has been changing, and it has been making efforts to implement the education assistance that suits to each country's situation. Its amount (commitment basis) increased from about \$200 million in 1987 to about \$750 million in 1996, which is about a fourfold increase in the past 10 years.

Grant aid has ranged from \$100 million to \$200 million in the past 10 years. Construction of elementary and junior high schools has been increasing since 1990. Also, grant assistance for grassroots projects has been rapidly increasing.

As to government loans, the amount largely varies depending on the year, because the amount per project is large and the addition or decrease of a single project makes a big difference in the total amount. Overall, however, there has been an increasing tendency. In addition, NGO activities in the education sector have been rapidly increasing.

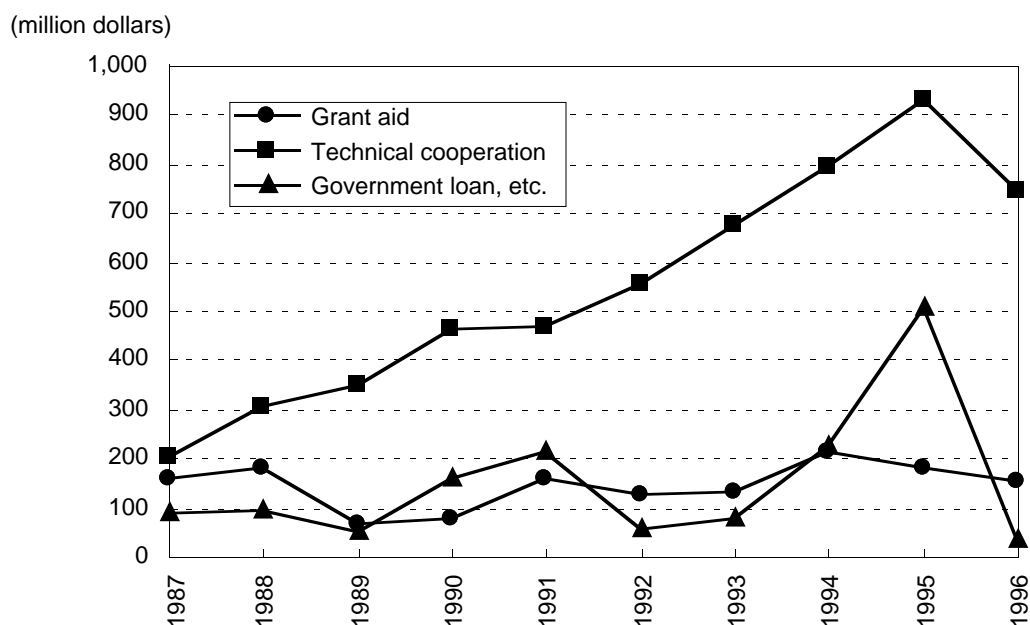
Table 3.1 Japan's Education Assistance in Bilateral Aid

(commitment basis, unit: million U.S. dollars)

Calendar year	Grant aid		Technical cooperation		Government loan, etc.		Education sector total	Bilateral ODA total	Share of education sector
	Amount	Share	Amount	Share	Amount	Share			
1987	159.88	15.4%	203.64	17.5%	89.26	1.7%	452.88	7,342.64	6.17%
1988	177.46	8.9%	302.03	19.5%	93.54	1.1%	573.02	12,325.77	4.65%
1989	63.03	4.5%	345.33	21.9%	50.35	1.0%	458.71	7,869.83	5.83%
1990	77.76	5.7%	463.76	28.2%	157.60	2.1%	699.12	10,385.48	6.73%
1991	155.41	10.1%	464.74	23.2%	209.61	2.2%	829.77	13,236.09	6.27%
1992	122.43	6.6%	555.26	25.1%	56.07	0.7%	733.76	11,749.65	6.24%
1993	132.04	6.3%	673.48	24.5%	76.65	0.7%	882.17	15,238.27	5.79%
1994	210.16	7.5%	792.46	23.8%	223.76	2.6%	1226.38	14,643.92	8.37%
1995	178.28	6.3%	930.07	25.6%	507.64	4.3%	1615.99	18,236.96	8.86%
1996	152.78	6.2%	746.60	22.5%	30.50	0.3%	929.88	16,671.75	5.58%

Source: Prepared by the writer from the Economic Cooperation Bureau of the Ministry of Foreign Affairs (1988-1997).

Figure 3.1 Japan's Education Assistance in Bilateral Aid



Source: Prepared from Table 3.1.

3.2.2 Aid Trends by Type

1) Technical cooperation

The breakdown of technical cooperation by type in education implemented by JICA in recent years is shown in Table 3.2. From 1991 to 1996, there has been an increasing tendency overall. In particular the following activities have consistently increased: dispatching of individual experts and Japan Overseas Cooperation Volunteers (JOCVs), and independent provision of equipment.

Many cases of training programs are vocational training. Regarding the Youth Invitation Program, about 30% of all invited persons are involved in the education sector, and most of them are primary and secondary school teachers. More than half of Japan's dispatched experts are sent to universities. About 40% of JOCVs, work for the area of education, and many teach at primary and secondary education, higher education, and vocational training. As to project-type technical cooperation, higher education and vocational training account for 90%.

Development study was generally conducted mainly in economic infrastructure, such as roads, and water supply and sewerage, while study on improving education quality was only conducted in limited areas, such as broadcasting education. In 1995, however, a *Study on Development Assistance for Development and Education* started as the first development study project in the education sector. Japan does not have much know-how regarding drawing up a master plan in the area of education, but implementing development study in the education sector enables cooperation other than infrastructure provision with further possibilities of yen loan extensions. This area will be an important field in the future.

**Table 3.2 Technical Cooperation Implemented by JICA in the Education Sector
(1991 - 1996)**

(lower-level unit: thousand yen)

Fiscal year	Training	Youth Invitation Program	Individual experts	JOCVs	Project-type technical cooperation	Development study	Independent provision of equipment	Recruitment and training of experts	Aid efficiency
1991	561 persons 1,324,649	617 persons 952,306	153 persons 1,404,220	817 persons 3,368,492	37 cases 6,193,942	0 case 0	–	1 case 4,665	–
1992	769 persons 1,803,033	618 persons 982,039	164 persons 1,563,852	893 persons 4,463,214	43 cases 7,276,565	1 case 163,564	–	1 case 2,687	–
1993	690 persons 1,834,710	549 persons 917,379	164 persons 883,768	1003 persons 4,089,213	54 cases 8,523,797	0 0	7 cases 125,267	1 case 1,947	6 cases 27,430
1994	582 persons 957,732	423 persons 680,607	175 persons 1,374,842	1381 persons 6,178,009	49 cases 7,211,015	1 case 160,913	17 cases 155,870	1 case 6,053	11 cases 68,622
1995	815 persons 1,218,739	504 persons 707,157	225 persons 1,525,875	1678 persons 8,143,334	36 cases 6,201,567	1 case 62,010	14 cases 323,189	1 case Invitation: 1 person 8,365	9 cases 83,476
1996	812 persons (1) 1,802,561	466 persons (2) 720,902	347 persons (3) 3,032,420	1511 persons (4) 7,035,216	43 cases (5) 6,245,988	1 case (6) 5,898	38 cases (7) 476,838	3 cases Invitation: 1 person 21,725	28 cases (8) 217,165

Note: (1) Number of participants accepted (general technical training, government general training, third-country training, international organizations: newly accepted)
(2) Number of youths invited (newly invited)
(3) Number of experts dispatched (general experts, international organization experts, senior experts: newly dispatched and continued from the previous year)
(4) Number of JOCVs members dispatched (general members, senior members, newly dispatched and continued from the previous year)
(5) Number of projects (cooperation period of R/D, including follow-up and after-care)
(6) Number of development studies (including preliminary study and formulation study after S/W)
(7) The number of equipment independently provided (equipment, study team: new and carried over)
(8) Aid efficiency-related operations (overseas project formulation, project formulation, project formulation specialists, overseas coordination) + (evaluation by project, post-evaluation, overseas post-evaluation since 1996)

Source: Documents of JICA

2) Grant aid

Higher education and vocational training had occupied most of grant aids so far, but construction of elementary and junior high school has increased since 1990. Especially in the regions of Africa, Indochina, and Southwest Asia, construction of elementary schools has rapidly been increasing, and accordingly, demand for teacher-training schools and facilities is increasing. These demands have increased because the recipient countries consider that these requests matches the Japan's schemes that focus on primary and secondary education in the context of donor coordination toward education.

Elementary and junior high school facilities projects, generally target regions with low enrollment ratios, or to aim at eliminating the overcrowded classes that are often seen in urban areas, and at replacing obsolete buildings. Regarding the projects for higher education, there are requests for cooperation toward university faculties, but these involve the supplying of advanced equipment, and from a viewpoint of wide benefit efficacy, it is difficult to implement surveys and projects.

Grant assistance for grassroots projects has been rapidly increasing, and a lot of assistance is given for educational facilities as well as elementary schools, such as for vocational training centers and education centers for handicapped people.

3) Loan aid

Japan extended loan aid in education to Indonesia for the first time in 1977. The total committed amount up to 1996 was about 237.3 billion yen. In FY1995 a project of junior high school construction in Indonesia was committed as a large-scale project, causing a large increase in the total amount.

Let's look at loan aid trends from the total of each continuous five-year period (since the per-project amount is large, causing a wide difference in its amount every year). The number of projects, committed amount, and the size of education assistance had respectively increased from fiscal 1976 to 1995. In particular, since fiscal 1991, they have been rapidly increasing (Table 3.3).

Table 3.3 Change of Direct Loans in Education (FY1976-1995)

Fiscal year	1976-1980	1981-1985	1986-1990	1991-1995	Total (1976-1995)
Number of projects	3	8	9	14	34
Amount (hundred million yen)	139	404	651	995	2,189
Share of education (%)	0.8	1.5	1.6	2.0	1.5

Source: Documents of OECF

Since fiscal 1991, loan aid has been extended to the four Southeast Asia countries of Indonesia, the Philippines, Thailand, and Malaysia. Indonesia accounts for 58% of its total disbursement, followed by the Philippines (23%), Thailand (15%) and Malaysia (6%). These countries have strong assistance needs for loan aid toward education sector due to the shortage of human resources in the areas of science and of people with higher education who will support the growth in long-term, in their rapidly developing countries.

The main target of loan aid is the higher education sector, but in recent years primary and secondary education have also been included. The main activities are to facilities expansion and equipment provision for educational institutions.

The overseas study programs mainly aim to provide degree-level education for university teaching staff, training activities for government staff, and opportunities for higher education that cannot be obtained at a domestic university.

3.2.3 Aid Trends by Content

1) Trend by sub-sector

Table 3.4 indicates the results of technical cooperation when the education sector is classified into the eight sub-sectors of (i) educational administration, (ii) pre-school education, (iii) primary and ordinary secondary education, (iv) technical secondary education, (v) higher education, (vi) other public education (vii) the non-formal education sector, and (viii) vocational training/ industrial technology education⁽¹⁸⁾. Looking at the amounts in education assistance, those for vocational training/ industrial technology education, and for higher education, are high. This is because project-type technical cooperation, which requires high expense, is concentrated in these two fields. In addition, the share of primary and ordinary secondary education, and the adult education and non-formal education sector, are high. Training programs, the Youth Invitation Program, and JOCVs directly target people, and their assistance in primary and ordinary secondary education is active.

Table 3.5 shows a breakdown of grant aid by region and by content. Many projects are concentrated in Asia and Africa, and grant assistance for grassroots projects is actively conducted toward Africa. In terms of amount, grant aid for Latin America exceeds 30%; this is because cultural grant aid is largely provided in this region.

2) Trends by content

The recent education assistance can be classified into either physical assistance, such as facility construction and provision of materials, or non-physical assistance, such as training experts, management and administration, and research and development. Japan's assistance in education is centered on the physical aspects. Except for grant assistance for grassroots projects, provision of equipment accounts for more than half of the total, and with grassroots projects added, almost 90% of projects are physical assistance (Table 3.6).

⁽¹⁸⁾ The sub-sectors in the education sector are classified in the *Study on Development Assistance for Development and Education* as follows:

- 1) Education administration: assistance in education administration
- 2) Pre-school education: assistance toward preschools and kindergartens
- 3) Primary and secondary ordinary education: assistance toward primary schools, junior high schools, and senior high schools
- 4) Secondary technical education: education assistance toward secondary technical schools.
- 5) Higher education: assistance toward higher education institutions, such as universities
- 6) Public education and others: assistance toward special schools, such as handicapped children's schools and music schools
- 7) Non-formal education sector: assistance for adult education and literacy education that are conducted outside the framework of public education, as well as assistance toward public institutions that can widely provide information to general citizens (public), such as museums and libraries, and assistance in broadcasting education targeting general citizens
- 8) Vocational training and industrial technical education: assistance in technical education and vocational training before and after employment at public institutions

3) Regional trends

The high proportion of Japan's education assistance is directed toward Asia, at more than 50%. Even including grant assistance for grassroots projects, about 40% of its assistance is toward Asia (Table 3.7). In particular, as mentioned earlier, assistance toward ASEAN nations accounts for over 90% in loan aid. As the future trend of technical cooperation and grant aid, however, assistance toward Africa with focus on basic education will increase.

Table 3.4 JICA's Technical Cooperation Achievements by Sector and Type in Education (1996)

Division	Training		Youth Invitation Program		Individual experts		JOCVs		Project-type technical cooperation		Development study		Independent provision of equipment		Recruitment and training of experts		Promotion of aid efficiency		Total
	Number of persons	Amount	Number of persons	Amount	Number of persons	Amount	Number of persons	Amount	Number of cases	Amount	Number of cases	Amount	Number of cases	Amount	Number of cases	Amount	Number of cases	Amount	
Educational administration	48	135,552	0	0	12	123,302	92	428,352	0	0	0	0	0	0	0	0	0	0	687,206
Pre-school education	0	0	25	38,675	0	0	50	232,800	0	0	0	0	0	0	0	0	0	0	271,475
Primary and ordinary secondary education	19	51,430	416	643,552	10	62,386	380	1,769,280	1	219,883	0	0	4	103,612	2	9,198	4	9,849	2,869,190
Technical secondary education	0	0	0	0	7	113,480	101	470,256	1	206,807	0	0	18	247,613	0	0	0	0	1,038,156
Higher education	163	191,486	25	38,675	226	1,669,210	276	1,285,056	15	2,006,403	0	0	0	0	0	0	3	27,713	5,218,543
Others (school for physically or medically handicapped children, music school, etc.)	0	0	0	0	3	5,894	76	353,856	1	98,067	0	0	0	0	0	0	1	2,051	459,868
Non-formal education sector	65	183,560	0	0	20	196,006	281	1,308,336	2	210,168	0	0	16	125,613	0	0	0	0	2,023,683
Vocational training, industrial technical education	321	687,029	0	0	69	862,142	254	1,182,624	23	3,504,660	0	0	0	0	1	5,229	5	36,620	6,278,304
Unclassifiable	196	553,504	0	0	0	0	1	4,656	0	0	1	5,898	0	0	1	7,298	14	140,932	712,288
Total	812	1,802,561	466	720,902	347	3,032,420	1,511	7,035,216	43	6,245,988	1	5,898	38	476,838	4	21,725	27	217,165	19,558,713

Source: Documents of JICA

Table 3.5 Breakdown of Japan's Grant Aid in Education (FY1994)

Region	Budget (million yen)	Number of projects	Sub-sectors										Assistance content					
			Basic education					Other than basic education					Physical aspect		Non-physical aspect			
			Pre-school education	Primary educating	Secondary education	Non-enrolled education	Adult literacy education	Technical secondary education	Higher education	Teachers training	Vocational training	Others	Construction of facilities	Provision of equipment	Training of experts	Management	Research and development	Others
Asia	532,172 38.7%	51 31.7%	0 0.0%	6 14.6%	5 35.7%	0 0.0%	0 0.0%	1 33.3%	12 63.2%	2 33.3%	1 5.9%	20 34.5%	23 31.5%	34 38.6%	2 11.8%	0 0.0%	3 50.0%	3 9.4%
Oceania	29,218 2.1%	15 9.3%	0 0.0%	6 14.6%	4 28.6%	0 0.0%	1 33.3%	0 0.0%	1 5.3%	0 0.0%	1 5.9%	0 0.0%	10 13.7%	11 12.5%	0 0.0%	0 0.0%	0 0.0%	1 3.1%
Africa	208,549 15.2%	47 29.2%	1 100%	18 43.9%	3 21.4%	0 0.0%	2 66.7%	0 0.0%	1 5.3%	4 66.7%	14 82.4%	11 19.0%	21 28.8%	12 13.6%	13 76.5%	0 0.0%	1 16.7%	21 65.6%
Middle and Near East	146,855 10.7%	12 7.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	3 15.8%	0 0.0%	1 5.9%	8 13.8%	4 5.5%	9 10.2%	2 11.8%	2 100%	2 33.3%	4 12.5%
Latin America	423,527 30.8%	35 21.7%	0 0.0%	11 26.8%	2 14.3%	0 0.0%	0 0.0%	2 66.7%	2 10.5%	0 0.0%	0 0.0%	18 31.0%	15 20.5%	21 23.9%	0 0.0%	0 0.0%	0 0.0%	3 9.4%
Europe	34,000 2.5%	1 0.6%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 1.7%	0 0.0%	1 1.1%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
Total	1,374,321	161	1	41	14	0	3	3	19	6	17	58	73	88	17	2	6	32

(Note) Total of general grant aid, cultural grant assistance, and grant assistance for grassroots projects. Individual cases were repeatedly counted when they were applicable to the items of the sub-sector and the assistance content, in accordance with the source.

Source: Prepared from Planning Department, JICA (1997).

Table 3.6 Japan's ODA by Content in the Education Sector (1990-1994)

(Number of projects: total)

	Physical aspect		Non-physical aspect				Total
	Construction of facilities	Provision of equipment	Training of experts	Management	Research and development	Others	
Results in the education sector (excluding grant assistance for grassroots projects)	19	31	2	3	1	0	56
	33.9%	55.4%	3.6%	5.4%	1.8%	0.0%	100%
Results in the education sector (including grant assistance for grassroots projects)	122	89	9	4	3	12	239
	51.0%	37.2%	3.8%	1.7%	1.3%	5.0%	100%

Source: Planning Department, JICA (1997).

Table 3.7 Japan's ODA by Region in the Education Sector (1990-1994)

(Number of projects by region: actual number)

	Results in the education sector			
	Excluding grant assistance for grassroots projects		Including grant assistance for grassroots projects	
	Number of projects	Rate	Number of projects	Rate
Asia	150	51.4%	259	39.7%
Africa	39	13.4%	148	22.7%
Latin America	56	19.2%	135	20.7%
Middle East	33	11.3%	56	8.6%
Oceania	7	2.4%	47	7.2%
Europe	7	2.4%	7	1.1%
Others	0	0.0%	0	0.0%
Total	292	100%	652	100%

Source: Planning Department, JICA (1997).

3.2.4 Trends in Recent Years

Countries in Indochina and East Europe have been newly included as targets for assistance. In countries of Indochina, such as Laos and Cambodia, demand for cooperation in basic education is strong. In other countries there is strong demand for cooperation in human resources development, such as in the fields of vocational education, higher education, and industrial technology education. Five to eight project formulation studies in the education sector are conducted every year. Toward LLDC, such as in Africa and Indochina, study on new educational cooperation in basic education has been increasing. On the other hand, individual projects in ASEAN nations and Latin America, are generally formulated in accordance with respective sectors, based on specific issues and backgrounds. In fiscal

1997, project formulation studies were conducted for Nepal and Bangladesh (basic education), Kenya, Malawi, and Tanzania (human resources development), Malawi (education, WID), and Kyrgyz and Uzbekistan (education, human resources development). Also, as mentioned earlier, basic study on the implementation method to probe for possibilities of development study in the education sector has been conducted since 1995.

As a new approach, package assistance, consisting of grant aid, JOCVs, dispatching of experts, and project-type technical cooperation, has been tested since fiscal 1993, and a science and arithmetic education project was implemented in the Philippines. In Honduras, JOCVs conducted a mathematics project in which six or seven members were dispatched as a group.

As to loan aid, loan agreement was concluded for the Junior Secondary School Building Construction Project in December 1995 in Indonesia. In the Philippines, loan agreement was concluded in March 1997 for the Third Elementary Education Project (focusing on elementary education in poor provinces), targeting 2003. In the same year, loan agreement was concluded for the Balochistan Middle Level Education Project in Pakistan.

3.2.5 Coordination with Other Aid Organizations

Based on collaboration with the World Bank, the Danish International Development Agency (DANIDA), and others, cooperation aimed at expanding basic education has been conducted in Nepal. This is a school construction project incorporating people's participation, in which Japan provides construction materials, local people build school facilities, and the World Bank pays the wages for the labor of construction. In Madagascar, Japan is planning to provide its grant aid for the maintenance and management of schools constructed with Japan's assistance or for the improvement in the incentives to go to school, in collaboration with UNICEF.

With the U.S., Japan put forward the Japan-U.S. Common Agenda for Cooperation in Global Perspective, in July 1993. To date, aid coordination has been made in over 20 fields. As the first Japan-U.S. cooperation project that was studied and agreed upon at the meeting of the WID Operation Division, cooperation on girls' education in Guatemala was implemented.

The UK has provided cooperation related to training of teachers for primary education in Kenya. Japan is planning a re-training project for secondary-education science and mathematics teachers, in the form of project-type technical cooperation, combined with grant aid and dispatching of JOCVs, in Kenya. It is promoting collaboration with the UK, including opinion exchange from the planning stage.

Also, in Sub-Saharan African nations, Sector Investment Programs (SIPs) have been implemented in various fields under the initiative of the World Bank. Project formulation requires collaboration with other donors, while maintaining conformity with Education Sector Investment Programs (ESIPs).

3.3 Trends among Major Aid Organizations

3.3.1 International Organizations

1) World Bank

The World Bank views education as serving to produce knowledge, skills, values, and attitudes, and as being essential for civic order and citizenship and for sustained economic growth and reduction of poverty. In particular, primary education is viewed as serving to increase productivity of the poor, lower the birth rate, improve health, and help people obtain abilities necessary to participate in their economy and society. It is further viewed as helping to strengthen citizen organizations that are essential for the application of sound socioeconomic policies, as well as helping to create good governance.

The World Bank made its first loans for education in 1963, and it is now the largest single source of external financing for education in developing countries. The Bank's lending commitment for education averaged \$600 million a year in early 1980, which represented 4% of total Bank lending, and this amount increased to about \$2 billion in 1994, at a share of about 10%.

The content of financing shifted from secondary technical education to basic education. From fiscal 1990 to 1994, half of financing in education targeted primary and secondary education.

The six key areas of reform are as follows ⁽¹⁹⁾ :

- (i) To encourage lower- and middle-income countries to give a higher priority to education and education reform as an important complement to economic reform programs.
- (ii) To take more account of outcomes of education projects and of relationship between educational inputs and its process at each school.
- (iii) To continue support in primary and lower-secondary education in low-income nations, particularly in Africa and South Asia.
- (iv) To emphasize equity, that directly impacts on poverty reduction, and to prioritize support for vulnerable people including girls and ethnic minorities.
- (v) To involve families in participatory development projects.
- (vi) To emphasize enhancing the quality of education.

2) UNICEF

The premise of the Convention on the Rights of the Child, which was adopted by the United Nations in 1989, is that children, as well as adults, have civil, political, social, cultural, and economic rights. Therefore, UNICEF emphasizes education as a human right, regarding it as a part of these rights, and it is making active efforts in the education sector.

UNICEF considers severe infringement of children's rights to be the most important issue, and its main cause is child labor. Education is positioned as the most important means to eliminate child labor, and a comprehensive strategy that includes education is needed. Education and child labor deeply influence each other. High-quality school education and education programs, which families want their children to receive, and which children want to receive, are required ⁽²⁰⁾ .

⁽¹⁹⁾ World Bank (1995).

UNICEF presents the following points as issues to improve basic education.

- (i) To teach useful skills
- (ii) Flexible education in accordance with children's circumstances
- (iii) To increase girls' enrollment
- (iv) To enhance the quality and social status of teachers
- (v) To reduce the family's burden of school expenses

3) United Nations Educational, Scientific and Cultural Organization (UNESCO)

UNESCO has focused on prevalence of primary education since the 1960s. Education is positioned as being essential for the spreading of culture, justice, freedom, peace, and dignity of human rights, as the means and method for achieving world peace, and as the source of ideas.

In the Mid-Decade Review of Progress toward EFA which was conducted in 1995-1996, following the WCEFA, basic education was reconfirmed to widely include early childhood development, primary education, and non-formal education for youth and adults, including literacy and life skills. In the report, the following points were presented as the urgent issues toward EFA realization ⁽²¹⁾ :

- (i) Improving learning achievement
- (ii) Increasing of resources and partnerships for EFA
- (iii) Building capacities to provide basic education
- (iv) Meeting the basic learning needs of all, including vulnerable people

Also, UNESCO holds adult education conferences; it conducted the Fifth International Conference on Adult Education in Hamburg in 1997. At the Fifth Conference, out-of-school children and adolescents, and adult illiteracy, which tend to be forgotten in EFA, were taken up as issues ⁽²²⁾ .

Furthermore, UNESCO is making effort to build partnerships among aid organizations, in the same way as the UNDP. Though there are differences in approaches and each nation's situation, they promote participation of people in developing countries in educational development and policy dialogue between aid organizations and developing countries' governments ⁽²³⁾ .

4) The United Nations Development Programme (UNDP)

The UNDP considers education to be an important factor for sustainable human development. In particular, basic education is considered to be the key for sustainable development, which will realize qualitative improvement of life and living, and which will cultivate knowledge, skills, attitudes, and a sense of values necessary for more advanced study.

The UNDP presented poverty, the environment, gender, and governance as the main fields of its activities. It considers women's empowerment, in particular, to be an essential factor for poverty reduction.

⁽²⁰⁾ UNICEF (1996).

⁽²¹⁾ UNESCO (1996).

⁽²²⁾ UNESCO (1997).

⁽²³⁾ Sack (1995).

The UNDP's *Human Development Report 1997* focused on poverty, and six items were presented as priority issues for poverty alleviation. Among them, the need for improving people's abilities to participate in the decision-making process related to their lives was pointed out regarding education. In order to improve such abilities, EFA and Health For All (HFA) were emphasized as issues to be urgently achieved ⁽²⁴⁾.

5) Asian Development Bank (ADB)

The ADB positions human development including educational development, as a top priority issue, together with promotion of economic growth, poverty reduction, improvement of the status of women, and protection of the environment, in its Medium-Term Strategy Framework (1995-1998) ⁽²⁵⁾. Regarding the results of the ADB's education division, the trend largely changed by the policy paper *Education and Development in Asia and the Pacific*, which was approved by the ADB's board of directors in October 1988. This paper aimed at implementing support for various educational needs of member developing countries, by clearly emphasizing basic education and by widely approving the role of education in development.

This change in policy resulted in increases in both the number of education projects and the amount of lending, and it also greatly affected the trend of lending allocation in the education division. A lot of lending was approved in each field of primary education, ordinary secondary education, and non-formal education. Since 1988, emphasis has shifted from vocational and higher education to basic education. ADB has recently focused on the form of sector project such as primary, secondary and non-formal education in South Asia, the Philippines and Indonesia ⁽²⁶⁾.

6) The Association for the Development of Education in Africa (ADEA)

Although not an international organization, the ADEA is a forum that conducts activities such as aid coordination and collaboration in the education sector in Africa.

In 1988, the ADEA was established under the initiative by the World Bank, aiming at adjustment and coordination among aid organizations in the education sector in Africa. After its establishment, since development in education in Africa required coordination with the ministries of education in each country, as the main players and, representatives of the countries' ministries of education participated in ADEA, forming a network. Presently, the ADEA Secretariat is placed within the International Institute for Educational Planning (IIEP) of UNESCO. The ADEA aims to build partnerships through informal discussion mainly on policies, and to coordinate education assistance efficiently based on leadership and ownership of African countries. The aid agencies that have conducting educational development in Africa regard on participation in the ADEA as important. They actively exchange information at the general assembly (which is held every two years) and at management conferences (which are conducted every six months). Also, there are presently about 10 actively working groups according to themes, such as "women's participation" and "teachers".

⁽²⁴⁾ UNDP (1997).

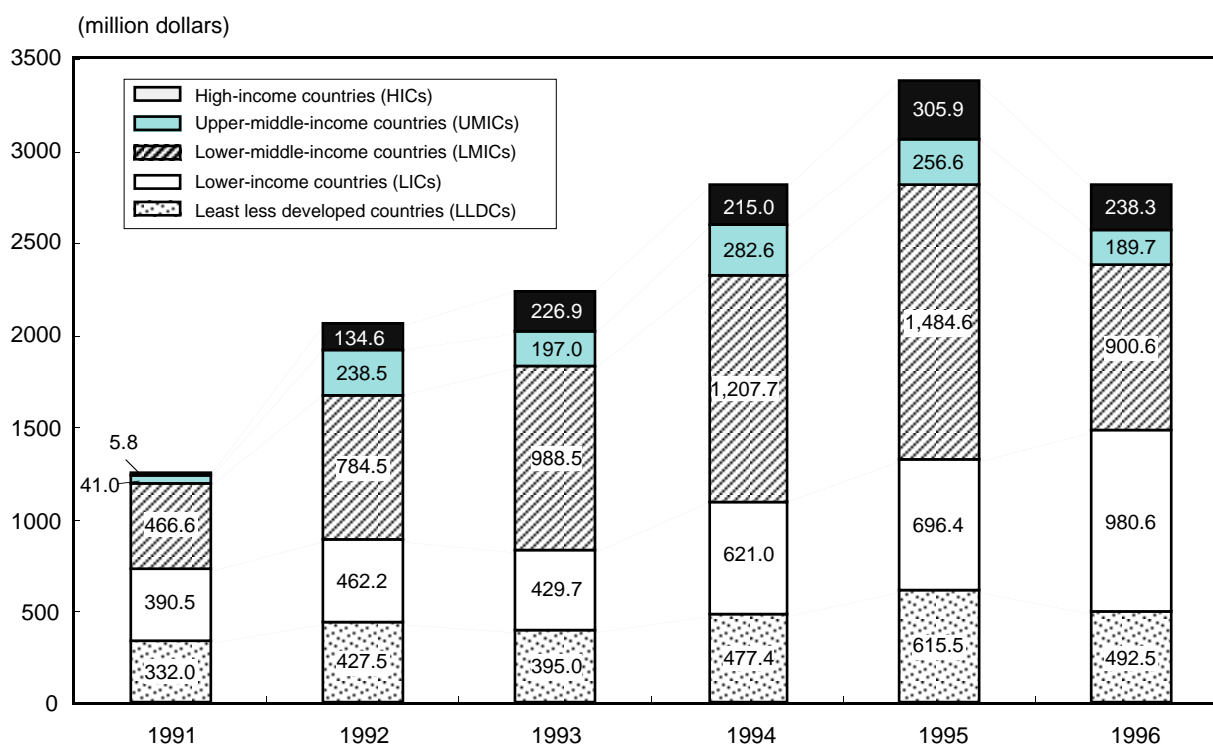
⁽²⁵⁾ ADB (1997).

⁽²⁶⁾ Yasufumi Hiroto (1997).

3.3.2 Bilateral Aid Agencies

In the 1990s, assistance to the social development sector increased worldwide. Particularly assistance in the education sector following the WCEFA has expanded largely since 1990. Bilateral assistance doubled from \$1,472.2 million in 1991 to \$3,123.9 million in 1996. Looking at bilateral aid by development level in terms of GDP per capita in recipient countries, education assistance for low-income countries consistently increased from 1991 to 1996, while there was only a slight increase in LLDCs (Fig. 3.2). The state of assistance by region shows that the amount increased threefold, from \$379.1 million in 1991 to \$1,386.8 million in 1995, in the East Asia region. In 1996 there was a noticeable increase of assistance in Central and South Asia. No large changes were seen in other regions except slight changes depending on regions (Table 3.8).

Figure 3.2 Education Assistance by Development Level (commitment basis)



Note: Development levels are based on the OECD classification.

Source: OECD (1996 & 1997).

Table 3.8 Trend in Education Assistance by Region (commitment basis)

(unit: million dollars)

Calendar year	1991	1992	1993	1994	1995	1996
Europe	46.9	194.5	183.2	186.2	211.7	196.0
North Africa	56.0	85.1	94.1	136.6	115.3	130.1
Sub-Saharan Africa	444.2	593.8	458.2	604.6	691.0	549.9
Central and North America	115.8	136.8	129.8	122.6	139.9	123.9
South America	56.7	191.2	183.8	267.7	215.3	135.6
Middle East	16.5	164.0	144.8	241.8	303.0	242.4
Central and South Asia	143.4	216.1	148.1	263.7	244.9	505.1
East Asia	379.1	500.8	934.2	998.3	1386.8	854.5
Oceania	75.4	46.8	72.1	96.0	140.3	102.3

Source: OECD (1996 & 1997).

Regarding the state of donor countries, high shares of education assistance were shown for France, New Zealand, and others (Table 3.9). Although simple comparison is difficult as the definition of the education sector varies among nations, Germany, Australia, and Ireland, in addition to the above two countries, generally, made strong efforts in education.

New Zealand emphasizes social development in its basic policy of assistance; education and training in particular are the mainstay, accounting for 34% of the entire assistance amount in 1996. New Zealand puts priority on countries of Oceania as recipients of assistance, and it is eagerly providing educational support for minority indigenous people in these peripheral countries. It also promotes student exchange program, and not a few countries in this region receive aid in the education sector, which accounts for over 50% of the assistance from New Zealand ⁽²⁷⁾.

Australia emphasize the areas of education and health care. In particular, assistance in education represented 15.2% of the country's assistance disbursement in 1995. Further, it focuses on basic education and technical expertise education. More than one-fourth of the assistance to Oceania is directed at education, including a scholarship system which targets students who study in the Australia and Oceania region. Its education assistance aims at strengthening education systems, curriculum development, training of primary and secondary school teachers and vocational training instructors, as well as regional level activities aimed at strengthening basic education and improving literacy rates ⁽²⁸⁾.

Germany considers assistance in education to be a main issue. Germany has traditionally regarded vocational training as the mainstay of educational development. Recently, however, it has recognized that basic education can bring high results both to economies and individuals, and vocational training and scientific education can be effective and sustainable only with adequate implementation of basic education. Germany is con-

⁽²⁷⁾ Ministry of Foreign Affairs and Trade (New Zealand) (1996).

⁽²⁸⁾ Ministry for Foreign Affairs (Australia) (1997).

ducting bilingual education and science education toward improving the level of basic education. It is also tackling improvement of mutual relations between teachers and students, and literacy education combined with the sectors of health care, agriculture, and conservation of the environment. In 1995, about 80 educational projects have started; its allocation was 46% for Africa, 26% for Asia and the Middle East, and 16% for Latin America ⁽²⁹⁾ .

France has provided assistance toward Franchophone African countries, in consideration of the historical background. France's assistance in education has been conducted by the Ministry of Foreign Affairs and the Ministry of Education, in addition to the Ministry of Cooperation. About one-fourth of efforts conducted by the Ministry of Cooperation was to the education sector. In February 1998, however, France announced that it would close the Ministry of Cooperation and that incorporate it in a division of the Ministry of Foreign Affairs; as such, attention should be paid to the future movement. The focus in education assistance include strengthening of primary education, improvement of the quality of secondary education, training of teachers, vocational training, improvement of higher education, and French language education. Among the shares of assistance in education provided by the Ministry of Cooperation in fiscal 1995, primary education accounts for 14%, general secondary education for 37.5%, technical and vocational training for 33%, higher education for 7%, and system education for 8% ⁽³⁰⁾ .

Table 3.9 Percentage of Education Assistance in ODA by DAC Countries

(unit: %)

Calendar year	1990	1991	1992	1993	1994
New Zealand	1.6	41.3	30.3	33.8	34.4
France	28.1	22.5	24.8	27.8	21.2
Portugal	--	--	16.4	16.4	20.8
Ireland	--	21.3	27.9	27.9	17.3
Germany	14.2	12.9	13.0	13.4	17.1
Australia	36.2	30.1	13.6	22.4	14.1
Austria	21.5	22.3	8.3	17.1	12.8
Belgium	17.1	14.9	15.1	14.8	11.6
UK	11.6	12.6	12.6	12.8	10.1
Canada	11.2	7.1	6.3	3.7	9.6
Spain	--	5.0	4.8	8.2	9.2
Japan	6.9	6.3	6.3	5.8	8.5
Sweden	5.6	9.1	4.2	6.9	6.6
Holland	12.7	12.3	6.1	3.0	6.2
USA	2.2	2.8	2.8	4.3	4.7
Others	23.6	32.3	31.9	27.4	15.8
Total of DAC countries	9.8	8.7	8.4	9.5	10.7

Source: OECD/DAC (1997).

⁽²⁹⁾ Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH (1996).

⁽³⁰⁾ Ministère de la Coopération (France) (1996).

4. Implementation of the DAC's New Development Strategy in the Education Sector

4.1 The Goals

Education is the basis of poverty alleviation, health care, and the sound environment, which are the other fields of the NDS. Though it is difficult to consider education as being in parallel with the other fields, that two out of the seven goals are educational issues shows that the importance of education is recognized in international assistance diplomacy.

The goals of the NDS in the education sector are the following two items.

- (1) Make primary education universal in all countries by 2015.

Prevalence of primary education in all countries was the goal to achieve by 2000 in the WCEFA. Actually, however, it is impossible to completely disseminate primary education by 2000. Then, is there any possibility of achieving the target by 2015? It will still remain difficult, but it will be possible to achieve a situation close to the target. Adoption of such a goal by DAC itself will have a great effect, resulting in continuous efforts to prevail primary education fully in each country.

- (2) Demonstrate progress toward gender equality and the empowerment of women by eliminating gender disparity in primary and secondary education by 2005.

This can be considered to be a new target in education. Gender disparity is formed not only because of poverty but also historical and social backgrounds, as every other forms of discrimination. Educational development needs to face such an issue.

4.2 What Has Changed?; Significance

The educational issue can be considered to have changed, passing through three stages in the 1990s since the WCEFA. The first stage is the change from 'an idea to a political issue' by presenting EFA. However, the new issues came up in spite of quantitative expansion of basic education: children did not attend school as expected even though the school facilities are increased; there are many dropouts and repeaters; and actual learning does not occur, as is indicated by poor study results. These led to the second stage, "from quantity to quality in education". Quality of education examine how children themselves study; it reconsider the education from the viewpoints of children or learners, not from outside. Thus the consideration toward the quality of education focuses on the outputs from the inputs, further on its process from the outputs. The change in the second stage can be considered as the 'discovery of children in educational development'.

From the second half of the 1980s, the perspective of WID began to be incorporated in development, and 'discovery of women in development' was conducted. That elimination of gender disparity became an issue in the NDS indicates that social justice and fairness became of prime importance in educational development. This is the third stage of change. Incorporation of the perspective of gender disparity into education indicates the need for education that urges reform of women's social surroundings. It urged that public education would be able to provide equal opportunities for women, in association with various movements for women's empowerment, and that the curriculum, content, and method of education be reconsidered from women's perspective. This women's viewpoint will aim to

guarantee the educational rights of people suppressed in a society, especially women, and the marginalized, such as indigenous people, handicapped people, and the poor. Therefore, the third stage of change can be called 'emphasis of social justice'. This means educational development policy must be planned and implemented with broader-than-ever attention to education in a society, beyond the range of education at school. Furthermore, it will demand emphasis on the function of education to reform a society, which is educational reform to introduce societal reform. It can be said that implementing educational development causes more methodological consciousness.

The issues of educational development in international cooperation have been expanded: prevalence of basic education became 'from an idea to a political issue', and it came to include 'discovery of children in educational development', which aims to improve the quality of study, and evolved into the 'emphasis of social fairness' that takes account of the situation of women and vulnerable groups. Leading such a flow is the significance of the NDS.

4.3 Challenges in Assistance for the Education Sector

Estimated cost necessary to provide every child an opportunity to attend school is \$146 billion at total at the value of 1986 during the years from 1990 to 2005. Moreover, \$30 billion must be invested as education assistance from outside ⁽³¹⁾. In other words, \$2 billion of additional education assistance, which is equivalent to \$2.5 billion at the 1990 value, will be required per year for 15 years. Presently, the total amount of bilateral ODA by OECD countries is \$40 billion, of which education assistance is \$4 billion, accounting for about 10%. In order to provide additional education assistance of \$2.5 billion, the share for educational must reach 16-17%.

Although it is known that increasing the amount for assistance does not necessarily enhance the education level, the World Bank, regional development banks, UNICEF, and other organizations are enthusiastic about expanding education assistance. Actually, the educational programs for developing countries, prepared through support by the World Bank and the ADB, approach many problems comprehensively, and they are valued as a foundation of education assistance projects.

Recently there has been decreased support for stressing only basic education, which was the prevalent view immediately after the WCEFA in 1990. Well-balanced educational development including technical education and higher education, is now being pursued. This trend is also seen in *Priorities and Strategies for Education*, a new educational policy paper prepared by the World Bank in 1995. Such educational trends can be seen in East Asia and Southeast Asia, whose economies are progressing, and in the Asian region, whose educational development focus is shifting to expansion of secondary education, technical education, and higher education.

This paper presents alternative resources in development of higher educational institutions, which is precisely the promotion of private schools. Considering the present state of developing countries, however, their effective functioning requires strong government initiative, which must be conducted in parallel with support for educational administration.

⁽³¹⁾ Colclough, *et al.* (1990).

4.3.1 Increase of Disparity in Educational Development and Diversification of Assistance Needs

While primary education enrollment ratios is retarded in low-income countries such as Africa, the population increase rate has declined rapidly, and the focus of educational policy is shifting from primary education to expansion of secondary education in Thailand and Indonesia. As such, education assistance needs are significantly changing, depending on regions and nations, and education assistance measures must be diversified respectively.

In order to respond to such diversification, using the same programs for different countries and nations is not appropriate. Instead, development of new approach for assistance which responds to the various needs is expected in conducting research and study based on a long-term viewpoint. Also, in order to cope with competition for higher education and educational background inflation, which will become more severe in accordance with educational development, a broader view with concern to in-company education and OJT will be necessary.

4.3.2 Enhanced Education and Study Exchange, and the Brain Drain Phenomenon

The end of the Cold War further international education and study exchange, leading to increased foreign students and foreign teachers. Therefore, the JICA and OECF activities are expected to link to foreign students programs.

Regarding accepting foreign students, the so-called 'brain drain' phenomenon has become an issue, and there is a view, especially in Europe, that supporting higher education in the recipient countries is more effective than accepting foreign students (DAC basic education meeting in July 1992). Even if higher education is implemented in developing countries, however, acceptance of foreign students is still necessary, so there is a need for well-balanced support. For example, at the U.S Agency for International Development (USAID), universities and university groups have sorely dispatched experts and accepted foreign students, achieving efficacy (agricultural education in Indonesia). Support of universities and acceptance of foreign students need to be interrelated more than in the past.

Also, there is a criticism that direct transfer of knowledge of industrialized countries to students of developing countries has diverted their attention from important local problems and goals⁽³²⁾. To study with a view only toward industrialized countries, instead of toward domestic study needs, can lead to a so-called 'internal brain drain'. The problems of brain drain and internal brain drain are related to issues such as how higher educational institutions should be and to how we support study. These issues indicate that institutions in industrialized countries that accept foreign students should carefully deal with the matter of education in developing countries.

4.3.3 Aid Coordination

In recent years, roundtable meetings have been frequently held to implement education assistance coordinated among aid organizations. In the past, Japan has not been very aggressive in aid coordination in individual fields partly because there was no expert in

⁽³²⁾ Todaro, M. (1997). p. 398.

education assistance at the field level, and inclination toward coordinated assistance was weak.

As education assistance expanded its area to the basic education sector, its target includes many persons in wider regions in any programs, such as for school construction and teacher training. Therefore, close coordination and collaboration among aid organizations are urgent, and it is necessary to dispatch experts in educational administration and planning to the education ministries of many developing countries, as well as establish a system to dispatch experts from Japan to related conferences.

4.3.4 Education for the Vulnerable Groups

Since WCEFA, the primary education enrollment ratio came to be highly emphasized, and it is now a primary index that determines the educational level. However, education should be diversified, and comprehensive measures, including primary, secondary, higher, and non-formal education, are needed, and well-balanced support must be studied.

Giving every citizen an opportunity to receive an education does not only mean equality of general educational opportunities. It also means to identify and respond to the education needs of the people who have not been given an educational opportunity, which is the socially vulnerable groups (the poor, women, handicapped people, indigenous people, etc.). It is necessary to internationally judge, as an important index, how education for such socially vulnerable groups is conducted, and an education indicator for that purpose should be created.

4.4 Defining Clear Indicators for DAC Goal

At a joint OECD/UN/World Bank seminar on indicators of development progress in May 1997, it was pointed out that the indicators of education have been considerably well organized, compared with other fields. However, the conventional indicators are quantitative indicators; qualitative indicators have been underdeveloped because of the difficulty in defining and measuring quality.

Fig. 4.1 shows the gross enrollment ratios and the percentage of spending on education in GNP, indicating almost no correlative relation. In other words, spending more does not necessarily result in higher enrollment ratios. The other factors seem to be related. Still, the nations that spend more seem to have higher-quality education, with more sufficient school facilities and good textbook distributions. It is necessary to create a new index related to quality of education, by combining several indicators, like the human development index.

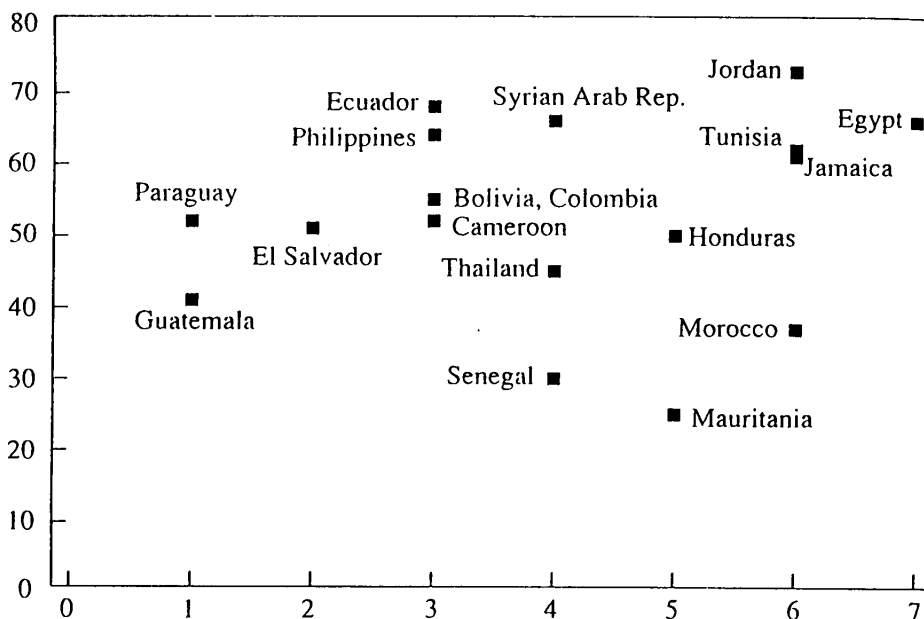
The ADB classifies the education project evaluation indicators into the four stages of input, process, output, and outcome, and it evaluates the respective factors and indicators comprehensively. The reason is that an education project cannot be evaluated only with input and output, and the process and social evaluation are also important (Table 4.1).

Table 4.1 Factors and Indicators of Education Input, Process, Output, and Outcome

Factor		Indicator
Input	Features of teachers:	With or without educational background and teachers training Age / experience Number of staff (total number / rate versus students / rate versus classrooms / rate versus number of schools), details regarding leaving employment, state by subject, race and nationality, gender, with or without specialty education, communication skill, attitude toward work
	Facilities:	Age of building, condition, size (school/classroom), number of students per school, number of classrooms per school, special facilities (science room, library, health room, others)
	Equipment:	State of obtainability, present state, adaptability, condition, state of effective usage
	Curriculum:	Mutual relation, degree of prevalence
	Teaching materials:	State of obtainability, appropriateness, ease of understanding, condition, state of effective usage
	Management ability:	Educational background, with or without training for management position, experience of teacher, experience of management, organization incentive
	Equality of educational opportunity:	State of enrollment
Process	Management:	Independence, sense of responsibility, attitude toward work
	Teaching:	Teachers teaching time, students class attendance time
Output	Prevalence of education:	Access, dropout, repeater, graduation
	Scholastic ability achievement degree:	School test results, national test results
	Non-scholastic ability achievement degree:	Sense of values, social attitude, matured behavior
	Correction of social justice:	Gender disparity, disparity in wealth, regional disparity, ethnic disparity
Outcome	Impact on economy, society:	States of employment, change of occupation, and unemployment, lifetime income, consumption and savings tendency, social trend
	Impact on politics, organization:	Political consciousness, voting, implementation of organizational reform, strengthening of organization management capabilities
	Impact on the environment:	Improvement of energy usage, improvement of consciousness regarding the environment, etc.

Source: Hirosato, Y. (1997). p. 261.

Figure 4.1 Relation Between Gross Enrollment Ratios and Public Spending on Education

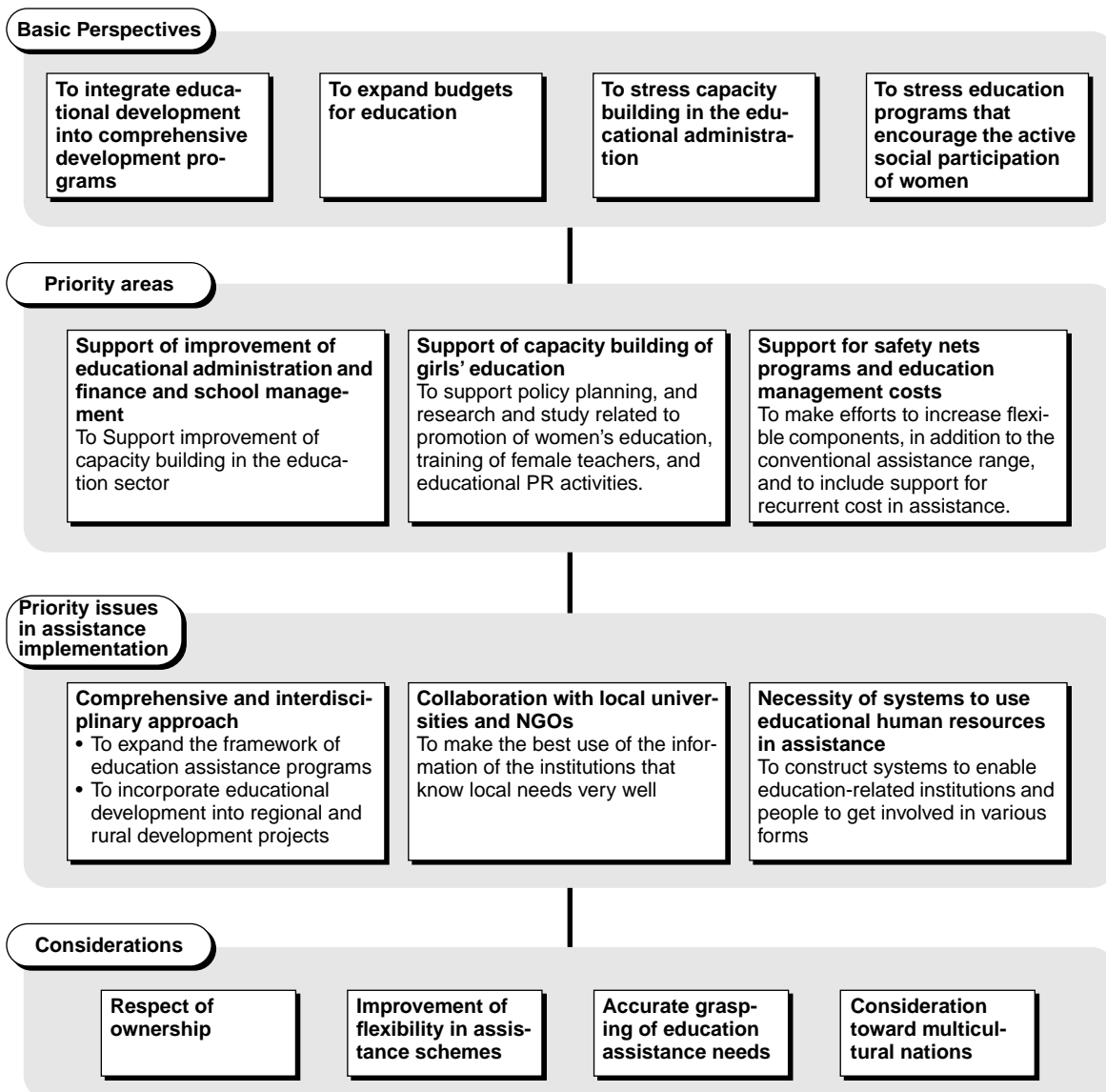


Source: World Bank (1995). p 68.

4.5 Ownership and Partnerships

Education is an issue that determines the future of a country, and the country's ownership must be directly displayed in deciding policies related to educational development programs, educational systems, and content of education. The content of education should be decided by the country itself, but research and study needed to revise curriculum, and equipment and training of teachers to implement the curriculum, can be supported. In order to actively provide necessary support under partnerships, while placing importance on ownership, various levels of exchange between donor countries and recipient countries in the education sector must be promoted.

5. Framework for Japan's Assistance for the Implementation of the DAC's New Development Strategy (Education)



5.1 Basic Perspectives

5.1.1 Integrating Educational Development into Comprehensive Development Programs

Primary education and prevalence of women's education, the two goals in the NDS, are hindered not only by the problems in the education sector but also by economic, historical, and social factors. As educational development is closely related to a region's diverse components of a community, such as poverty, population, health, and the environment, it is important to plan and implement educational programs as a part of a comprehensive program that balances with other sectors.

5.1.2 Expansion of Budgets for Education

In order to secure children's study, sufficient educational financial resources is essential. The educational budgets in low-income countries and the cost per child has been decreasing. In order to reverse this phenomenon, it is necessary to seek initiative of the government in improving educational finances, such as setting the goal of doubling the educational budget per child by 2015.

5.1.3 Capacity Building in the Educational Administration

In order to promote quantitative expansion and qualitative enhancement in primary education, it is necessary to strengthen capacity building in the central and local education administration. Also, in order to realize social justice in education, such as elimination of gender disparity in education, and to guarantee education for the vulnerable groups, capacity building from a wide viewpoint beyond the conventional education framework is essential.

5.1.4 Education Programs that Encourage the Active Social Participation of Women

Elimination of gender disparity in education cannot be achieved by efforts in the education sector alone. Efforts toward women's positions in social, cultural, and religious aspects must be made at the same time. Also, special emphasis should be placed on the problems of women in social margins, such as those in rural areas and mountain areas, minority races, and handicapped people.

5.2 Priority Areas and Issues

5.2.1 Comprehensive and Interdisciplinary Approach

To formulate assistance projects with emphasis on link between assistance in education and development projects in other sectors. To clarify the content of assistance in the education sector that meets the needs of local people, through the comprehensive and interdisciplinary approach, such as expansion of the framework of an education assistance program, and incorporating education development into a regional development project or a rural development project.

5.2.2 Usage of Local Universities and NGOs

In formulation and implementation of an education project, to form new channels, and establish and arrange systems for joint activities, to enable the best usage of the information of the institutions that know local needs very well, such as local universities and NGOs.

5.2.3 Support for Education Administrative and Financial Systems, and School Management

To support the improvement of central and local education administrative and financial systems and school management, aiming at developing countries' capacity-building in the education sector.

5.2.4 Support for Capacity Building of Girls' Education

To support policy planning, and research and study, related to promotion of women's education, and training of female teachers, and related advocacy (PR) activities, aiming at elimination of gender disparity.

5.2.5 Support for Safety Nets Programs and Recurrent Cost

To support safety nets programs that cope with reduction of educational budgets due to structural adjustment programs. To make efforts to increase soft components, in addition to the range that can be implemented under conventional assistance, such as building schools and training teachers, and to include support for education management cost (recurrent cost), which is running expenses, in the assistance.

Support for recurrent cost should be provided as an exceptional measure to prevent destruction of the education system in the event of civil war or an extreme financial crisis. In that case, consideration should be given to constructing a support system that enables reducing the support in line with annual progress, by setting limited-time targets, as well as monitoring.

5.3 Challenges and Considerations

5.3.1 Respect of Ownership

Public education, centered on primary education, has a function that will deeply affect the recipient's sovereignty, the state of the society, and the nation's future. Therefore, a developing country's ownership must be fully respected. At the same time, it is desired for a favorable relation to be established between a developing country and an outside partner for mutual learning, aimed at establishing better education systems.

5.3.2 Flexibility in Assistance Schemes

The problems of education in developing countries transcend an approach from the education sector alone. Also, efforts in the education sector are essential, for such problems as population increase, increase of the poor, weakening of communities, and the shift to multicultural and multi-language societies, but such efforts must be conducted as part of a comprehensive policy. In addition, in order to enhance the effectiveness of aid coordination

and collaboration with local NGOs and universities, assistance schemes should be flexible. Effective association of grant aid, loan aid, and technical cooperation, as well as collaboration within the each category will be needed. Furthermore, it will be increasingly needed to plan the presently conducted education assistance (school construction and dispatching of JOCVs) in association with higher-rank programs.

5.3.3 Establishment of a System to Grasp Education Assistance Needs

Education in developing countries is diversified due to each historical, social, and economic states. Some countries have inherited the education system, curriculum, and evaluation from former suzerains while some other countries' education systems themselves are destroyed due to civil war or for other reasons. Requested assistance projects in such circumstances do not necessarily reflect the national needs. On the other hand, developing countries predicate the aid trends among donors and sometimes choose the request for assistance due to its acceptability by donors. Implementing assistance according to such requests may work against the original purpose of promoting autonomous progress of education. To avoid this, there is a need for a continual research and study system to accurately grasp the education situation and assistance needs in developing countries. Research and study regarding education assistance is currently implemented individually by respective aid organizations, universities, and research institutes, but it is necessary to establish a system to integrate such research and study, and associate them with program implementation.

5.3.4 Need for a System to Widely Use Japan's Education Human Resources in Assistance

As coordination and collaboration among multilateral organizations and aid agencies are becoming active in the education sector, education assistance projects are getting larger and more comprehensive. For planning and implementing assistance, therefore, participation of education institutions and experts from various fields is needed. Also, considering education's goal of achieving social justice, including educational administration and girls' education, support for capacity building is more emphasized than in the past. There is a need for integrated use of Japan's assistance schemes (technical cooperation, loan and grant aid, acceptance of foreign students, cooperation in study, and dispatch of JOCVs) as well as integrated management that maximise its effectiveness of and activate each schemes. For that purpose, it is necessary to construct a system that will enable Japanese education-related institutions and related people to become involved in education assistance in various forms.

5.3.5 Consideration for Cultural Diversity

Perspective and consideration toward coexistence of multiple cultures in a society are required in education assistance because of its relevance to education. In every aspect of education -- language, curriculum, and educator training -- influence on multiple cultures, languages, and religions must be taken into consideration.

How to handle multicultural situations is strongly related to what kind of society Japan is pursuing. In other words, the way of international cooperation is deeply related to the current nature of the society of a donor country. How Japan is handling multiracial and

multicultural situations greatly influences the formulation and the implementation of international cooperation projects. Therefore, implementation of education assistance always requires methodical self-consciousness.

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1. Health Care: Basic Issues

1.1 Recognition of Health Care Issues

At one time, paediatricians were taught that the infant mortality rate of a nation was an indicator of the status of its health care system and its civilisation. It is true that the quality of a nation's health care service often correlates with the level of its social stability and development. Also, it is needless to say that enjoying good health and receiving the benefit of health care services are widely recognised as basic rights every person should have, regardless of when or where on earth he or she was born.

However, even today, just before the end of the 20th century, about 80% of the people on earth still live in developing countries. In these countries, the majority of people are forced to live an unhealthy life, and, at the same time, suffering from extreme poverty, population increases, and unequal treatment between men and women. Moreover, behind such situations, there often exist extreme social inequality, corruption and illegal practices, immature social development, danger of civil war and antagonism, and political instability from various reasons. In particular, the people who benefit the least from health belong to the absolute poor, whose daily income is US\$1 or less. Despite the efforts to alleviate the poverty, the total number of persons in poverty amounts to around 1.3 billion, which represents about 25% of the world's population. It is clear, therefore, that the health problem and social development are inextricably linked.

The physical, social and mental health of each individual in the world is essential not only for the protection of individual rights but also for the development of a sound society. In turn, the development of a sound society can be considered the essential environment for physically, mentally, and socially sound human development. Health is not only an issue at the individual level, but also a basic factor in building sound domestic and international relations, through the development of regional societies to which people belong.

1.2 Goals of the DAC's New Development Strategy

1.2.1 Improvement of the Infant Mortality Rate (IMR)

If one representative health index is to be selected, it should be the Infant Mortality Rate (IMR), which reflects the state of health care service for children, and which is also related to the life expectancy at birth. Roughly speaking, if a health care system is established in which citizens can receive treatment within several hours, or a day at the latest, when they become sick or injured, and in which people can receive 'preventive medicine', such as immunization for children or examinations for pregnant and nursing women, the majority (about 80%) of infant mortality would be represented by that during the perinatal period and the neonatal period within 28 days after birth, and the majority (about 80%) of mortality for persons under 5 years of age (the Under 5 Mortality Rate: U5MR) will also be represented by that of infants of age 1 or younger. In other words, if either of these two indexes is known, other indexes can be estimated.

In developing countries, however, a considerable number of children die after the infant period from infectious diseases and malnutrition, which are preventable through Primary Health Care (PHC) interventions such as immunization. Therefore, the U5MR which

is greatly influenced by the level of PHC services and the IMR which needs various care including special medical treatment have been addressed as first considerations.

The NDS aims at lowering both the U5MR and the IMR to one-third of the 1990 level by 2015. In terms of child health, countries with the U5MR exceeding 150 ⁽¹⁾ should set their current objective at reducing the U5MR. As the U5MR is greatly influenced by PHC service (which intends to prevent many from getting ill at the same time) the improved PHC service should be placed as a priority issue. It is considered to be more practical that the issues of medical intervention (with consideration to both nutrition and maternal health) and measures to lower the IMR (which needs more accurate and wide-ranging health care), together with further reduction of the U5MR, come next.

If the IMR becomes less than 100 ⁽²⁾, measures will differ. More accurate examination of a pregnant woman including maternal health condition check and neonatal medicine with higher technology will be necessary in order to lower the frequency of low-birth-weight infants.

1.2.2 Reduction of the Maternal Mortality Rate (MMR)

In April 1996, WHO and UNICEF estimated that 585,000 deaths out of the worldwide mortality per year are directly related to pregnancy and delivery based on a recent survey. It should be emphasised that as much as 99% of these deaths occurred in developing countries. It is therefore no exaggeration to state that pregnancy-related deaths are limited to developing countries.

It is extremely significant that DAC took up women's health and set a target of reducing the Maternal Mortality Rate (MMR) in each developing country by three-fourths by 2015. However, there is more to do with grasping the present state of maternal mortality, which is a prerequisite for achieving the target. Most deliveries in many developing countries, especially in rural areas, take place at home without a trained assistant. In addition, neonatal deaths and deaths of delivering mothers often go unreported.

As a matter of fact, in countries with Total Fertility Rate (TFR) exceeding 50 ⁽³⁾, repeated pregnancies and deliveries over 30 years during so-called reproductive age (15-45 years old) have adversely affected women's health and have lead to chronic poor health and deaths, together with direct pregnancy- and delivery-related deaths. These indirectly related deaths are referred to as the Invisible Death Rates.

The International Conference on Population and Development in 1994 set the target of reducing the MMR in developing countries to half of that of 1990 by 2000, and by a further one-half by 2015. The World Conference on Women in 1995 also agreed with this proposal. In order to achieve this target, however, the present status must be clarified and accurate data must be obtained.

⁽¹⁾ 26 out of 189 countries, according to *the State of the World's Children 1998*, UNICEF and those whose GNP/capita average is US\$298.

⁽²⁾ It is currently between 50 and 100 in 43 countries out of 189, whose GNP/capita average is US\$821, according to *the State of the World's Children 1998*, UNICEF

⁽³⁾ 53 out of 173 countries that have provided data, according to *the State of the World's Children 1998*, UNICEF

1.2.3 Improvement of Reproductive Health Service

The greatest gap between developed and developing countries in the area of health care can be seen in the MMR. Women in the poorest countries repeat pregnancy and delivery at a risk that is about 70 times higher than that of women in the wealthiest countries.

DAC goal is to make it possible for every woman of appropriate age to receive reproductive health services through PHC as early as possible, by 2015. This target is highly significant given the little effort that has been made to improve women's health compared that of children. However, it is not only health care problems that have prevented the improvement of women's health, but also social factors rooted in long history or tradition. In order to expand reproductive health services, therefore, action must be taken not only in the health arena, but also in other areas such as education services and tackling poverty.

2. Current Health Care Issues and Challenges

2.1 Changes in Health Care Cooperation in Developing Countries

The majority of countries presently referred to as developing countries have achieved long-sought political and national independence following World War II (the 1950s-1970s). However, except for very few countries, no economic independence, let alone political stability, has been achieved. There was no more capital investment, and management systems had become outdated because they used to be provided by the former suzerains and under the control of suzerain personnel. In addition, various social infrastructures such as health care services, which were barely maintained in urban areas, had rapidly become impoverished.

Immediately after World War II, the USA, the only advanced nation at that time, was primarily interested in assisting the recovery of Europe in order to develop its own market. The contribution to other regions was therefore limited. In the 1950s, for example, 'medical care' was sometimes seen as charity from benevolent persons of industrialised countries, represented by Albert Schweitzer, or the USA provided medical care in order to agitate anti-communism in Indo-China. Though some of these activities were later developed into the present health care cooperation, they were significantly different from today's development cooperation.

In the 1960s, more African countries became independent, and these new nations were both economically and politically unstable and their social infrastructures were weak. Assistance from industrialised countries rapidly expanded and arrangements for an international system for development cooperation were promoted. Much assistance was also provided in the health care field, but was only directed at symptomatic handling of problem areas. For example, the infrastructure building such as medical facilities did not include the considerations to community health care systems. Furthermore, whilst many outside experts visited developing countries, no integrated plan was put in place and activities were not based on the new emerging concept of community health.

In the 1970s, the assistance so far was considered not to have benefited the poor in developing countries who really need help, and an alternative approach was sought. Consequently, the index on human development or welfare such as the IMR, the U5MR, life expectancy at birth and literacy ratio was more focused. The idea of Basic Human Needs (BHN) originated from this point. This idea was advocated by the United States Bureau for International Development (the predecessor of the United States Agency for International Development: USAID) in 1973, and it was later introduced by the International Labor Organizations (ILO) and the World Employment Conference, which aim to eradicate poverty. Up to today, this idea has been inherited as a basic principle for development cooperation in various fields. BHN comprises various factors needed for human beings to maintain a minimum standard of living, including health care service. Development cooperation became an intervention for problems solving in this category. PHC, which was advocated in 1978, can be considered as a philosophy of health care intervention pursuing the purpose of BHN, and presently, it is an essential idea not only for developing countries, but also for developed countries in order to utilize the limited resources effectively.

In the 1980s, decentralization and charging for medical services were introduced to ensure the self-sufficiency and sustainability in health care services in developing coun-

tries. This is one of progressed efforts that associate with the structural adjustment programs that started in African countries at that time in response to the sluggish economy and debt increases. On the other hand, however, this effort has caused the negative impacts: the poor cannot take health care services free of charge.

2.2 PHC Alma Ata Declaration and Diseases in Developing Countries

PHC is a specific strategy to achieve “Health for All by the Year 2000 (HFA)”, which was advocated at the World Health Assembly in 1977. A conference was held in September 1978 in Alma Ata in Kazakhstan, of the former USSR (Alma Ata: Almaty, the present capital of the Kazakhstan Republic). WHO, UNICEF, 67 multilateral organization, NGOs and 143 countries participated in this conference, adopted this HFA declaration again, and agreed on the promotion of PHC as its strategy.

The basic concept of PHC is health care whereby disease prevention and health are promoted by each individual who participates in health activities and who makes efforts in terms of self-help. This is different from medical care that is centred on treatment of individuals with disease, and it does not include medical intervention using so-called advanced technology. The most important point in this concept is that each individual participate in the health care activities (community participation) based on the recognition that good health is important for economic progress as well as for the improvement of quality of life of each individual, each family and each community. In other words, it can be said that health is something that an individual protect by oneself, and that health care services with appropriate charge help maintain and develop a system that reflects community participation, each individual's voluntary response, self-reliance and self-decision-making. Moreover, as PHC is the health care system which local people refer first, it is desired to equip appropriate level of constant service provision as well as the efforts to make it referable to where people live and work.

The specific strategy of PHC by WHO has the following four principles: community participation; orientation toward the satisfaction of actual health needs; effective use of available resources; and coordinated efforts of all related sectors. Furthermore, at least the following eight factors are included:

1. To prevail health education
2. To maintain adequate food supply and nutrition intake
3. To improve safe water supply and basic sanitation infrastructure
4. To implement maternal and child health care services including family planning
5. To implement immunization against major infectious diseases
6. To prevent and deal with local endemic diseases
7. To provide appropriate treatment against common diseases and injuries
8. To ensure essential medicines

As noted above, PHC should be regarded not only as a component of a health system in a country but also as one of regional social and economic development plans including the area of housing, transportation, agriculture, communication and education. Close cooperation among governmental organizations in charge of the respective fields is therefore essential.

Among the above-mentioned items, the basis of PHC is health education. Only by fully understanding the factors necessary to live a healthy life can people know what individuals should do and decide actions to take. For this purpose, the existence and the training of health workers who are actually in contact with people at the community level is important.

The Basic Health Units (BHUs) and the Rural Health Centres (RHCs) need to be established in locations within about 5km walking distance from most households, thus affording local citizens easier access to the health services they offer. A referral system should be set up that enables transfer of patients to higher level secondary or tertiary medical facilities if advanced medical care is needed. However, the chronic shortage of medicines in developing countries should be solved to function these basic facilities. It is difficult to sufficiently secure even essential pharmaceuticals, which results in people's distrust toward government and health facilities. Therefore, it is important to improve a system for the supply of essential pharmaceuticals to maintain PHC services.

There are some successful examples in PHC. China has a system called 'barefoot doctor', aimed at supplying a certain level of medical services in large poorly developed areas. In Kerala State in India, health care situation was remarkably improved by community participation and strengthened female education under democratization. In Sri Lanka, health care facilities inherited from the former suzerain and high primary school enrollment ratio including girls have contributed to a favorable health index, compared with its low GNP. In Costa Rica, the government reduced its military expenditures as redistribution of financial resources and improved health care services.

This grand idea advocated by WHO should not only be the core of health care measures in developing countries but also be introduced in industrial countries in terms of appropriate distribution of resources.

2.3 Child Health – GOBI

GOBI is composed of **G**rowth monitoring (which records fully the child growing process), **O**ral rehydration salts (ORS), **B**reast-feeding and **I**mmunization, and is advocated by UNICEF. ORS does not directly cure the diarrhea, but its worldwide use contributed to halving the child deaths by diarrhea. In addition, Expanded Programme on Immunization (EPI) contributed to saving about 9 million children every year. The Joint Polio Eradication Strategy by WHO and UNICEF is a recent major EPI program, following the eradication of smallpox. It is true that there has been significant improvement in child health by using a method that works in a relatively short period.

Short life expectancy at birth in developing countries generally reflects the high U5MR, and the factors comprise not only inadequate health infrastructures but also different factors from the ones in industrialized countries. In developing countries, for example, chronic poverty and poor nutrition intake are frequently caused by parents' lack of knowledge regarding basic child-rearing and nutrition. Shortages of micro-nutrients, such as various vitamins, iodine, and iron, are related to many diseases and poor health. A shortage of Vitamin A increases the incidence rate of some infectious diseases, and its severe shortage can cause a visual disorder that will result in loss of sight. An extreme shortage of iodine negatively affects children's mental development, and it can cause physical development disorders, intellectual disorders, retardation and other disorders.

Needless to say, a poor living environment is related to a high incidence of infectious diseases. In regions where there is no regular supply of clean drinking water, excretion is disposed often inappropriately, and infectious diseases of the digestive system through oral infection occurs frequently. Also, when many people live together in a small place with insufficient air vents, such as for cooking and heating, diseases that can be decreased by improving the living environment, such as bronchitis, pneumonia, and other Acute Respiratory Infections (ARI), as well as rheumatic fever (hemolytic streptococcal infection), tend to spread easily.

Even the diseases that can be prevented by immunization, such as tuberculosis, measles, polio, diphtheria, pertussis, and tetanus, often cannot be fully handled due to the inadequate health infrastructure in terms of human resources. The lack of parents' education due to domestic inequality, an unsanitary living environment and reduced resistance due to poor nutrition intake are causing chronic prevalence of infections among children. Such situations prevalent in developing countries today result in the death of 14 million children under age 5 every year with over 4.2 million of these dying from an ARI (1.52 million dying from measles and 510,000 from pertussis). A further 4 million children die of diarrhoea, 1 million die of malaria, and 800,000 die of neonatal tetanus.

A number of different measures are necessary to resolve this situation. These include alleviating poverty, supplying safe drinking water, improving living conditions and the physical housing environment, enhancing nutrition levels, and spreading good hygiene practices and health education. Such interventions will require time and patient effort. Therefore, it is desirable to now introduce highly cost-effective measures along with PHC, as advocated by WHO, UNICEF, and the World Bank.

It is important that local people in developing countries understand the scientific meaning of such health care strategies introduced from the outside. For example, the prevalence of immunization will contribute to reducing infectious diseases among children while the dissemination of ORS prevent children dying from dehydration, even if ORS itself does not reduce the frequency of diarrhea. This knowledge is common not only to health workers but also to people in industrialized countries. However, people in developing countries neither know this knowledge nor are accustomed to measuring the weight of their babies and children accurately, or to preparing one liter of water for making ORS. Therefore, it is most important to tell these people why immunization is necessary, how immunization can prevent diseases, and why dehydration endangers children's lives. Without such education, these efforts will not work or become inaccurate sooner or later after intervention from outside withdraws. It is not necessarily to inform them difficult medical theories, but we have to make efforts to convey a message that "immunization gives your children the resistance against the cause of epidemic diseases (such as bacteria and viruses) and it is important to keep your sick child away from other children to prevent spreading the disease".

It is difficult to disseminate these efforts in a traditional society where child death and maternal death from delivery have been accepted easily, based on the idea that having another would satisfy their needs. Therefore, strong efforts are necessary to prevail such intervention from outside, not only in terms of achieving the targeted immunization ratio and distribution number of ORS packages.

The World Summit for Children, held in New York in 1990, adopted a specific action plan. The Conference regarded the needs of children and women as important, proposing that developing countries prepare and implement a national action program to achieve the target. The targets regarding health are as follows:

- To eradicate polio by the year 2000.
- To eliminate neonatal tetanus by 1995.
- To decrease the incidence of measles by 90%, and to reduce its mortality by 95%.
- To spread immunization to over 90% of one-year-olds (by the year 2000)
- To reduce infant mortality caused by diarrhoea by half, and to eliminate the incidence of diarrhea by 1/4.
- To eliminate 1/3 of the infant mortality caused by acute respiratory infections.
- To almost completely eliminate disorders caused by vitamin A deficiency and iodine deficiency.
- To reduce the incidence rate of delivery of low-birth-weight infants, to 10% or lower.

As of 1993, 85 countries made national action programs, and 60 countries are working toward its implementation. In fact, out of the 14 million deaths of infants under age five mentioned earlier, two-thirds died of diarrhea, measles, acute respiratory infections, and neonatal tetanus. As such, the above-mentioned targets can be achieved by the low-cost health measures that are included in this national action program.

2.4 Women's Health - Safe Child-bearing

Active efforts toward the improvement of child health have resulted in considerable achievements. On the other hand, effective intervention measures in the area of women's health, in particular maternal health, have not been established. As mentioned earlier, the gap of the MMR between industrialised countries and developing countries is more extreme than that of the U5MR. For example, the MMR in Japan from 1980 to 1990 was 8.5 for every 100,000 deliveries, while the MMRs in Afghanistan, Nepal, and Bolivia were, respectively, 640 (the modified value by WHO and UNICEF in 1996 was 1,700), 830 (modified, 1,500), and 600 (modified, 650), and the simply compared risk was 75-fold (200-fold as modified), 98-fold (176-fold), and 71-fold (76-fold) higher.

About 600,000 women worldwide die from pregnancy- and delivery-related complications, including dangerous abortions. Many more suffer from disorders related to pregnancy and delivery, including post delivery complications. These numbers mean that one out of 50 women in developing countries dies of abnormalities, complications, or inter-current diseases accompanying pregnancy or delivery. Its risk is much higher compared with the rate women in industrialised countries (1/2700).

The poor health of women, of mothers in particular, causes a higher frequency in immature and low-weight infant deliveries as well as perpetuates ill health among its family. Furthermore, about one-third of pregnancies in developing countries are unplanned or undesired by mothers. Pregnancy, delivery, and child-raising which starts at a relatively young age and its repetition with short intervals carry risk for the lives and quality of living of both mothers and infants. Also, illegal abortions conducted for undesired pregnancies are estimated to account for 20 to 30% of the MMR in developing countries.

Recently, there has been a view that family planning should be high quality, including the means for women to decide by themselves, whether or when to be pregnant. Moreover, from the gender perspective, the efforts to reduce the maternal and child deaths and complication during the reproductive process are considered to remove the obstacles to both women's and family health, leading to regional and national development.

At the International Conference on Population and Development in Cairo in 1994, all the participants recognized the need for reducing the maternal deaths from abortion and delivery, and agreed on promoting reproductive health services to all communities, enhancing the level of education for women, and making efforts toward gender equality.

Reproductive health is the wider concept including simple maternal and child health. It aims to equip people with the proper family planning, such as planning desired number of children at desired time. It also aims to women to have safe delivery without being exposed to diseases of a reproductive system, dangerous abortions and sexually transmitted diseases including AIDS. The major achievement in this conference is the agreement on the need that women should be more able to control their own life including delivery, as a key to solve the population problems. It should be noted that international society publicly recognizes that women's and maternal health are not simply medical issues, but greatly affected by social surrounding of women, which necessitates measures from various fields.

As a matter of fact, mother and female children generally eat the leftover of men at home. This custom has resulted in their chronic unbalanced or poor nutrition intake, compared with men. The number of reported cases of iron deficiency anemia is as high as 458 million for women, compared with 238 million for men. Such chronic malnutrition and pregnancy at young age negatively affect the progress of their pregnancy. For example, incomplete development of mother's pelvis increases the risk not only for the neonate at birth, but also for mother's body due to prolonged or overstrained delivery. Higher MMR and large number of women's deaths can be seen in sub-Saharan Africa and South Asia. In these areas, traditional view that favors having many children as well as the custom of ablating female genitals contribute to increasing the risk of delivery to women's lives.

Following the Cairo Conference in 1994, African countries established national family planning committees to promote family planning. In many countries, however, this committee was an independent organization, separate from the health medical service division. Moreover, it has no lower-unit and did not work well. In light of this situation, it recently is aiming to integrate family planning and health care services.

At the Fourth World Conference on Women, held in Beijing in September 1995, problems common to the urban poor and rural households were addressed: shortage of food, in particular, unequal distribution of food between women and men, no access to safe water, sanitation infrastructure, and fuel supply, poor housing environment, and negative influence on health due to its ill living environment. It was pointed out that all of these factors represent excessive burdens on women and their families and negatively affect their health. The Beijing declaration and platform for action aims at comprehensive development in various areas, such as improvement of women's social status, empowerment of women, increased budget allocations for social services and health care, strengthening of BHN services especially in poor areas, and considers girls, women, and their reproductive health.

At the World Summit for Children in 1990, the following targets were presented as national action programs for women (maternity), and these targets should be emphasised in the future from the viewpoint of reproductive health.

- To immunize all women of reproductive age against tetanus.
- To reduce the prevalence of iron deficiency anaemia in women by one-third from the 1990 level.
- To provide every woman with pre-natal care, assistance at the time of delivery by trained personnel, and access to medical care that handles high-risk deliveries and emergencies during delivery.

2.5 Health Gap between Groups - Disease Structure and Its Change

The causes of overall deaths differ greatly between developing and industrialised countries. In developing countries, even today, infectious diseases account for one third of all deaths. Every year just over 14 million children die of infections or malnutrition. In other words, 40,000 persons per day, or nearly 2,000 persons per hour, are dying. In addition, chronic diseases such as parasitic diseases and tuberculosis cause many deaths in developing countries. The prevalence of these infection diseases can often be seen before its society or components of disease changes along with industrialization and the changed pattern of living. Poverty and poor sanitary environment correlate with such diseases. On the other hand, in industrialised countries, the majority of disease incidence rates and mortality rates are chronic diseases and so-called lifestyle diseases (adult diseases), such as malignant tumours (cancer), stroke, circulatory disease (heart disease), neurological disorders and arthritis. Such a change in the disease structure is called an epidemiological transition.

In some developing countries, while infection diseases can be seen most, chronic and adult diseases, which have been considered as specific diseases only in industrialized countries, are gradually increasing. Moreover, there are new health threats, such as the worldwide prevalence of HIV (Human Immunodeficiency Virus) /AIDS, addictive substances (tobacco, alcohol and drugs), labor and traffic accidents, environmental pollution, as well as natural and man-made disasters (war and civil conflicts). Together with classical measures against these diseases, considerations toward epidemiological transition are necessary in order to combat such new threats. However, this is often beyond the capacity of developing countries.

Not only death, but also the burden of disease caused due to complications and sequelae is a serious problem in terms of social development. A useful measure for planning health policy is Disability Adjusted Life Years (DALYs). According to diseases, for example, while infections account for 71% of all disease in sub-Saharan Africa, they occupy only 10% in industrialised countries with established market economies. Furthermore, as to the details of infections, the 71% in sub-Saharan Africa comprises 10.8% for respiratory infections, 10.8% for malaria, 10.4% for diarrhoea diseases, 8.8% for sexually transmitted disease and HIV, 9.6% for children's infections that are preventable by vaccination, and 7.1% for infections acquired related to the perinatal period. On the other hand, in industrialised countries, from among the entire disease, including death and disorders, 19.1% is due to cancer, followed by neuropsychiatric diseases, and then ischemic heart diseases. In

India, Pakistan, and the Middle East including Afghanistan, higher rates for infections acquired during the perinatal period, can be seen: 9.1% and 10.9%, respectively (2.2% in industrialised countries).

However, these changes can be seen worldwide, and there is a combination of epidemiological transition and demographic change, referred to as health transition. It is estimated that mortality due to non-infectious diseases will increase by about 77% in developing countries, to be the most common cause of death by 2020. Along with this health transition, there will be a change in the needs in health care in developing countries, to which more attention must be paid.

2.6 New Health Issues

In 1967, researchers who handled green monkeys that were sent from the tropical rain forest in Uganda to Germany and the former Yugoslavia for experimentation, suddenly had high fever and severe bleeding from the body. Seven out of 31 researchers that were affected died. It was a new disease that is presently known as Marburg hemorrhagic fever. It seemed the beginning of an emerging disease age that preceded the Ebola hemorrhagic fever that staged a dramatic outbreak in Sudan in 1976.

According to WHO, at least 30 new infectious diseases have appeared in the past 20 years. All of them are characterised by sudden occurrence, high infection and fatality rates, and resistance to ordinary antibiotics treatment. Among them, AIDS, which occurs due to infection with Human Immunodeficiency Virus (HIV), has spread throughout the world in a short time. As of 1995, 24 million adults over the world are estimated to be infected and this figure is expected to increase to 40 million by the year 2000. At present there is no definitive cure, nor usable inexpensive medicine for treatment. The only measures that can be taken are prevention through health education and behavioural changes. It is pointed out that the high level of infections in adult men in Africa can constrain regional development. In addition, vital infection (influenza), bacteria infection (new cholera O139) and hemorrhagic colitis (by O159), which can be seen in the US, the UK and Japan, are prospected as new threats. These new infections in developing countries sometimes spread from infected patients taken to medical institutions with insufficient equipment and knowledge. Therefore, improvement in both physical and human resources are urgently needed.

Also, there is a group of diseases, generically called 're-emerging diseases', such as streptococcal toxic-shock syndrome (the 'flesh-eating bacteria') in 1994; pests that plagued India in 1994; cholera, which spread in South America; tuberculosis, which is becoming prevalent again with the expansion of AIDS; malaria, whose drug resistance is becoming a more serious, and other tropical parasitic diseases. New measures are needed to tackle these infections, at a time when many people can travel easily to distant places.

Also, the emergence of refugees and internally displaced people in developing countries due to wars, civil wars, and racial or religious conflicts, cause significant public hygiene problem in terms of population movement, as well as spreading of micro-organisms. Action needs to be taken since these man-made disasters damage many people's health, in addition to natural disasters, such as volcanic eruptions, earthquakes, typhoons, and floods.

Other wide-scale problems are population increase and environmental pollution. In fact, these new problems are unlikely to be solved by PHC alone. A shortage of basic knowl-

edge of health and hygiene, poor health care infrastructures, and insufficient environment and hygiene infrastructures underlie the problems. It is necessary to equip the basic medical measures both in physical and non-physical terms, safe water supply as well as to link the both sanitary and housing environment with PHC.

2.7 Nutrition

In a serious emergency situation, such as a large-scale disaster and the creation of refugees, it is often said that “food is the best medicine”. For human survival, food, or adequate nutrition, is an essential substance, in addition to water. At global level, the significance of nutrition in health is multi-faceted. There is the occurrence of habitual lifestyle diseases (adult diseases) caused by over-eating in North, while many do not satisfy minimal food levels necessary to sustain life in South.

Food production has continually decreased by almost 10% in Africa since the 1980s compared with the 1960 level. This is due to drought, desertification and poor development, and it is impossible to support the continually increasing population. Moreover the food provision from outside is often interfered with by disputes and wars. Nutrition problems also exist in other developing countries due to lack of means to appropriately utilize, safely maintain and transport foods as well as the unfair distribution of foods by conflicts and political reasons.

In terms of dietetics, PHC has improved the ophthalmic disease (caused by vitamin A deficiency, that result in sight loss), iron deficiency anemia (suffered by many women), iodine deficiency, goiter and growth disorders (in inland and mountain areas where only rock salt is available). However, it is difficult to radically handle the situation through health care measures alone. Efforts are needed in many other sectors, such as education, the environment and development.

3. Efforts to Improve Health Care: Health Care Policies and Systems in Developing Countries

Health care is one of social activities, and complicated issues, which go beyond health sectors, lie behind health indexes such as the U5MR and the MMR. In particular, maternal and child health are related to female school enrollment, equal opportunities for women and literacy, while regional health state is strongly related to safe drinking water supply, water and sewage system, housing environment, disease structure and nutrition. These are issues for holistic social development including poverty alleviation, education, public hygiene and the environment, and infrastructure building. In addition to traditional social factors, the improvement in health care can indicate social activities and social movements.

In order to improve health care and to ease the population increase, we need leaders with a strong will to continually invest in the social sector and to foster the necessary personnel. Even though social reform based on a long-term view is recognised as being essential to improve health care, political decisions are still important, considering actions in the health care field, as indicated in the questions of the then-Director-General of the WHO to the attendants at the opening ceremony of the Alma Ata Declaration:

- If needed, are you prepared to radically reform the present health system in order to establish a health service supply system that places the greatest emphasis on PHC?
- Regarding the spreading of PHC on a national level, are you prepared to fight politically and from the technical aspect of health care, the resistance that will be encountered from the social and economic fields, as well as from the existing health care field?
- Are you prepared to accept PHC and make a clear political decision for international unity, in order to achieve the target of “Health for All by the Year 2000”?

In conclusion, PHC can be described as an epoch-making social reform centred on citizens. This concept had to be accepted first by citizens, but at the same time it needed the awareness of political leaders in respective countries. In other words, if PHC is recognised as being part of citizens’ basic human rights, the difference seen in the results and development of PHC among countries can be considered as differences in political acceptance.

Political decision-making, which is decision on the priority and distribution of resources, is the most important factor in determining a nation’s health index. The key to the success of the PHC is most likely related to the level of the political commitments as well as citizens’ participation.

From this viewpoint, breakdown such as the percentage of health care expenditures in the national budget and the percentage of allotment to the local health service and public hygiene field, can be said to directly indicate a nation’s health policy. In industrialised countries, the health cost per person in 1981 and 1982 was \$670 on average, but was only \$8.8 in low-income countries. The public health cost out of the government’s expenditures is over 10% in industrialised countries, but just 5% or less in low-income countries, and the percentage had decreased from 1972 to 1983. As such, overall, economic investment in the health sector has been decreasing.

While expenditure in the health sector is decreasing, military expenditure are getting larger in many developing countries. Even though the Cold War collapsed, military expenditures in developing countries are still increasing. Its budget grow larger than that for education and health care, although these two fields are essential for a nation's development. Ironically, the imports of arms are actually increasing in some developing countries according to the increase of assistance from outside.

On the other hand, the average breakdown of health budget in developing countries comprises mostly therapeutic medicine (70-85%), which has low cost effectiveness, and very low percentage of prevention measures and community services. In some country, its health ministry allocated over 20% of its budget to one university-affiliated hospital.

However, health policy in developing countries should be sustainable and specific.

Central governments including the ministry of health in developing countries claim that there exist fine systems from PHC services (such as BHU and RHC), secondary regional core hospitals, to the tertiary medical institutions in the capital to be referred. Once we go into rural areas, however, nothing seems to be working. Also, in some projects, the word 'regional health care' seems to be confused with 'medical examination' in villages of several thousand persons. We need to further discuss how to utilize the health care facilities at community level, which external donors actively supported.

4. Aid Trends (Health Care)

4.1 Japan's Aid Trends

4.1.1 Outline

Recent emphasis on BHN has attracted more attention to health and medical cooperation as one of priority fields. In the 1990s, emphasis shifted from cooperation to central hospitals and research institutions which require advanced equipment, to cooperation in the fields of regional health, public hygiene, maternal and child health, and measures against infections, by a PHC approach. Also, in every health and medical project, efforts are being made in the population/health field, which is a global issue.

4.1.2 Aid Trends by Aid Type

1) Grant Aid

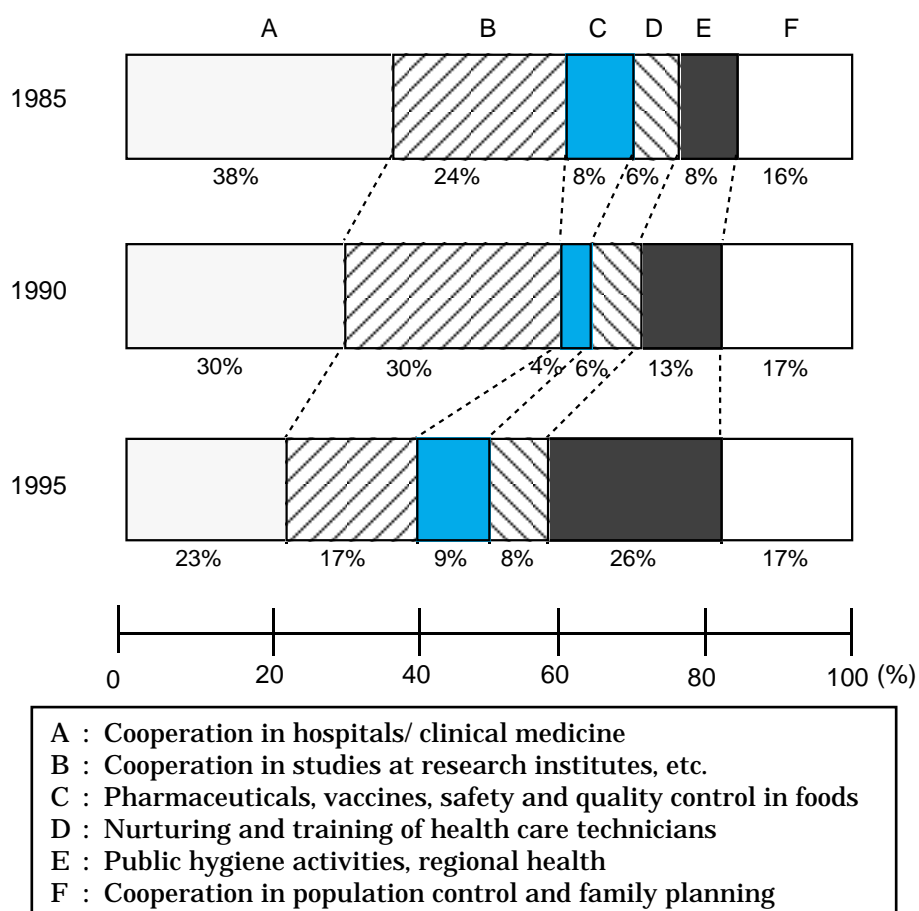
Japan's grant aid is directed at low income countries, whose economic and social development is slow. Assistance is directed to sectors that are not profitable and that are difficult to handle through extending loans. Health care is recently considered to be a priority sector, as part of BHN, in addition to the environment, education, and Women in Development (WID). In particular, population/AIDS and child health have been actively taken up, following views put forward at the Japan-U.S. summit in 1994. The priority region continues to be Asia, but in the future, cooperation with the African region will increase, reflecting the aid trends toward LLDC.

In recent years, Japan has provided medical equipments to local medical facilities and health centres, while Japan used to construct research institutes and provided large-sized medical equipment. Furthermore, it should be noted that provision of materials, including consumer goods (such as vaccine and vitamin agents) which had been difficult to provide (in grant aid for population/AIDS measures and health care for children). As these materials require correct usage by individual consumers, appropriate instruction at distribution is essential. Therefore collaboration with multilateral organizations, NGOs, and technical cooperation projects is important.

2) Technical Cooperation

Regarding technical cooperation, dispatching of experts and the Japan Overseas Cooperation Volunteers (JOCVs), and acceptance of trainees have been carried out. Until the mid-1980s, Japan's technical cooperation in the health care field has centred on hospital/clinical medicine education and cooperation in study at research institutes. Cooperation in both fields accounted for 62%, among the project-type technical cooperation in 1985. Thereafter, cooperation fields became diversified, such as family planning, maternal and child health, population education, vaccine production, and public hygiene. Recently, in particular, projects for regional health, maternal and child health, public hygiene, and measures against infections, by a PHC approach, have been increasing (Figure 4.1). Also, in hospital-type cooperation projects, efforts are recently being made to sustain project through general cooperation, including not only medical care but also technical instruction on nursing and hospital management.

Figure 4.1 Change in the Number of Projects according to Types of JICA Medical Cooperation



The major ongoing projects by region are:

Asia: In ASEAN, diversified health and medical cooperation accompanying economic progress, for example, emergency medicine and food hygiene projects. In addition, region-based projects, such as for infectious diseases and maternal and child health in the entire Asian area. Projects with a PHC approach for maternal and child health, public hygiene, and measures for infectious diseases and clinical projects including hospital management.

The Middle and Near East: Family planning and population education projects in the Islamic sphere.

Africa: Infectious disease study projects, maternal and child health/population education projects.

Central and South America: Clinical treatment projects, regional health/medical system arrangement projects

As part of technical cooperation, a number of items are provided, including vaccines against infectious disease, cold chain equipment (in cooperation with UNICEF and WHO), family planning materials, such as contraceptive devices and audio-visual materials (in

cooperation with United Nations Fund for Population Activities (UNFPA) and JOCVs) and materials for AIDS diagnosis.

3) Loan Aid

There is small amount of loan aid in the area of health care, as it is not economically profitable. Recent loan projects include the Malaysia National University Hospital (1993), and improve and expand health centres in Indonesia (1994).

4) Cooperation through Multilateral Organizations

In the health care sector, contributions made by Japan were as follows: \$72.04 million (both assessed and voluntary contributions) for WHO in 1995, \$30.43 million for UNICEF, and \$71 million for UNFPA. Japan also has provided bilateral cooperation (multilateral-bilateral cooperation), in association with UNICEF and UNFPA. In addition to this economic support, Japan has dispatched personnel and provided technical exchanges to various projects.

4.1.3 Aid Trends by Subsector

1) Immunization measures (including polio eradication)

Japan has provided vaccines, cold chain equipment, vehicles, etc., as provision of equipment in technical cooperation and grant aid. Cooperation in this field can be largely classified into cooperation in regular immunization and in polio eradication. Japan has actively collaborated with relevant organizations, such as WHO and UNICEF, to eradicate polio by the year 2000. The mainstay activity is providing vaccines and equipment. However, projects (in China, Laos), dispatching of experts, and acceptance of trainees have also been carried out.

Related organizations' efforts have born fruit, and eradication of polio has almost been achieved in the West Pacific region (East Asian region, including Indo-China, China, and Pacific nations). In the future, the centre of cooperation may shift to South Asia and Africa. Japan continually supports regular immunization in developing countries by providing vaccines, etc. (for five years in principle), for six diseases: measles, diphtheria, pertussis, tetanus, polio, and tuberculosis. As of 1997, Japan had been providing cooperation in 16 countries.

2) Measures for infectious diseases (diagnosis, treatment, and study)

Projects are now being conducted in Thailand, Ghana, Kenya, Zimbabwe, Zambia, Turkey and other nations. For many years, Japan has collaborated with the Noguchi Memorial Institute for Medical Research in Ghana and the Kenya Medical Research Institute (KEMRI). An Africa region infectious disease diagnosis laboratory network is now being built up, centred on these two research institutes. In future, not only central research cooperation but also cooperation to create a surveillance system in regions will be required. In addition, following the statements of Prime Minister Hashimoto at the Denver Summit, preparations are also being made to take measures against parasitic diseases, particularly malaria.

3) Maternal and child health/ family planning

A child's health is greatly influenced by that of the mother. In maternal and child health, more emphasis has been placed on child health than that of mothers. However, following the results of the International Conference on Population and Development (Cairo) in 1994, and the World Conference on Women (Beijing) in 1995, there are increasing approaches to maternal health, including reproductive health, maternity protection, and safe delivery. Projects being conducted include maternal and child health/ family planning projects in Cambodia, Mongolia, Pakistan, the Philippines, Brazil, Mexico, Ghana, and Tanzania, reproductive health/ WID projects in Vietnam and Jordan, and population education projects in Turkey, Tunisia, Kenya, and Jordan. Moreover, Japan has provided contraceptive devices, delivery tools, basic pharmaceuticals, and educational equipments, in cooperation with UNFPA and JOCVs (front-line project).

4) AIDS

AIDS is one of the most serious health problems world wide, and the number of HIV-infected people is estimated to reach 40 million by the year 2000. The majority of infected persons are in developing countries, and AIDS has a huge economic impact on such countries, such as a sharp decline in persons at the most productive age and increasing medical expenses. In 1994, Japan launched a program called "Global Issues Initiative on Population and AIDS (GII)" with a view to aggressively providing assistance in this field. Specifically, Japan is conducting projects in the Philippines, Thailand, Ghana, Kenya, and elsewhere, as well as cooperating in such various schemes as equipment provision, acceptance of trainees, dispatching of experts, and grant assistance for grassroots projects. Also in 1997, grant aid for population and AIDS started. Cooperation is also expected in such fields as education and enlightenment regarding prevention, transfer of examination technology, studies and research.

4.2 Trends among Major Aid Organizations

4.2.1 Multilateral Organizations

1) World Health Organization (WHO)

Basic policy: The WHO's main role, in order to achieve "Health for All," is (i) giving technical instruction in the health care sector, (ii) establishing world standards in the health field, (iii) cooperating with each government to strengthen national health program, and (iv) developing and disseminating appropriate "technology, information, and standards" in the health care sector.

Priority areas:

- a. Infectious disease measures
- b. Promotion of PHC
- c. Supply of essential drugs
- d. Improvement of urban housing environments
- e. Building of partnerships
- f. Encouragement of healthy lifestyles.

2) United Nations Children's Fund (UNICEF)

Basic policy: To analyze problems that affect mothers and children, and to encourage people to solve their own issues. To serve as a mediator to achieve the targets of national activity projects by utilizing the resources of governments, donors, and NGOs.

Main activities: To protect children oppressed due to wars, disasters, extreme poverty, and abuse. To use the media (radio, video, soap opera, street theater, pamphlets, posters) to raise awareness of child health, child welfare, and child rights. Recently, mainstay cooperation has shifted from immunization to such fields as nutrition, education, and securing safe water.

3) The World Bank

Basic policy: To integrate "investment in people" and "sound economic policy," based on the view that investment in people does not work effectively unless the government establishes an economic framework.

Priority areas:

- a. Primary and regional health care services
- b. To equip referral (referring patients to more advanced medical institutions) systems
- c. Nutrition
- d. Health promotion/ disease prevention
- e. Reproductive health

Priority countries: Nations in East Asia, South Asia, the Middle East, North Africa, Sub-saharan Africa, and East Europe.

Budget: \$10.9 billion up until 1996 (cumulative investment amount in the fields of health, nutrition, and population control. 75% of that amount had been invested in primary health services from 1992 to 1996).

4) United Nations Fund for Population Activities (UNFPA)

Basic policy: To improve reproductive health and family planning services, and to assist in formulating population policy for sustainable development efforts.

Priority areas:

- a. Reproductive health (including maternal and child health, and family planning)
- b. Information, Education, Communication (IEC) in the area of population
- c. Information collection and studies on population, planning and evaluation of population policy.

Priority countries: Assistance is being implemented in 168 countries, consisting of 46 countries in Sub-saharan Africa, 37 countries in Latin America and the Caribbean, 44 countries in Asia and Oceania, and 41 countries in the Middle East and Europe.

Budget: \$309 million (budget in fiscal 1996).

4.2.2 Bilateral Aid Agencies

1) The U.S.A.

Basic policy: To stabilise the world's population and to protect people's health.

Priority areas:

- a. Continual reduction of unwanted pregnancies
- b. Reduction of the MMR
- c. Reduction of the U5MR
- d. Reduction of HIV/STD (Sexually Transmitted Diseases) infections

Priority countries: Nations in Asia, the Middle East, Latin America, Central Asia, and East Europe. Priority countries in the common agenda include Bangladesh, Egypt, Ghana, India, Indonesia, Kenya, Peru, the Philippines, and Thailand.

Budget:

2) The U.K.

Basic policy: To make people's health sustainable by increasing access to feasible, cost-effective and high-quality health care.

Priority areas:

- a. Health sector reform
- b. Reproductive health
- c. Measures against tuberculosis, malaria, HIV/AIDS
- d. Humanitarian assistance in times of emergencies (such as disasters, conflicts)

The UK has increasingly conducted projects with a comprehensive approach, resulting in regional development, including water source development and improvement of the status of women, rather than PHC alone.

Priority countries: India, Bangladesh, Nepal, Pakistan, Cambodia, Angola, Kenya, Uganda, Tanzania, Nigeria, Ghana, Gambia, Zimbabwe, Zambia, Malawi, and South Africa.

Budget: The percentage allocated to the health and population field in the entire budget has been increasing, and 100 million pounds was invested in fiscal 1993/1994.

3) France

- Strategy:
- a. To incorporate projects in countries that require health policy and institutional capacity building.
 - b. To make adjustments between the central level and the local level in project implementation.
 - c. To strengthen the collaboration between different levels of health care, and between fund users and donor organizations.
 - d. To promote programs sustainability by seeking fund sources necessary for work implementation, such as sharing of expenses.
 - e. Long-term support even if partners change.
- Priority areas:
- a. Infectious diseases
 - b. Maternal and child health
 - c. Sharing of medical expenses for ordinary diseases
- Main activities:
- a. Supply, distribution, and fund control of essential drugs
 - b. Improvement of the quality of medical activities (prevention, diagnosis, treatment)
 - c. Basic hospital treatment
 - d. Promotion of self-sufficiency in fund procurement of and ownership in management of health and hygiene education
 - e. Capacity building of management of the health and hygiene information conveyance system, and the health and hygiene systems on central and local levels
 - f. Improved treatment of personnel engaged in health care
 - g. Establishment of fund procurement systems and management systems to improve peoples' accesses to primary medical care
- Budget: 1,095.3 million francs (total amount of projects being conducted in 1996)
- Breakdown: Strengthening of health care systems: 53%
Measures against infectious diseases: 32%
Maternal and child health activities: 9%
Other: 5%

4) Sweden

- Basic policy: To select a comprehensive approach with consideration to fairness for health improvement. To directly target areas of greatest need, while also considering reproductive health.
- Priority areas:
- a. Capacity building
 - b. Reproductive health
 - c. Rehabilitation of handicapped people
 - d. Environmental hygiene
 - e. AIDS prevention

Priority countries: 15 countries, including Angola, Ethiopia, Guinea-Bissau, Kenya, Tanzania, Uganda, Zambia, the West Bank, Laos, Vietnam, Nicaragua, other Central American countries, etc. Sweden has recently reduced the number of target countries.

Main activities: Immunization, child health / health education, reproductive health (including safe abortion), family planning, provision of vitamin A, hygiene, nutrition, regional rehabilitation of handicapped people, AIDS prevention and prevention of drug abuse.

Budget: 1603 million krona (total amount in the health field in fiscal 1994/1995)

Breakdown: SIDA ⁽⁴⁾: 61%
Swedish Agency for Research Cooperation with
Developing Countries (SAREC): 6%
Multilateral organizations: 33%

5) Australia

Basic policy: To improve direct health care services through prevention and treatment activities using simple and cost-effective methods that emphasise citizens' participation based on the basic concept of PHC.

Priority areas:

- a. Infectious diseases (malaria, polio, neonatal tetanus, etc.)
- b. Maternal and child health
- c. Citizens' health education
- d. Education and training of health care workers
- e. Family planning / reproductive health
- f. Supply of drinking water and sanitation
- g. HIV/AIDS

Priority countries: Emphasis is placed on nations in Southeast Asia and the South Pacific region, but assistance through NGOs is also conducted in South Asia, the Middle East, and Africa.

Main activities: Combination of bilateral and multilateral assistance and support for NGOs. Australia also dispatches experts who assist in formulating, proposing and implementing projects as well as provides equipment.

Budget: 130 million Australian dollars (amount of budget for health / population in fiscal 1996/1997)

⁽⁴⁾ SIDA was integrated with other four assistance-related agencies and became Swedish International Development Cooperation Agency (Sida) in July 1995.

6) Canada

- Basic policy: To contribute to the improvement of health and welfare of people in developing countries. For that purpose,
- a. To support health improvement by developing countries themselves.
 - b. To approach factors that determine health conditions through cooperation among wide-ranging sectors.
 - c. To reflect Canada's diplomatic policy.
 - d. To establish a priority order in program planning.
- Priority areas:
- a. Development of sustainable national health systems
 - b. Women's health and reproductive health
 - c. Child health
 - d. Reduction of malnutrition and elimination of shortages of micro-nutrients
 - e. Measures against serious diseases and emerging diseases (HIV/AIDS, tuberculosis, malaria) and nicotine addiction, trauma from abuse, etc.
 - f. Introduction of appropriate technology and special initiatives
- Priority countries: Those related to the medical field are not clearly identified. For all of Canada, 65% is distributed to British Commonwealth nations and the Francophone region. The percentages according to regions are: 45% for Africa; 39% for Asia; and 16% for Latin America. By policy, 50% of the total is to be distributed to LDCs in Africa, Asia, and Latin America.
- Budget: 165.19 million Canadian dollars (budgetary amount in the health/population field in fiscal 1993/1994; this represents 12% of the total aid).

4.3 Future Challenges - the New Development Strategy in Future Health Care

Effective intervention in the health care field has demonstrated short-term efficacy. Certain factors should be incorporated into the PHC system, such as immunization against childhood preventable infectious diseases through vaccines, dissemination of oral rehydration salts which prevent dehydration caused by diarrhoea, thorough early diagnosis of paediatric acute respiratory infections and provision of micronutrient supplements, such as vitamin A and iodine. Governments of low-income countries, such as those in Sub-saharan Africa and Southwest Asia, should allocate more of the health care budget to the cost-effective public health field. Development cooperation from outside should also be limited to this field.

As mentioned above, PHC has made significant achievements in child health. Also in the International Conference on Population and Development held in Cairo in 1994, the use of PHC and the promotion of health were considered as the central strategies to lower disease incidence rates and mortality rates. Furthermore, an action plan to improve child survival and health and women's health (including reproductive health) in the framework of PHC is recommended. In other words, it is certain that PHC will continue to be the basic

health care strategy in developing countries in the future, and external cooperation should therefore aim to maintain it.

However, it cannot be said that PHC can solve all problems in health care. WHO is now monitoring and evaluating Health-For-All Policy (HFA). It will greatly assist the planning of future development strategies in the health care field. In other words, reviewing of the existing constraints in PHC as well as considering measures to solve them will be the core of the future new development strategy. Here, problems in PHC are listed, and specific strategies will be mentioned in the recommendations that follow.

- PHC has been conducted in the conventional health care system: the reforms has been performed in the framework of medical system centered on treatment, resulting in insufficient awareness among policy makers, those engaged in medical care, and ordinary citizens.
- Poor capacity in terms of supervision and management: although the role of a health worker at regional level is significant, the human resource development of health workers is most inadequate.
- Difficult balance between the degree of local participation and government intervention: government intervention has to be minimal to encourage self-help efforts, but there are constraints in financial and technical sustainability.
- It is difficult to judge which approach (selective approach/ comprehensive approach) is suitable: selective approach can bring clear result such as cost-effectiveness, but institutional structure tends to be rigid and it is difficult to evaluate the efficacy of an overall PHC programs.
- It is doubtful whether PHC can follow the changes in a society or in disease structure: there remains some problems in the ability to respond changed needs according to such changes in this information era, and financial constrains in (somewhat advanced) medical care that local people desire.

5. Application of the DAC's New Development Strategy

5.1 Positioning of Health Care - Relation with Other Fields

Health care is equal to social development, and various health indexes compose social factors such as poverty, education, and the environment. Health indexes are therefore often correlated with the indexes of other fields. Tuberculosis illustrates this point. In spite of economic improvement accompanying the Industrial Revolution and the reduction of disease incidence rate following improvements in hygienic environment and nutrition intake and the discovery of antibiotics, tuberculosis remains a serious issue in public health. However, the indexes should naturally best reflect problems specific to health and medical activities, such as the medical system and medical technology. General evaluations can therefore be made from these indexes.

The World Bank's *World Development Report 1993* said, "health enhances individuals' economic productivity and promotes a nation's economic growth. Therefore, investment in health is a method of accelerating development and health itself is the target". In that sense, health care has more essential value than poverty, education, and the environment in the social development sector. In other words, the way in which health care is evaluated as a strategic means show what can effectively be related to development through the health care sector.

From the BHN perspective, development cooperation in the health care field is a high priority. Also, from a humanitarian perspective, intervention in this field is important in any situations, including short-term rescue activities during war or large-scale natural disasters. However, considering medium-term health medical cooperation, success will depend on from decision-making level to how local people think. As mentioned earlier, it should be understood that improvement in health care services is inseparable from social development. Even if a cooperation plan is within the range of PHC, and regardless of how well prepared it is, it requires the development of the surrounding environment and health care industries as well as a change in people's awareness.

In China, for example, the practice of basic examination techniques transferred by Japanese experts was difficult in the past, but as the Chinese economy developed and various advanced equipment was introduced, measurement was improved from the unit of the gram (g) to the milligram (mg), and further to the microgram (μg), which is one-thousandth of a milligram. Health education on hygiene, which was conducted at the same time, was hardly put into practice. But as the economy progressed, the level of hygiene in the same society changed remarkably. This shows that education is ineffective unless people's consciousness changes as well as living habits being improved, even if education is practically possible in terms of basic techniques and abilities.

Although good health is a basic human right, trust cannot be obtained unless people desire it, and unless reliable health services are put in place. How health services should be implemented as an aspect of social activity should be decided according to each country, region, and situation. Neither ready-made health cooperation that can function anytime and anywhere, nor golden rules on development cooperation exist. Planning well-associated with each surrounding environment will always be necessary.

5.2 Goal Values

The goal of the health care sector in the NDS are:

- The IMR and the U5MR should be reduced in each developing country by two-thirds of the 1990 level by 2015.
- The MMR should be reduced by three-fourths the 1990 level by 2015.
- Access should be available through the PHC system to reproductive health services for all individuals of appropriate age as soon as possible and no later than the year 2015.

These indexes are appropriate in terms of the above-mentioned cooperation in the health field.

In the past, the basis of Japan's health policy was centred on the wealth and military strength of the country, which was aimed at nurturing strong soldiers and strong labour forces. When investment in health and its efficacy and benefits are considered, it cannot be denied that age is an important factor. Presently, however, good health of both children and women is recognised as a basic human right. The methods of overcoming the difficulties to which the weak are first exposed should be an index for development, which is highly appropriate from the perspective of fairness in human development. These health indexes would directly reflect such a perspective.

The NDS goals have the following characteristics necessary to achieve "Development Partnerships in the New Global Context".

- Targets should be about human development.
- Targets should be feasible.
- Targets should be specific (measurable).
- Targets should be aimed also at multilateral development cooperation.

Considering these points, the features and problems of each index are described as follows.

5.2.1 The IMR and the U5MR

Every year throughout the world, 144 million babies are born and of these 4 million die before reaching one month old. A further 12 million die before reaching the age of 5. The IMR is a measure of the number of live-born infants (per 1000) who die before their first birthday. The average IMR in the group of industrialised countries from 1991 to 1993 was 7, while it was 71 in developing countries (112 in the poorest countries).

The U5MR expresses the number of live-born infants (per 1000) who die before their fifth birthday. The average U5MR in the group of industrialised countries from 1991 to 1993 was 9, while it was 103 in developing countries (176 in the poorest countries). The causes of 70% of these deaths before age 5 were diarrhoea, pneumonia, measles, malaria, and malnutrition, and these frequently occur in combination in individual persons. The gender gap in the IMR is a problem in specific nations. In 30 developing countries, the IMR of girls is considered to be significantly higher than that of boys.

There is also the Neonatal Mortality Rate (NMR) which is strongly related to issues in medical technology, such as neonatal intensive care, which frequently requires highly advanced technology.

5.2.2 The Maternal Mortality Rate (MMR)

According to new estimates, such as those of WHO, 585,000 women throughout the world die due to pregnancy and delivery every year, but 99% of these deaths occur in developing countries. As such, the MMR is a public health indicator which shows the wide disparities between industrialized and developing countries. The MMR reflects gender inequity in particular, and indicates not only the pregnancy- and delivery-related risks, but also women's general health, and furthermore, social and economic status of women. Being further medically related, the MMR can be considered as an indicator which reflects the impacts of health care services toward women.

The MMR refers to the number of deaths due to pregnancy or its control, or any illness deteriorated by pregnancy or its control during the pregnancy term or within 42 days after the end of pregnancy for every 100,000 births. The MMR from 1991 to 1993 was 7 in industrialised countries, while it was 328 in developing countries (518 in the poorest countries). Though the IMR has significantly improved in recent years, the MMR, which is an indicator of women's health, has shown no signs of improvement.

The breakdown of maternal mortality includes 80% for direct obstetric death caused by complications, presence or absence of treatment, and inappropriate treatment in various periods of pregnancy (early period of pregnancy, middle or late period, delivery, and the puerperium). Other 20% consist indirect obstetric death caused by disease existing from before pregnancy or disease that occurred accompanying pregnancy (anaemia, malaria, cardiovascular disease, hepatitis, diabetes, etc). The former causes include bleeding (25%), septicaemia (25%), and toxemia of pregnancy (12%), but unsafe abortion is also considered a frequent cause.

The short-term targets to reduce maternal mortality are as follows:

- i. A reduction in the number of unsafe or unwanted pregnancies (e.g., through improved family planning).
- ii. A reduction in obstetric complications (by conducting thorough medical examination of pregnant women, and improving the precision of such examinations).
- iii. A reduction in mortality of patients suffering from complications (by refining systems for the provision of emergency obstetric care).

From a long-term perspective, it is necessary to improve women's social status and household environment, which bring women easier physical, economic, and socio-cultural access to health care, and to strengthen the position of women by expanding the health-care system in terms of quantity and quality.

There is a methodological problem regarding maternal mortality and it is currently difficult to accurately measure MMR. Almost no developing country has a complete birth registry or death registry system, resulting in poor baseline data. Also, as the MMR is expressed as the number per 100,000 persons, delivery itself is a relatively rare phenomenon, and its value is wide-ranging, which is another problem with the MMR as an index.

There are estimation methods as follows:

- i. Household survey
- ii. Sisterhood method
- iii. Reproductive age mortality survey (RAMOS)

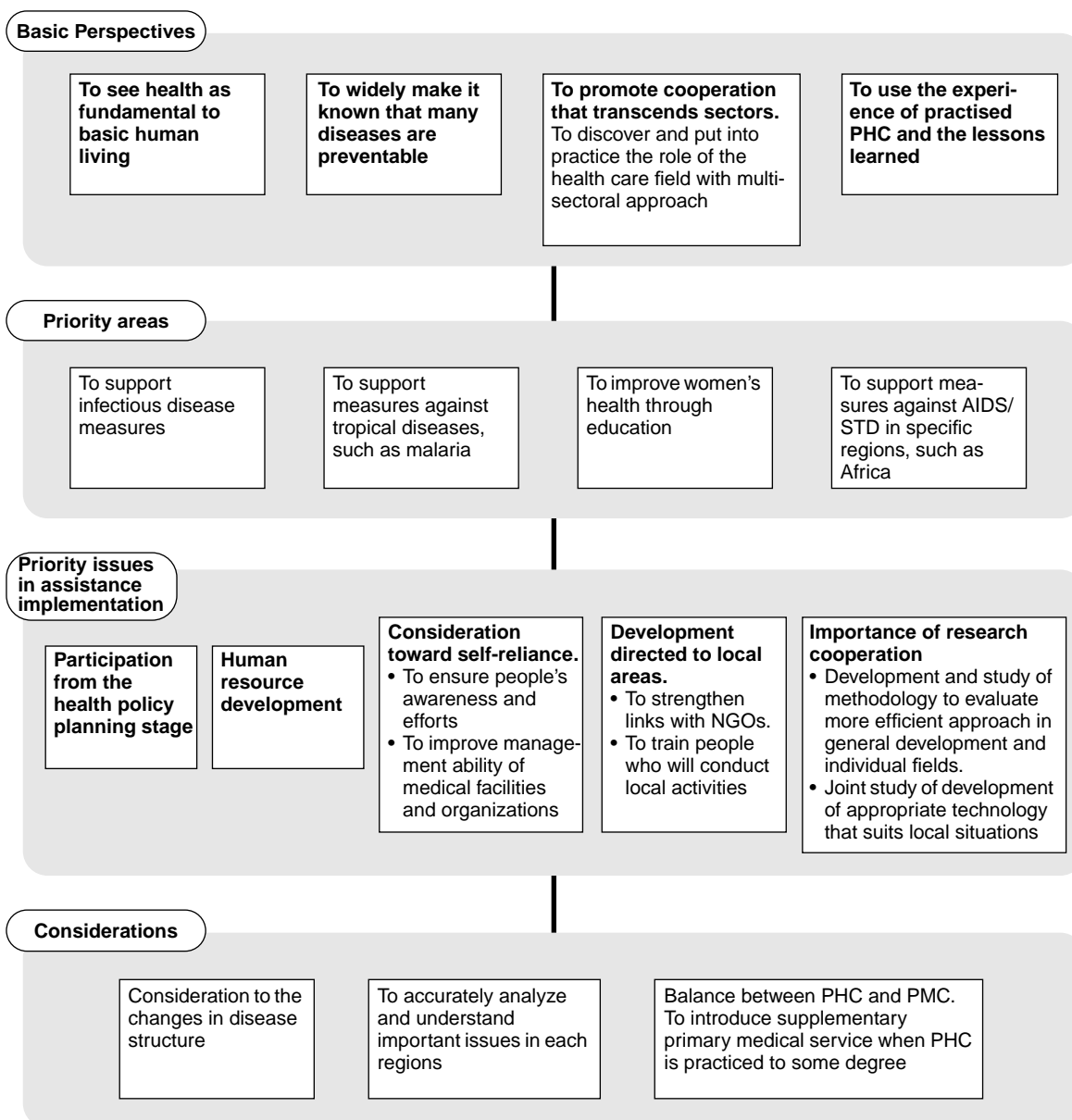
The first method requires a large sample size as well as costly and time-consuming. With the second method, a rough estimate value can be obtained, though it tends to be an underestimate. The last method is relatively widely accepted and it is newly used by WHO, etc. which conventionally calculate the MMR by estimating the cause of death of every woman at reproductive age from 15 to 45 from various data.

5.2.3 Other Indexes

Related to WID, safe pregnancy, and reproductive health, other indexes of the MMR are as follows:

- Total fertility rate
- Life expectancy at birth (total)
- Life expectancy at birth (male)
- Life expectancy at birth (female)
- Contraceptive prevalence rate (CPR)
- Percentage of childbirths attended by health workers
- Percentage of pregnant women immunized against tetanus
- Percentage of low-birth-weight infants
- Immunization coverage
- Percentage of population with access to safe drinking water.

6. Framework for Japan's Assistance for the Implementation of the DAC's New Development Strategy (Health Care)



6.1 Basic Perspectives

Regarding health care, both citizens and health administrators should understand that many diseases can be prevented and they should be aware of the specific methods for prevention. Furthermore, everyone should realise that good health is the foundation for a wholesome life at home and for social activities in any country, any region, at any time, and that it is a fundamental prerequisite for personal growth and social development.

Dr. William Henry Welch, the founder of the Johns Hopkins University School of Hygiene and Public Health, which was established in 1916 to train development specialists in health care, said in 1892, "to improve the regional hygienic condition and people's health is a large social investment". However, it is difficult to evaluate the results of development by using economic indexes alone in very basic areas where the economic efficacy is not clear in the short term, such as health and education. Other indexes are therefore needed.

The HFA (Health for All by the Year 2000), which was advocated 20 years ago, is a wide concept. PHC is a specific strategy for that purpose and it is true that considerable results have been achieved towards HFA. This is because firstly, PHC, a novel yet clear strategy, was established, and secondly, considerable practical efforts have been made by sympathized persons at all levels.

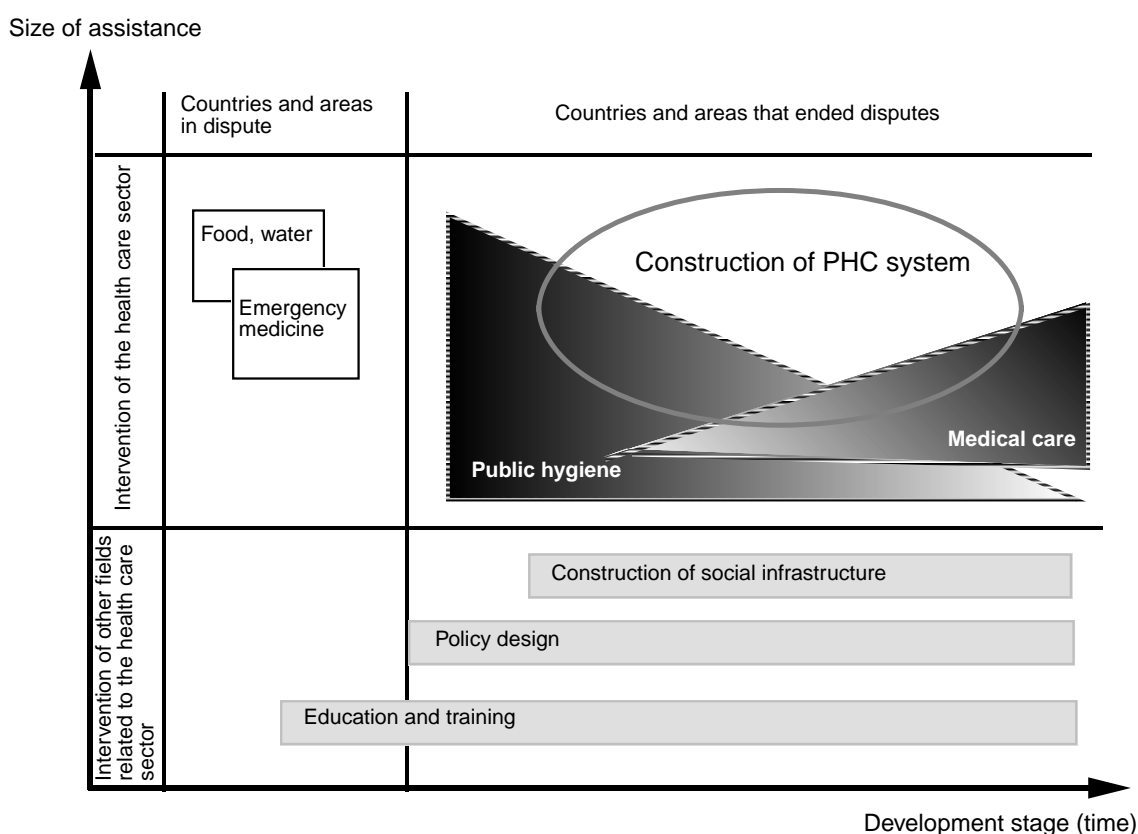
The NDS can bring more effect than that of HFA by seeking and practicing the role of health care in multisectoral comprehensive approach. However, multisectoral approach typically require enormous sums of money and an excellent coordinator to play a leading role. It is also important that people managing projects on a long term basis, including distribution of limited funds, become involved from the policy making stage. Moreover, in order to foster the development of a harmonious society, it will be essential to consider reducing military expenditure and other such expenses.

On the other hand, aid donors must be evaluated in terms of their professionalism in development in health care field which include complicated issue. By the same token, it is urgent to cultivate the necessary human resources. In fact, it will be necessary to devise structures that enlist experts with interdisciplinary experience and wide-ranging practical experience, rather than specialists in the singular field of health care in industrialised countries or benevolent persons who seek to participate in medical practice in a developing country. Effective frameworks will also be needed to provide leadership training to personnel who are experienced in providing PHC and who has already understood the realities confronting development assistance in the developing world. In order to continue such a strategy over a long period, support system are needed and these require considerable time and cost.

6.2 Priority Areas

Many countries, such as the NIEs of Southeast Asia, have already experienced health transitions. In countries where shifts are occurring from a disease structure centred on infectious diseases to the one centred on chronic disease, such as habitual lifestyle diseases (adult diseases), there has been improvement in the basic indexes (the IMR etc.) used to determine development cooperation. Life expectancy has also prolonged. Donors must be prepared to set priorities for different types of assistance in such countries, bearing in mind this changing disease structure. Figure 6.1 shows this idea.

Figure 6.1 Intervention of Health Care in accordance with Stage



To that end, it is essential that they have the ability to identify and more effectively accommodate different stages of national or regional development. Cooperation that suits respective stages of development should be carried out, paying attention to the widening gaps between such countries and industrialised countries, among developing countries themselves as well as any domestic gaps. In some stage of development, effective cooperation is impossible if it only involves the health sector, so comprehensive packages of aid that transcend sectors must be considered. In some developing countries, rich urban districts and affluent social classes try to protect their vested interests, abandoning their obligation to assist development at the rural level, in effect leaving that task entirely to foreign aid. Something must be done to encourage such countries to rectify this attitude.

6.2.1 Measures against Malaria and Other Infectious Diseases

Infectious diseases, which at one time human beings seemed to have conquered, are sweeping the world as a new health threat. For example, the number of people who enter and leave Japan is almost 20 million a year and today's global transfer of people can bring a pathogen any region at a very distant place in a short time.

It is worthwhile for Japan to involve in taking measures against infectious diseases as a global threat to health. The measures will contribute to preventing infections from spreading directly to ordinary citizens as well as to solving issues on imported foods and distribution of goods economically. Scientifically, a long-term cooperation plan is required in order to study pathogens that hardly exist in Japan.

The absolute number of patients with tropical diseases, including malaria, is larger than the number of patients with any other diseases. In recent years tropical diseases have been increasing in the form of “imported” infections in Japan and there are many factors such as global warming, that could contribute to spreading them. Internationally, there is not much inclination to aggressively promote wide-ranging malaria measures, due to past bitter experience, but pilot projects are being conducted in specific regions. Japan will also need to actively participate in an international cooperation network, including drug resistance issues, in addition to its own activities.

6.2.2 Measures against HIV Infection, AIDS, and Sexually Transmitted Diseases

In developing countries, especially in traditional rural villages, women are still taken as passive figure. This passiveness (vulnerability) is one of the backgrounds that women work (or are forced to work) in sex industry easily. Consequently, women frequently get sexual transmitted diseases, such as HIV/AIDS.

Although the increasing pace of the number of people infected with HIV has slowed down, HIV may spread epidemically in some Southeast Asian countries in the next several years. To involve in measures related to women’s education is possible and desired.

6.2.3 Women’s Development and Education

At the opening ceremony of JICA’s maternal and child health project in Pakistan, the Japanese ambassador made a congratulatory address in the local language, saying, “a healthy society is formed through healthy mothers”, which was widely reported in newspapers. As is well known, when women’s literacy rate increases, the IMR decreases. In addition, the degree of school enrollment and knowledge among women positively correlates with their health status, as well as that of their family, especially their children.

Also, in a traditional society where women’s advancement in a society is discouraged, access to health care frequently exist as their only contact with their society. Therefore, through any chances possible in the filed of health care, women should have opportunities to receive education. It could be regular education or informal training.

As such, Japan has mainly provided cooperation in facility construction in health care field, but recent introduction of educational aspect is desirable.

6.3 Challenges and Considerations

Future challenges and considerations in the NDS in the health care sector is as follows:

6.3.1 Ownership and Partnership - Involvement from the Health care Policy and Program Formulation Stages

It is needless to say that each developing country is responsible for its development in general as well as in the health care sector. The role of outside partners is “to help strengthen capacities in developing countries to meet various requirements for sustainable development of various functions and service in health care, guided by the conditions and commitments in each country”, as is mentioned in the NDS. In the past development cooperation, participation of a developing country itself in the process of planning was rare or

almost nil, regardless of the national-level cooperation plan at the macro-level, or a project targeting a local area or an institution. For example, even if donors made a huge effort to make a plan for a recipient country, lack of consideration to current situation and the capacity of that country would lead to a deadlock in its early implementation stage. This will not only constrain the progress of the plan but also require large amount of money and labors to fix the plan.

However, developing countries may not be able to find enough reliable personnel for formulating their policies. Some government staff from the wealthy class and educated in industrial countries are not willing to acknowledge the problems affecting national people. Moreover, the personnel in the positions are replaced one another due to political instability. On the other hand, at local level, there is lack of intermediate-level managers, who hold decision power, and local people are not sufficiently equipped with a means and capacity to recognize the very factors which constrain their own health and what to do.

It is therefore crucial that aid donors and the recipient countries are involved equally in formulating specific plans as well as communicate each other and share their responsibilities. Even if this preparation stage takes time, attained mutual understanding at this stage will greatly facilitate the later process. For example, a small team, composed of experts from both donor and recipient sides, was set up to conduct a baseline survey (at JICA maternal and child health project in Pakistan). Having analyzed the survey result together, the team members were able to share the issues and constraints and to formulate a plan successfully. In the case of JICA maternal and child health project in Cambodia, JICA was involved from the stage of formulating a health plan with the Ministry of Health (as Cambodia was in the reconstruction stage). These projects had long preparation periods along with appropriate personnel. This had brought true partnership with trust, while related persons in developing countries who participated in the projects were aware of ownership.

With national-level development cooperation in developing countries, in which various needs in each field are accumulated, it is also desirable for donors to participate in the stage of determining a health policy and in the process of priority-setting in that stage. To give advice so that a developing country can make a more rational plan is also cost-effective. If Japan is involved from the planning stage, she can know which donor will be involved in which part of the plan as well as understand its background, process and problems. This further enables Japan to take practical measures for implementation. In this process, however, Japan has to respect fully the ownership of a recipient country. Such an attitude is even more important in the case of multisectoral assistance or program-type assistance based on a long-term prospects.

Presently, health system reform is being conducted in various countries and cooperation to the very national policies, such as introducing insurance systems and privatisation, will be increasingly important in the future.

6.3.2 Consideration for Sustainability

One reason why development cooperation programs in the health care field fail to take root is related to the issue of ownership. Foreign aid donors sometimes formulate and implement the plans based on their decision.

As has been mentioned repeatedly, health care issues arise from their tradition, customs and habits. Therefore, unless the people suffered from ill health are aware of the causes and have the strong will to explore countermeasures, the situation will easily revert when assistance withdraws, even if temporary improvement has been made. Also, such repetition can result in dependence on assistance. Regarding sustainability, it is most important for people to realize their problems and to have a strong will to continue to improve the situation. As economic profitability cannot be expected particularly in the health field, ensuring sustainability still remains as the most important issue.

Along with decentralization, cost-sharing methods such as an user-fee system and a revolving system for financial sustainability have recently been introduced. Unless equality and transparency are assured, however, it is difficult to continue such methods. In order to maintain the health care service that satisfy people's needs, not only supply side but also recipients need to equip a strong commitments to keep the service sustainable. Even if it is just a small basic intervention, giving assistance as a charity brings harm in the long term. From these aspects, collaboration with local NGOs is important to be involved in regional activities positively.

There are various support divisions in the area of public hygiene service provision other than large-scale medical facilities, where wide-ranging knowledge and technology are accumulated. They include the formulation of surveillance plans, analysis of the results, purchase and change of necessary drugs, management of water supply and sewerage, and quality control of nutrition and foods. Moreover, assistance to enhance management capacity is important.

Such institutional capacity building is essential in any fields, but especially in the health field, human resource development centered on management capacity is the future challenge for hospitals and health posts, where facilities and systems are relatively organized. In addition, cooperation for building a constant drug supply system as well as basic diagnosis and examination system, which are extremely insufficient in most developing countries, is important.

6.3.3 Qualitative Improvements in Medical Care and Research-oriented Cooperation

Where PHC has been practised to some degree, it will be necessary to introduce supplementary medical care as well as quality enhancement. In fact, prevention does not eradicate all problems, and case management also requires a certain level of effective primary medical care. As a referral system (which introduce patients from basic facilities to advanced medical institutions in accordance with the level of disease and injury) does not work well. As a result, patients are concentrated at the high medical level, making responsibilities of each level vague while giving pressure on medical facilities financially. The issues should be tackled by participating in the policy planning stage, as mentioned earlier. For example, an effective obstetric emergency care system, including blood transfusion and emergency transfers, is an urgent issue also for preventing pregnant women dying. Regarding intervention in tropical parasitic diseases such as malaria always include treatment of infected patients, human vectors of pathogens.

The next step is study cooperation, and two types can be pointed out.

As present, we are not allowed to provide temporary assistance without considering long-term effects or impacts. Japan, as the top donor, is obliged to study more efficient measures in general and in individual fields. For that purpose, Japan needs to realize the situations particular to each developing country and to cooperate in the basic fields, including epidemiological surveys based on long-term prospects, in addition to supporting studies based on novel ideas centered on local people. Japan should also enable development cooperation experts in the health care field to enthusiastically challenge field-oriented innovative research backed by novel ideas.

The other study is a joint study in the health care field. Japan should prepare a support system in which personnel in developing countries explore appropriate technologies for local situation, rather than introducing advanced technologies, with the collaboration with outside partners.

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1. The Environment: Basic Issues

1.1 The Environment as Resources

Most components that comprise the environment also support the socio-economic system by providing a 'place' for the socio-economic system and 'sources of energy and materials' for economic activities. Their circulation structure (from absorption to dissolution, and to assimilation of wastes) help the socio-economic system working. If these components are regarded as resource, the environment itself (that is composed of these components and the circulation structure) is the resource.

There has been few studies and theories on the environment as resource. Economic value of the environment as resources has been considered only through the price of products produced by using the environment, or through economic loss as a result of damage done to the environment. The value of various functions and services of environmental resources has been excluded. Taking forests as an example, the economic value of functions and service of forests, such as nurturing water sources, good-quality soil production, prevention of topsoil erosion, supply of a good-quality and constant nutritious source to the water system, supply of regional living materials, mesoscale climate stabilization, and a place of cultivation of aesthetic sentiments and environmental education for children, has long been excluded from the subjects of consideration or theorization, as a non-money issue. We have to ask, in addition to direct economic value, how such functions and services of environmental resources that support regional development from the bottom could be valued. Presently, interdisciplinary study on "the environment and the economy" is being promoted, and various values of the environment as resources are actively re-recognized, studied and theorized.

1.2 Meaning of Deterioration/ Loss of Environmental Resources

Deterioration/ loss of environmental resources has at least two meanings. First, deterioration of environmental resources, in terms of environmental pollution, means deterioration of soil, water, and air that directly threaten the health of people and living creatures. The polluted substances directly or indirectly (such as concentration, transformation and transportation) reach the human, which are positioned the highest level of the living creature, and threaten their health. Ill health hinders economic and social development in terms of both providing and securing good-quality and stable labors at national and regional levels. In addition, ill health gives great damages on families, the basic unit of a society. For example, coastal industrial development from the 1960s, based on heavy and chemical industry, had a great effect on the surrounding region as well as families in that area.

Second, humanís activities transform and destroy the circulation structure of environmental resources, resulting in a change or destruction of the basis of regional and national development on a medium- and long-term. Pursuit of development can be viewed as the cause of the destruction of development base itself. Water resource development, agricultural, forestry, and fishery development, industrial development, and social infrastructure building always risk the destruction of the regional development base when they are planned and implemented without understanding the circulation structure of the environ-

ment in that area. The environmental pollution can be considered a problem in this meaning, if polluted crops lost the market value and thereby hindered the regional development. In this case, the circulation structure includes not only the circulation within environmental resources but also the circulation between the natural (primary products) and socio-economic systems (consumption). The effort to avoid destroying the circulation structure of the environmental resources is most essential to national and regional development for the developing countries where they depend on the exploitation of environmental resources (such as in the primary industry) along with insufficient practice of measures against harmful substances.

1.3 Environmental Resources and Global Environmental Issues

The global environmental issues greatly affect the deterioration of the condition of environmental resources. However, its impacts vary depending on the functions of environmental resources such as forests and coral reefs. The environmental issues such as the increase of carbon dioxide, ozone pollution, and acid rain are generally described as the global environmental issues, because their impacts can expand to the global level or over vast areas. However, its very impacts are deterioration and loss of its potential of the environment as resources or as a base of regional development. Rising temperature and the climate zones shifting, accompanying the increase of carbon dioxide, bring changes in a regional natural system that comprises soil, forests and water, and risk the total destruction of the base of agriculture, which people have built strenuously. If global warming occurs, thermal movement will be bigger, and hurricanes, flooding and drought are expected to occur more frequently in some regions, in addition to the problem of the climate zones shifting. Depletion of the ozone layer will essentially threaten the reproduction of creatures in both land and water spheres. If acid rain gave a damage on the vast forest area, it means the functions of the forest such as nurturing water resource, soil-retaining, will also disappear. These will give negative impacts on the regional development extremely. What is common to these issues are that, first, the influence substantially increases when a phenomenon exceeds a certain level, second, reverting the situation becomes very difficult when the phenomenon itself becomes irreversible. Moreover, such impacts can affect the basis of the socio-economic system on a regional or global level. Further, it is difficult to say if the general influence mentioned above will be within the range of what we are experiencing or anticipating at this point in time, or if it will exceed it by far.

From a different viewpoint from the above, such global environment problems as global warming, deforestation, acid rain, desertification, and ocean contamination in the wide area also can be said to be resource issues. The reason for this is that environmental resources themselves have functions to reduce global-level influence or absorb causative substances. Forests' function as a carbon dioxide absorption source is well known, but recent studies have been clarifying that coral reefs also have a similar function. Both forests and coral reefs are integral to retaining biodiversity in wide-ranging spheres (land and water spheres). An ecosystem with rich biodiversity is known to have higher resistance toward environmental change than a simple ecosystem. Some forests greatly contribute to mesoscale climate stabilization. Furthermore, genetic resources are nurtured by forests that have diversity. How much the ecosystem, characterized by diversity, can resist the

changing global environment greatly depends on the speed of its change. If diversity is lost, it means that we lose the means to cope with global environment problems. Also, considering from the viewpoint of genetic resources, it means the loss of opportunity to support future human society. Appropriate management of environmental resources is indeed a matter that affects the future of the earth.

As to the NDS goal “to ensure that current trends in the loss of environmental resources are effectively reversed at both global and national levels by 2015,” the difficulty in achieving the target and the time required for achievement may largely vary, depending on how the influence of global environment problems emerges in a wide-scale region that transcends national boundaries, such as the Asian region. A further in-depth and more systematic observation will be needed.

1.4 Inseparable Tie with the Economy and Society

Environmental problems occur due to the pressure of human socio-economic activities on environmental resources, and the generated problems cannot be fully addressed by technical measures alone, calling for economic and social measures as well. As such, environmental problems, from their generation to treatment, are inseparable from society and economy. In order to appropriately manage (use and preserve) the environment as resources, as well as to maintain the function as a place of production and a place that creates social service, measures that appropriately combine economic, social, and technological means are required: a management plan that integrates soil, forests, and water; a land tenure system; a participatory land utilization plan; a legal system that guarantees and supports human rights and participation; appropriate prices of products; an infrastructure and a market that connect production and consumption, and introduction of technology that fits to the features of regional environmental resources. Also, it is necessary to study policy measures, from the trade and market aspects, that lead to appropriate management of environmental resources at a place where they are used (often exploited).

2. The Goal of the DAC's New Development Strategy

The goal is set up as “there should be a current national strategy for sustainable development in every country by 2005, to ensure that current trends in the loss of environmental resources are effectively reversed at both global and national levels by 2015.”

This goal is evaluated in the point that the environment is regarded as resources. This conforms to the viewpoint on environmental problems mentioned earlier, and it is a good starting point to recognize environmental resources as the basis of regional/ national development, and to study measures for their sound usage and preservation, or management. However, it is not sufficient to focus only on the ‘loss of resources.’ ‘Deterioration and loss of resources’, which means both quality and quantity, should be a target. In the cases of agriculture, forestry, and fishery, which depend on environmental resources, we must not forget that deterioration (not loss) of the environmental resources concerned will damage productivity and greatly affect the industry concerned or the regions. The International Food Policy Research Institute points out that, “natural resources, which are the basis of future food production, have been deteriorated to a dangerous state. Almost 2 billion ha of farmland has suffered degradation over the past 50 years, and around 180 million ha of forests disappeared for other usage in the 1980s.”

In the goal, establishment of a current national strategy by 2005 is advocated. Various strategies for conservation of the environment on the national level have already been made. However, improvement has not been seen in environmental resources. Why is that so? Without answering this question, it is hard to expect that the national strategy determination will automatically result in reverting the loss/ deterioration of environmental resources by 2015. There is a wide gap between determining a strategy by 2005 and reversing the trends in the loss/ deterioration of environmental resources by 2015. Objectively speaking, bridging the distance between the targets for 2005 and 2015 can be assumed difficult. The future prospects regarding poverty by the 2010 Committee of the Economy Council of the Economic Planning Agency of Japan are as follows:

- The population of the earth in 2010 will be about 7.2 billion, and the majority will be represented by people in developing countries, due to population explosion. This will work as a factor to continually expand the income gap throughout the world.
- Looking at the changes in the economic growth rate, the population growth rate, and the income gap among developing countries (in the Gini coefficient) over the past 10 years in each region, the South-South gap will continue to expand.
- Economic progress centered on primary products, except for petroleum, will become less advantaged, and the gap between South and North, and between South and South, will expand.
- In developing countries, it is difficult to generalize if the gap among each of income classes and social groups will expand or improve, but it is hard to expect that the present remarkable gap will rapidly improve by 2010.

The situation assumed here means that factors that inhibit appropriate management of environmental resources will not be eliminated; rather, they will become more serious at both national and regional levels. In particular, it is difficult to expect improvement of the situation in developing countries that primarily depend on primary industry that directly uses environmental resources.

On the assumption of the above-mentioned scenario, reversing current trends in the deterioration/ loss of environmental resources by 2015 will demand changes in industrial structure to decrease pressure on the environmental resources and radical improvement of the pattern of development in developing countries. This cannot be handled at all by such approach as cleaning up the environment. This is a target that cannot be achieved without reforming the structure itself that poses pressure on environmental resources. In the national environmental strategy that will be determined by 2005, it is necessary to achieve general standards for environmental pollution protection, but that is not enough. Reform of the structure that poses pressure on environmental resources must be studied in the national environmental strategy. In this regard, several suggestions can be made. *First, the regional perspective should be incorporated in the national strategy.* In the regional development plans and sector development plans, which are main parts of national development, planning and implementation of appropriate management of regional environmental resources should be clearly incorporated. Also, the tactics that guide planning and implementation of a region-based plan should be incorporated into the national strategy. *Second, measures against the structure that poses pressure on environmental resources - pressure factors toward environmental resources - should be incorporated.* In other words, we should study, various development policies and development systems, disparity in wealth, the land tenure system, etc., from the viewpoint of desirable management of environmental resources, in the process of establishing the national strategy policy. This cannot be conducted only by the ministries and agencies in charge of the environmental sector. *Third, mutually related environmental resources should be treated in an integrated manner.* This cannot be fully conducted by national-level consideration, but regional-level where various environmental resources are related mutually. Instead of individually handling environmental resources (pay attention to the point that many international and domestic standards are individual standards), we should make in-depth observation on the mutual relation and the circulation structure of environmental resources in regions, relation between land and water areas, relation between the socio-economic system and the environmental resources system, and others, and thereby the content that guides establishing a plan based on this work should be incorporated into the 'environmental strategy'.

In order to incorporate the above three points into the national strategy, it is essential to ensure participation of the development-related ministries, local governments, region-related organizations, and citizens in the process of establishing the strategy. As is mentioned later, not only ownership of the government of the developing country but also regional ownership must be displayed. Also, diverse and creative approaches that emphasize diversity of nations and regions must be considered. This is a main reason why the partnership between the donors and the host country, as well as between the central government and the regions, is required. It should be noted that the ownership and partnership emphasized in the NDS are the principle that has to be carried through during the entire process of establishing a environment strategy.

Regarding the criteria for evaluation of improvement, global and national standards are presented. They can be understood as evaluation criteria for environmental pollution, but they are not suitable as evaluation criteria for the deterioration and loss of environmen-

tal resources. We should seek for criteria that can guide the implementation of the environmental strategy, which has the above-mentioned content, and that can evaluate specific performance.

3. Diversity, Scope, and Challenges in the Environmental Issues

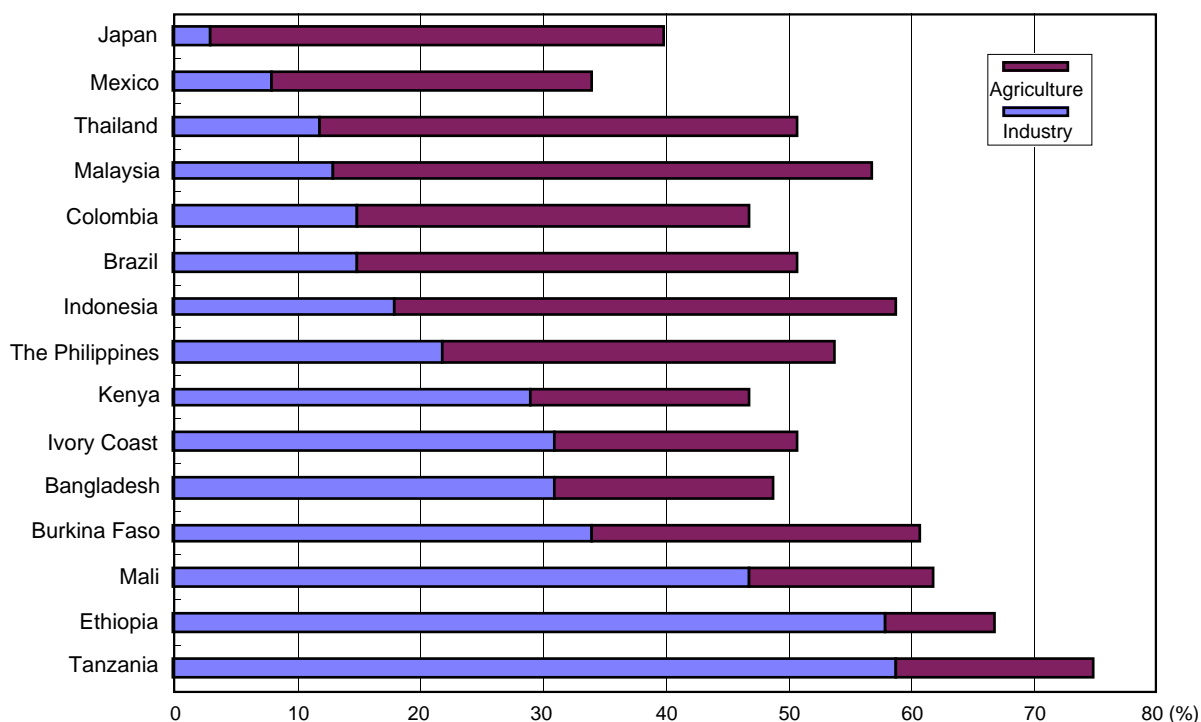
3.1 Diversity of the Environment and Socio-economic Development Stage

There are various phenomenal forms of environmental problems, and various impacts on communities and nations. This is clear from the differences in socio-economic systems that pose pressure on environmental resources, differences in environmental resources subjected to that pressure, and differences in the social and economic conditions that receive responses of the environmental resources toward the pressure.

The quality and quantity of factors that pose pressure on the environmental resources greatly vary depending on the industrial structure and the socio-economic development stage in each nation (Figs. 3.1, 3.2). The pressure toward water, soil, and forests is largely different between a nation or region primarily dependent on agriculture, with a high population of farmers, and a nation or region centered on a secondary industry. In developing countries which depends on agriculture with a high rate of agricultural population, direct influences on water, soil, and forests are great. In general, together with low agricultural productivity and pressure from an increasing population, there is high motivation to expand farmland. Therefore, environmental resources of forests, soil, and water are under a constant and increasing threat. Also, various difficult problems are caused, such as water and soil contamination accompanying inappropriate use and management of agricultural chemicals and chemical fertilizer for the improvement of agricultural productivity, and in the long term, lack of organic substances in soil, and lowering resistance against pests and diseases. In middle-income countries, which are in a transition process from agriculture to industry, the direct threat toward environmental resources as mentioned above tends to reduce, but there would be more pressure on water, air, and soil affected by industrial development. In these countries, due to insufficient economic surpluses and weaknesses in strict application of legal systems (though there is an issue as to whether or not the regulations and standards are appropriate), it is frequently seen that serious environment pollution problems in the regions concerned have not been solved. From a cross-comparison of the relation between the environment and development pattern and the development level at the present time, diversity can be observed, but it is necessary to pay attention also to diversity in the courses of economic and social development that respective nations will take in the future.

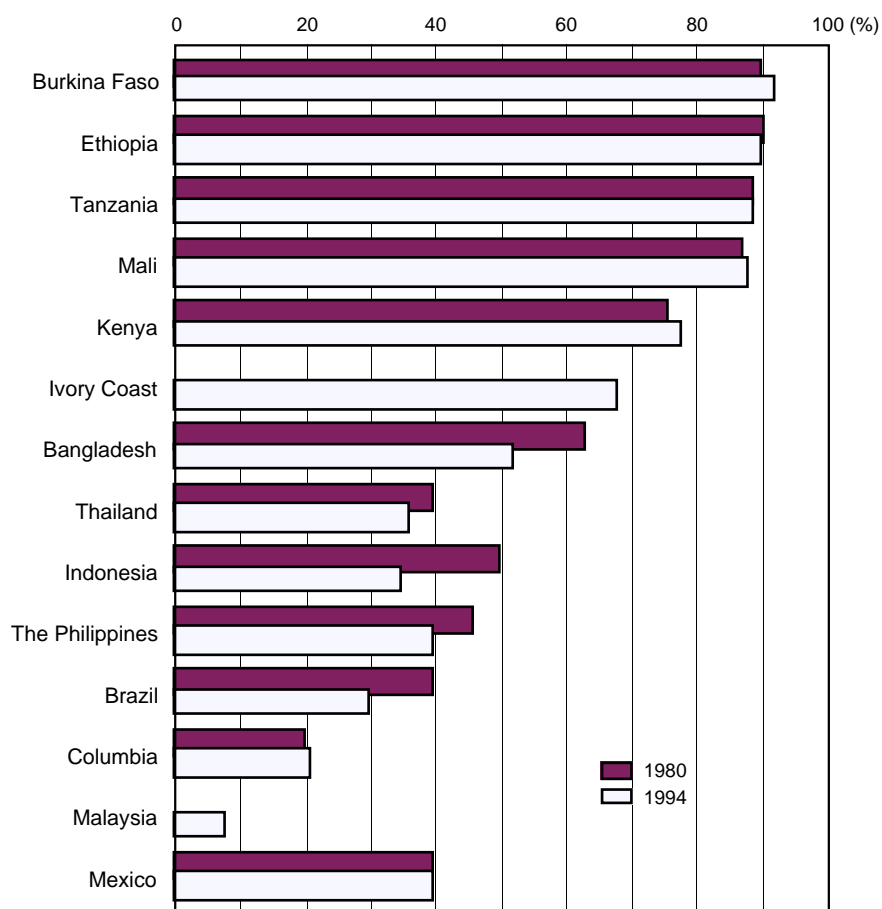
The difference in environmental resources subjected to pressure causes a difference in reaction of environmental resources toward the pressure, even if the development activity is of the same nature superficially. Taking road construction and the creation of farming land as an example, in the tropical zone, which has laterite and easily-washed-out soil, exfoliation and washing away of topsoil, the decrease of soil fertility, the influence on the water and ocean areas, and furthermore, the influence on fishery, are greater than in the temperate monsoon zone, which has fertile soil with restorative power.

Figure 3.1 Production Structure (% to GDP), 1995



Source: prepared by the writer based on World Bank (1997b).

Figure 3.2 Share of Traditional Fuel (ratio to total energy consumption)



Source: prepared by the writer based on World Bank (1997b).

The impacts of the above-mentioned reactions of environmental resources on a society and economy are also different, depending on the developmental level. Many of the reactions of environmental resources that can be solved by the economy and technology, often cannot be solved in developing countries that are weak in terms of economic and technical capacity. Not only the industrial pollution problem but also this weak capacity in developing countries is a significant problem, particularly for a regional society that depends on agriculture, forestry, and fishery that directly use environmental resources.

The above three points indicate the necessity of diversified environment approaches in accordance with the diversity of development levels and economic structures in regional societies. Because of such diversity, the courses of economic and social development that industrialized nations have experienced in the past several hundreds years, and the experiences of success and failure in the environmental resources management issue, cannot be applied as they are, or they are difficult to apply to developing countries. In studying and implementing diversified environmental approaches, it is essential to gain knowledge on the dynamics of regional environmental resources in the regional societies of developing countries, and to come up with techniques and rules for the utilization and management of regional environmental resources. This cannot be achieved without partnership, and this is why the importance of partnership is emphasized in the NDS.

3.2 Scope and Challenges in Environmental Issues

It has been seen that there are various phenomenon of environmental problems as well as different impacts on a society and economy due to the diversity of development stages and the environment itself. From the existing environmental problems of developing countries, several common scopes can be pointed out: *1) health risk; 2) productivity risk; 3) urban-rural risk; and 4) constraints in institutional capacity and human resource development*, which underlies the other risks.

Health risk is generated along with industrial development and agricultural development. The degree of influence on flora and fauna, and people varies, depending on the types and scales of industries and agriculture (degree of energy consumption, degree of the environmental load due to harmful substances, etc.) and location (coastal, inland, urban area, etc.). The impact due to agricultural development will vary, depending on the type of agricultural chemicals used, as well as the way agricultural chemicals and chemical fertilizers are used.

Productivity risk is a risk that causes deterioration and loss of environmental resources, along with development of agriculture and forestry, fresh-water fishery and aquaculture, inappropriate slash-and-burn farming practices, overgrazing, excessive deforestation for fuel, etc. Their impacts also varies, according to the types of development of agriculture, forestry, and fishery (deforestation type/ coexistence type, resources circulation type, etc.; cash crop/ foods; development scale; used technology), location (urban area, forests, swamp), and scales. Industrial development also causes productivity risk, when it negatively affects agricultural land and fishery area.

Urban-rural risk is produced from the insufficient public sanitation infrastructure in urban areas when rural people moved to cities due to the impoverishment of rural areas.

In order to effectively cope with the above-mentioned four categories, the following four challenges must be addressed:

- a. Sustainable industrial development (health risk, productivity, risk),
- b. Sustainable utilization and preservation of environmental resources (productivity risk),
- c. Reduction of environmental pressure toward urban areas/ improvement of the sanitary environment, and development and activation of rural areas (urban-rural risk), and
- d. Institutional building, with emphasis on the relation between development and environmental resources management.

The details of how they are addressed will be presented in the chapter 4, but what should be emphasized here is that in developing countries, industrial development, development of agriculture, forestry, and fishery (excluding traditionally well-managed agriculture, and environmental-resources-coexistence-type agriculture, forestry, and fishery), and population increase often directly result in increased pressure on environmental resources. It should be pointed out that, first, there are pressure factors against sustainable regional development through appropriate utilization of regional environmental resources. Pressure factors exist from the international to the regional level, such as pressure from international trade (changes in primary products' prices and environmental resources management), pressure from competition among countries (relaxed regulations and resources management standards to attract capitals), pressure from the emphasis on cash crops and export products, pressure from the poor (no alternative livelihoods other than swidden farming), pressure toward the community rules on the resource management (due to population increase and commercialization).

3.3 Embodiment of the Value of the Environment

These three risks appear partly because the value of targeted environmental resources is not embodied (even though recognized) on a national or regional level, and therefore, incentive of management is not generated (or it is difficult to generate). No incentive for management means that it is hard to consider it as a target in development policy, which tends to constrain generation of and to lose various values (refer to 1.2) of environmental resources.

To embody various values of the environment is naturally concluded from the viewpoint of 'the environment as resources'. *Agenda 21* says, "to promote further the integration of social and environmental costs into economic activities, and make prices appropriately reflect the relative scarcity and total value of resources" (Chapter 8)⁽¹⁾. Whether integrating social and environmental costs into economic activities affect management of environmental resources in primary industries that directly use environmental resources, such as soil, greenery, and water (which are also mutually related). However, the pressures from international trade (decreased price of primary products in the early 1980s has constrained appropriate management of forests and soil in developing countries) and competition among nations (competition to attract investment by relaxing resources management level

⁽¹⁾ Supervised by United Nations Secretariat (1993)

in nations that depend on wood exports) seem to make the integration of environmental cost, let alone social cost, into economic activities an extremely difficult challenge.

The main reason valuable nature and biodiversity are not preserved is because there is no incentive for such preservation, or at least there is no economic benefit for regions. As to how such economic benefit could be given to regions, several noteworthy trials have been made. One is a well-known 'debt-for-nature swap'. This is a means to preserve the valuable nature in a country concerned, instead of buying the country's debt sold in the secondary market, and there have been over 10 achievements. Although residents inside or around the swapped conservation areas were often forced to leave, and thereby the method was criticized at the beginning, an approach has recently been changed to coexist with related residents. The second approach is originated from the contract (in 1991, the third contract was concluded this year) concluded by Merck & Co., Inc., a U.S. pharmaceutical company, with the Instituto Nacional de Biodiversidad (INBio) in Costa Rica, which can be called a 'genetic resource patent' approach. Specifically, Merck pays to the INBio for two years' research regarding preparation of specimens of insects and plants in the nature protection area managed by the INBio. Additionally, Merck pays a royalty to the INBio when a sales profit generates from a drug developed using such specimens. The rate of royalty is 3%. A U.S. Professor Jansen, who was a leading player in this contract, has instructed the residents around the nature protection area how to prepare specimens of plants and insects, for many years. Preparation of specimens, as in the contract, is done by regional residents, who became semi-professional in preparing specimens.

Both approaches embody the economic value of precious nature and biodiversity, while they bring about economic benefits to a nation and a region concerned. It is also very important that they contributed to creating job opportunities for regional residents who acquired special skills, as in the case of Merck. On the other hand, however, the way regional residents are involved in the resource management is a key issue.

In addition to these approaches, there are other approaches that have been attracting attention in recent years, such as eco-tourism. However, there are some issues to be considered, such as prevention of risks that cause deterioration of excellent nature itself, participation of local people, and returning economic benefit to a region. In Japan, some rural areas that failed in agriculture and depopulation are activated as the places for children to experience and study at mountain villages. Here, environmental resources in these villages are utilized for environmental education and cultivation of aesthetic sentiments for children, who will shoulder the future, and at the same time, its utilization contributes to regional promotion.

4. Environment-related Points at Issue

Environmental problems basically occur from various relations between the nature system and the socio-economic system. Dealing with environmental problems therefore inevitably includes issues in the socio-economic system, such as international trade, regional trade, a nation's macro-economy and micro-economy, various social systems, and markets and industrial structures. With relations with such a large structure in mind, relations with the market, relations between regional development and poverty, and relations with institutional issues will be taken up as issues deeply related to achievement of the environmental goal in the NDS.

4.1 Relation with the Market

The relation between environmental resources management and the market can be considered from two-folds. First, there is a market that delivers products generated from using environmental resources to consumers, without discarding or decomposing them. Irregularity and poor access of local markets in developing countries are hidden factors that inhibits appropriate usage of environmental resources in rural areas.

The second is the formation of a market that promotes appropriate management of environmental resources. It is a system that, for instance, provides certification to enterprises or agricultural and forestry products that take a certain level of environmental measures, thus promoting improvement of environmental management at the production stage. This, on the other hand, makes it difficult for the products of the companies that are not given certification, or agricultural and forestry products without certification, to participate in the market. As a result, enterprises that do not address the environmental problem will lose competitiveness. This is a system that could be called 'market environment criteria'. The EU's Eco-Management and Audit Scheme (EU/EMAS), which were introduced in 1995, and the ISO 14000 series established in 1996 (environmental management system and an environmental audit system were established; environment labeling and life cycle assessment are under consideration) are targeting enterprise activities. Further, there is a system targeting natural resources, such as a wood certification/ labeling system, which is now being studied by the International Tropical Timber Organization (ITTO) while being implemented by the Forest Stewardship Council (FSC) ⁽²⁾. These systems are characterized by the introduction of environmental management at the production stage (improvement of the production process, resources-saving, and energy-saving by enterprises, sustainable forestry management, appropriate usage of agricultural chemicals, usage of organic manure, etc.) rather than just an end-of-pipe approach, which can be seen generally. Such efforts and performance are evaluated by the market, resulting in enhanced competitiveness of enterprises, and agriculture, forestry, and fishery producers/ organizations that conduct appropriate environmental resources management, while eliminating the enterprises, producers, and organizations that do not conduct it. Effective functioning of the market environment criteria will require adjustment of the international environmental discipline of the market, with regional uniqueness from the diversity of environment, society, and economy in developing countries. At any rate, it is desired to expand and strengthen the systems that have

⁽²⁾ A NGO established by the support of WWF in 1993

market environment criteria that encourage and strengthen appropriate environmental resources management at the production stage.

4.2 Regional Development, Poverty, and Environmental Resources

Regional development, eradication of poverty, and management of environmental resources are inseparably interrelated. *Agenda 21* describes this relationship as follows: To ensure substantial increases in economically efficiency of resource productivity and measures to ensure that the local population benefits fully from resource use; to rehabilitate degraded resources, and to introduce policy measures to promote sustainable use of resources for basic human needs (Chapter 3).

This perspective is extremely important in a country or region that centers its development on direct use of environmental resources, namely agriculture, slash-and-burn agriculture, forestry, and fishery. The fundamental challenge for regional development of a nation or a region that has a vast poor class; for instance, a poor farmer class that is often directly related to poverty, is to guarantee benefits of development to local people through the nation's or region's appropriate management of environmental resources. Elimination of poverty cannot be achieved without taking this course.

In order to achieve regional development and poverty alleviation at the same time, the region's appropriate management of environmental resources is a prerequisite. For that purpose, it is necessary to grasp the location of environmental resources, dynamism of environmental resources such as their mutual relation and its circulation structure, and potential of environmental resources as a development base at the regional level. However, grasping and analyzing the environmental resources conditions are only the first step. We have to look into the relation of environmental resources and people. The majority of poor farmers in developing countries often do farming in a region not blessed with good natural conditions (severe natural conditions). The disparity in wealth between the population group in a fertile region and one in a sterile region will widen if no measures are taken. It is well known that agriculture in a sterile region (marginal farming) involves much trouble in management of soil and water. Reforming this situation requires a firm policy that ensures access to land or an agricultural financing system for the poor class. The FAO says, "the objectives embodied in *Agenda 21* will only be realized if technology and policy are accompanied by participation, equity, and dialogue; enabling mechanisms; empowerment, and incentives" ⁽³⁾. Furthermore, it will be necessary to foster region-based industries and a related market. In short, it is necessary to start with thorough understanding of the region's potential for developing environmental resources, and then to construct and mobilize various measures, systems, and methods to realize "development of the people (main player of development), by the people (means of development), for the people (purpose of development)" ⁽⁴⁾ in order to stop unnecessary deterioration and loss of environmental resources. How far these three factors (regional development, poverty, environmental resources) in major development fields and regions should or can be covered in the "national strategy," which is to be prepared by 2005, will vary depending on the maturity of the plan-

⁽³⁾ FAO (1996)

⁽⁴⁾ JICA (1996)

ning at a regional level of rural, forestry, and small- and medium-size enterprise development at a national level. However, it is certain that a strategy with a focus on the relations among these three factors must be studied.

4.3 Institutional Building and Human Resources Development

In order to take an approach that integrates regional development, eradication of poverty, and environmental resources management, regional implementing organizations and personnel are essential. This could be further strengthened, by receiving policy, organizational, and economic support from the national government. Without any national support, or under a policy or system that restricts region-based activities, even excellent activities on a regional level, which can be a model for an entire nation, will become sluggish and unable to play a role as a model example.

Agenda 21 indicates the importance of “establishing new community-based mechanisms and strengthening existing mechanisms to enable communities to gain sustained access to resources needed by the poor to overcome their poverty,” and “empowering community organizations and people to enable them to achieve sustainable livelihoods”.

This indication includes important issues for ‘environmental strategy’: collaboration between the central government and local level; decentralization of decision-making powers; securing and fostering of local organizations and personnel; utilization/ improvement of traditional disciplines for environmental resources management in a region; and an institutional framework and economic support measures to secure access to resources. Though it is not clearly stated, region-based market formation, which is essential for regional development, will also be included in the issues of the strategy. These strategic challenges indicate basically issues such as a democratic system at a national level and the establishment of regional ownership.

Environmental problems have different features not only at the national level but also essentially at the regional level. The economic and social impacts of deterioration and loss of environmental resources constrain national management, but more direct and serious influences appear in these environmentally degraded regions. This indicates that participation of local organizations that are in a position to know (that have to know) the actual conditions of regional environmental resources, and their capability to study, formulate, implement, and monitor various plans, are essential for the prevention of and countermeasures toward problems. In order for local organizations to function as expected, strengthening of local institution and personnel, on the assumption of decentralization as mentioned, is essential.

The government agencies in developing countries seem to look at enterprises and farmers’ and fishermen’s organizations just as something they have to regulate and supervise. They tend to lack or have only a weak view of mobilizing the capacity of these groups, and as a result they do not seem to fully utilize the capacity they have in their own countries. Policy-planning and implementation agencies must fully understand the capacities of targeted enterprises, farmers and fishermen while mobilize their capacities to the best extent. From this viewpoint, the general issues such as institutional and system building as well as human resource development become specific challenges which reflect each nation’s or region’s characteristics by building appropriate institutions and systems and developing

human resources that maximize its own capacity. To combine the experiences of industrial countries with the national or regional features in each developing country is the first step. Moreover, the role of government are as follows: 1) to build an institutional framework (networking the related organizations, to set up a standard, and to formulate a basic plan) in which enterprises, farmers, agricultural associations and fishermen and fishing associations can participate and take actions; 2) to provide forum; and 3) monitoring and follow-up for support.

In addition to strengthening the capacity of the agencies in charge of the environment, capacity building of the development agencies, to manage environmental resources, is also important. It is necessary to create a system in which expertise and technical capacity of the development-related ministries/ agencies, and initiatives of the enterprises, groups, and organizations covered by the development-related laws, can be fully utilized for environmental resource management.

5. Aid Trends (The Environment)

5.1 Japan's Aid Trends

5.1.1 Outline

Environmental cooperation by Japan's ODA has intentionally been expanded since the Paris Summit in 1989. During three years since 1989, the implementation of environmental cooperation amounted to 407.5 billion yen, which exceeded the committed amount (300 billion yen) at this Summit. At the London Summit in 1989, Japan clarified its focus on tackling poverty/ population issues, which are closely related to environmental problems, as the new environmental ODA policy.

Moreover, Japan aimed at the cooperation of from 900 billion to 1 trillion yen for five years since 1992, at the United Nations Conference on Environment and Development (UNCED) in 1992. At the same year, the ODA Charter was established, proposing pursuing environmental conservation and development in tandem, as well as setting the global issues and poverty as priority areas for Japan's ODA. In order to achieve this goal, Japan has been active in promoting the environmental awareness among the governments of developing countries by policy dialogues, along with the formulation of specific development projects from the project finding surveys. As for loan aid, Japan has promoted the environmental conservation projects in developing countries by introducing the special interest for the environment (lower than the ordinary loan interest) in 1995. Many countries had requested for the environmental cooperation and this cooperation amounted to over 1.4 trillion yen for five years.

Furthermore, at the United Nations General Assembly special session on the environment in June 1997, Japan announced increased environmental cooperation mainly by Japan's ODA and the following two specific initiatives: 1) Initiatives for Sustainable Development towards the 21st Century (ISD) - the comprehensive ideas and lessons from the past environmental cooperation policies, 2) Global Remedy for the Environment and Energy Use (GREEN) - action programs for the climate change.

ISD is comprised of three norms: first, the environmental conservation is human security in a broad sense. Second, the self-help efforts and initiative (ownership) by the developing countries toward the environmental problems are important, and donors should support this (partnership). Third, donors should promote environmental cooperation with consideration to the development stage and the socio-economic situation in a recipient country from the perspective of sustainable development. Moreover, the Programs of Action to realize ISD were made in the following five areas: 1) air/ water pollution and wastes; 2) the global warming; 3) the preservation of environment (green issues and blue issues such as forest plantation); 4) fresh water; and 5) the environmental awareness raising and global environmental strategy towards sustainable development.

In December 1997, at the Third Conference of the Parties (COP-3) to the United Nations Framework Convention on Climate Change in Kyoto (UNFCCC), Japan presented "Initiatives for Sustainable Development toward the 21st Century (The Kyoto Initiative)" in order to further strengthen the measures against the global warming (one of the above-mentioned Programs of Action). This Kyoto Initiative is aimed at promoting the cooperation centered on the three pillars of: 1) cooperation in human resource development (training

3000 persons for five years from fiscal 1998, including trainees and experts and counterparts in project-type technical cooperation); 2) ODA loan with the most concessional terms (0.75% for 40 years); and 3) effective use and transfer of Japan's technology and experiences.

5.1.2 Trends in Bilateral Environmental ODA by Sub-field

The achievements of bilateral environmental ODA by sub-field are shown in Table 5.1. The cooperation in the field of housing environment (water supply and sewerage and waste disposal), account for 50-60% of the total, followed by the cooperation in the field of anti-pollution measures.

Table 5.1 Results of Environmental ODA

(Unit: hundred million yen)

Year	Housing environment	Preservation of forests	Anti-pollution measures	Disaster prevention	Others
1992	1,633 (58.2)	180 (6.4)	302 (10.8)	546 (19.5)	37 (1.3)
1993	1,374 (60.3)	169 (7.4)	391 (17.2)	136 (6.0)	48 (2.0)
1994	1,128 (66.9)	87 (5.2)	362 (21.5)	58 (3.4)	52 (3.1)
1995	1,296 (54.9)	252 (10.7)	183 (7.7)	453 (19.2)	176 (7.5)
1996	2,801 (62.6)	372 (8.3)	609 (13.6)	429 (9.6)	266 (5.9)

- Note (1) The results show the total of loan aid, grant aid, and technical cooperation (not including multilateral assistance).
 (2) () shows the percentage of each sector in the total of environmental ODA in the year concerned.
 (3) The others include the natural environment, environmental administration, and ocean contamination.

Source: Economic Cooperation Bureau, Ministry of Foreign Affairs (1997).

As to JICA's technical cooperation by sector, cooperation in the housing environment (such as waterworks, drinking water, ground water, sewerage and wastes) and in the green agenda (such as forest conservation) accounted about 50% of the total amount in fiscal 1996. On the other hand, cooperation in the brown agenda (such as pollution measures) has decreased its share from 20% in fiscal 1992 to 10% in fiscal 1996. Instead, the cooperation in the area of capacity building in complex and environmental capability increased (Table 5.2). Amongst the housing environment, the share for waterworks and sewerage and ground water for drinking water is high, accounting approximately 80%. Moreover, the share categorized as 'the other area' has been increasing every year, because 'the other' includes not only the transfer of environmental technology but also the design of monitoring plan and capacity building toward the environmental issues (such as institutional and organization building) as well as because the targeted fields has been expanding.

In terms of regional cooperation, about 50% of the total amount was directed at Asian region, followed by the cooperation to Central and South American region (about 20%).

Table 5.2 Results of JICA's Environmental Cooperation

(Unit: million yen)

	1992		1993		1994		1995		1996	
Air pollution	1,168	20%	1,041	16%	1,102	13%	495	13%	684	11%
Water contamination	1,728		655		706		468		1,886	
Others combined environmental pollution	589		1,796		1,088		1,917		168	
Water supply and drinking water	1,065	15%	2,820	22%	3,814	26%	3,561	21%	4,136	25%
Sewerage	585		978		602		524		1,215	
Wastes	830		883		1,305		617		1,064	
Forests/ greening	3,142	30%	3,993	28%	4,452	30%	4,462	31%	4,925	28%
Biodiversity	525		855		873		958		1,272	
Natural resources management	1,561		1,130		1,309		1,570		1,106	
Saving/ substitute energy	943	5%	1,201	6%	609	3%	1,216	5%	1,740	7%
Disaster prevention	4,340	25%	3,287	15%	2,959	14%	2,712	12%	3,379	13%
Environment management/ administration	215	5%	648	13%	693	14%	396	17%	201	15%
Environmental education	22		89		33		19		75	
Complex/ improvement of environment management, others	693		2,035		2,330		3,379		3,484	
Total	17,406	100%	21,411	100%	21,875	100%	22,294	100%	25,335	100%

Source: Documents of Environment, WID, and Other Global Issues Division, Planning Department, JICA

5.1.3 To Strengthen and Expand the Environmental Consideration

In order to promote sustainable development by making development and the environmental conservation compatible, as is the basic principle of the ODA Charter as well as ISD, it is essential to prevent and reduce the impacts on the environment in implementing a development project.

In 1989, a guideline for environmental consideration was formulated by OECF for the first time. This was later revised in 1995, setting that an environmental impact assessment report must be submitted if a project brings about large environmental impacts (especially social environmental impacts such as resettlement of local residents). This has been applied to projects requested since August in 1997. On the other hand, since 1990, JICA has also formulated its own guideline for environmental consideration in development surveys in approximately 20 areas (such as social infrastructure, agriculture, forestry, and fisheries, and mining and manufacturing). In addition, more than one person has been appointed for environmental consideration in each development survey team.

In 1993, OECF set up the Environment and Social Development Division while JICA established the Environment, WID, and Other Global Issues Division for enhanced environmental considerations. Both divisions are aimed at collecting and arranging environmental information, as well as promoting the method study on the environmental cooperation and information exchange with other aid agencies.

5.2 Trends among Major Aid Organizations

The trends in the environmental cooperation among the major aid organizations are shown in Table 5.3, and the overview is as follows.

5.2.1 Bilateral Aid Agencies

1) United States Agency for International Development (USAID)

In 1994, USAID presented “Strategies for Sustainable Development”, comprising the following five priority areas: a) population, health, and sanitation; b) the environment; c) democracy; d) economic growth; and e) humanitarian assistance.

As the strategic target in the environment field, two items are presented: a) the global environmental issues, especially to reduce the long-term threat due to loss of biodiversity and climate change; and b) to promote sustainable economic growth locally, nationally, and regionally by addressing environmental, economic, and developmental practices that impede development and that are unsustainable. Under these strategies, USAID aims to tackle global warming and loss of biodiversity as global issues, while to handle human health damage, deterioration of natural resources and water resources, inadequate management of household and municipal wastes in urban areas, environmental administration, and lack of local participation and empowerment, as local issues.

As USAID regards environmental cooperation limitedly, the environmental cooperation of the entire ODA accounts for around 9% (average of 1992-1995). Amongst the environmental cooperation, system and institutional building (such as environment planning and policy) shows the highest share, accounting about 30%, followed by the brown agenda (such as urban and industrial pollution measures) for about 20% and energy measures, production and usage of renewable energy for about 20%. The green agenda (such as forest and biodiversity preservation, environment-friendly agriculture and water resource management) comes next.

Regarding its approach, the environmental consideration is integrated in every aspect of other four priority areas. USAID focuses on the local level and intends to empower the individuals and civil society by reviewing the problems in education and policy. USAID also puts emphasis on post-evaluation, and is preparing the detailed indexes for not only project inputs but also evaluation of the project results and effects. As to implementation, the participation of NGO is regarded as important, and cooperation through NGO accounts for about 30-40%.

Table 5.3 Environmental Cooperation of Major Aid Agencies

2) Canadian International Development Agency (CIDA)

In 1995, CIDA clarified the purpose of ODA as “to support sustainable development of developing countries, to reduce poverty, and to contribute to a safer and prosperous society,” and formulated the following five priority programs: a) BHN; b) women in development; c) infrastructure development; d) human rights, democracy, and good governance; and e) the environment.

As to the environment, a policy on environmental sustainability was determined in 1992. This policy comprises three factors: first, environmental assessment (the CIDA’s development activities will not have a negative impact on the environment), second, environment programming (to help developing countries acquire technology necessary for addressing environmental problems), and third, leadership in domestic and international society (collaboration and coordination both at home and abroad).

The actual expenses doubled, from 30.7 million Canadian dollars (C\$) in fiscal 1989/1990, to C\$68.0 million in 1993/1994. This can be classified into the following three sub-sectors.

- a. Environmental conservation and management (preservation of biodiversity, management of national parks, sustainable management of natural resources, prevention of desertification, new and renewable energy)
- b. Capacity building for the environment management (construction and strengthening of environment training centers, support of environment NGOs, technical cooperation in the area of the environment, environmental education, etc.)
- c. Prevention and control of contamination (wastes management, measures against air and water pollution, measures against soil contamination, etc.)

Amongst the environment cooperation, the first two sub-sectors account for 95% of the total amount. Regarding capacity building for environmental management, cooperation are directed at non-physical area (such as environmental education) due to the small project scale (0.5-1.0 billion yen per project). Average achievements for the past five years in regional distribution are composed of 49% for Asia, 43% for Africa and Middle East, and 8% for Central and South America.

Regarding its approach, CIDA puts forward Capacity Building in Environment (CDE). CDE aims at realizing sustainable both environmental conservation and production by supporting development and economic progress for livelihoods. Its approach attempts in its implementation to build the capacity of every stakeholder (such as individuals and groups) and systems.

3) Department For International Development (DfID), UK

In a paper (*Eliminating World Poverty: A Challenge for the 21st Century*) published in November 1997, the DfID put forward a policy for global sustainable development, which promotes cooperation in health and sanitation, education, and the environment under the goal of eradicating poverty.

5.2.2 Multilateral Organizations

1) World Bank

The World Bank has three basic strategies to the global environmental issues: a) to strengthen the environmental management in developing countries through the support for the formulation of National Environmental Action Plan (NEAP); b) enhanced environmental considerations; and c) efforts towards the global environmental issues through Global Environmental Facility (GEF). The Bank's cooperation is mainly in the three areas: a) the brown agenda (pollution, urban environment); b) the green agenda (natural resources management, local environmental management; and c) institutional and capacity building.

Among the 166 environmental projects (US\$11.63 billion) that were conducted in 1997, 79 projects (US\$3.86 billion) are for the green agenda, 58 projects for the brown agenda (US\$6.76 billion), and 29 projects for institutional capacity building (US\$1.09 billion). In addition, 102 projects (US\$749 million) are for GEF/ Montreal Protocol (MP) ⁽⁵⁾.

The green agenda projects are aimed at promoting forest management and preservation of biodiversity while improving living, with participation of citizens and NGOs. Brown agenda projects have the largest expenses per item, as they include investment in pollution-prevention facilities and equipment. In particular, wastes management projects are increasing, and reduction in waste generation or other measures are incorporated in the urban development programs, instead of just symptomatic treatment. Projects for institutional and capacity building attempt to strengthen administration capacity so that environmental preservation measures can be taken at both national and local levels, such as by helping the formulation of NEAP and Local Environmental Action Plans (LEAP).

2) Asian Development Bank (ADB)

The ADB presented five development purposes in its Medium-Term Strategic Framework (1995-1998): i) promoting economic growth, ii) reducing poverty, iii) supporting human development, iv) improving the status of women, and v) preserving the environment. Regarding preserving the environment, the following four items are being conducted to achieve the purpose:

- a. review of environmental impact (project, program, policy);
- b. support through "Technical Assistance" so that governments in developing countries will incorporate environmental preservation measures in the development activities in the planning and implementation stage;
- c. promotion of projects that improve the environment and living;
- d. awareness raising on the importance of environmental aspects in economic development, among the ADB staff and governments officials in developing countries.

In 1996, environmental assessment reports regarding 21 projects were opened to the public and submitted to the board of directors for deliberation 120 days later. Also, ADB conducted support in making environment plans and arranging environmental regulations and standards, in order to enhance the capacity of developing countries themselves. Among projects for improving the environment and living, primary environmental projects (the

⁽⁵⁾ The Montreal Protocol on Substances that Deplete the Ozone Layer was adopted in 1987 as an international treaty to eliminate ozone-depleting chemical production and consumption.

environment component is over 50% of the total cost), such as environmental resources management, accounted for about 7% of public projects (US\$368.1 million), and secondary environmental projects (the environment component is over 20% of the total cost) accounted for 10% (US\$368.0 million).

6. Application of the DAC's New Development Strategy to the Goal of Reversing Environmental Depletion Trends

The NDS set out the target “to ensure that current trends in the loss of environmental resources are effectively reversed at both global and national levels by 2015”, and it presented ownership and partnership as the principles to follow. Also, establishment of a current national strategy for sustainable development (by 2005) is presented as a means to achieve it. Necessary conditions that a current national strategy, and basic action have been studied so far. The basic viewpoints and approaches are as follows:

- To view environmental problems as resource problems;
- To seek for flexible and various approaches that reflect the diversity of environmental problems.
- To place emphasis on a regional approach with the organic “place” as an unit, such as a catchment area, while paying attention to the stratified nature of the environment.

In addition to the above-mentioned basic viewpoints and approaches, the items to be considered in applying the NDS include measuring deterioration/ loss of environmental resources, efforts to reform the basic structure that creates environmental problems, capacity building, and ownership.

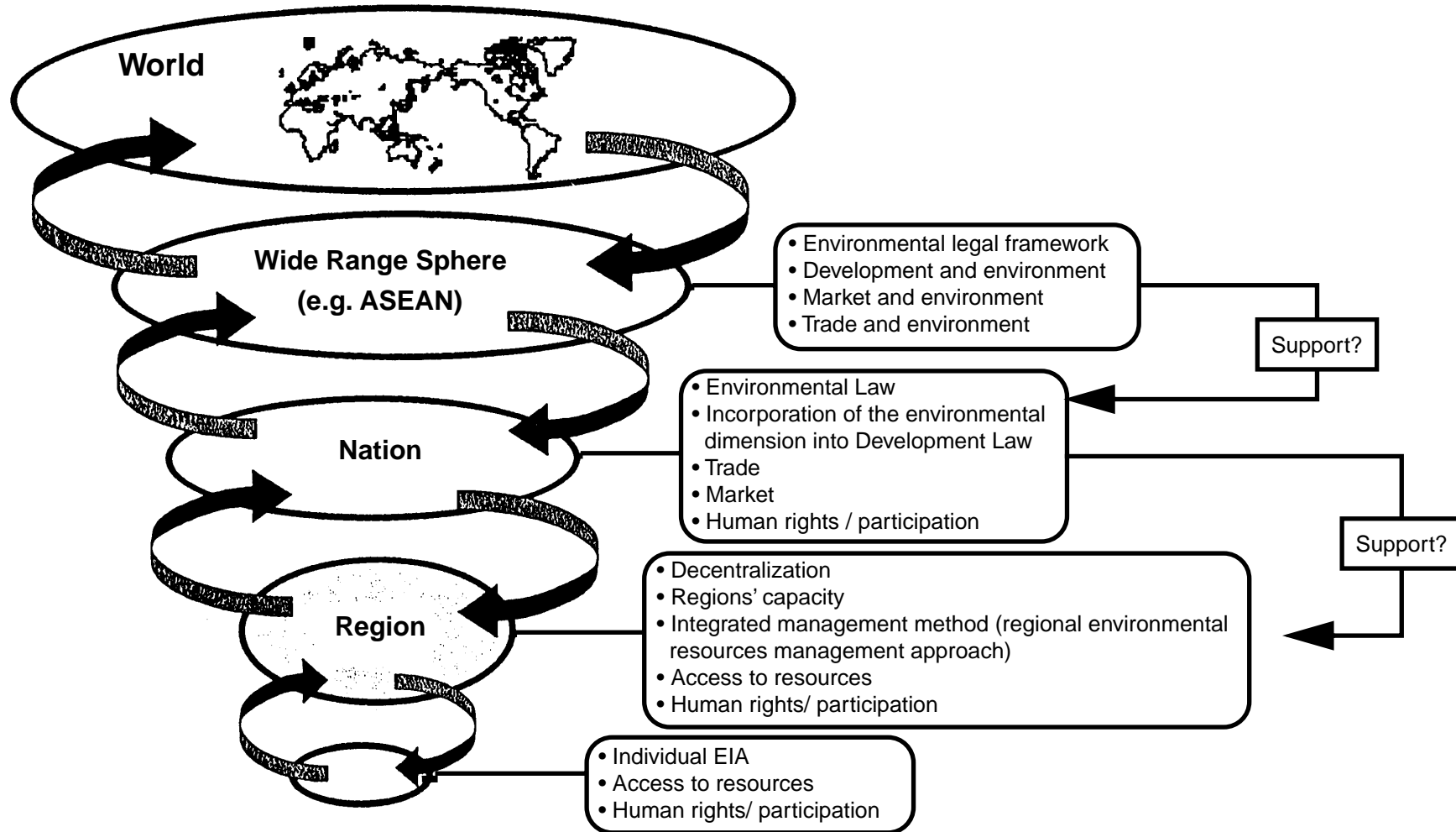
6.1 Measurement and Evaluation of Deterioration/ Loss of Environmental Resources

6.1.1 Necessity of establishing a target considering both the characteristics and mutual relations of regional environmental resources

The target in evaluating deterioration/ loss of environmental resources depends on how reversed trends in the deterioration and loss will be described in the national strategy to be newly prepared by 2005. At first, we should study and set up the target in the national strategy, considering the meaning of the environment as resources in regional development, evaluation of the value of overall functions of environmental resources, and the environmental resources themselves having the mutual relations and the circulation structure in the region as an organic unit. However, this is a very difficult task. It is almost impossible to set a target based on specific relations of forests, water, and soil in a nation-level consideration, and the individual, dispersed targeting is more likely. In this case, it is difficult to go beyond the existing limit, and study of the qualitative and quantitative targets for forests, water, and soil as a regional unit is inevitable.

Figure 6.1 Point of Framework

- Is it a framework that promotes appropriate resources distribution and resources use that brings profit to the nation or community based on fair participation?
- Can the upper-layer framework guide and support appropriate use of environmental resources in the lower-layer?



Japan's measures against industrial pollution started from the individual efforts towards major enterprises, such as Pollution Prevention Treaty, at an early stage, and evolved into the application of national uniform regulation and standard. Some regions faced with the limit of the individual approach took regional and comprehensive approach based on the pollution control program. This can be applied into the early stage of the development in developing countries for sustainable development. Moreover, regional development in developing countries are not necessarily specified into heavy and chemical industry like Japan, rather based on complex development depending on natural resources such as agriculture, forestry and fishery. Therefore, a regional approach that reflects regional features and that opens the way for wise use of regional environmental resources is more important. As such, the criteria to evaluate deterioration and loss of environmental resources should be studied based on consideration of various regional features of environmental resources and their mutual relations. The global and national standards presented by the NDS as criteria can be the effective judgment standards for the pollution caused by harmful substances. However, for the regional approach that aims at appropriate management of environmental resources, they can be the base for judgment and evaluation, but not absolute standards.

6.1.2 Monitoring Method

As mentioned above, if an organic regional unit (e.g. water catchment) is considered as the base for environmental resources management, analysis on deterioration/ loss of environmental resources must also incorporate regional aspect and mutual relations among environmental resources. Point-based monitoring, which is popular for conventional environmental monitoring, is necessary, but it will not be enough. It will be important to use satellite images over the targeted space and further to apply a method that can grasp deterioration/ loss of regional environmental resources with the regional features, by combining the satellite images with Geographic Information System (GIS).

On the other hand, it is also important to grasp deterioration/ loss of environmental resources from the viewpoint of a nation in a wide-ranging area (e.g. ASEAN). As mentioned already, how the global environmental problem will appear and exert influence in the wide area might considerably affect the achievement of the national target for the environmental resources management in the NDS. In this regard, it will be effective to conduct judgment and evaluation considering the trend of environmental resources in a wide area, by using the capacities of various organizations (UN, industrialized countries' research institutions, etc.) that can conduct or are conducting wide-area monitoring of environmental resources.

6.2 Reforming the Basic Structure that Creates Environmental Problems

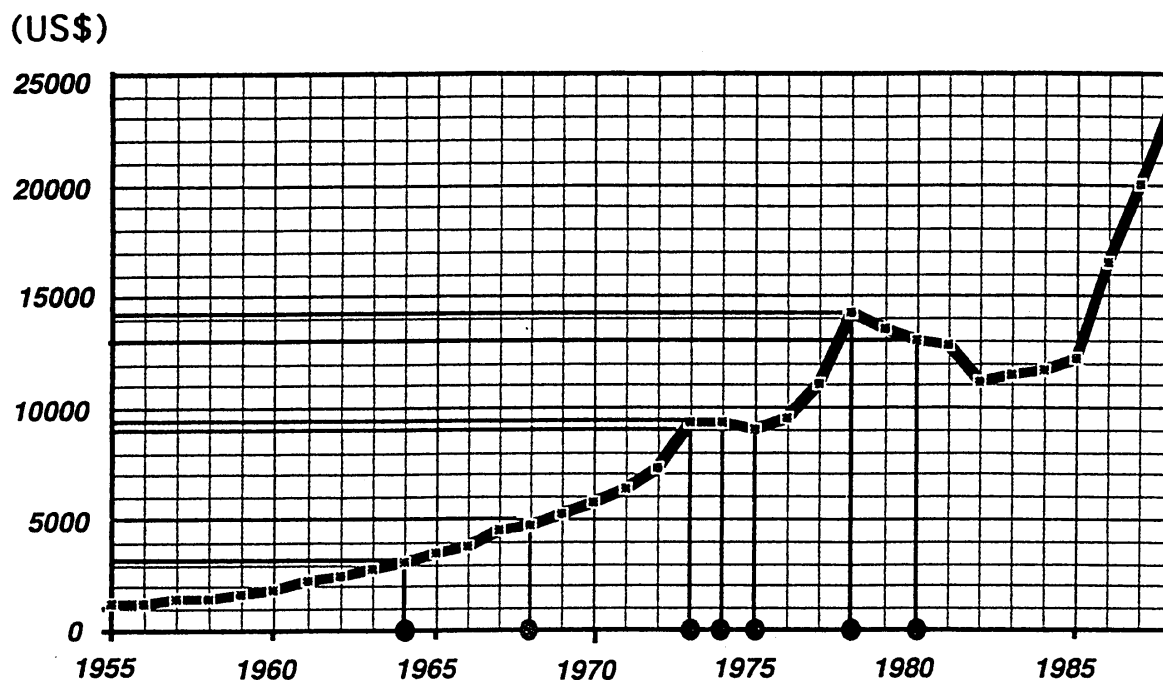
In order to achieve the environmental goal in the NDS, which is "to ensure that current trends in the loss of environmental resources are effectively reversed at both global and national levels by 2015", it is necessary to avoid the main causal factor of environmental problems in developing countries, which is the structures in which "poverty and population increase directly result in deterioration/ loss of environmental resources", to reform such structures.

Three out of four issues taken up in the section 3.2 (the scope and challenges of the environmental problems) will be discussed here: the sustainable industrial development; sustainable use and conservation of environmental resources; and reducing the pressure on urban environment and improving sanitary environment.

First, regarding sustainable industrial development (health risk by pollution accompanied with industrialization, loss/ degradation of resources), it should be noted that developing and middle-income countries lack sufficient economy, technology and human resources for effective environmental measures that are common and applicable in industrial high-income countries. The history of anti-pollution measures of industrialized countries, especially of Japan, has many lessons in this regard. In Japan's industrial sectors, a shift has occurred gradually, from measures against dust at the GNP level of \$1,000 (equivalent to \$3,000 in present value), to measures against sulfur oxides when it reached \$2,000, and to measures against nitrogen oxides when it was \$3,000. In this process, Japan had made efforts to save energy and resources to improve the production process and to pursue human resource development. Expensive technologies that require advanced management, such as for flue-gas desulfurization, had been primarily applied in major enterprises, and minor factories have reduced pollution by introducing cleaner production technology and distributing low-sulfur heavy oil. Furthermore, introduction of these measures was promoted by step-by-step strengthening of regulation standards. The anti-pollution measures that are considered common in a country with a GNP of \$20,000 had not been taken in Japan in the 1960s.

As mentioned above, there are two practical means to solve problems caused by pollution associated with industrial activities in developing and middle-income countries (excluding advanced foreign-capital-affiliated enterprises). The first means is a gradual introduction and implementation of applicable regulations that suits to the development stage of a country or a region, as well as that lead to the base for advanced measures for future. Japan's experience, recent cleaner production technology and the 'win-win approach' promoted by the World Bank are based on this idea (these three approaches were attempted by Japan as anti-pollution measures). Developing countries often lack the legal regulation to support the introduction of such cleaner production technology. The second means is a measure that uses market function, such as ISO 14000s, EU/EMAS. They are considered as the market environment criteria as enterprises have to adopt environmental measures for being qualified for participating in the market. However, its participation is voluntary in principle and there is a room for each enterprise to arrange autonomous environmental measures. Though they are market environment criteria, observance of domestic legal regulations, and improvement of the production process, such as energy-saving, resources-saving, resources-recycling, and cleaner production, are presented as conditions for certification. The largest challenge of this system is to make the market function in such way. Participation of every stakeholder, including citizens, stockholders, and enterprises, as well as disclosure of information are essential. It is desired for many enterprises in developing and middle-income countries to be able to participate in this system, or a modified similar system.

Figure 6.2 Growth of GNP per capita and Development of Pollution Control in Japan



- 1962 Soot and Smoke Control Law
- 1964 Pollution Control Agreement (Yokohama city and Isogo Thermal Electric Power Station)
 - 1965 “Views on the Basic Issues of Pollution Control”: Federation of Economic Organizations (not in favor of the establishment of SO₂ Std. as a legal measure)
- 1967 Basic Law for Environmental Pollution Control
- 1968 K Value control on SO_x emitted from stacks, Tokyo Electric Power Ltd. established a “Pollution Control Bureau” in the company
 - 1969 Establishment of Ambient Standard for SO₂
 - 1970 Revision of the Basic Law for Environmental Pollution Control (deletion of a clause=environmental protection in harmony with economic development)
- 1971 Regulation on fuel quality (S content)
- 1973 Interim Removal Standard for Sediment containing Hg
 - Emission Standard for NO_x from stationary source
 - Emission Standard for NO_x from automotive exhaust gas
- 1974 Total Mass Regulation on SO_x
- 1975 Interim Removal Standard for Sediment containing PCB
- 1978 Emission Standard for NO_x from automotive exhaust gas (very stringent standard=one-tenth of the 1973 level)
- 1980 Total Mass Regulation on COD (Tokyo Bay, Osaka Bay, etc.)

Source: prepared by the writer

Measures for sustainable use and preservation of environmental resources (productivity risk) must be taken, regardless of the size of GNP. This issue is exactly a matter of how the direct connection of poverty and population with increase of deterioration/ loss of environmental resources, as mentioned above, should be avoided or improved. Developing countries' position that "we cannot afford to think about environmental problems", can be understood regarding the several environmental problems linked with industrial pollution, but does not justify the perspective of the environment as resources. In order to solve this dilemma, appropriate use of environmental resources should be studied and presented at national, regional and community level. The participation of local people, especially the poor in this process is important (the poor affect the loss/deterioration of environmental resources directly, which is, population increase are not necessarily directly related to the loss/ deterioration of environmental resources). It is impossible to expect them to appropriately use environmental resources without giving them a substitute means. It is necessary to strengthen efforts for such as agroforestry, mixed agricultural methods, and small-scale farming, which are presently being made at regional levels, under support measures, such as for the land tenure system and improvement of the pricing/ distribution system. When the forest is commercially exploited in a way that impedes the forest's renewability, this will distort or destroy not only the forest but also the regional circulation of soil and water.

On the level of international trading, efforts have been made for restoring the forest and benefits to the affected region. At the ITTO Eighth Council Session (1990, Paris), the action plan that "all tropical timber traded internationally by member states shall, by the year 2000, originate from sustainably managed forests" was adopted. The recommendation to the member states at the Tenth Council Session (ITTO's activities) propose that: "Correct economic policy regarding forests and timber (a system to maximally evaluate the value of forests, etc.), and returning profits obtained from forests... to the community that is connected to forests". Environmental resources management and distribution of profit to the region at the very early stage of timber production are considered a step closer to reform of the basic structure of the problem. Certification of timber products, an approach with similar efficacy using market function, has been tried. In 1995, a public forestry corporation, 'Perum Perhutani', which is in charge of forestry management in Java Island, received acknowledgment from an eco-labeling group (FSC) as realizing sustainable forests management. Presently, the ITTO is also studying timber certification.

Reduction of environmental pressure toward urban areas, improvement of the sanitary environment, and development and activation of rural areas are an approach to consider urban and rural areas in an integrated manner. This is not something that denies individual characteristics of urban environmental problems nor the peculiarity of the measures in need. The urban population in developing countries, which was only about 17% of the countries' total population in 1950, is prospected to reach 60% in 2025. The rapid increase of the urban population in developing countries, where sanitation infrastructure is insufficient, will cause an explosion of urban sanitary environmental problems. The problems caused by urban migration are the problems caused by the migration by the poor who has low skills and low education attainment, rather than the problems accompanying the general population increase. Many come from rural areas and this migration is intensifying, probably because agricultural society cannot support farmers, there is few employment opportunities in local villages (no other industry), there is a wide gap in income between cit-

ies and rural village, and because there is no other attraction as urban areas have. Not only insufficient sanitary public infrastructure in urban areas but also such rural issues contribute to increasing pressure on urban environment. It is therefore difficult to tackle urban problems only in urban areas. On the other hand, rural areas cannot be developed without development of urban consuming areas. This also requires improved transportation infrastructure between rural areas (production area) and urban areas (markets). Furthermore, it is also necessary to promote activation of rural areas in various forms.

If the relation between urban areas and rural areas is considered from a viewpoint of material circulation, rural areas can be positioned as places that consume organic matter generated in urban areas. It is a structure in which urban areas are the production areas and rural areas are the consumption areas. However, this is based on the assumption that organic matter, such as garbage ordinarily discarded in urban areas, is restored to the soil in rural areas. When cities rapidly grew by displacing rural areas, like in Japan, it is extremely difficult to restore organic matter generated in urban areas to the soils in rural areas. However, urban areas except capitals, in developing countries are surrounded by rural areas. This situation can still form a material circulation between cities and rural areas, which used to exist but has disappeared in Japan. By considering cities and rural areas integrately, it may be possible to probe a way to solve or reduce problems of both areas in a mutually beneficial way.

6.3 Capacity Building and Ownership

6.3.1 Region's Capacity and Ownership

It has strongly been emphasized to incorporate regional viewpoints in the national strategy, which is to be prepared by 2005 in the NDS. Even if the national strategy that incorporates a regional viewpoint is prepared, achievement of (or near) the target of reversing current trends in the deterioration/ loss of environmental resources by 2015 requires region-based organizations/ groups that implement regional-level programs/ projects that are incorporated in the national strategy, as well as a support system. Regarding regional comprehensive soil enhancement programs, Per Pinstrup Andersen pointed out that, first, farmers, communities and governments had better establish and fulfill the rights for natural resource use and management for its implementation. Second, it is necessary to strengthen regional control of natural resources and to enhance regional organizations and their management systems. As such, it is essential for groups that directly use natural resources (such as farmers and fishermen) and region-based groups that are deeply involved in environmental resources management (such as universities, research institutes and youth councils) to equip the adequate capacity for environmental resource management. In addition, there should be the conditions to enhance such regional-level efforts (rights of environmental resource management = regional ownership).

6.3.2 Establishment of an Environmental Responsibility System and Improvement of Environment Management Capacity, of the Ministry/ Agency in Charge of Development

The capacity of ministries and agencies responsible for the environment in developing countries are generally weak, and it is difficult for them to conduct environmental assessments at various stages of national and regional development programs. Considering this situation, one of possible measures is that development agencies themselves take appropriate environmental measures in order to ensure sustainable development as well as to prevent loss/ deterioration of environmental resources. Specifically, the following efforts are needed: i) to incorporate the environmental perspective into special knowledge and technology that development agencies have; ii) to build an implementation system for environmental management by establishing a division responsible for the environment in development agencies; and iii) to enhance their capacity of environmental resource management.

7. Framework for Japan's Assistance for the Implementation of the DAC's New Development Strategy (The Environment)

Basic perspectives

Diversified and flexible approaches
Study and implementation of measures that function making use of a recipient's financial and technical capacity

Regional approaches
To place emphasis on environmental measures at the regional level, where environmental resources have organic relations

Continued, long-term programs of action
Intensive joint work through assistance conducted for a relatively short term, followed by follow-up continuation of long-term environmental resources management through ownership of developing countries, will be needed

Priority areas

Promotion of measures against industrial pollution

Development of an urban environmental sanitation infrastructure

Promotion of regional environmental resources management

Protection and utilization of biodiversity

Priority issues in assistance implementation

Improvement of the production process, study of measures against industrial pollution, such as through modernization, and their application

Strengthening of a participation system
Two-step loan, credit

Linkage with a framework using the market
Swapping, labeling, ISO14000s, EU/EMAS, emission rights trade

Development and application of planning methods to use and protect environmental resources based on organic "places" as the unit

Considerations

Formation of fora that enable a comprehensive approach
Formation of networks with aid agencies and research institutes, etc.

Systematization and theorization of Japan's environmental experience and personnel training

A broader perspective of environmental cooperation
Incorporating components that contribute to solving environmental pollution and management of environmental resources in development activities.

Active participation in the support of environmental measures using an international scheme.

- Swapping, ISO14000s
- Development of an infrastructure that will be the base of energy conversion

Strengthening of function of JICA and OECF offices

- Strengthening of regional-level information collection and analysis abilities
- Strengthening of collaboration with aid agencies on the field level

7.1 Basic Perspectives

7.1.1 Diversified and Flexible Approaches

Assistance considering each nation's natural and social diversity, industrial structure, and differences in the industrial development level is required. Even if we transfer the technologies and the systems that effectively function only under the social and economic systems and economic power that the industrialized countries have formed over a long time, they cannot be expected to function well. However, developing countries have local technology and know-how suitable for their nature and societies, and they have a lot of know-hows regarding environmental resources management related to primary industry that heavily depends on environmental resources. Therefore, we must seek for appropriate resource management suitable for the concerned areas in collaboration with people in developing countries. Especially in primary industrial development, the features and the mutual relation of regional environmental resources should be deeply considered as well as the know-hows owned by developing countries could be applied (improved if necessary).

As to industrial pollution, the pollution problem caused by harmful substances should be strictly handled, but, instead of the environmental measures that work only on the level of \$20,000 of GNP, the measures that function by using the recipient country's financial power and technical capacity should be first studied and implemented, and a course to gradually strengthen them should be considered.

7.1.2 Regional Approaches (Space Scale Issue)

It is desired to focus on environmental measures at regional/ community level in which environmental resources are organically related. Such regional measures inevitably take a comprehensive approach, which can overcome the limits of the individual approaches as well as which make us possible consider production and markets, or urban areas and rural areas in an integrated manner.

In order to make a regional approach effective, policy support at the national level (a legal system that guarantees community or regional participation and environmental resources management) is essential. On the other hand, a regional approach can contribute to improve the national legal system from the regional perspective.

7.1.3 Continued, Long-term Programs of Action (Time Scale Issue)

The goal of the NDS is to "ensure that current trends in the loss of environmental resources are effectively reversed by 2015." The time scale required for resuscitation and recovery of the natural system comprising forest, soil and water greatly varies depending on natural conditions of the regions. Ten to fifteen years will be considered appropriate if efforts for environmental resources management are made without new development pressure. If there is additional development pressure in the process of resuscitation and recovery of the system, it will require more time. In this way, in cooperation which needs a long time-scale, intensive joint work through relatively short-term assistance, followed by long-term environmental resources management under ownership of developing countries, will be needed. Efforts must be made to construct a system that supports long-lasting regional activities, including fostering of regional personnel who participate in environmental

resources management over a long time from the stage of specific assistance design, building of organizations, and incorporation of local universities and other research institutes.

7.2 Priority Areas

7.2.1 Measures against Industrial Pollution

As mentioned above, Japan's anti-pollution measures are not confined to 'end-of-pipe' measures, such as desulfurization systems. The flue gas desulfurization plant contributes only one-third to one-fourth of Japan's SO_x measures. Introduction of good-quality energy and cleaner production (including saving energy) contributes for the rest of SO_x measures. Therefore, anti-pollution measures in developing countries with weak economic power, technical capacity and human resources, should be based on the full introduction of cleaner production (including energy-saving), which leads to the improved and modernized production process. Without this, advanced anti-pollution measures cannot be expected to be applied, nor appropriately managed. Moreover, nowadays, this is a prerequisite for entering and winning in the increasingly environment-friendly market (such as ISO 14000, EU/EMAS).

However, it should be noted that both ISO 14000 and EU/EMAS need technological as well as management elements (such as institutional building and human resources development) for successful operation. A management system from the top-level to the workers-level is essential for involved enterprises to introduce and operate appropriate technology as environmental measures. All the Japanese enterprises that has succeeded in introducing energy-saving and cleaner production technology have adopted excellent management systems at the same time. In this way, Japan has accumulated successful experiences in terms of not only technological elements but also management elements, such as building and improving institutions and human resources that could fully utilize introduced technology. Japan has already provided assistance for anti-pollution measures in the process of industrialization in developing countries. Such cooperation is desired to enhance its efficacy by incorporating above-noted management elements.

7.2.2 Support for Study and Implementation of Environmental Resources Management with a Region-based Comprehensive Approach

In a region, there are primary, secondary, and service industry with wide-ranging stakeholders. Under such circumstances, the limit of individual approaches to the environment is apparent. Furthermore, environmental resources are not essentially individual in existence, which will require a comprehensive approach. Japan has made efforts for comprehensive and region-wide cooperation, as seen in rural development, social forestry, and regional environmental (air, water) management projects. In particular, regional efforts has been pursued regarding poverty alleviation and improving access to land and financial support measures, such as credit. Such cooperation is desired to be strengthened. However, there is room for consideration in targeting the entire regional environmental resources, and for incorporating the view of, the recovery and construction of a circulation system between the urban and rural areas, or construction of a regional-level organic link between production and markets. In order to address these issues, it is desired to develop and improve survey methods, such as the use of GIS and satellite images to grasp an entire image and characteristics of a region, and to strengthen regional approaches. In order to

realize the specific regional-level measures presented in the survey, it is desirable to apply diversified cooperation schemes, such as grant assistance for grassroots projects, grant aid, and yen loans, in accordance with the features and scales of cooperation.

7.2.3 Creation of a Scheme Linking Protection and Use of Environmental Resources with Regional and National Development

Existence of biodiversity itself has environmental value, but it is also resources that can contribute to national and regional development if it is properly preserved and wisely utilized. Furthermore, it can serve as a source for future scientific progress and the development of new medicines crucial to the survival of human beings. In many cases of debt-for-nature swap, protected areas, such as forests and swamps, are main targets for swapping, but these areas are frequently the places that nurture biodiversity. In order to protect biodiversity and the 'places' that nurture it, and to ensure wise utilization, it is necessary to embody its social and economic values at national and regional levels. When such social/economic incentives lack, it is difficult to expect the nation or the region to pay due attention to and take effective action for the protection of biodiversity and 'places'. The contract concluded between the INBio in Costa Rica and Merck & Co., Inc., and the conducted debt-for-nature swap (refer to this chapter 3.3), are good examples of measures to give economic incentive to nations and regions and to secure protection and appropriate utilization. However, adoption of these measures is based on a premise that the inventory of biodiversity to be protected, the characteristics of the places that support biodiversity, and the various services given to the region and nation by biodiversity and the 'places', have been scientifically acknowledged. The survey on biodiversity developed in Indonesia in cooperation with Japan and the U.S. can be positioned as cooperation to satisfy this premise. Also in the future, it is desired to provide cooperation in surveys that incorporate embodiment of social and economic values of biodiversity and the 'places' that nurture it.

7.2.4 Linkage with a Framework Using Market Functions

How to create incentives to promote measures has already been individually stated on anti-industrial pollution measures, environmental resources management, and protection of biodiversity. As a common incentive, utilization of market functions was studied. As a framework to use market functions, there are debt-for-nature swap, various environment-related labeling, ISO14000s, EM/EMAS, and emission rights trading that was presented at the Kyoto Conference as CO₂ measures. At present these (except emission rights trading) directly contributes to protection and management of environmental resources or reduction of industrial pollution. Moreover, they have a significant meaning in environmental cooperation for developing countries, since they emphasize the measures in the places or stage of production process, and they are expected to be effective tools.

Helping developing countries manage their environmental resources, protect their indigenous biodiversity, and combat industrial pollution should not be limited to technical aspects of the environmental measures. It is desired to pursue economic incentives for the measures by using such market framework, or to grow motivation for environmental measures, in order to win in the market competition (motivation beyond internalization of external diseconomy). Whether or not such market framework functions in favor of environmental consideration greatly depends on the awareness of people (general consumers,

enterprises, stockholders, etc.) who participate in the market. In this regard, education and awareness raising of related people, especially those in industrialized countries, are essential.

7.2.5 Development of an Urban Environmental Sanitation Infrastructure

Improved urban environmental sanitation infrastructure is essential to mitigating the health risks faced by urban dwellers, considering the population increase in urban areas and the consequent impacts in developing countries. In this case, however, the selection of methods duly considering the technical and economic capacity of developing countries (as mentioned in 7.1.1 Diversified and Flexible Approaches) is important. Also, a view to consider construction and improvement of water supply and sewerage systems in an integrated manner is necessary.

7.2.6 Respect and Support for Ownership

Financial assistance systems, such as two-step loans and credit, can encourage initiatives and participation of various stakeholders in recipient countries, resulting in developing their own discipline to think, select, and take action. The role and effect of such financial systems in areas of anti-pollution measures and environmental resources management are considered to be great. In developing countries, however, there are several difficulties, including unavailability or poor competence of consultants who conduct engineering service, in introducing cleaner production technology. Japan has attempted to incorporate such elements as technical advice and institutional building with two-step loans, but it is desired to further strengthen technical advisory elements, such as engineering service, and to integrate software techniques support, such as improvement of enterprises' management systems.

7.3 Challenges and Considerations

7.3.1 Formation of Fora for a Comprehensive Approach

Assistance to seek and form the measures against industrial pollution and environmental resources management required in developing countries needs participation of human resources in wide-ranging specialties. In terms of implementing technical cooperation, development specialists and consultants that conduct research have responded to these needs, but a comprehensive approach is also required in forming strategies and policy for environmental cooperation itself, and in developing new methods.

In addition, consideration on this level needs the input of specific issues, such as various problems that development and cooperative activities actually faced, as well as examples of success and failure. In this way, strategic and policy issues as well as problems generated at the field level should be taken up together, analyzed, theorized and systematized at the level of the 'forum/ places' that enable a comprehensive approach. These matters cannot be handled in an ad hoc form nor by a single committee. There must be networking between development agencies (such as JICA and OECF) and research institutes, universities, academic societies and experienced local governments, and their continuous support is necessary. The 'forum/places' that enable a comprehensive approach will have a multi-layered and cross-sectional structure.

7.3.2 Systematization and Theorization of Japan's Environmental Experiences and Human Resources Development

As emphasized earlier, Japan's full-scale anti-pollution measures started from the period with per capita GNP of about \$800. Even before that time, major enterprises had taken voluntary measures (especially heat control, energy-saving). Such experiences together with environmental sanitary infrastructure development during the same period have many lessons for considering measures against industrial pollution in developing countries. Although these experiences are being systematized gradually, its progress is far from practical use. Therefore, first, these experiences should be analyzed and systematized, and then, we should tell these experiences to Japanese experts and researchers involved in the areas of anti-pollution measures and environmental sanitary development. Japan has accumulated experiences and know-hows in the area of environmental resources management as well. For example, one mountain village has managed forest, soil and water in an integrated manner with community rules. To utilize these know-hows in developing countries with diversified natural and social environments requires systematization and theorization of such experiences. Consequently, its effects should be shared by people concerned assistance. Also, in order for the theorized and systematized results to be used in training, specific consideration, such as the teaching materials for training Japanese experts, as well as materials to train personnel in developing countries, will be necessary.

7.3.3 A Broader Perspective for Environmental Cooperation

There is no doubt that the main pillars of environmental cooperation are support for finding solutions to industrial and urban environmental problems, reviving depleted forests, soil, and other environmental resources, and securing environmental considerations in the development projects. However, there are various methods to solve pollution and environmental resources problems. Environmental cooperation is not confined to projects of reducing pollution or of restoring the degraded environmental resources. To integrate components that contribute to the solution of pollution and the environmental resource management into development projects in one form of environmental cooperation. Especially in the developing countries that seek sustainable development, an approach that makes development itself environmentally sound is important. For example, the following approaches could be considered as effective tools for reducing the environmental load: rationalization and modernization of industry; to reduce air pollution from cars, by developing an urban public transportation system; to improve the energy itself that causes air pollution; and to incorporate integrated management system of forests, soil, and water into rural development. Some research cooperation has already been conducted with such viewpoints, but it is desired to further strengthen such cooperation in the future. It is also desirable to study the option of granting laxer conditions than ordinary loans for development projects in which components of environmental pollution measures and environmental resources management are incorporated (it is also an idea to target only the environment-related components of the project, instead of the entire project).

7.3.4 Active Participation in Support for Environmental Measures through International Schemes

Study and development of international schemes that will lead to strengthening or support of environmental measures have rapidly been promoted in recent years, such as debt-for-nature swap, various environment-related labeling, ISO14000s, and furthermore, emission rights trading now under consideration. It is considered important for Japan to actively participate in support of environmental measures using such international schemes, with a view to producing good results and increasing cooperation performance on the international level. Also, movement away from the use of petroleum (so-called de-petroleum) and its review (shift from petroleum to natural gas, and natural gas and hydrogen hybrid gas; and use of hydrogen gas, etc.) are also remarkable. It is highly possible that this will substantially contribute to improvement of air pollution in developing countries in the near future, if the problems of construction of gas pipelines and prices are solved. A cooperation scheme for energy conversion, which is considered to play an important role in air pollution measures, should be studied now. In this case, various levels and scales of cooperation can be expected: development of a basic large-sized infrastructure for energy conversion (construction of gas pipelines, etc.); construction of a gas supply system in developing countries; and switching of regional heat supply systems and factories' combustion facilities to gas combustion facilities. Therefore, demarcation and collaboration between the government and private sectors in Japan's assistance must be fully studied.

7.3.5 Enhanced Usage of JICA and OECF Offices in Developing Countries

Pursuing approaches that reflect diversities and features of different countries and regions will require local information regarding each region's society, nature, culture, and administration. Coordination with the UN, the World Bank, and other aid agencies in regional cooperation activities is also essential for efficient promotion of Japan's cooperation. Such information cannot be fully obtained only on a government-to-government level, and coordination with aid agencies' headquarters is not fully effective. Although functional enhancement of JICA and OECF offices in developing countries has been pursued so far, ability to gather and analyze regional level information and collaboration with aid agencies must be further strengthened.

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Year	Title			
Country Studies				
1987	Country Study for Japan's Official Development Assistance to the Philippines	J	E	
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1989	Country Study for Japan's Official Development Assistance to Thailand	J	E	
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