### Chapter 4 Effective Approaches for Rural Development<sup>1</sup>

Three-quarters of the world's poor live in rural areas.

### 1 Overview of Rural Development Issues

### 1-1 Current Situation and Issues in Rural Development: Importance of Poverty Reduction

The overall purpose of development assistance is to improve the livelihoods of citizens in recipient countries, especially the impoverished. Poverty reduction is internationally recognized as an important assistance issue. For example, in 1996 the DAC set a clear achievement goal in its action policy to reduce poverty. (International trends will be described in chapter 1-3.)

Development cooperation focusing on rural development is a very important component for poverty reduction for the following reasons:

Approximately three-quarters of the world's impoverished live in rural areas<sup>2</sup>.

Many poor people in cities are migrant workers and farmers who have left rural areas<sup>3</sup>. Therefore, if living standards and income generations in rural areas are enhanced and rural immigrants to cities return to rural areas, excessive population influxes to cities should be reduced, causing poverty in the cities to decrease.

Improvement of rural areas can be a safety net when there is a lack of job opportunities in cities due to depressed economic conditions.

Also, many governments in developing countries have recently been shifting to decentralization in order to adequately deal with local needs. Due to the necessity for an active local economy within decentralization, rural development is receiving increasing attention.

The subject of development has shifted from

government to private, and rural development has become more participation-oriented.

<sup>&</sup>lt;sup>1</sup> The contents of "Rural Development" need to be revised after coordination between "Rural Development" and "Poverty Reduction" JICA thematic guidelines.

<sup>&</sup>lt;sup>2</sup> World Bank (2001a)

<sup>&</sup>lt;sup>3</sup> In many developing countries, there has been an acute population shift from rural to urban areas, and many of those who have migrated and belong to the low-income group have no choice but to engage in the informal sector which is insecure, low-wage, and has a poor environment.

The main actors of development activities are also changing. Since the end of 1980s, many developing countries' governments have shifted from bureaucrat-oriented to public-oriented bodies. Therefore, bureaucrat-oriented development approaches such as "large-scale farm development and agricultural modernization" are changing to people-centered approaches to rural development with a focus on establishing a system to facilitate community participation and the effective use of local resources.

This in turn requires flexible, tailored cooperation from donors based on local conditions.

#### 1-2 Definition of Rural Development

The definition of "rural" differs by country, though it is usually used in contrast to "urban". For instance, this word is defined based on population density in Japan, indicating an area other than "an area with over 5,000 people, which consists of each district with a population density of over 4,000 per square kilometer". However, we cannot simply apply this definition to other countries. Moreover, due to the fact that the concept of "rural" varies from Asia to Africa, it is difficult to define it uniformly. Therefore, **the use of "rural" (including fishing and mountain villages) as a relative concept to "urban", based on social, economical, and natural conditions in each country may be most adequate.** The term could also be used to describe areas where a majority of the residents are engaged in agriculture in a broad sense (including livestock farming, forestry, and fisheries).

The final beneficiaries of development assistance are local people in both rural and urban areas. However, their livelihoods are based on significantly different social, economic, and natural environments. Most rural residents in many developing countries (especially in the least developed countries, or LLDC) are engaged in and depend on local agriculture, forestry, and fishery resources to make a living. If the local people are final beneficiaries of development assistance, the aim of rural development can be defined as the improvement of sustainable livelihoods (especially impoverished groups), with careful attention paid to local characteristics<sup>4</sup>.

Frequently, the concept of rural development is used confusedly with "agricultural development" or "regional development", however these concepts differ as described in Box 1.

The scope of "rural" areas differs by country and region. It is a concept relative to "urban".

Goal of rural development: Sustainable improvement of livelihood for rural people

<sup>&</sup>lt;sup>4</sup> According to the World Bank (1975), rural development is defined as "a strategy aiming at the improvement of economic and social living conditions, focusing on a specific group of poor people in a rural area. It assists the poorest group among the people living in rural areas to benefit from development".

### Box 1: The difference between rural development and other similar concepts

#### **Agricultural Development:**

"Agricultural Development" mainly aims at increasing agricultural products such as crops, livestock, fish and etc. Human being, land and capital are simply regarded as production goods and means. On the other hand, "Rural Development" mainly targets on people and institutions. Rural development includes agricultural development activities, however it is one of the means of economic revitalization for active farmers and targeted rural villages.

#### **Regional Development:**

"Regional" has a wide meaning to describe "area" (i.e. a certain area in country) or "region" (i.e. continent of countries). The Rural Planning Association, for example, considers regional development as a regional plan including rural and urban development.

Source: Niki (2002)

### 1-3 International Trends

Many assistance organizations emphasize poverty reduction as an important international assistance goal. The number of organizations which focus on rural development as a way to reduce poverty has grown with the realization that most impoverished groups live in rural areas. The major international trends for poverty reduction and rural development are below.

The **World Summit for Social Development** held in Copenhagen in 1995 declared the goal to reduce absolute poverty in the world by half through people-centered social development.

As a result of this conference, the goal of **reducing the ratio of the poor by half between 1990 to 2015** was adopted at the **DAC High Level Meeting** of OECD in 1996. In addition, the UN General Assembly (Millennium Summit) in 2000 promoted this effort as one of its Millennium Development Goals (MDGs), with the World Bank and IMF also promoting the target.

As a result of this international trends towards poverty reduction, the number of organizations engaging in rural development has increased. For example, the **Asian Development Bank** (**ADB**) is shifting its development assistance focus to fighting poverty and the World Bank is developing a new strategy for rural development in addition to the Poverty Reduction Strategy Papers (PRSP). **The Department for International Development (DFID)** in the United Kingdom adopted the Sustainable Livelihood concept as an alternative development approach to existing rural development and for effective anti-poverty programs. Moreover, most NGOs regard rural development as

World Summit for Social Development, 1995

DAC High Level Meeting, 1996

Millennium Development Goals, 2000

Major donor agencies take multisectoral approaches to rural development. effective in reducing poverty and have expanded their activities to include remote rural areas such as areas in Southeast Asia.

Community participation has been recognized as an essential asset in the promotion of the independence of local people with many organizations implementing multi-sectoral activities based on local conditions, such as activities in agriculture, forestry, and fisheries as well as in non-agricultural income generation, education, health care and hygiene or infrastructure improvement.

#### 1-4 Japan's Assistance in Rural Development

In the past, Japanese assistance focused not on rural development but on agricultural development and the improvement of agricultural productivity. Therefore, approaches centering on technical transfers such as construction of irrigation facilities and introduction of farming techniques were utilized. However, the agricultural approach alone was insufficient. As a result, multisectoral activities increased. This included non-agricultural income generation, capacity building for farmers, health and hygiene, infrastructure, education, environment, and capacity building. International trends in comprehensive efforts also contributed to this change.

In Japan, the ODA Charter of 1992 states that poverty in developing countries should not be overlooked for humanitarian reasons. Also, in its Medium-term Policy on ODA in 1999, the Japanese government demonstrated its intention by implementing ODA under the Charter, keeping the objectives of the new 1996 DAC strategy in mind. This policy emphasizes the importance of economic growth and the fair distribution of its benefits and assistance for the poor. In addition, the Japanese government emphasizes the importance of basic education, health care, support for women in developing countries, safe water supply, and the improvement of regional differences through assistance to poor rural areas.

### 2. Concept of Assistance for Rural Development

### 2-1 Rural Development Issues

Rural development issues are often equated with poverty reduction. Although the definition of poverty varies<sup>5</sup>, income poverty is used as a general

Agricultural development had been a major approach in Japanese assistance, but a multi-sectoral approach has recently become more recognized.

ODA Charter, 1992

Mid-term Policy on ODA, 1999

Rural development = Improvement in livelihood of people in rural areas (poverty reduction)

<sup>&</sup>lt;sup>5</sup> The World Bank's "World Development Report" (1990) defined poverty as having less than US\$370 of annual income per capita, and absolute poverty as less than US\$250. These indicators were calculated based on the idea that human beings require approximately US\$1 a day to obtain minimum nutrition needs.

guideline in defining poverty. In the case that "three-quarters of impoverished groups live in rural areas", "impoverished (poverty)" indicates conditions resulting from income poverty. Improvement of livelihood is a central component of rural development.

There also exists an opinion, which is increasingly becoming mainstream, that living standards cannot be measured by income and consumption, but require a wider view. For those who support this argument, the satisfaction of **Basic Human Needs (BHN)** is necessary<sup>6</sup> to improve living standards. Also, the United Nations Development Programme (UNDP) has been using the Human Development Indicator (HDI), which is based on life expectancy, literacy rate, gross enrollment ratio, and real GDP per capita in its **Human Development Reports** since 1990<sup>7</sup>.

In the OECD/DAC Guidelines on Poverty Reduction, poverty is described as the lack of the following five capabilities.

Definition of Poverty in DAC Guidelines on Poverty Reduction

Poverty is multidimensional and includes factors other than income (such as education, health, politics, and society, vulnerability etc.). Economic capabilities: to earn an income, to consume, and to have assets Human capabilities: to have access to health care, education, sufficient nutrition, clean water, and hygienic living conditions

Political capabilities: human rights, to participate in political and policymaking process, and to be able to have an influence on decision-making. Socio-cultural capabilities: to participate as a valued member of the community with social status and dignity

*Protective capabilities: to prevent vulnerability from food insecurity, illness, crime, war, and conflict.* 

As described above, comprehensive measures are essential for a multidimensional approach to poverty reduction. The number of assistance organizations which view comprehensive rural development as an effective approach in improving the livelihoods of rural people has increased. For example, agricultural development needs an increase of consumers, industrial development, and the improvement of infrastructure, and inhabitant's productivity through expansion, education, health care services has much effect

<sup>&</sup>lt;sup>6</sup> In 1970, ILO (International Labour Organization) defined BHN as including food, shelter, clothing, safe water, health and sanitation facilities, access to public services such as education, securement of jobs for a sufficient income, a healthy and humane environment, and people's participation in the decision-making process which influences their lives and freedom.

<sup>&</sup>lt;sup>7</sup> HDI is formulated based on the Amartya Sen's definition, "poverty indicates a lack of basic human capabilities (potential selective capability of individuals) and development means enhancement of potential capabilities each individual has."

on those conditions. Also, it is important to preserve the environment through resource management and natural disaster prevention. Moreover, it is essential that governments assist a variety of activities through a cross-sectional approach. In short, rural development deals with multi-sectoral issues, such as infrastructure, health care and hygiene, education, environment and governance as well as local income generation.

#### 2-2 Significance of Assistance

Rural development aims to improve livelihoods by implementing comprehensive development for rural areas where a majority of people in poverty live. Rural development can also contribute to reduce poverty in urban areas by reducing excessive population influxes from rural areas.

#### 2-3 Effective Approaches for Rural Development

Although the trickle-down theory was based on the belief that an expanded macro economy could improve the living standards of impoverished people, its effectiveness has been questionable. However its failure does not necessarily mean that efforts should be concentrated at the grass-roots level only. This is because the development of rural areas cannot be achieved without attention to urban areas, which are the main consumers of agricultural products. If conventional development projects were effective, rural poverty would have improved more significantly. Therefore, it is clear that the traditional rural development approach needs to be improved<sup>8</sup>.

Hitherto, rural development depended on external assistance from foreign countries. However external inputs have been restrained due to donors' current poor financial conditions. As a result, **the promotion of rural development requires effective external inputs to generate sufficient results** and is capable of engendering further improvements. Development issues must therefore be comprehensively and cross-sectionally understood for this to be realized. **Maximum use of human and material resources in rural areas is also necessary.** Some potential approaches are described as followsbelow.

Rural development contributes to poverty reduction.

Effective use of external resources and internal resources of rural areas is needed.

<sup>&</sup>lt;sup>8</sup> Based on statement by Hikaru Niki, JICA Senior Advisor

### <u>Endogenous</u>

#### Development means: 1) Comprehensive

- local development2) Mixed economic and inter-industrial relationship
- 3) Enhancement of local autonomy

### (1) Endogenous Development<sup>9</sup>

To emphasize comprehensive local development for human rights advocacy, human development and qualitative progress of living standards based on environmental conservation and sustainable social development.

To adopt a development approach that promotes inter-industrial relationships through the comprehensive utilization of local resources, techniques, industries, human resources, cultures, and networks placing value on mixed economic working situations. Also, to implement necessary regulations and instruction to promote cooperation between cities and local economy.

To facilitate community participation in policy-making. To establish local autonomy through community participation, decentralization and resident self-governance. At the same time, to develop project implementation bodies based on regional realities.

### (2) Participatory Development

The promotion of the development of human and physical resources in rural areas requires recognizing the fact that local people themselves are the main implementors of development projects. If the people participate passively in projects, they become inactive and will depend on external inputs. In order to avoid this situation, local decision-making in project planning and implementation is important. In other words, a project that the local people themselves plan and implement is given priority as local materials and human resources are utilized effectively by the local people's initiative and responsibility. Local independence and sustainable development of project outcomes are enhanced by the effective use of local resources.

### 2-3-1 Formulation of "Development Objectives Chart"

Figure 1-5 indicates the chart of rural development objectives. The chart deductively segmentalizes factors related to five capabilities of the *DAC Guidelines on Poverty Reduction* (as described above in section 2-1) to "Development Objective", "Mid-term Objective", "Sub-targets of Mid-term Objective" and "Examples of Activities".

Development Objectives Chart: Development Objectives Mid-term Objectives Sub-targets of Mid-term Objectives

Examples of Activities by clarifying the goals-means relationship

<sup>&</sup>lt;sup>9</sup> Hobo, T. (1996)

Four Development Objectives

### <Development Objectives>

- 1. Improvement of Economic Capabilities (Agricultural income improvement, non-agricultural income improvement, improvement of industries, and development of infrastructures)
- 2. Improvement of Human Capabilities (General health improvement and development of educational standards)
- 3. Improvement of Protective Capabilities (Conservation of natural environment and natural disaster prevention measures)
- 4. Improvement of Political Capabilities (Decentralization and improvement of policy-making capabilities)

Although the *DAC Guidelines on Poverty Reduction* describe "Socio-Cultural Capabilities" as one of the five required capabilities, it is not included in the chart as it is recognized as a factor to be given special consideration in project implementation.

Also, charts on protective and political capabilities were created by focusing on agricultural and JICA-related issues (for example, conservation of the natural environment and measures against natural disasters as issues of political capabilities, and administrative capabilities as issues of political capabilities).

"Development Objective 4 Improvement of Political Capabilities" encompasses the improvement of general political capabilities. Effective administrative capabilities for each field were placed under Development Objectives 1~3.

Four symbols (  $\times$  ) in the column "Examples of Activities" were utilized to describe the extent of experience on each project. means that JICA has considerable experience, represents the fact that JICA has certain experience, indicates that JICA has experience as a component of projects, and  $\times$  areas signify where JICA has little experience.

For Sub-targets of Mid-term Objectives, JICA's main interventions in rural development fields are listed in the "**JICA's Schemes**" column. The symbol represents a project that could potentially serve as a model for other similar projects.

In addition, "**Relevant Projects on Rural Development**" in "JICA's Main Operations in Rural Development" (Appendix1) shows major cases of JICA's rural development projects. (All rural development projects are not included.) The case number of each project on the list corresponds to the examples of activities on the Development Objectives 1~4 (Figure 2~4).

Examples of Activities: JICA has considerable experience JICA has certain experience JICA has experience as a component of projects × JICA has little experience

### JICA's Schemes

A project which will potentially serve as a model for other similar projects.

### Figure 1 Development Objectives Chart on Rural Development

Development Objectives	Mid-term Objectives	
	1-1 Agricultural Income Improvement	
1. Improvement of Economic	Average annual agricultural income	•
Capabilities	Income growth rate (indicator of average growth conditions)	
Average annual income		
Employment rate	1-2 Non-agricultural Income Improvement	
	Average annual non-agricultural income	
	Income growth rate (indicator of average growth conditions)	
	Employment conditions in non-agricultural industries	
	Number of people engaged in non-agricultural industries	
	1-3 Capacity Building for Fostering Industries	
	1-4 Development of Infrastructure	
	2-1 General Health Improvement	
2. Improvement of Human	Infant mortality rate	1
Capabilities	Average life expectancy	
	Average morbidity rate	
	2-2 Improvement of Educational Standards	1
	Literacy rates	1
	School attendance rate	
	Advance rate to lower secondary education	
	Advance rate to upper secondary education	
	3-1 Conservation of Natural Environment	[
3. Improvement of Protective	Cultivable land area	•
Capabilities	Forest area and trees planted	
	Water quality	
	Amount of marine resources	
	3-2 Measures Against Natural Disasters	r
		l
	Number of deaths per disaster	
	Number of floods	
	Number of droughts	
	3-3 Improvement of Administrative Capabilities for Environment	
		I
4. Improvement of Political	4-1 Improvement of Central Administrative Capabilities for Decentralization	
Capabilities		
Capabilitios	4-2 Strengthening of Local Administrative Capabilities for Decentralization	

Figure 1: Rural Development Objectives Chart draws a large view of the issues to understand the multi-demensions of poverty from bird's eye view. However, **the selection of projects requires careful attention toward public interest and equity due to the budget**, which come form taxes. For instance, in cases of the project assists specific farmer's activities, NGOs can freely implement projects for specific target groups based on the agreement of sponsors. By contrast, for JICA which implements public works, there needs to be a clear explanation of the reason. This point is elaborated in 2-3-3 JICA's priority.

#### 2-3-2 Overview of Development Objectives Chart

The basic outline, important points and JICA's operations on each Development Objective are shown as below. However, each individual Objective is only outlined, as it is necessary to deal with rural development through multi-sectoral approaches based on local needs.

<u>Development</u> <u>Objective 1:</u> Improvement of Economic Capabilities

<u>Mid-term</u> <u>Objective 1-1:</u> Agricultural Income Improvement

# [Development Objective 1: Improvement of Economic Capabilities]

The incomes of local people need to be increased in order to improve their lives. Income generation activities can be divided into agricultural and non-agricultural income generation.

### Mid-term Objective 1-1: Agricultural Income Improvement

As most local people obtain income from agriculture, income generation through improved agricultural productivity and marketing of agricultural products should be considered when implementing rural development. **Agricultural income can be increased through two broad methods** 1) stabilizing prices of agricultural products and reducing intermediary exploitation (e.g. construction of feeder roads or improvement of markets); and 2) improving agricultural productivity (e.g. multiple crops, introduction of agricultural techniques, and improvement of agricultural infrastructure such as irrigation systems).

### JICA's Activities

JICA has engaged in income improvement projects mainly focusing on

Targeting small-scale, self-sufficient farmers for income generation through agriculture.

#### Main activities of JICA:

- Development of small-scale irrigations
- Capacity building for agricultural
- extension workers

  Empowerment of
- community-based activities for farming • Comprehension of
- above

It is important that farmers take the initiative in maintaining agricultural infrastructure.

When introducing new technology, risk management is required. Less risktaking methods using traditional farming ones are preferable. small-scale self-feeding farmers. JICA implements projects under the various schemes of Project-type Technical Cooperation, Development Study, or Japan Overseas Cooperation Volunteers (JOCV)<sup>10</sup> as follows; **1**) **development of small-scale irrigation systems** (construction of irrigation systems and development of water user associations); **2**) **capacity building for agricultural extension workers** (e.g. improvement of cultivation techniques, enhancement of a variety of crops and vegetables and agroforestry), **3**) **empowerment of community-based activities for farming** (e.g. organization of shipping and distribution cooperatives and rice banks), **4**) **comprehensive rural and agricultural development** (e.g. integrated projects with development of small-scale irrigation, capacity-building for agricultural workers, and strengthening of community-based activities for farming).

Development of small-scale irrigation is a common JICA project aiming to generate income for small-scale, self-feeding farmers. It is essential for a sustainable project that farmers themselves maintain irrigation facilities, and recover and reinvest initial investment costs. Therefore, the construction of irrigation facilities should be implemented, considering farmers' maintenance capabilities and the recovery and investment of capital by comparing irrigation facility construction costs to the net income growth of farmers in the future. Moreover, it is important to involve farmers in the project-planning stage for development of administrative organizations for irrigation facilities, as it is difficult to facilitate local ownership after construction of such infrastructure.

As for **capacity building of agricultural extension workers**, project plans based on low-risk traditional farming methods are desirable, as modern techniques require additional technical and economical risks for impoverished groups<sup>11</sup>. That is to say, although technical assistance often tries to introduce modern techniques, the economic vulnerability of small-scale farmers must be considered when introducing such techniques. If anything, **an improvement of existing techniques to the extent that farmers can handle them and generate income by increasing their productivity may lead to a situation in which farmer ownership can be better facilitated and projects made successful.** 

In terms of **community-based activities for farming**, **development of a shipping system is also important**. There are two factors for the

<sup>&</sup>lt;sup>10</sup> Although there are some cases within the Community Empowerment Program and JICA Partnership Program, JICA has more experience in Project-type Technical Cooperation, Development Study, and JOCV.

<sup>&</sup>lt;sup>11</sup> JICA (2000)

### Figure 2 Development Objective 1 "Improvement of Economic Capabilities"

ndicators: Average annual agricultural incor	ne, Income growth rate (indicator of average growth c	onditions)	
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Improvement of Productive Techniques Number of crops farmers cultivate Farming equipment utility time per	Survey on technologies	1, 3, 21, 22, 25, 27	<ul> <li>Construction of agricultura technology training center for women (Grant Aid)</li> </ul>
household Average number of types of crops produced per household Number of people attending agricultural	Research of productive techniques	3, 4, 19, 20, 21, 22, 27	<ul> <li>Improvement of cultivatio technology and cropping syster (Project-type Technica Cooperation)</li> </ul>
technology schools	Capacity building for agricultural extension workers	2, 4, 8, 9, 19, 20, 27	<ul> <li>Preparation of training an extension plans an development of teachin materials based on participator approach (Project-type Technic Cooperation/ Developmen Study)</li> </ul>
	Expansion of technological training system (e.g. agricultural schools)	2, 4, 31, 37	
	Strengthening of community-based activities for farming	2, 4, 26, 27, 36, 41	<ul> <li>Promotion of livestoc husbandry such as poulti</li> </ul>
	Promotion of multiple agriculture to reduce risk of monoculture	1, 2, 6	farming, pig farming, an apiculture (Project-typ Technical Cooperation/ Dispatc of JOCVs)
	Promotion of agricultural mechanization of optimal size	1, 3, 4, 7, 25	<ul> <li>Workshops on operation an maintenance of agricultura</li> </ul>
	Introduction of improved and proper crop varieties	2, 3, 4, 5, 7, 8, 20, 27, 31	machinery for local citizer (Project-type Technic: Cooperation)
mprovement of Agricultural	Development and construction of irrigation systems	1, 4, 5,	<ul> <li>Development of water channel</li> </ul>
Infrastructure for Production Irrigated land area Average cultivated land area per farmer	with sustainable management	25, 27	for irrigation systems (Projec type Technical Cooperation Development Study)
Number of facilities for seeds and seedlings Number of processing facilities	Improvement of land and farm roads for productive efficiency Construction of productive facilities suitable to local	1 2, 4, 27	<ul> <li>Introduction of irrigation techniques with portable pump to reduce water drawing labor</li> </ul>
	needs (e.g. pools for fish farming and centers for seeds and seedlings) Construction of agrotechnical facilities suitable to		<ul> <li>(Development Study)</li> <li>Establishment of seedling field and assistance for seedling</li> </ul>
	local needs (e.g. rice centers) Development of basis for double and triple cropping	3, 4, 7	production (Project-typ Technical Cooperatio Development Study)
mprovement of Agricultural	<ul> <li>Development and expansion of market places in optimal size</li> </ul>		<ul> <li>Construction of a period market (Team Dispatch)</li> </ul>
Products Average distance to markets Distance to feeder road	Development of feeder roads based on past results and demand forecasts	1	<ul> <li>Construction of farm roads ar pedestrian ways (Project-typ Technical Cooperation)</li> </ul>
Participation rate in shipping cooperatives Operating rate of facilities for shipment	Development of consolidating stations and storages according to local production	1, 2, 4	<ul> <li>Construction of storages f seeds (Project-type Technic Cooperation)</li> </ul>
	Organization of shipping cooperatives Technical improvement of post harvest	7 2	Cooperative sales of produc by farmer institutions (Projec type Technical Cooperation)
Development of Distribution Management System	Development of distribution system (e.g. decrees) × Development of research systems for prices of		
Price information charts on number of users of agricultural products Number of merchants in markets	agricultural products Development of market management and distribution system for efficiency Consentations of available control for excitational		
	Strengthening of quality control for agricultural products		
	Development of agricultural statistics regarding the needs of producers	21	<ul> <li>Plan for the poor in remote run areas(Development Study)</li> </ul>

Mid-term Objective 1-2 Non-agricultural Income Improvement Indicators: Average annual non-agricultural income, Income growth rate (indicator of average growth conditions), Employment conditions in non-			
agricultural industries, Number of people engaged in non-agricultural industries			
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Strengthening of Farmer Institutions	Establishment of agricultural banks		<ul> <li>Seminars and workshops</li> </ul>
Number of farming households	Trainings of local group leaders	1, 2, 3, 4, 27	for problems confronting
participating in agricultural cooperatives	Promotion of organization	1, 2, 3, 4, 5,	citizen organizations
Participation rate of cooperative members		6, 12, 14, 25,	(Development Study)
to activities		27, 36, 41,	<ul> <li>Site visits for farmers to</li> </ul>
Satisfaction level of cooperative members		42, 43	areas with developed
on cooperative functions			activities (Development
			Study)
			<ul> <li>Publication of newspapers</li> </ul>
	Development of coordination with private companies		by the Union of Agricultura
			Co-operative (Project-type
			Technical Cooperation)
	Development of mutual guarantee system		Promotion of women's
			participation ir
			organizational managemen
			(Project-type Technica
			Cooperation)
Expansion of Vocational Training	Expansion of vocational schools	4, 9, 37	Vocational training sessions
System and Entrepreneurial Knowledge		1, 0, 01	in villages according to
Number of entrepreneurial seminars	Expansion of entrepreneurial seminars		technical level (Tean
Number of people attending vocational	Expansion of vocational training system for working	4	Dispatch and Dispatch o
schools	people	-	Japan Overseas
Number of participants in commerce and	<ul> <li>Capacity building for entrepreneurial advisors</li> </ul>		Cooperation Volunteers)
industry associations	× Capacity building for local commerce and industry		Cooperation volunteers)
industry associations	associations		
Expansion of Micro-finance Services	Micro-credit programs by NGOs	7, 41	Management of farming
Number of micro-finance service users	Micro-credit programs by NGOS	7,41	
			credit (Project-type Technical Cooperation)
Repayment rate of debtors	Establishment of revoluing funds	1.2.4	
Turnover rate of funds	Establishment of revolving funds	1, 2, 4,	Establishment of revolving
		17, 27	funds system for garmen
			manufacturing
		_	(Development Study)
	Formulation of micro-finance model	7	Credits of seeds, fertilizers
	Establishment of mutual guarantee system by local	41	agricultural chemicals, and
	people		agricultural equipment fo
			small-hold farmers
Development of Passurass for Tourism	··· Tourism convice consciptions (o.g. quides)		(Development Study)
Development of Resources for Tourism	× Tourism service associations (e.g. guides)		
Number of newcomers	× Assistance for construction of tourism related facilities		
Number of people engaged in tourism	× Promotion of tourism		
businesses	× Conservation of cultural assets and landscape		
Number of tourists	× Development of infrastructure for tourism (e.g.		
Development of Traditional and New 1	transportation network)	4 5 05 00	Dromotion of montrations
Development of Traditional and New	Strengthening of sales channels and market surveys	4, 5, 25, 39,	<ul> <li>Promotion of marketing and applicate the product of t</li></ul>
Industries		40, 43	sales of handicrafts
Amount of augmentation of earnings from	× Strengthening of micro-finance services		Market survey (Community
traditional industries			Empowerment Program)
Number of workers in traditional and new	Expansion of management seminars	26	<ul> <li>Workshops on grocery</li> </ul>
industries	Expansion of micro-finance services	16	store management fo
Number of people engaged in traditional	Technical assistance for new product development (e.g.	4, 6, 9, 16,	single mothers
industries	design)	26, 39, 40,	(Development Study)
Number of newly developed products	Business consulting services	41, 43	<ul> <li>Technical training or</li> </ul>
			manufacturing sewing
			products (Developmen
			Study/Dispatch of JOCVs)
Promotion of Agrotechnical Industry	Agro-processing technical training	4, 5, 6, 37, 42	<ul> <li>Training on dairy product</li> </ul>
Total sales of agrotechnical products	Assistance for agrotechnical related institutions		processing to increas
Number of people engaged in agro-	Strengthening of sales channels and market surveys		women's incomes (Project
processing	Expansion of management seminars		type Technical Cooperation
	× Expansion of micro-finance services		Construction of facilities for
			disseminating butter, nu
			processing techniques, an
			improvement of processin
			techniques and export
			(Community Empowermer

### Mid-term Objective 1-3 Capacity Building for Fostering Industries

Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Capacity Building for Industry Related	× Training courses for administrative officers		
Local Administrative Officers	× Development of business manuals for administrative		
	officers		
	× Supervision system for administrative officers		
Improvement of Statistics on Industrial	× Development of survey systems to identify economic		
Development	trends		
	× Development of monitoring systems		
Improvement of Tax Collection System	× Imposition of new taxes		
	× Improvement of tax collection system		
	× Tax privilege system for new industries		
Revision of Local Finance	× Efficiency of finance		
	× Expansion of budgets for fostering industries		

#### Mid-term Objective 1-4 Development of Infrastructure

Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Rural Electrification	Small-scale hydro power	30	Master Plan Formulation on
Number of solar panels	× Diffusion of solar panels		rural electrification through
Production of electricity by hydro power	× Assistance for extending electric wires		solar power, small-scale
and extension of electric wires	× Capacity building for associations and development of		hydropower, and wind
Number of user association members	management system		power (Development Study)
Expansion of Communication and	× Expansion of telephone networks		
Information Networks	× Expansion of wireless communication networks		
Number of telephone subscribers	× Expansion of wire communication networks		
Number of radios owned	× Construction of antennas at transmission sites		
Number of radio stations	Capacity building of technicians on communication		
	infrastructure		
Development and Expansion of Local	Construction of local roads	4, 13	<ul> <li>Improvement of village</li> </ul>
Roads	Improvement of techniques for maintaining local roads	4	roads (Project-type
Length of local roads which have been	Development study on maintenance of local roads		Technical Cooperation/
developed (kilometers)	Development of maintenance organizations	4	Individual Experts/Dispatch
Number of cars utilizing local roads			of Japan Overseas
			Cooperation Volunteers)
Development of Public Transportation	Expansion of bus services		
Networks	× Expansion of marine transport networks		
Users of public transportation	× Expansion of railroad maintenance		
Number of users			
Promotion of Transportation Related	× Capacity building for entrepreneurs		
Companies	× System for priviledged finance		
Number of people engaged in traffic	× Capacity building for cooperatives		
industries			
Number of traffic industry users			
Capacity Building for Transportation	× Capacity building for traffic administrative officers		
Policy Making	× Development of transportation statistics		
Securement of Budget for Traffic	× Improvement of tax collection system		
Infrastructure	× Revision of local finance		

\*"Case No." corresponds to the number in the list of relevant projects (see appendix 1.)

Examples of Activities	:	JICA has considerable experience
		JICA has certain experience
		JICA has experience as a component of projects
	×	JICA has little experience
JICA's Schemes:		A project which will potentially serve as a model for other similar projects

Community participation is required for all projects. improvement of agricultural income. These are the enhancement of productivity and increase of agricultural product prices. Although the enhancement of productivity is led by the development of agricultural techniques, marketing is essential for farmers to improve the selling price of their agricultural products. When farmers sell their products individually to middlemen, the selling price often is lower due to the small volume of trading. However, a larger volume through cooperative shipment enables farmers to set higher selling prices. JICA promotes projects that focus on improvement of farmers' associations and market facilities for such reasons.

JICA also considers **community participation to be essential in its projects**.

#### Mid-term Objective 1-2: Non-agricultural Income Improvement

<u>Mid-term</u> <u>Objective 1-2:</u> Non-agricultural Income Improvement

Past cooperation activities:

- Development of business
- capabilities

  Improvement of
- business conditions

The development of small and medium enterprises provides employment opportunities for impoverished groups. The processing of primary products in rural areas increases income generated and labor opportunities by adding value, although the prices of primary products from agriculture products do tend to be lower. Also, non-agricultural activities enable small-scale farmers to improve income, despite the limited income generation from improvement of land productivity (except in cases where land reforms lead to expansion of cultivated areas). In cases where there is insufficient land as a result of population growth, income generation from non-agricultural sources or work away from home may be favorable. However, an excessive influx of migrant workers causes an increase of poverty in cities due to the lack of labor opportunities. Thus, it is important to improve income generation from non-agricultural activities in rural areas.

**Non-agricultural improvement** is classified broadly into two objectives: 1) to improve existing non-agricultural industries and, 2) to start new ones for income generation.

### JICA's Activities

JICA's operation for improvement of non-agricultural income is divided into a) the development of farmer's business capabilities and b) improvement of conditions for small-scale businesses and entrepreneurs. More women are beneficiaries of nonagricultural income generation projects.

### a) Development of Farmers' Business Capabilities

There are some examples of business capability development through vocational training and seminars to strengthen business knowledge. In the past, JICA has implemented projects in apiculture, handicrafts, soy milk, sewing products, plant dyes, weaving, ceramics, bamboo works, butter processing, wood carving, basket making, and so on. Such assistance may focus on technical improvement for existing products or the introduction of new products.

Most JICA projects for non-agricultural income improvement have targeted women groups. Vocational training and seminars are usually implemented to improve conditions for small-scale businesses and entrepreneurs (e.g. introduction of microcredit, improvement of access to markets, and so forth) as described in b). Moreover, there are many cases in which literacy education is implemented because it is useful for management and business contracting. It is necessary to plan capacity building projects for entrepreneurs with consideration to the factors given in Box 2.

## Box 2: Points of concern for planning the development of farmers' business capabilities

To plan projects based on a comprehensive approach which combines technical development and vocational training, and to correctly assess their needs. To conduct feasibility studies on people's needs for products and initial and operating costs before starting vocational training of small-scale handicrafts. To select practical techniques suitable to the educational levels of targeted groups. To examine small-scale financial organizations which can provide business funds for trained persons.

Source: JICA (2000)

For non-agricultural income generation, product sales are important. It is essential to improve the capital acquisition environment.

### b) The improvement of Conditions for Small-scale Business and Entrepreneurs

For non-agricultural income improvement, the development of conditions for product sales and acquisition of business funds is required in addition to implementation of modern techniques and technical training. Thus, JICA has implemented various projects such as microfinance services, shipping and distribution cooperatives, and market development as stated in the following: For microcredit, resources other than JICA are utilized.

Community organization alleviates vulnerability, and enhances development efforts.

For community organization, cooperation with NGOs and CBOs is

necessary.

### Microcredit

Microfinance is an effective tool used to improve farmers' access to capital for business in rural areas. As a result, many donor agencies implement projects related to microcredit. JICA cannot provide funds for microcredit, but provides assistance on administrative and technical aspects of farmers' business that involves credit, such as screening and funds management for organizations without experience in microcredit. Japan's Grant Assistance for Grass-roots Projects can however provide direct funds for microcredit (up to 10 million yen per project).

### c) Community organization

Community organization alleviates impoverished groups' vulnerability and enhances the efficiency of development projects. The benefits of community organization are considered below:

- Impoverished farmers are able to become independent as active beneficiaries of development through social and economic improvement.
- Farmers' organizations are preferable for donor agencies from the perspective of efficiency, compared to assistance of individuals.

Source: JICA (2000)

The organization expands farmers' choices in development. For example, an organization may be able to rehabilitate roads or develop markets where individuals cannot.

However, it is important to carefully study local human relationships, societies, customs, and cultures before starting projects, as the success of organizations often depends on effective leaders and cultural factors in the regions. By incorporating such surveys and the opinions of local people, projects can be designed. The facilitation of mutual understanding between local people and community participation as well as cooperation with local NGOs and community-based organizations (CBOs) from project-design stages will be promoted.

#### Box 3: Development of local communities

The need for community organization is high in rural development. For example, when a water system is constructed, it is often managed by the community or a water users association because it is difficult to dig wells for each household. Cooperatives for product distribution, material purchases, or community organizations for schools, medical facilities, and preservation of the natural environment are also important. For example, community organizations are necessary when individuals or local governments with limited budgets are involved in forestry conservation and riverbank protection works.

The most important point regarding community organization is to facilitate ownership that enables the local people to participate. For realization, the application of participatory approaches from the first stage of the project-formulation process is necessary.

#### Mid-term Objective 1-3: Capacity Building for Fostering Industries

<u>Mid-term</u> <u>Objective 1-3:</u> Capacity Building for Fostering Industries

For income generation, both industries including agriculture and the capabilities of the administrators must be developed. For example, the training of administrative officers who are in charge of industrial development and the collection of industrial statistics used in the policy-making process are required. Moreover, the tax collection and financial systems must be improved in order to promote financial improvement for industries.

To date, there are few cases of JICA's assistance in this field.

#### <u>Mid-term</u> <u>Objective 1-4:</u> Development of Infrastructure

#### Mid-term Objective 1-4: Development of Infrastructure

In order to develop an economy, the development of infrastructure, such as transportation and telecommunications, is indispensable. At the same time, there are various other factors which inhibit economic development in rural areas, such as limited access to necessary information, limited transportation and inadequate communication means (roads, public transportation services, etc.), information (such as telephones and mail routes), and electricity. The development of transportation and telecommunication infrastructure, including rural electrification infrastructure, telecommunication networks local roads and public transportation is important. It enhances human and social capabilities. For example, rural electrification facilitates the use of medical apparatus and storage of medical supplies in health care facilities (e.g. storage of vaccines in refrigerators). Also, the development of transportation and information infrastructure enhances individual capabilities and evokes their consciousness as members of the society through the provision of necessary information and knowledge for the civil life. In this way, infrastructure such as roads, electricity, and information systems are important elements in order to improve productivity and living standards in rural areas. However, there are problems with infrastructure distribution and management systems in developing countries<sup>12</sup>. Priority is often given to infrastructure development in cities over rural areas. Furthermore, budget shortages, lack of human resources, and distance from cities (where equipment and human resources are often found) may inhibit maintenance and management of infrastructure.

### JICA's Activities

Although JICA has not provided extensive assistance to the development of infrastructure in rural areas, it has conducted various surveys through its Development Study scheme including feasibility studies on ecofriendly rural electrification through solar power, small-scale hydropower, wind power, and so on. JICA has constructed local roads and disseminated photovoltaic systems<sup>13</sup> through other schemes. JICA has found that it is possible to extend electric wires to rural areas that are relatively close to cities and power stations. However, such rural electrification is often inappropriate in remote rural areas from the viewpoint of relevance and efficiency, as well as construction costs. Therefore, in many cases, JICA has engaged in rural electrification projects using renewable energies and generators. Following are the main issues that should be considered when developing infrastructure in rural areas.

### a) Survey on and Promotion of Infrastructure Utilization

Although infrastructure is necessary for local people to engage in efficient productive activities, **the promotion of utilization**, **as well as development of economical infrastructure is also important**. Adding non-agricultural **income generation activities and/or improvement of agricultural productivity generates synergy effects of infrastructure development and income generation in most cases**. The maintenance and management of facilities may also be improved by local income generation. However, rural electrification and the restricted supply of electricity through solar power and small-scale hydropower necessitates improvement of power generating facilities

Assistance for rural electrification mainly utilizes solar power, small-scale hydropower, and wind power means.

Infrastructure development together with other activities generates synergy effects.

<sup>&</sup>lt;sup>12</sup> JICA (2000)

<sup>&</sup>lt;sup>13</sup> In terms of solar and wind power, the low durability of batteries should be taken into consideration, although panels and propellers are enduring.

People must be involved from the construction stage, and maintenance and management under their initiatives are preferable. corresponding to the required amount of electricity, based on the priority and clarification of institutions (including houses) that should be electrified.

### b) Ensuring Sustainability and Appropriate Management

Support for infrastructure such as rural electrification and local transportation, maintenance methods, and the recovery of investment costs is a key in expanding the impact of facilities. In developing countries, the promise of recurrent cost budgets is often not kept due to financial problems. Therefore, many projects are currently planned so that community organizations can maintain and manage the infrastructure themselves without depending on the state. Facilities must therefore be constructed so that the local people can maintain and manage them financially and technically. In addition, cooperation with local NGOs with a solid understanding of local situations facilitates community organization.

Although community organization activities have been implemented under JICA's schemes such as Project-type Technical Cooperation after construction of facilities, community participation should be promoted from the project-planning stage, to facilitate local ownership after construction.

### [Development Objective 2: Improvement of Human Capabilities]

The term "human capabilities" used here refers to the health conditions and educational level of the local people.

#### Mid-term Objective 2-1: General Health Improvement

One aspect of poverty in rural areas is the unsatisfactory health conditions of local people. Unhealthy and ill people cannot perform to the best of their capabilities nor make efforts to improve their living conditions. Therefore, the promotion of rural development necessitates the improvement of health conditions for local people. Usually, impoverished people tend to have insufficient nutrition, are not vaccinated, or live in unhealthy conditions. On top of this, suitable medical treatment cannot be obtained in many rural areas due to a lack of sufficient public medical services. These inadequate medical facilities and lack of treatment in turn leads to other family members having to take care of the ill, lowering the productivity of the family as a whole. Therefore, **an expansion of public medical services and improvement of** 

<u>Development</u> <u>Objective 2:</u> Improvement of Human Capabilities

<u>Mid-term</u> <u>Objective 2-1:</u> General Health Improvement

#### To improve medical facilities, it is important to consider maintenance and management, and benefit assessment.

A combination of clinics (treatment) and PHC (prevention) is required.

#### Disease Prevention:

- Nutritious
- improvement
- Reservation of safe
- drinking water
- Clean housing

#### sanitary conditions are essential.

In many developing countries, however, the benefits of advanced medical services centering on modern hospitals rarely reach rural areas for economic and geographical reasons. The health and medical reforms which many developing countries are promoting today as a result of severe financial situations are increasing not only effective management, but also medical payments by public medical services such as vaccinations.

Regional medical institutions can be categorized with hospitals (where several doctors are always available) at the top of the hierarchy, and health centers (where nurses and midwives are available) and health posts (run by health assistants) underneath. In this pyramid, **development of a referral system becomes important in order to link regional medical institutions, in addition to the construction of institutions suitable to the local population and economy**. Furthermore, several approaches including public medical services for treatment and primary health care (PHC)<sup>14</sup> for prevention should be combined.

Oral infections are commonly seen in rural areas where access to safe water is restricted and there is a lack of adequate sewage systems. Local people and infants who are malnourished due to poverty suffer from frequent infections and may often die of a preventable illness. **Infections in rural areas can be prevented through the (a) improvement of nutrition, (b) construction of safe drinking water, and (c) a clean housing environment.** 

Fertility in rural areas is also considered to be a problem. In developing countries, local people tend to bear many children due to high infant and child mortality rates. Fertility may not only ruin a mother's body but also cause the increase of impoverished groups. Parents frequently cannot financially cover the educational expenses of their many children. In addition, many people often leave their homes in rural areas to work in cities, but for those with low educational backgrounds, jobs do not pay well, resulting in an increase of poverty in the cities. Family planning and birth control activities are conducted to help alleviate the burden on women and to improve their health, as well as to improve the social and economical conditions of impoverished groups.

<sup>&</sup>lt;sup>14</sup> Primary health care provides access to basic health services indispensable to good health, and to help poor people acquire and maintain good health, through the provision of eight comprehensive and participatory factors. The eight factors include the improvement of nutrition and food intake, health education, vaccination, maternal and child health, water supply and sanitation, provision of basic medicines, prevention of infectious diseases, and basic medical services.

### Figure 3 Development Objective 2 "Improvement of Human Capabilities"

	life expectancy, Average morbidity rate		
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
xpansion of Medical Facilities	Construction of hospitals		<ul> <li>Recovery and strengthening</li> </ul>
Distance to public medical institutions	Construction of clinics	4, 44	clinic functions (Commun
Time to medical institutions in case of	Establishment of a referral system	15, 44	Empowerment Program)
emergency	Establishment of a medical supply system	14	1
<b>U</b>			Managamant assistance for r
Availability of medicines in medical			Management assistance for ru
institutions			public pharmacies (Project-ty
			Technical Cooperation)
Qualitative and Quantitative	Expansion of a nurse training center		<ul> <li>Training practical nurses a</li> </ul>
nprovement of Medical Practitioners	Establishment of a retraining system for medical	4, 14, 16,	instructors at health center
Number of nurses per population	practitioners	38, 44	(Development Study)
Number of doctors per population	Establishment of a support organization for medical	4, 44	Capacity building for medi
		-,	
Number of citizens participating in support	practitioners		practitioners (Commun
organizations			Empowerment Program)
romotion of Vaccination Campaign	Provision of Medical supplies		
Rate of vaccination against diseases	Establishment of a vaccination program		
Number of vaccinations	× Medical supply system		
	Training on preventive medical care	4, 14	
afo Wator Supply	Construction of water works	2, 17, 25, 32	· Construction of door drill
afe Water Supply	Construction of water works	2, 17, 25, 32	Construction of deep-drill
Distance to water supply facilities			wells and provision
Number of water facilities per population	Well digging (deep and shallow wells)	4, 26, 41	maintenance equipment (Gra
Water quality (quantity of bacteria, etc)	Protection of wells (from livestock excreta and	17, 25	· Conservation of water resour
Number of citizens participating in water	others causes)		through participatory approact
management cooperatives			(Project-type Technic
· · ·			
Quantity of water supply			Cooperation/JOCVs)
Reduction of time required for water	<ul> <li>Systematization of periodical water inspections</li> </ul>		
collection			<ul> <li>Implementation of chlo</li> </ul>
			sterilization devic
			(Development Study)
	Organization and development of water	4 0 4 00	( I <i>i</i> )
	Organization and development of water	1, 2, 4, 26	Distribution of manual w
	management associations		pumps (JICA Partners)
	<ul> <li>Establishment of a water supply training center</li> </ul>		Program)
nprovement of Sanitary Conditions	× Improvement of domestic drainage measures		<ul> <li>Dissemination of improved jil</li> </ul>
Number of latrines	Promotion of the use of latrines	2, 4, 5, 6, 9,	(ovens) (Development Stu
Number of waste disposal facilities		14, 41	JOCVs)
Number of health care centers and	Improvement of waste disposal	2, 4	<ul> <li>Production and dissemination</li> </ul>
		2, 4	
institutions	Establishment of a health care center		portable latrines (Project-ty
Number of participants in community	Capacity building of community groups on sanitation	4, 14	Technical Cooperation)
groups	issues		
nprovement of Maternal and Child	Promotion of family planning	4, 14, 15, 16	<ul> <li>Maternal and infant medi</li> </ul>
ealth Education			examinations (Project-ty
Number of participants in maternal and			Technical Cooperation)
child health education seminars	Nutritional education	2 1 11 10	Maternal education (Project-tr
		2, 4, 14, 15	· · · ·
Number of seminars held			Technical Cooperation)
Reduction of morbidity rate for traditional	Promotion of health education after childbirth	14, 15	<ul> <li>Development of teaching</li> </ul>
mid-wives	Child health education	14, 15	materials on family planning a
	Education of traditional mid-wives	4, 14, 15	maternal/child health ca
		.,,	(Project-type Technic
			Cooperation)
nowledge-building on Public Health	STD education		<ul> <li>Educational campaigns through</li> </ul>
Number of participants in seminars on	Education for prevention of infectious diseases	4, 14	videos and puppet sho
sexually transmitted diseases			(Project-type Techni
Number of trained health workers			Cooperation)
	Diffusion of knowledge on home medical treatment	1 14	Facilitation of skills training
Boiling of drinking water	5	4, 14	
	Capacity building of community health workers	4, 14, 16,	promotion staff (Project-ty
		25, 41	Technical Cooperation)
nprovement of Health policy-planning	Capacity building of health care administrative	14, 15, 25,	<ul> <li>Training of health ca</li> </ul>
	officials	28, 29	practitioners (Project-ty
	Development of health care database		Technical Cooperation)
	Development of health care valabase		1 /
			Conducted gender educat
			(Project-type Technic
			Cooperation)
ecurement of Financial Resources for	× Improvement of taxation system		

ndicators: Literacy rates, School attendance rate, Advance rate to lower secondary education, Advance rate to upper secondary education			
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Infrastructure Development	Construction of classrooms	4, 33, 34,	School construction using local
Number of students per classroom		45, 46	equipment and materials (Grar
Number of books per school	Preparation of teaching materials	4, 45	Aid)
Number of farming households	× Construction of teachers' residence	4, 45	Construction of a learning cent
participating in community organizations	Strengthening of community organizations	4, 34	(Community Empowermen
participating in community organizations	Ortenginening of community organizations	7, 37	Program)
			Construction of Terakoya (JIC
			Partnership Program)
Capacity Building of Teachers	Expansion of teacher re-training system	4	Formulation of a non-form
Number of teachers participating in	× Strengthening of community organizations		education model (Communi
seminars	Expansion of teacher training schools	45	Empowerment Program)
Rate of filled vacancy of teachers	Expansion of an educational inspection system		p
housings	Seminars on school management		
Capacity of teacher training schools	g		
Improvement of Educational Quality	Improvement of the syllabus and curriculum	4	Development and expansion
Distribution of learning materials based on	Preparation and distribution of textbooks	46	teaching materials for no
new teaching methods	Increase of educational materials	4, 45	formal education (Commun
<b>j</b>	× Establishment of evaluation system of teachers	, -	Empowerment Program)
	,		Provision of picture books ar
			teaching materials (JIC
			Partnership Program)
Reduction of Gender Disparity in	Classes for girls		
School Enrollments	Assignment of female teachers		
Boy/Girl student ratio	× Improvement for female students curriculum		
Girls' school enrollment rate			
Improvement of Understanding of	Education seminar	45	
Education	× Development of an association for improvement of		
Number of seminars held	the environment for education		
Number of child laborers	× Reduction of child labor		
Creation of an Educational Fund	× Scholarship system		
Number of loan borrowers	× Student loan system		
Number of participants in mutual aid	× Establishment of a mutual-aid association on		
sessions	education		
Improvement of Education for School	× Follow up classes (encouraging dropouts to return		
Dropouts	to school)		
Number of students who return to school			
Improvement of Literacy Rate	Expansion of literacy classrooms	4, 9, 17,	<ul> <li>Preparation of texts of</li> </ul>
Number of literacy trainers		41, 45, 47	environmental conservation f
Number of class participants	Development of literacy materials for adults	17, 41	literacy classrooms (Project-typ
Number of textbooks			Technical Cooperation)
	Capacity building for literacy instructors	4, 9, 47	Adult literacy classes (JOC)
			Partnership Program)
	Dissemination of printed information	4	Literacy training for prima
			school teachers (JIC
			Partnership Program)
Citizenship education and education for	× Expansion of civil rights education		Workshops for opening libra
the improvement of living conditions	Life planning seminars	2	and librarians (JICA Partnersh
Number of seminar participants	× Education on democratization		Program)
Number of library users	Construction of a regional library	46	
Improvement of Educational Policy	× Capacity building of educational administrators		
Planning	× Preparation of statistics on education		
Number of seminar participants	Seminars		
Securement of Financial Resources for Education	× Improvement of the tax system		
	<ul> <li>Review of local finances</li> </ul>	1	

\*"Case No." corresponds to the number in the list of relevant projects (see appendix 1.)

Examples of Activities:		JICA has considerable experience
		JICA has certain experience
		JICA has experience as a component of projects
	×	JICA has little experience
JICA's Schemes:		A project which will potentially serve as a model for other similar projects

The improvement of health-related knowledge is as important as medical facilities in enhancing health conditions. Health conditions of local people can be improved not only through the development of medical facilities but also by increasing people's knowledge regarding health care. Due to restriction of health knowledge, they may be unaware of hygiene, nutrition, and family planning issues. For example, efforts should be made to disseminate knowledge on how to keep drinking water safe, in addition to the actual construction of clean water (even if wells or springs for safe drinking water are dug or found, health will not improve if the local people cannot separate their drinking water for their livestock or if there is no custom of washing glasses with clean water). Another example may be the increase in the number of local people suffering from sexually transmitted diseases (e.g. HIV) transmitted by family members who have come back from the cities. In this case, improving people's knowledge of health care through health education becomes imperative.

### JICA's Activities

JICA has worked on various activities for health care improvement of local people, including **a**) **family planning and reproductive health**, **b**) **primary health care (PHC), c) prevention of infections, d) prevention of HIV and e) surveys and expansion of local health care services**. Activities related to PHC for poverty alleviation have increased in particular. Such activities directly target impoverished groups and encourage community participation. PHC activities should be emphasized more in the future. Participation of local people and administrative officers in PHC activities is an important precondition for success, as focus must be converted from treatment to prevention.

**Family planning and reproductive health activities should involve not only females but also males.** Although family planning promotes the establishment of the rights of women, it is necessary for males to understand and participate for effective contraception. While family planning projects implemented by JICA in the past sometimes targeted only women, it is necessary to implement activities targeting both men and women in the future, since family planning is not solely a female matter.

<u>Mid-term</u> <u>Objective 2-2:</u> Improvement of Educational Standards

#### Mid-term Objective 2-2: Improvement of Educational Standards

The improvement of educational standards is a very important element for income generation. Literacy skills enable local people to read

It is important to gain the understanding of men as well as women for family planning. manuals on agricultural techniques and equipment, increasing agricultural productivity. Local people with literacy skills can acquire information their society needs. Moreover, as educational background is an important factor for obtaining a better job, highly educated emigrant workers tend to get jobs easier and earn a higher income.

Although assistance approach for education is detailed in the report of "Basic Education", the improvement of formal education for children and the expansion of non-formal education for adults are important elements in rural development. There are two approaches in the improvement of formal education for children: **school construction and improvement of educational quality** (quality of teachers, curriculum, etc.). Many developing countries face a lack of school buildings and teachers due to inadequate financial resources. In such cases, schools often employ persons without certification as substitute teachers, resulting in low-quality teaching. For educational standards in rural areas to be improved, training of substitute teachers and in-service training is necessary in addition to the construction of school buildings.

Furthermore, in spite of a strong desire for education in developing countries, even the minimum opportunities for education are neither guaranteed for all local people, nor are the people able to appropriately utilize such opportunities<sup>15</sup>. These situations show that there are not only educational sector problems with educational services and teaching materials, but also economic problems, restricting access to schools, and social problems stemming from customs and values, and health and nutrition conditions among others. Therefore, **it is important to create an environment where children can attend school.** 

**Literacy education** for adults and **citizenship education** such as seminars for improvement of living conditions should also be considered in the **future adult education activities**.

Finally, the above-mentioned educational approaches should not be implemented individually but combined to be most effective. For example, constructed school buildings can be utilized for supplementary instruction and literacy education.

Many people cannot send their children to schools even if they wish to for financial and social reasons. Measures must be incorporated into cooperation practices.

<sup>&</sup>lt;sup>15</sup> JICA (2000)

Although JICA has little experience in the social dimensions of basic education, it can be said that these dimensions are much related to poverty issues.

For literacy education and non-formal education, cooperation with NGOs is effective.

> Development Objective 3: Improvement of Protective Capabilities

<u>Mid-term</u> <u>Objective 3-1:</u> Conservation of Natural Environment <u>Mid-term</u> <u>Objective 3-2:</u> Measures Against Natural Disasters

### JICA's Activities

Although JICA's activities for basic education are detailed in the chapter on Basic Education, JICA has recently started to assist the social dimensions of basic education through Development Study as seen in cooperation for school mapping, in addition to its previous emphasis on primary school construction by Grant Aid and Grant Assistance for Grass-roots Projects. In addition, JICA has dispatched Japan Overseas Cooperation Volunteers (JOCV) in the education field to projects on secondary science and mathematics education through Project-type Technical Cooperation. Although these activities have contributed to the improvement of quantity and quality in education, an increasing trend for social development in primary education is yet to be seen.

On the other hand, NGOs have a long history of educational cooperation and often implement community-based activities. Cooperative activities for basic education with NGOs may be the most effective, as exemplified when some schools with NGO cooperation have engaged in formal and non-formal education on health care, environment, social disparities, and so on. As examples of JICA's assistance in non-formal education including literacy work, the various experiences under the Community Empowerment Program and JICA Partnership Program are noteworthy.

Literacy is essential for participation in modern economic activities and has a strong impact on poverty reduction, but sufficient attention to the planning stages is necessary to prevent expansion of existing social gaps (gender, ethnic minorities, the most impoverished groups, etc.) by focusing on specific groups<sup>16</sup>.

### [Development Objective 3: Improvement of Protective Capabilities]

### Mid-term Objective 3-1: Conservation of Natural Environment Mid-term Objective 3-2: Measures Against Natural Disasters

In the *DAC Guidelines on Poverty Reduction*, "protective capabilities" are referred to as "human capabilities to protect oneself from various kinds of suffering such as a) starvation, b) natural disasters, c) conflicts, d) crimes, e) violence, f) diseases, and so on." In this chapter, measures against natural

<sup>&</sup>lt;sup>16</sup> JICA (2000)

### Figure 4 Development Objective 3 "Improvement of Protective Capabilities"

Indicators: Cultivable land area, Forest area and trees planted, Water quality, Amount of marine resources				
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes	
Soil Conservation	Environmental research	23	<ul> <li>Study on land utilization and soil</li> </ul>	
Number of terracing locations	Terrace (erosion) and dam construction	17	erosion (Development Study)	
Number of checkdams	Forestation and planting of trees for protection	17	<ul> <li>Participatory prevention of gully</li> </ul>	
Number of environmental education	against wind		and land slides (Project-type	
courses	Environmental training and development of	17	Technical Cooperation)	
Number of citizens participating in	cooperatives			
cooperatives				
Forestry Conservation	Environmental research	25, 48	<ul> <li>Study on forest and wate</li> </ul>	
Number of afforestation trees	Establishment of afforestation and vegetation zones	20, 48	mangement and utilization	
Number of participants in cooperatives	Sustainable resource management	17, 20, 35	(Development Study)	
Environmental study area	Environmental training and development of	17, 20, 48	<ul> <li>Expansion of seedling</li> </ul>	
	cooperatives		plantations (Grant Aid)	
			<ul> <li>Seedling nursery managemer</li> </ul>	
			training (Project-type Technica	
			Cooperation)	
			<ul> <li>Environmental education utilizin</li> </ul>	
			literacy classrooms (Project-typ	
			Technical Cooperation)	
Bio-diversity Conservation	Environmental research		<ul> <li>Research and Development or</li> </ul>	
Environmental study area	Fishing and hunting restrictions		aquaculture technology (Projec	
Number of researchers	Fish, animals, and insects are to be released to		type Technical Cooperation)	
Water quality	conserve the bio-diversity			
Amount of marine resources	Water quality conservation activities			
	Building capacity of environmental researchers			
Water Quality Conservation	× Construction of sewage disposal facilities			
Number of participants in cooperatives	Education on domestic waste water			
Number of water purification locations	Environmental training and development of			
	cooperatives			

Indicators: Number of deaths per disaster,	Number of floods, Number of droughts		
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Flood Prevention	Construction of river banks	18	<ul> <li>Participatory improvement of</li> </ul>
Number of river banks	River prevention work against floodings	18	rivers (Project-type Technical
Number of river protection works	Construction of emergency evacuation area for in		Cooperation)
Number of seminars held	the case of flood disasters		
	Disaster prevention	18	
Anti-earthquake measures	× Fire extinguishing water reservoirs		
Number of water facilities	× Anti-earthquake building measures		
Number of disaster prevention training	Disaster prevention courses		
courses held			

#### Mid-term Objective 3-3 Improvement of Administrative Capabilities for Environment

Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Capacity building of local administrative	Training courses for administrative officers	18, 19	
officers	× Development of business manuals for administrative		
	officers		
	× Supervision system for administrative officers		
Improvement of statistics on environment	Development of environmental research systems		
	Development of monitoring systems		
Improvement of tax collection system	× Imposition of new taxes		
	× Improvement of tax collection system		
	× Tax privilege system for environmental conservation		
	issues		
Revision of local finance	× Efficiency of finance		
	× Expansion of budgets for environmental		
	conservation		

Case No." corresponds to the number in the list of relevant projects (see appendix 1.)

Examples of Activities:		JICA has considerable experience
		JICA has certain experience
		JICA has experience as a component of projects
	×	JICA has little experience
JICA's Schemes:		A project which will potentially serve as a model for other similar projects

disasters are instigated, due to their importance toward rural development. Natural disasters such as floods and desertification seriously damage economic and social infrastructure such as roads, irrigation systems, cultivated lands, forests, and so on. Therefore, such issues are an important component in rural development activities. Furthermore, because impoverished people in rural areas are most vulnerable to natural disasters, as cultivated land can be easily damaged from floods, erosion and sediment control as well as the conservation of the natural environment are important measures in reducing poverty.

People in poverty can not help depriving natural resources and also they easily worsen environment because of lack of financial and psychological afford to concentrate on environmental conservation. Their environmental aggravation then causes food shortages, worsening the poverty situation<sup>17</sup>. The vicious circle of poverty and environmental aggravation must be ended. For project effects to become sustainable, activities, which do not harm the environment, should be emphasized. These are some of the reasons for conservation of the natural environment within rural development projects. The protection of forests is effective in not only alleviating natural disasters such as floods but also in protecting the land from topsoil erosion and maintaining or improving productivity.

The natural environment can be conserved by preserving and rehabilitating existing natural resources (land and soil preservation and water-resource and forest-resource conservation) for improvement against natural disasters (flood, drought, etc.).

### JICA's Activities

JICA's activities in this field focus mainly on forest conservation, ecofriendly agriculture, and flood, erosion, and sediment control.

Forestry conservation projects have an "afforestation" image, but **these projects are also involved in designing afforestation from which local people can benefit, since simply planting young trees is ineffective.** For this reason, the activities in which agriculture and afforestation are united and the approaches of planting fruit trees in forested areas are implemented in line with agroforestry concepts. Even in this case, if the local people do not use full-grown trees, they may cut down young trees for firewood. For this reason, forestry

It is required to give consideration to local benefits.

Forest conservation should be conducted together with the diffusion of agricultural techniques and educational campaigns.

<sup>&</sup>lt;sup>17</sup> JICA (2000)

### conservation activities are frequently implemented parallel to the diffusion of agricultural techniques and education in schools.

In cultivated areas where the land slopes, which people in rural areas often cultivate, soil runoff has an influence on productivity. Subsequently, activities that **prevent topsoil erosion** are incorporated in the projects to improve the productivity of small-scale farmers. Soil conservation can be achieved through terracing fields, checkdams, and agroforestry.

Governments in developing countries cannot fully implement public works on flood and erosion controls due to the lack of budget and human resources. **Community participation on flood and erosion controls should be promoted as well as technical transfer to local engineers.** The introduction of **low-cost construction techniques** using local gravel and stones may also be effective.

<u>Development</u> <u>Objective 4:</u> Improvement of Political Capabilities

Enhancement of decentralization and strengthening of local government are important to conduct rural development suited to the area.

> <u>Mid-term</u> <u>Objective 4-1:</u> Improvement of Central Administrative Capabilities for Decentralization

### [Development Objective 4: Improvement of Political Capabilities]

In the DAC Guidelines on poverty reduction, "political capabilities" are defined as "enabling participation in policy-making and to make decisions independently in situations where human rights are guaranteed." This chapter focuses on decentralization in rural development.

Rural development approaches are to make development plans corresponding to the various special conditions of rural areas and to implement the projects through community participation. Development assistance, which quickly responds to local needs, requires cooperation with local governments. For this reason, **decentralization is an important factor in rural community development.** 

However, despite the fact that decentralization is an adopted policy in many countries, it has progressed slowly. For example, there are cases where local governments lack policy-making capabilities or human resources since central governments still have the decision-making. On the other hand, decentralization can cause further regional inequalities and differences. This leads to the conclusion that **appropriate decentralization measures are required in rural development activities, including the capacity building of the central governments, and improvement of laws and financial management for decentralization.** 

Finally, rural development projects should be consistent with local

Flood and erosion control require involvement of local people as well as local technicians.

### Figure 5 Development Objective 4 "Improvement of Political Capabilities"

Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Strengthening of Policy-making and	Strengthening of basic strategy for decentralization	4, 22	<ul> <li>Establishment of sustainable</li> </ul>
Implementation Capabilities	and policy-making capabilities for execution		community development
	× Delegations of various authorities from central to		techniques at nationa
	local levels		universities (Project-type
	× Development of laws for decentralization		Technical Cooperation)
	Improvement of officers' mentality and knowledge	4, 12	
	on decentralization		
Improvement of Statistical Information	Development of various statistics		
	× Promotion of budget allocation based on		
	decentralization		
	× Improving efficiency of fiscal expenditure and		
	cooperation on budget execution		
	× Utilization of private funds through promotion of		
	cooperation with private sectors and NGOs		
	× Improvement of application of funds through		
	thorough auditing		

#### Mid-term Objective 4-1 Improvement of Central Administrative Capabilities for Decentralization

#### Mid-term Objective 4-2 Strengthening of Local Administrative Capabilities for Decentralization

Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Capacity Building for Local Government	Strengthening of policy-making capabilities of local	4, 10, 11,	<ul> <li>Assistance for institutionalizing</li> </ul>
	officers for community development	12, 22	cooperation system among
	Improvement of local officers' mentality and	2, 4, 11,	governments, community
	knowledge based on decentralization	12, 26, 30	organizations and NGOs
	Promotion of community's participation in	2, 4, 10,	(Project-type Technical
	development policy-making	11, 12, 25	Cooperation)
			<ul> <li>Policy-making on rural</li> </ul>
			community development based
			on local needs (Project-type
			Technical Cooperation)
Development of Regional Statistics	× Development of various regional statistics		
	× Establishment of tax collection system for local		
	governments		
	× Capacity building for revenue agents		
	× Increasing annual revenue of local governments		
	(e.g. local tax)		
	Utilization of private funds through promotion of		
	cooperation with private sectors and NGOs		
mprovement of Local Administration	× Simplification of decision-making process within		
System	local governments		
_	× Development of management manuals		
Expansion of Local Administration	× Establishment of various governmental facilities (e.g.		
Service Facilities	municipal governments)		

\*"Case No." corresponds to the number in the list of relevant projects (see appendix 1.)

Examples of Activities:	×	JICA has considerable experience JICA has certain experience JICA has experience as a component of projects JICA has little experience
JICA's Schemes:		A project which will potentially serve as a model for other similar projects

<u>Mid-term</u> <u>Objective 4-2:</u> Strengthening of Local Administrative Capabilities for Decentralization government development plans. If the development plans of donors differ from local government development plans, it is difficult to obtain the effects, which projects and programs intended, and local government capacity can become overstretched managing the various projects and programs. Thus, **the improvement of administrative capabilities of local governments is required** for policy-making and sustainability based on local conditions. As the formulation of development plans requires the incorporation of local opinions, community participation, and utilization of existing local resources, the management capabilities of administrative officers must be improved in addition to those officers in charge of planning and members of local councils. These training opportunities may be limited, since most training facilities are located in cities, necessitating capacity building support by local administrative officers in order for decentralization to occur in the locality targeted.

### JICA's Activities

Past JICA activities to expand the capacity of local administrative officers for promoting decentralization have been implemented under JICA's Projecttype Technical Cooperation and Dispatches of Experts schemes. For example, *the Rural Development Plan for Supporting Poverty Alleviation project in Sulawesi, Indonesia* aimed to improve local administrations and promote community participation, emphasizing the relationship between villages and the local government. From this experience, it is believed that expanding local administration capacity improves the capabilities of government administrations, promotes strong relationships between villages and the government, and increases community participation.

### JICA's Priority

In the case of implementation of rural development activities for poverty affiliation, the commitment to NGOs, accumulation of the know-how applicable to other areas, and training of human resources are important, based on cost effectiveness.

### 2-3-3 JICA's Priority

Since JICA projects are funded by its citizen's taxes, it is necessary to evaluate cooperation from the viewpoint of public interest and relevance. The following cases are examples of relevant JICA cooperation.

### (1) Antipoverty Measures

In Japan, impoverished families below a certain level receive support from the government as social security. Governments in developing countries however do not have sufficient funds to support impoverished groups that are far below the average. **JICA could provide assistance on behalf of these**  governments for income generation of impoverished people in rural areas. However, in this type of assistance, cost effectiveness becomes an issue. In the past, JICA technical cooperation has proven the validity of the implementation, as technical transfer to governmental organizations has benefited the local people. However, as assistance to specific groups has limited spillover effects on development, it is difficult to prove the validity of the impacts in contrast to assistance costs. Usually, the assistance is **entrusted to NGOs** under JICA's Community Empowerment Program and JICA Partnership Program after considering the priority of assistance.

Although activities carried out under JICA's Project-type Technical Cooperation etc. aim for the establishment of model rural development and poverty reduction, it is actually difficult to apply this plan to other areas as rural development requires specific local approaches<sup>18</sup>. Therefore, when human resources in charge of rural development are required, the **provision of training for these resources using the know-how acquired from experience during the model project** is considered to be an effective development approach. When training is not an effective approach, efficiency and the expansion of direct beneficiaries of the project may be emphasized.

#### (2) Food Production

Although there are cases relevant to project implementation in development of food production areas, assistance solely targeting food production increases is categorized as agricultural development rather than rural development. However, in order to improve the comprehensive conditions and sustainability of farming areas, to promote income generation and a stable food supply, comprehensive approaches are required. These rural development approaches, which focus on agriculture to increase food production, differ from large-scale agricultural development projects.

In addition, since such cases tend to be model projects, there should be a creation of a system to transmit lessons learned from model projects to other areas and to produce projects and plans in cooperation with largescale comprehensive agricultural development plans.

In order to extend spillover effects, training courses for development administration are also important.

For stable food supply, it is necessary to a take comprehensive approach. Also, the creation of a system which transmits lessons to other rural areas and agricultural development cooperation should be implemented.

<sup>&</sup>lt;sup>18</sup> Applicability of development in a country to other areas has its limitations due to limited financial resources of the government. For this reason, a "development model" which requires heavy investment cannot be disseminated and regarded as a good model for problem solving. Therefore, it is necessary to take into consideration the financial situations of governments and the income levels of local people for "development model" projects.

Rural development activities for natural environment conservation include the promotion of effective forest resource usage and alternative techniques. For promotion of the results of these activities, local administrative and NGO capacity building as well as comprehensive cooperation with NGOs is required.

JICA provides comprehensive rural development cooperation for local people suffering from conflicts and disasters as part of its effort in reconstruction.

For improvement of administrative capabilities, local rural development officers will be trained and policy advisors to central governments dispatched.

### (3) Conservation of the Natural Environment

Rural people are the main users of natural resources and the key persons for the conservation and sustainable use of the natural environment. For example, since it is difficult to promote conservation of forest resources to local people who require firewood, the promotion of effective forest-resource use and the combination of alternative techniques such as the use of biogas and cow manure are also required.

The summary of the lessons from projects and **the trainings of local** administrative officers and NGOs would help disseminate project results and increase the impact of other projects. If such measures cannot be carried out, the project validity could be improved by extending the targeted regions and lowering development costs per area (for example, commissioning projects to NGOs or simultaneously implementing two or more small projects).

### (4) Reconstruction Support

JICA will provide support for the reconstruction of a country torn by civil wars and conflicts. For local residents to re-start their lives after conflicts or large disasters, priority will be given to the reconstruction of rural areas, where a large portion of these citizens live. A comprehensive approach encompassing assistance in agriculture, industry, education, health, and infrastructure sectors is necessary for the reconstruction of rural areas after conflicts.

### (5) Improvement of Administrative Capabilities

As many developing countries are currently in the process of decentralization, it is important for local administrative officers to acquire knowhow on policy-making in multi-sectoral local development and on industrial development including agriculture, in order to increase local government revenues. **Capacity building of local administrative officers** is a highly relevant field to rural development and is implemented through mutual cooperation with governments. Furthermore, **dispatches of policy advisors** to the central governments are also highly relevant because sending people to numerous local governments becomes a heavy burden on the donor agencies.

### 2-3-4 Procedure of Cooperation

The following procedures for multi-sectoral assistance in rural development are required.

<u>Procedure of</u> <u>Cooperation></u> To create a national rural development plan To set JICA's priority issues and regions To plan and implement regional projects focusing on local networks

Reconstruction Supports:

- To establish an overall plan with other donors and governments
- To take surveys on regional priority issues

#### Points of Concerns

- It is important to establish the system to spread the effects to other areas.
- Rural development should be coordinated with multi-sectoral and various concerned people and organizations
- It is necessary to choose issues strategically based on national rural development plans.

To create a grand design reflecting policies and priorities of the concerned country (through the Development Study scheme etc.) To set JICA's priority issues and regions with consideration of other government and donor activities

To plan and implement regional core projects focusing on establishment of networks between local administration, research institutes and rural communities (establishment of project strategy combining JICA's schemes)

Detailed surveys on possible reconstruction support after **civil wars and disasters** (not Emergency Cooperation) may be difficult. Also, if donors provide uncoordinated reconstruction support, the effects may be restricted. Therefore, **it is important to establish a grand design**<sup>19</sup> for reconstruction development and to implement project activities based on discussions with the governments, donors, and other concerned organizations.

Moreover, as food, water, housing and health care services are given high priority in emergency cooperation, development projects targeting longterm matters, such as ensuring normal daily lives of victims of conflicts and disasters are required in reconstruction support. **Surveying is important in order to determine local priorities.** 

### 3. Toward Future Cooperation

Rural development is in fact a multi-sectoral activity that generates synergy effects. This approach includes "Integrated Rural Development," which effectively combines multiple sectors and techniques from health care service, agricultural expansion, education, improvement of infrastructure to technical transfer, choosing specific regions and treating the local governments as counterparts. This approach has advantages when coping with multidisciplinary issues such as poverty, or tackling regional problems and in obtaining participation of the people concerned. However, despite intensive investment in a limited area, effects are not easily spread to other areas. Actually, there are a considerable number of JICA projects that have not been applied to other areas in the past, even though they were considered "model" projects.

For this reason, it is important to establish a system to disseminate

<sup>&</sup>lt;sup>19</sup> Reconstruction development follows emergency cooperation. Therefore, it is important to implement reconstruction after adjustments with donors from the emergency cooperation period.

know-how acquired from the implementation of rural development projects and programs. This is because activities that are implemented in a limited area and have an only slight spillover effect are not suitable to Japanese ODA as public work from the viewpoint of equity and public interests. Also, NGOs may be able to implement more cost effective activities. With this in mind, projects that draw on the strengths of JICA as an ODA executing agency should be implemented. Coordination between concerned organizations such as governmental organizations, donors, NGOs and communities must be coordinated in multi-sectoral rural development projects. Also, it is important to implement projects with the cooperation of two or more ministries or agencies. Furthermore, JICA should aim to implement assistance with a variety of people and organizations including rural communities and NGOs.

When a program includes comprehensive rural development approaches, **strategic choices** will have to be made in the selection of projects.

### **Box 4: Integrated Rural Development**

Integrated Rural Development is a concept prevalent in Western donors in the 1970s, which received renewed attention in the 1990s. This concept effectively combines multiple sectors and techniques from health care service provision, agricultural expansion, education, and improvement of infrastructure to technical transfer, regarding local governments as counterparts to deal with the multidimensional causes of poverty. Some projects based on this concept are implemented under JICA's Project-type Technical Cooperation, Team Dispatch of JOCV, and JICA Partnership Program.

The advantages of integrated rural development are described as; To enable multidisciplinary anti-poverty efforts in rural areas, To enable solutions to regional problems, targeting impoverished groups, and To promote the participation of local people, local administrative organizations, and civil society.

However, intensive investment in a specific area does not necessarily disseminate spillover effects to other areas. Also, it is difficult for activities of integrated rural development to make consistency with sectoral measures at national levels.

Local cultures and customs also need to be considered. Frequently, gender roles are clearly divided in rural areas, so when new agricultural organizations, techniques, and skills are introduced, benefits may vary by gender. For example, when concepts of irrigation agriculture and farmers associations were introduced to an area where traditional slash-and-burn agriculture was dominant and where males cut and harvested, whilst females engaged in other agricultural activities, male work decreased while female work increased as a result of the introduction of double- and triple-cropping. In addition, when the

To pay attention to the difference of gender roles and local customs males sold their surplus through the farmers association, they were able to benefit from the introduction of the irrigation system but females did not in spite of the increased labor input. This lowered female motivation and made it difficult for the project to succeed. Hence the importance of special consideration of gender by making detailed surveys of the local culture and customs in the project-making process.

# Appendix 1. JICA's Main Operations on Rural Development

As rural development encompasses various sectors, it is difficult to clarify which activities are categorized as rural development. This chapter shows a list of projects implemented in rural areas in order to illustrate rural development projects. The Relevant Projects on Rural Development list shown later does not cover all projects related to rural development, but tries to depict an image of rural development.

In this section, these projects are categorized by their objectives and schemes through an examination of their characteristics and problems.

Capacity building through Technical Assistance

## 1. Capacity building through Technical Assistance (Project-type Technical Cooperation/Team Dispatch of Experts/Group Dispatch of JOCVs)

JICA has supported the capacity-building of public administration officials in charge of rural development through the Project-type Technical Cooperation, the Team Dispatch of Experts and the Group Dispatch of JOCVs. The major characteristics of this type of cooperation are: (1) integrated rural and community development; (2) rural community development and training of administrators; (3) health care improvement; and (4) enhancement of protective capabilities. There is a recent tendency towards projects with regional dimensions, networking local administration and rural communities, and Team Dispatch of Experts for management and guidance of facilities constructed with Grant Aid. In the latter case, three to seven experts are dispatched and work with counterpart staff for approximately five years.

#### Agricultural and Rural Development

Integrated rural development for small-scale farmers is implemented through Project-type Technical Cooperation. The creation of model is important.

## 1-1 Agricultural and Rural Development (Project-type Technical Cooperation/Team Dispatch of Experts/Group Dispatch of JOCVs)...Case No. 1-9

Aimed at income-generation and the improvement of living standards of farmers in less-developed rural (impoverished) areas, integrated *rural and community development has been implemented through the Team Dispatch of Experts and the Group Dispatch of JOCVs.* These schemes introduce the skills and knowledge for agricultural and rural development required for a region's environmental and social conditions. *Most target groups are small-*

*scale farmers.* Most integrated rural or community development projects select model communities or areas, and initiate the participation of residents in these areas. However, if a model project is costly, dissemination of this model to other areas is difficult with a limited budget. Careful attention is necessary to avoid such situations.

Community Development and Capacity Building of Administrative Officers

Establishment of administration supporting resident's initiatives

> Health Care Improvement Project

Strengthening of PHC for prevention rather than construction of medical-treatment facilities.

## 1-2 Community Development and Capacity Building of Administrative Officers (Project-type Technical Cooperation) ...Case No. 10-13

Projects for community empowerment and local administration staff training, aim to establish a sustainable and effective local development mechanism as well as better relationships between communities and administration. For administration staff, JICA provides assistance on planning and coordination skills within a development plan and a chance to acquire participatory development methods. On the other hand, it encourages community empowerment and participation, working with communities and NGOs. These projects attempt to *encourage local administrations to support people's initiatives, rather than to pursue a top-down style.* Some examples of this type of cooperation are; The "*Project on Strengthening Sulawesi Rural Community Development to Support Poverty Alleviation Programme*" in Indonesia, the "*Cebu Socio-economic Empowerment and Development Project*" in the Philippines, and the "*Preliminary Survey on Mini-Project-type Technical Cooperation for Participatory Rural Development*" in Bangladesh.

# 1-3 Health Care Improvement Project (Project-type Technical Cooperation)...Case No. 14-16

Projects for the improvement of farmers' health include primary health care (PHC), family planning and maternal and child health care. These projects *focus on prevention rather than on treatment, and activities involve local residents*. The "Phase II of the Family Planning Maternal and Child Health Project" in the Philippines was conducted under the Project-type Technical Cooperation scheme with JOCVs reaching grass-root communities. The improvement of health services in Mexico, the "Family Planning Maternal and Child Health Project", made an attempt to strengthen cooperation between medical care centers at each level of medical treatment and to enhance a referral system which supports family planning and maternal and child health care. The "Project for Family Planning and Gender Development Phase 2" in Jordan

supports women's income generation as well as health care and hygiene.

Protective Capabilities Improvement Project

Implementation of natural resource management, combined with rural development

> Policy-making of Rural Development

Cooperation with other schemes is important.

## 1-4 Protective Capabilities Improvement Project (Project-type Technical Cooperation/Group Dispatch of JOCVs)...Case No. 17-20

This category includes forest conservation and tree planting through the Project-type Technical Cooperation and the Dispatch of JOCVs. *Many projects conduct afforestation activities and encourage participatory natural resource management.* The "*Community Development and Forest/Watershed Conservation Project Phase II*" in Nepal was designed to conserve the forest by promoting participatory community development, through the integration of Project-type Technical Cooperation, JOCVs and local NGOs.

# 2. Policy-making of Rural Development (Development Study)...Case No. 21-30

Since many developing countries have limited policy-planning capabilities, effective development plans cannot be formulated at times. Therefore, the Development Study scheme presents a grand design for national policies and overall plans of counterpart countries. Verification of planned projects and pilot projects are also implemented. Based on the study, community-based plans are formulated with social, economic and environmental considerations. Major Development Studies on rural development include: (1) recommendations on improvement of agricultural productivity; (2) support for improvement of local health care; and (3) local infrastructure improvement as well as school mapping. Based on the results of the Development Studies, Grant Aid and the Project-type Technical Cooperation may be provided. Although the Development Study formulates plans, plan implementation is almost always given priority in formulation. For the implementation of appropriate projects, the plan must be formulated deliberately based on solid research. Therefore, collaboration between Development Study and other schemes, such as the Project-type Technical Cooperation, are important. Project formulation and planning will also require cooperation with other schemes such as Grant Aid and the Project-type Technical Cooperation.

Rural development requires a multi-sectoral development plan. However, an all-embracing plan without detailed sector strategies is usually not welcomed. Recommendations should be specific and feasible with clear priorities.

Development of Facilities

Basically grant aid is provided for infrastructure, and cooperation with social components is required.

### Development of Facilities (Grant Aid)...Case No. 31-35

There are a lot of model projects through Grant Aid, based on the Development Study. Past projects include the construction of infrastructure such as road and traffic control (roads and bridges), enhancement of public transportation (including busses), rural electrification (small-scale waterpower, solar energy etc). Extensive assistance has been provided for school construction to expand access to education and market-related infrastructure. Recently, consultants and other aid workers have promoted the social dimension of development, such as management and maintenance through training and educational activities in the construction of infrastructure under Grant Aid. As a result, technical transfer on maintenance know-how is conducted with the construction of infrastructure and provision of equipment. Such infrastructure is effective in improving industries, educational curriculum and teaching staff. *The combination of different schemes and multi-sectoral approaches is expected to take place in future projects.* 

The project for water supply in Senegal is an example that moved forward from the construction of facilities to technical cooperation. Although water supply facilities were built with Grant Aid, local irrigation associations were not adequately institutionalized. After provision of the Grant Aid, the Project-type Technical Cooperation will provide and assist in the establishment of a participatory management system initiated by irrigation associations.

Cooperation in Specific Rural Villages

## 4. Cooperation in Specific Rural Villages (Community Empowerment Program/JICA Partnership Program) ...Case No. 36-48

Regionally-based integrated rural development has been implemented by NGOs, rather than under a government initiative. Support for public organizations focused on technical transfer to counterpart organizations and on infrastructure development in pursuit of economic development. On the other hand, the private sectors and NGOs have provided detailed assistances to specific areas. Some NGOs have accumulated quite a lot of knowledge on participatory development approaches, and an increasing number of projects

have requested NGOs to implement rural development projects in specific areas. In recent years, poverty reduction has increasingly become the crucial issue in rural development. Utilizing NGO knowledge and promoting collaboration with NGOs is important in providing assistance to the poor at the grass-roots level and is expected to accelerate. JICA collaborates with NGOs through its Community Empowerment Program, the JICA Partnership Program and in certain components of some Project-type Technical Cooperation projects.

# **Relevant Projects on Rural Development**

No	Country	Project Name	Period	Type of Schemes	Mid-term Objectives	Characteristics
1.					-type Tec	hnical Cooperation, Dispatch of Experts, Dispatch
		Overseas Cooperation	Voluntee	ers)		
1-1		al and Rural Development				
1	Indonesia	Technical Cooperation for the Integrated Agricultural and Rural Development Project in Southeast Sulawesi Province	1991.1- 1998.2	Project-type Technical Cooperation	1-1, 1-2	Conducted several rural development activities with a participatory approach. This included improvement of agricultural infrastructure such as small-scale irrigation systems, improvement of productive techniques, strengthening farmer organizations. Paddy fields were drastically developed by the project. Farmers were enabled to obtain fuel and parts for agricultural machinery through a stock fund system established among themselves.
2	Philippines	Training Services	1996.6-	Project-type	1-1, 1-2,	Formulated training courses and rural development programs at
		Enhancement Project for Rural Life Improvement	2001.6	Technical Cooperation	2-1, 2-2	an agricultural training center based on various surveys at model sites to gain an understanding of the real lives of villagers (e.g. "survey on local community situation" and "individual household survey").
3	Philippines	Bohol Integrated	1996.11-	Project-type	1-1, 1-2	Established a training center for extension workers. At the field
		Agriculture Promotion Project	2001.11	Technical Cooperation		level, introduced comprehensive agricultural development technology that included cultivation techniques, farm management, water use management and agricultural machinery. Performance of groups using water for irrigation was greatly improved.
4	Cambodia	Refugee Resettlement	1992.12-	Dispatch of	1-1, 1-2,	Known as tripartite cooperation, this project promotes resettlement
		and Rural Village Development Project	2004.3	Experts, Dispatch of JOCVs	1-4, 2-1, 2-2, 4-1, 4-2	of repatriated refugees, internally displaced persons and demobilized soldiers, and conducts rural development programs on agriculture, health care, hygiene, and education. Grant aid for expenditure on field activities and dispatch of experts and Japan Overseas Cooperation Volunteers are provided by the UNDP. Also, experts from ASEAN provide detailed assistance by using techniques based on local conditions.
5	Indonesia	Implementation Support	1995.1-	Dispatch of	1-1, 1-2,	Conducted comprehensive regional development programs for
		for Integrated Area Development in Barru District	2001.12	JOCVs	2-1	poverty reduction in rural areas, such as rehabilitating irrigation systems, improving cultivation, multiple agriculture, providing recommendations on establishing public market systems, intensive management for livestock husbandry, diffusion of productive side businesses, and improvement of living conditions. Project involved a JICA's Team Dispatch.
6	Panama	Promotion of Cooperatives in Ngobe- Bugle	1998.12-	Dispatch of JOCVs, Community Empowerment Program	1-1, 1-2, 2-1	Develops cooperatives for improving living standard of ethnic minorities through poultry farming and establishment of comprehensive farms. Also, JOCVs engage in various projects related to handicrafts, health care and hygiene, and improving stores and infrastructure based on local needs. A cooperative project between a Community Empowerment Program and JOCV.
7	Ghana	The Small-scale Irrigated	1997.8-	Project-type	1-1, 1-2	Technical assistance to small-scale farmers for rehabilitation of
		Agriculture Promotion Project	2002.7	Technical Cooperation		existing irrigation systems in terms of facilities and management through farmer participation and to develop a sustainable farming system. Also, conducts a verification study of microcredit on agricultural machinery and equipment.
8	Malawi	Project to Disseminate Appropriate Horticultural Techniques in Robi	1998.11- 2003.11	Dispatch of JOCVs	1-1	Conducts JOCV Team Dispatch with the aim of implementing a field trial to identify and formulate adequate horticultural techniques and diffusion of technical knowledge to farmers. (e.g. vegetables, soil fertilizers, plant pests, and fruit trees)
9	0	Comprehensive Rural Development in Fatick	1987.1-	Dispatch of JOCVs	1-1, 1-2, 2-1, 2-2	Conducts comprehensive regional development to improve local lives, such as the establishment of latrines, implementation of hygiene and literacy education, technical transfer of crop cultivation and income generation through handicraft and dyeing. A Group Dispatch of JOCVs engaged in vegetable farming, fruit growing, nursing, and rural development.
1-2		y Development and Capacit				
10	Indonesia	Project on Strengthening Sulawesi Rural Community Development to Support Poverty Alleviation Programme	1997.3- 2002.2	Project-type Technical Cooperation	4-2	Promoted establishment of organization control with a focus on local development needs and improvement of officers' attitudes and knowledge in order to strengthen policy-making and management of participatory rural development projects. Local awareness of issues were raised through PRA (Participatory Rural Appraisal) techniques facilitating development of policy-making by local people. Moreover, an increasing number of development meetings were held by independent groups.

No	Country	Project Name	Period	Type of Activities	Mid-term Objectives	Characteristics
11	Philippines	The Cebu Socio- Economic Empowerment and Development Project	1999.3- 2004.2	Project-type Technical Cooperation	4-2	Strengthens mutual cooperation between local governments and local communities and develops pilot projects for improving BHN (Basic Human Needs) and livelihoods in 20 regions by developing administrative capabilities for participatory and sustainable local development. Emphasizes decision-making process of development projects based on local needs and establishes this knowledge as a sustainable system.
12	Tanzania	Sokoine University of Agriculture Centre for Sustainable Rural Development (SCSRD)	1999.5- 2004.4	Project-type Technical Cooperation	4-1, 4-2	Establishes specific development methods of a local development center of an agricultural university (SUA methods) through verification and case studies at model areas under the concept of "reality comprehension of fieldwork", "conventional potentials" and "focus on characteristics of communities".
13	Bangladesh	Preliminary Survey on Mini-Project-Type- Technical Cooperation for Participatory Rural Development in Bangladesh	2000.4- 2004.4	Team Dispatch of Experts	1-4, 4-2	Experimentally makes use of systems and organizations to promote links between local governments and local people based on the "link model" suggested at the Kyoto University-centered "Rural Development Experiment". Establishing participatory rural development model through construction of small-scale infrastructure.
1-3		e Improvement Project				
14		Phase II of the Family Planning, Maternal and Child Health Project	1997.4- 2002.3	Project-type Technical Cooperation	1-2, 2-1	Developed various activities based on the community, such as construction of latrines and co-management of village drug stores, educational campaigns through puppet shows and videos at the initiative of the provincial board of health, and capacity building for village health volunteers. Strengthened cooperation with NGOs by creating an "NGO network". This project works in a zone defense style whereby experts work in different areas and JOCV assists those works.
15	Mexico	Family Planning, Maternal and Child Health Project	1992.4- 1998.3	Project-type Technical Cooperation	2-1	In addition to participatory activities of family planning, maternal and child health in model sites, a referral system with medical institutions was strengthened to support such activities.
16	Jordan	The Project for Family Planning and Gender Development Phase 2	2001.7- 2003.6	Project-type Technical Cooperation	1-2, 2-1	Conducts information services at local meetings, home visits, and educational campaigns with religious leaders to promote awareness of reproductive health. Moreover, promotes women's activities for income generation such as breeding goats and apiculture to increase the status of women. This is a project targeting promotion of family planning and the participation of women in society in the most conservative and poor areas of Jordan.
1-4		Capabilities Improvement F	-			
17	Nepal	Community Development and Forest/Watershed Conservation Project Phase II	1994.4- 2000.8	Project-type Technical Cooperation Dispatch of JOCVs	1-2, 2-1, 2-2, 3-1, 3-3	Emphasized local empowerment process based on local needs instead of a "blueprint" approach. Also, gave special consideration to social justice and gender issues. A cooperation project between Project-type Technical Cooperation, JOCV and local NGOs with the aim to improve resource management and preserve the environment.
18	Nepal	Disaster Mitigation Support Programme Project	1999.9- 2004.8	Project-type Technical Cooperation	3-2, 3-3	Conducts development of disaster prevention methods and education at a low cost and local participatory activities aiming to promote community participation based on local conditions and disaster characteristics. Also, establishes systems and methods for disaster surveys and restoration.
19	Costa Rica	Plan for Environmentally Friendly Farming	1993.8- 2000.2	Dispatch of JOCVs	1-1, 3-1	Research project for agriculture environmental conservation implemented by JOCVs at a university in Costa Rica because environmental pollution and danger to public health by usage of chemical fertilizers and agricultural chemicals were seen as problems. Moreover, promoted organic agricultural methods through JOCVs group dispatch.
20	Niger	Project for Cooperation on Stimulation of Greenery in Karegoro	1993.1- 2001.6	Dispatch of JOCVs	1-1, 3-1	Promoted forestation, development of seedling fields and agroforestry with local people to prevent desertification caused by man-made devastation. Also, promoted vegetable and fruit farming, development of market channels and improved stoves.
	-	king of Rural Develop	•	velopment Stud	ly)	
	gricultural De	velopment, Rural Developm Feasibility Study of Agrarian Reform Communities in Marginal Areas	ent) 1996.2- 1997.7	Development Study	1-1	Conducted various surveys to improve farmers' settlement and agricultural productivity at remote areas focused under the Philippines' comprehensive agricultural land reform plan. Formulated a development master plan based on condition surveys of 12 model areas and conducted feasibility studies in 4 pilot areas. Also, formulated guidelines for development plans at villages regarding agricultural land reform.

No	Country	Project Name	Period	Type of Activities	Mid-term Objectives	Characteristics
22	Laos	Master Plan Study on Integrated Agricultural Development	2000.11- 2001.10	Development Study	4-1, 4-2	Formulated an action plan on comprehensive agricultural development according to the national policy, "Escape from poorest country status by 2020". Made 10 sub-sectors and 110 project programs, set priorities, and conducted general evaluations.
23	China	Study for Taihang Shan Integrated Agricultural Development Project in Hebei Province	1998.6- 1999.9	Development Study	3-1	Formulated comprehensive agriculture development master plan aiming for poverty reduction and environmental conservation through farmer oriented projects, government public works, and assistance to farmers. Based on this plan, model area was selected and a feasibility study was conducted.
24	Bangladesh	Model Rural Development Project Phase 2 for Kachua, Nabinagar, Bancharampur and Debidwar Upazilas	1988.10- 1989.9, 1990.2- 1991.8	Development Study (Grant Aid ) (Dispatch of JOCVs)	1-1, 1-2	Formulated a master plan based on promotion of productivity in rural areas, capacity building for human resources, development of specific beneficiaries and improvement of organization and systems. Based on this plan, Grant Aid and Team Dispatch of JOCV were implemented.
25	Guatemala	Study on Integrated Rural Development for the Reduction of Poverty in the Central Highland Region	2000.2- 2001.7, 2001.8- 2003.3	Development Study	3-1, 4-2	Aiming for farmer income generation, improvement in living conditions and conservation of natural resources, conducted a Development Study. Study involved two stages, policy design and verification. Introduced participatory planning techniques at workshops with local people and formulated detailed plans based on local needs, with the intent of implementing a pilot project in the future.
26	Mozambique	Study on Development of the Resettlement Area for Demobilized Soldiers and Mine Laborers from South African	2000.7- 2002.9	Development Study	1-1, 2-1	Formulates rural development plans including specific action plans for settlement and life improvement of demobilized soldiers, ex- South African mine workers and widows. Conducted empirical research on priority action plans such as rural water supply, agriculture, gender issues, micro-credit, human resource development.
27	Tanzania	Verification Study on the Small Scale Horticultural Development Project for Poverty-Farmers in Coast Region	1999.10- 2004.3	Development Study	1-1, 1-2	Conducting various projects within "the Small Scale Horticultural Development Plan for Poverty" where prices of traditional cash crops in coastal regions are not stable. Evaluating the effectiveness of each project provides feedback for the development plan. Promoting technical transfer and capacity building for people concerned in the process of the pilot project.
•	ealth Care Imp Malawi	Master Plan on Strengthening Primary Health Care Services	1998.6- 2000.1	Development Study	2-1	Formulated a model plan on a specific region to promote Primary Health Care for infants and women of reproductive age. A master plan for disseminating the model plan throughout the nation was formulated.
29	India	Development Study on Reproductive Health in the State of Madhya Pradesh, India	2000.11- 2002.3	Development Study	2-1	Investigated actual situation of women's health care, nutrition, hygiene, education and labor conditions to improve health care services in areas with a high maternal death rate. Also, reviewed existing government programs and made master plans on target areas.
(De	evelopment of	Local Infrastructures)		I		
	Bolivia	Rural Electrification Implementation Plan for Renewable Energy	1998.8- 2001.9	Development Study	1-4, 4-2	Investigated rural electrification utilizing renewable energies such as sunlight, small-scale hydropower, and wind power to improve living standards of impoverished groups in rural areas. Also made a project master plan that contributed to the Poverty Reduction Strategy Papers (PRSP). Local government implemented the project and electric committees/cooperatives and NGOs managed it.
З.	Developme	ent of Facilities (Grant	Aid)			
31	Bangladesh	Establishment of a rural women's research institute	1995	Grant Aid	1-1	Constructed an agricultural training center for women as a joint project between Grant Aid Cooperation and an NGO (OISCA). The Ministry of Women's Affairs delegated management to the NGO. Vegetables, eggs, and rice cultivated at the training center became known as OISCA Brand and became popular.
32	Senegal	Project for Water Supply in Rural Areas	1979-1995	Grant Aid (Project-type Technical Cooperation)	2-1	Water system improvement at 79 sites because rural areas were enormously damaged by depletion of well water caused by dry weather and water-related diseases. Project had a favorable impact on diet modifications and income generation through sufficient water supply to community and neighboring nomads on the sites. In addition to strengthening water committees for the concerned facilities, assistance project for improvement of living conditions and rural development implemented.
33	Philippines	Project for Improvement of Educational Facilities	1994-1996	Grant Aid	2-2	Constructed classrooms with limited budgets in areas lacking educational facilities. Adopted local techniques for future improvement plans and sourced as much as possible locally except for manual water pumps.

No	Country	Project Name	Period	Type of Activities	Mid-term Objectives	Characteristics
34	Nepal	Project for Construction of Primary Schools under Basic and Primary Education Program II)	1999	Grant Aid	2-2	Supplied necessary funds for procuring equipment to construct schools. Conducted community-oriented construction of primary schools based on local needs.
35	Senegal	Project for Management of Forest Nurseries	1991	Grant Aid (Project-type Technical Cooperation)	3-1	Developed and expanded forest nurseries at 3 sites and supplied related equipment. Not only improved productivity at the facilities but also assisted with anti-desertification. Based on this result, a Project-type Technical Cooperation "Comprehensive Rural Forestry Development Plan" began in January, 2000.
4.	Cooperati	on in Specific Rural Vi	illages (C	ommunity Emp	owermen	t Program, JICA Partnership Program)
(Ag 36		velopment, Rural Developm Empowerment of the	ent) 1999.2-	Community	1-1, 1-2	Local NGOs implemented empowerment project for 600 poverty
	macricola	Poor in South Sulawesi to Support Poverty Alleviation	2002.1	Empowerment Program	,	groups in South Sulawesi with the assistance of Project-type Technical Cooperation "Rural Development Plan for Supporting Poverty Alleviation in Sulawesi".
37	Malaysia	Food Processing at Tenom KPD Youth Training Centre	1998.11- 2001.11	Community Empowerment Program	1-1,1-2	Improved food processing training (e.g. coffee, meatballs or fishballs) at a training centre in Sabah where there were inadequate incomes and labor shortages in farming communities with the aim of increasing earnings.
38	Cambodia	Model Health and Social Service Centers in Cambodia	1998.12- 2001.12	Community Empowerment Program	2-1	Trained social workers and provided counseling services to improve community welfare services for people who suffered from mental and physical aftereffects of the of Pol Pot regime.
39	Laos	Income Generation Activity Project in Oudomxai	1998.12- 2001.1	Community Empowerment Program	1-2	Conducted vocational training and entrepreneurial education of garment manufacturing, natural dyeing and weaving to raise the status and earnings of women in rural areas. Project was assisted by the UNDP and Japanese UNVs instructed designing.
40	Laos	Project Supporting Women's Lives	1998.12- 2001.11	Community Empowerment Program	1-2	Implemented vocational training sessions on weaving, plant dyeing, sewing, bamboo work and ceramic, targeting women or people with disabilities. Also, conducted marketing activities to increase their incomes.
41	Bangladesh	Participatory Rural Development Project through Empowerment of the Poor	2001.8- 2004.7	Partnership Program	1-1, 1-2, 2-1, 2-2	Improves the environment for rural development activities of mutual assistance organizations of the poor, <i>shomitis</i> (savings and credit groups). Activities include promotion of <i>shomitis</i> ' activities, group training sessions, adult literacy classes, capacity building for local health volunteers, provision of manual pumps and latrines, skills training sessions for income generation or micro-credit.
42	Ghana	Project for Organizations of Women around Sheanuts Production	2000.2- 2003.1	Community Empowerment Program	1-2	Improving the income and status of women through providing assistance to their organizations and technical guidance to female farmers that produce sheer butter nuts. Dispatch of JOCVs and experts to this project under consideration.
	Kenya Balth Care Imp	Promotion and Managerial Guidance of Traditional Handicraft Producing Group	2002.1- 2003.1	Small-scale Development Partner Scheme	1-2	Increases community earnings through improvement of producers' organization for traditional handicrafts (e.g. sisal baskets and wood carvings), technical training, training of new leaders, and environmental development.
44	Tanzania	Integrated Reproductive Health and Vocational Skills Training for Youths in Peri-Urban Dar Es Salaam (Buguruni Ward)	2001.10-	Community Empowerment Program	2-1	Conducts rehabilitation of pharmacies and clinics, capacity building for health care professionals and educational campaigns to local people to improve health and medical services in areas where refugees live.
<u> </u>	<b>tucation)</b> Ethiopia	Life Glow School II	1999.10- 2002.3	Community Empowerment Program	2-2	Provided opportunities for education and conducted literacy campaigns in areas with limited access to education to enhance basic education. Established an informal education model managed by NGOs.
46	Cambodia	Improved Access to Primary Education in Rural Areas through Community Participation Project	2000.10- 2003.9	Partnership Program	2-2	Develops basic education environment to increase the standard of targeted areas such as the construction of school buildings, workshops intended for librarians and monks, rice banks, and traditional music performance training.
47		Project for Promotion of Adult Literacy in the Northern Mountainous Region	2000.4- 2003.3	JICA Partnership Program	2-2	Literacy and continuous education targeting adults in one of the poorest areas in the Northern Mountainous Region. Constructs Terakoya and implements training courses to establish government and local management organizations for Terakoya.
<u> </u>	vironment)	Droigot to Intraduce	2004	Small acate	24	Ctransthened apparentian with Vistoreness second
48	Vietnam	Project to Introduce Japanese Natural Forest Management Techniques to a Vietnamese NGO through Training and Forums	2001	Small-scale Partnership Program	3-1	Strengthened cooperation with Vietnamese governmental organizations to preserve natural forests in crisis both qualitatively and quantitatively. Mutually exchanged opinions on problem recognition of natural forest enforcement in Japan, on relationships with local people, and also transferred techniques and knowledge.

# Appendix 2. Basic Checklist (Rural Development)

Basic checklist of "rural development" were to be summarized in each system chart on development issues in this report. Instead, however, task-based indicators of "poverty alleviation" created by donor agencies are given as a reference here. The JICA "poverty issues" task force will develop rural development basic checklist in the future, based on the following.

#### <Multilateral Institutions>

	Common Indicators	UNDP 1)	WORLD BANK 2)	ADB 3)	FAO 4)
(E	conomic Capabilities	)			
1.	Household consumption	Real GDP per capita (HDI)	Household consumption expenditure	GNP per capita	
			GDP per capita	Energy consumption per capita	
			Net income per capita	Electric power consumption per capita	
			Percentage of population	National commodity price	
			under national poverty line (rural/urban)	indicator less than US\$1(percentage and actual	
			(Turai/urban)	figure)	
			Percentage of population	National poverty line	
			under international poverty	(percentage and actual	
			line (PPP less than US\$1-2) Poverty gap	figure)	
2.	Family property structure		Child labor		
			Employment by type of industry (male/female)		
			Average working hours and		
			basic wage		
			- agricultural wage		
_	Duranting of OME		- manufacturing wage		
3.	Promotion of SMEs		Average income in urban areas		
			Housing cost per income		
			Access to public services		
			(water, electricity etc.) Informal employment in		
_			urban areas		
4.	Rural development			Agricultural land ratio	Productivity of agricultural products, livestock, and
					fishery products (primary
					sector, primary production)
					Trade volume of agricultural
					products and livestock
					Volume of food supply (agricultural products,
					livestock)
					Food balance sheets
					Producer prices (crops,
					Land (land use, irrigation)
					Means of production
					(agricultural machinery,
					fertilizers, pesticides)
					Food aid
					Forest resources (by type) output
_					Timber trade volume
5.	Consumption by gender	Income ratios by gender (GDI, GEM)	Consumption rate by income bracket		
			Pensioner ratio		
			Female employment rate		

	Common Indicators	UNDP 1)	WORLD BANK 2)	ADB 3)	FAO 4)
(Pe	olitical Capabilities)				
6.	Influence rating		Benefits during maternity		
-	Lefter and the second second		leave Position of women in terms		
7.	Influence on political decision making process		of decision making (Cabinet- level)	Governmental expenditure by type of public sector	
8.	Decision making by	Seats in parliament held by	10101)		
	gender	women (GEM)			
	•	Female legislators, senior			
		officials and managers (GEM)			
		Female professionals and			
		technical workers (GEM)			
9.	Legislation on				
	decentralization				
<u>`</u>	uman Capabilities)				
10.	Infant mortality rate	Life expectancy at birth	Infant mortality rate		
		(male/female) (GDI)	(according to the highest and		
			lowest value of family assets)		
			Validity ratio on infant		
			vaccinations (according to the		
			highest and lowest value of		
			family assets) Prevalence of infant		
			malnutrition (according to the		
			highest and lowest value of		
			family assets)		
11.	Maternal mortality rate	Probability at birth of not	Prevalence of maternal		
	(HIV prevalence/AIDS	surviving to 40 year old (HPI)	malnutrition		
	mortality rate)	, , , , , , , , , , , , , , , , , , ,	Fertility rate		
12.	Monitoring of diseases in	Population with access to	Expenditure ratio on primary	Number of beds in hospitals	
	each community	health services (HPI)	health care in rural areas	Number of patients per	
				doctor	
		Population using improved	Acess to sanitation	Daily per capita supply of	
		water sources (HPI)		protein	
		Percentage of malnourished		Primary and secondary	
		children under 5 year old		enrollment ratio (Male/	
		(HPI)		Female)	
		Combined primary,			
		secondary, and tertiary			
		enrolment ratio (Male/			
		Female) (GDI)			
13.	School-aged children by	Adult Literacy Rate (HDI)		Adult literacy ratio (Male/	
	gender	(Male/Female) (GDI)		Female)	
				Number of students per	
				teacher	
<u>`</u>	ocio-cultural Capabili	ities)			
14.			Consumption rate by income	Gini index	
	poor		bracket Gini index		
15.	Relationship between		Unemployment rate by level		
· J.	different social classes		of education		
16.					
	importance of community				
	activities				
(P	otective Capabilities	)			
17.	Frequency and impact of		Desertification	Desertification ratio (1980-	
.	natural/human disasters			2000)	
			Nationally protected areas (%	Nationally protected areas (%	
			of total land area)	of total land area)	
			Level of water pollution	Carbon dioxide emissions	
			density		
			Carbon dioxide emissions		
			Access to sanitation facilities		
			Level of air pollution density		
18.	Population mobility		Female population		
			Population growth		
			Crude mortality rate		
			Crude birth rate		
			Age dependency ratio		
10	Ornehilita anti-		Urbanization		
19.	Capability rating Crime rate				

#### <Bilateral Donor Agencies>

15	Common Indicators	USAID 5)	CIDA 6)	DFID 7)
•	conomic Capabilities)	000		
1.	Household consumption	GDP per capita growth ratio	GDP growth ratio per capita	Gross national income growth per capita
			Population ratio under international income poverty line (PPP \$1)	Proportion of population below \$1 per day
				Gross national savings Poverty gap ratio Unemployment rate for 15 to 24 years old
	Family property structure	Aid as a percentage of GNP Trade growth ratio Trends in direct foreign investment		External debt (% of GDP) Fixed telephone lines per 1,000 people Computers per 1,000 people
		Economic Freedom Index since 1995 (Heritage Foundation) Agricultural labor growth ratio under total population growth ratio		Trade (% of GDP) Primary Share of exports (% of merchandise exports)
3.	Consumption ratio by			Net foreign direct investment (% of GDP) Consumption rate by income bracket
_	gender			Female employment rate
-	olitical Capabilities)			
4.	Influence rating	Number of countries classified by Freedom House as free/partly free/not free	HDI/GEM/GDI indicators (UNDP)	
5.	Influence on political decision making process	Freedom House scores for political rights Freedom House score for civil liberty	Corruption Perceptions Index 2001 (Transparency International)	
6.	Legislation on decentralization			Proportion of seats held by women in national parliament
(H	uman Capabilities)			
7.	. ,	Mortality rate for children under five	Mortality rate for children under five	Under-5 mortality rate Infant mortality rate Proportion of 1 year old children immunised against measles
8.	Maternal mortality ratio	Maternal mortality rate		Maternal mortality ratio Proportion of births attended by skilled health personnel Contraceptive prevalence rate
9.	HIV Prevalence/AIDS mortality ratio	HIV prevalence rate in 15 to 24 year olds		Number of children orphaned by HIV/AIDS HIV prevalence rate among 15-24 year old pregnant women
0.	each community	Number of deaths from the top ten infectious diseases (besides HIV/AIDS) Percent of children under five who are underweight		Prevalence of underweight children under-five years of age (HPI) Proportion of population below minimum level of dietary energy consumption Prevalence and death rates associated with malaria Proportion of population in malaria risk areas using effective malaria prevention and treatment measures Prevalence and death rates associated with tuberculosis Proportion of TB cases detected and cured under DOTS (Directly Observed Treatment Short Course) Proportion of population with access to affordable essential drugs on a sustainable basis
	aged children	National primary school achievement test scores for reading, mathematics, and science, by sex Gross primary enrollment ratio, by sex Net primary school enrollment ratio, by sex Primary school gender equity ratio Proportion of pupils starting grade 1 who reach grade 5 by sex Primary school repetition rates, by sex	Literacy rate of 15 years old and older Proportion of pupils starting grade 1 who reach grade 5 by sex	Literacy rate of 15 years old and older Net primary school enrollment ratio, by sex Proportion of pupils starting grade 1 who reach grade 5 by sex Combined primary, secondary and tertiary enrolment ratio (HDI) Male/Female (GDI)
(S	ocio-cultural Capabiliti	es)		
2.	Gap between rich and poor		Income gap between highest and lowest of 5- grade model	

	Common Indicators	USAID 5)	CIDA 6)	DFID 7)
13.				
	different classes			
14.	Frequency and importance			
	of activities by different			
	communities			
(P	rotective Capabilities)			
15.	Frequency and impact of natural/human disasters	GDP per unit of energy use	GDP per unit of energy use	GDP per unit of energy use
		Percentage of energy production from renewable sources	Carbon dioxide emissions	Proportion of land area covered by forest
		Nationally protected areas		Land area protected to maintain biological diversity
		Carbon dioxide emissions, average annual rate of growth		Carbon dioxide emissions
		Percentage of urban population with access		Proportion of population with sustainable
		to safe drinking water		access to an improved water source (urban/ rural)
		Percentage of urban population with access		Proportion of people with access to improved
		to sanitation services		sanitation (urban/rural)
		Annual change in total forest area (percent		Proportion of people with access to secure
		change and in hectares)		land tenure (urban/rural)
		Annual change in natural forest area (percent		
		change and in hectares) Annual change in plantation forest area		
		(percent change and in hectares)		
16.	Emergency/Conflict	Crude mortality rate (CMR) in emergency		
		situations		
		Prevalence of underweight children under-five		
		years of age in emergency situations		
		Number of people displaced by open conflict Evaluation of political and economical freedom		
		after open coflict (by Freedom House and		
		Heritage Foundation)		
17.	Population mobility			
18.	Situation of crime		Military expenditure	

Source: These are basic indicators typically used by each agency:

<Multilateral Institutions>

- 1) UNDP "Human Development Report"
  - Note: HDI (Human Development Index), HPI (Human Poverty Index), GDI (Gender-related Development Indexicator), GEM (Gender-related Empowerment Measure)
- 2) World Bank "World Development Indicators"
- 3) ADB "Growth and Change in Asia and the Pacific-Key Indicators 2001"
- 4) FAO "FAOSTAT Agriculture Data" http://apps.fao.org/page/collections

Note: Country and area specific data is available and can also be processed on the website.

#### <Bilateral donor agencies>

- 5) USAID "Strategic Plan 1997" (Revised 2000)"
  - Note: For details on indicators of economic freedom, refer to the Heritage Foundation website

(http://www. heritage.org/index/2000methodology.html). Also, refer to the Freedom House's website

- (http://www.freedomhouse.org/) for details regarding political capabilities.
- 6) CIDA "Results-based Management and Accountability Framework", Jan. 2001 Note: Refer to the web site of the Transparency International website (http://www.transparency.org/cpi/index.html) for corruption perception
- index. 7) DFID "Department Report 2001", "Statistics on International Development 2001"

#### Remarks 1. Standards of classification:

(1) Classification by of DAC's definition of poverty

- According to the "The DAC Guidelines on Poverty Reduction" (2001) pp.51, poverty is attributed to the lack of five types of capacities: economic, political, human, social, and protective ("The DAC Guidelines Poverty Reduction" 2001, pp.51).
- (2) Sub-categories
- Sub-categories in this table refer to status and fields related to a lack of each individual's capability. The remarkable point is that poverty is not only an individual issue, but a lack of capability with a macro-level impact on an entire society.

#### (3) Relationship to other fields

Rural development, education, health, and ecology are referred as important fields related to poverty alleviation, and are placed in the columns of related capabilities.

#### Remarks 2. Basis of selection and categories of each donor agency:

(1) Multilateral Institutions

Playing a role of data collection for international comparison, The UNDP and the World Bank have an exhaustive collection of data due to involvement in data collection for international comparisons. In this table, the indicators are compared to with those specifically used by those of the ADB which are specialized in its area, and those of FAO, who specialize in with its specialty in collecting agricultural data.

(2) Bilateral donor agencies

In terms of bi-lateral donor agencies, USAID, CIDA, and DFID indicators are used to measure performance of projects. They are formed to implement projects, rather than to identify poverty like those of the World Bank. Also, the data is collected by each country or domestic agency.

#### Remarks 3. How to read the table:

- (1) This table shows an overview of approaches and applying indicators to gain an understand of the overall picture of poverty alleviation.
- (2) Since there is a variety of data collection methods, a comparison of data from each agency is not entirely accurate. Instead, this table shows indicators used by each agency, summarizing the common items in development issues from the various aspects and approaches taken.
- (3) Refers to sources and notes for specific data.

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Development Objectives	Mid-term Objectives	Sub-targets of Mid-term Objectives	Examples of Activities
1. Improvement of Economic	1-1 Agricultural Income	Improvement of Productive Techniques	Survey on technologies
Capabilities	Improvement	Number of crops farmers cultivate	Research of productive techniques
Capasinico	Average annual agricultural income	Farming equipment utility time per household	Capacity building for agricultural extension workers
Average annual income	Income growth rate (indicator of average	Average number of types of crops produced per	Expansion of technological training system (e.g. agricultural schools)
Employment rate	growth conditions)	household	Strengthening of community-based activities for farming
		Number of people attending agricultural technology	Promotion of multiple agriculture to reduce risk of monoculture
		schools	Promotion of agricultural mechanization of optimal size
		Improvement of Agricultural Infrastructure for	Introduction of improved and proper crop varieties Development and construction of irrigation systems with sustainable
		Production	management
		Irrigated land area	Improvement of land and farm roads for productive efficiency
		Average cultivated land area per farmer	Construction of productive facilities suitable to local needs (e.g. pools
		Number of facilities for seeds and seedlings	for fish farming and centers for seeds and seedlings)
		Number of processing facilities	Construction of agrotechnical facilities suitable to local needs (e.g.
			rice centers)
		Improvement of Agricultural Infrastructure for	Development of basis for double and triple cropping  x Development and expansion of market places in optimal size
		Distribution of Products	Development of feeder roads based on past results and demand
		Average distance to markets	forecasts
		Distance to feeder road	Development of consolidating stations and storages according to
		Participation rate in shipping cooperatives	local production
		Operating rate of facilities for shipment	Organization of shipping cooperatives
			Technical improvement of post harvest
		Development of Distribution Management System	Development of distribution system (e.g. decrees) × Development of research systems for prices of agricultural products
		Price information charts on number of users of	Development of market management and distribution system for
		agricultural products	efficiency
		Number of merchants in markets	Strengthening of quality control for agricultural products
			Development of agricultural statistics regarding the needs of
		Strongthoning of Former Institutions	producers
	1-2 Non-agricultural Income Improvement	Strengthening of Farmer Institutions Number of farming households participating in	Establishment of agricultural banks Trainings of local group leaders
	Average annual non-agricultural income	agricultural cooperatives	Promotion of organization
	Income growth rate (indicator of average	Participation rate of cooperative members to	Development of coordination with private companies
	growth conditions)	activities	Development of mutual guarantee system
	Employment conditions in non-agricultural	Satisfaction level of cooperative members on	
	industries	cooperative functions	
	Number of people engaged in non-	Expansion of Vocational Training System and	Expansion of vocational schools Expansion of entrepreneurial seminars
	agricultural industries	Entrepreneurial Knowledge Number of entrepreneurial seminars	Expansion of vocational training system for working people
		Number of people attending vocational schools	× Capacity building for entrepreneurial advisors
		Number of participants in commerce and industry	× Capacity building for local commerce and industry associations
		associations	
		Expansion of Micro-finance Services	Micro-credit programs by NGOs
		Number of micro-finance service users Repayment rate of debtors	Establishment of revolving funds Formulation of micro-finance model
		Turnover rate of funds	Establishment of mutual guarantee system by local people
		Development of Resources for Tourism	× Tourism service associations (e.g. guides)
		Number of newcomers	× Assistance for construction of tourism related facilities
		Number of people engaged in tourism businesses	× Promotion of tourism
		Number of tourists	× Conservation of cultural assets and landscape
		Development of Traditional and New	× Development of infrastructure for tourism (e.g. transportation network)     Strengthening of sales channels and market surveys
		Industries	× Strengthening of micro-finance services
		Amount of augmentation of earnings from traditional	Expansion of management seminars
		industries	Expansion of micro-finance services
		Number of workers in traditional and new industries	Technical assistance for new product development (e.g. design)
		Number of people engaged in traditional industries	Business consulting services
		Number of newly developed products Promotion of Agrotechnical Industry	Agro-processing technical training
		Total sales of agrotechnical products	Assistance for agrotechnical related institutions
		Number of people engaged in agro-processing	Strengthening of sales channels and market surveys
			Expansion of management seminars
	4.2. Conseitu Duilding fan Fostaring	Conscitu Building for Industry Deleted Local	× Expansion of micro-finance services
	1-3 Capacity Building for Fostering Industries	Capacity Building for Industry Related Local Administrative Officers	<ul> <li>Training courses for administrative officers</li> <li>Development of business manuals for administrative officers</li> </ul>
			Supervision system for administrative officers
		Improvement of Statistics on Industrial	Evelopment of survey systems to identify economic trends
		Development	× Development of monitoring systems
		Improvement of Tay Callestian System	k Imposition of new taxes
		Improvement of Tax Collection System	<ul> <li>x Imposition of new taxes</li> <li>x Improvement of tax collection system</li> </ul>
			× Tax privilege system for new industries
		Revision of Local Finance	× Efficiency of finance
			× Expansion of budgets for fostering industries
	1-4 Development of Infrastructure	Rural Electrification	Small-scale hydro power
		Number of solar panels Production of electricity by hydro power and	<ul> <li>x Diffusion of solar panels</li> <li>x Assistance for extending electric wires</li> </ul>
		extension of electric wires	<ul> <li>× Capacity building for associations and development of management</li> </ul>
		Number of user association members	system
		Expansion of Communication and	× Expansion of telephone networks
		Information Networks	× Expansion of wireless communication networks
		Number of telephone subscribers Number of radios owned	<ul> <li>× Expansion of wire communication networks</li> <li>× Construction of antennas at transmission sites</li> </ul>
		Number of radio stations	Capacity building of technicians on communication infrastructure
		Development and Expansion of Local Roads	Construction of local roads
		Length of local roads which have been developed	Improvement of techniques for maintaining local roads
		(kilometers)	Development study on maintenance of local roads
		Number of cars utilizing local roads Development of Public Transportation	Development of maintenance organizations Expansion of bus services
		Networks	× Expansion of marine transport networks
		Users of public transportation	× Expansion of railroad maintenance
		Number of users	. Conceite building for extremely and
		Promotion of Transportation Related Companies	<ul> <li>Capacity building for entrepreneurs</li> <li>System for priviledged finance</li> </ul>
		Number of people engaged in traffic industries	<ul> <li>× Capacity building for cooperatives</li> </ul>
		Number of traffic industry users	
		Capacity Building for Transportation Policy	Capacity building for traffic administrative officers
		Making	× Development of transportation statistics
		Securement of Budget for Traffic	× Improvement of tax collection system
		Infrastructure	<ul> <li>Revision of local finance</li> </ul>

Examples of Activities:	JICA has considerable experience	
	JICA has certain experience	
	JICA has experience as a component of projects	
×	<ul> <li>JICA has little experience</li> </ul>	

# **Development Objectives Chart on Rural Development (2)**

Development Objectives	Mid-term Objectives 2-1 General Health Improvement	Sub-targets of Mid-term Objectives Expansion of Medical Facilities	Examples of Activities Construction of hospitals
Improvement of Human		Distance to public medical institutions	
Capabilities	Infant mortality rate		Construction of clinics
	Average life expectancy	Time to medical institutions in case of emergency	Establishment of a referral system
	Average morbidity rate	Availability of medicines in medical institutions	Establishment of a medical supply system
		Qualitative and Quantitative Improvement of	Expansion of a nurse training center
		Medical Practitioners	Establishment of a retraining system for medical practitioners
		Number of nurses per population	Establishment of a support organization for medical practitioners
		Number of doctors per population	
		Number of citizens participating in support	
		organizations	
		Promotion of Vaccination Campaign	Provision of Medical supplies
		Rate of vaccination against diseases	Establishment of a vaccination program
		Number of vaccinations	× Medical supply system
			Training on preventive medical care
		Safe Water Supply	Construction of water works
		Distance to water supply facilities	Well digging (deep and shallow wells)
		Number of water facilities per population	Protection of wells (from livestock excreta and others causes)
		Water quality (quantity of bacteria, etc)	× Systematization of periodical water inspections
		Number of citizens participating in water	Organization and development of water management associatio
		management cooperatives	× Establishment of a water supply training center
		Quantity of water supply	
		Reduction of time required for water collection	
		Improvement of Sanitary Conditions	× Improvement of domestic drainage measures
		Number of latrines	Promotion of the use of latrines
		Number of waste disposal facilities	Improvement of waste disposal
		Number of health care centers and institutions	Establishment of a health care center
		Number of participants in community groups	Capacity building of community groups on sanitation issues
		Improvement of Maternal and Child Health	Promotion of family planning
		Education	Nutritional education
		Number of participants in maternal and child health	Promotion of health education after childbirth
		education seminars	Child health education
		Number of seminars held	Education of traditional mid-wives
		Reduction of morbidity rate for traditional mid-wives	
		Knowledge-building on Public Health	STD education
		Number of participants in seminars on sexually	Education for prevention of infectious diseases
		transmitted diseases	Diffusion of knowledge on home medical treatment
		Number of trained health workers	Capacity building of community health workers
		Boiling of drinking water	
		Improvement of Health policy-planning	Capacity building of health care administrative officials
			Development of health care database
		Securement of Financial Resources for	× Improvement of taxation system
		Health	× Local finance review
	2-2 Improvement of Educational	Infrastructure Development	Construction of classrooms
	Standards	Number of students per classroom	Preparation of teaching materials
	Literacy rates	Number of books per school	× Construction of teachers' residence
	School attendance rate	Number of farming households participating in	Strengthening of community organizations
	Advance rate to lower secondary	community organizations	
	education	Capacity Building of Teachers	Expansion of teacher re-training system
	Advance rate to upper secondary	Number of teachers participating in seminars	× Strengthening of community organizations
	education	Rate of filled vacancy of teachers housings	Expansion of teacher training schools
		Capacity of teacher training schools	Expansion of an educational inspection system
			Seminars on school management
		Improvement of Educational Quality	Improvement of the syllabus and curriculum
		Distribution of learning materials based on new	Preparation and distribution of textbooks
		teaching methods	Increase of educational materials
			× Establishment of evaluation system of teachers
		Reduction of Gender Disparity in School	Classes for girls
		Enrollments	Assignment of female teachers
		Boy/Girl student ratio	× Improvement for female students curriculum
		Girls' school enrollment rate	
		Improvement of Understanding of Education	Education seminar
		v	
		Number of seminars held	× Development of an association for improvement of the environm
		Number of child laborers	for education
			× Reduction of child labor
		Creation of an Educational Fund	× Scholarship system
		Number of loan borrowers	× Student loan system
		Number of participants in mutual aid sessions	× Establishment of a mutual-aid association on education
		Improvement of Education for School	× Follow up classes (encouraging dropouts to return to school)
		Dropouts	
		Number of students who return to school	
		Improvement of Literacy Rate	Expansion of literacy classrooms
		Number of literacy trainers	Development of literacy materials for adults
		Number of class participants	Capacity building for literacy instructors
		Number of textbooks	Dissemination of printed information
		Citizenship education and education for the	× Expansion of civil rights education
		improvement of living conditions	Life planning seminars
		Number of seminar participants	× Education on democratization
		Number of library users	Construction of a regional library
		Improvement of Educational Policy Planning	× Capacity building of educational administrators
		Number of seminar participants	× Preparation of statistics on education
			Seminars
			Jerimais
		Securement of Einspecial Descuress for	x Improvement of the tax system
		Securement of Financial Resources for Education	<ul> <li>Improvement of the tax system</li> <li>Review of local finances</li> </ul>

# **Development Objectives Chart on Rural Development (3)**

Development Objectives	Mid-term Objectives	Sub-targets of Mid-term Objectives		Examples of Activities
3. Improvement of Protective	3-1 Conservation of Natural	Soil Conservation		Environmental research
•	Environment	Number of terracing locations		Terrace (erosion) and dam construction
Capabilities	Cultivable land area	Number of checkdams		Forestation and planting of trees for protection against wind
	Forest area and trees planted	Number of environmental education courses		Environmental training and development of cooperatives
				Environmental training and development of beoperatives
	Water quality	Number of citizens participating in cooperatives		E - de la constat de la constat
	Amount of marine resources	Forestry Conservation		Environmental research
		Number of afforestation trees		Establishment of afforestation and vegetation zones
		Number of participants in cooperatives		Sustainable resource management
		Environmental study area		Environmental training and development of cooperatives
		Bio-diversity Conservation		Environmental research
		Environmental study area		Fishing and hunting restrictions
		-		5 5
		Number of researchers		Fish, animals, and insects are to be released to conserve the bi
		Water quality		diversity
		Amount of marine resources		Water quality conservation activities
				Building capacity of environmental researchers
		Water Quality Conservation		× Construction of sewage disposal facilities
		Number of participants in cooperatives		Education on domestic waste water
		Number of water purification locations		Environmental training and development of cooperatives
	3-2 Measures Against Natural	Flood Prevention		Construction of river banks
	Disasters	Number of river banks		River prevention work against floodings
	Number of deaths per disaster	Number of river protection works		Construction of emergency evacuation area for in the case of flow
	Number of floods	Number of seminars held		disasters
	Number of droughts			Disaster prevention
		And: conthermoles responses		
		Anti-earthquake measures		× Fire extinguishing water reservoirs
		Number of water facilities		<ul> <li>Anti-earthquake building measures</li> </ul>
		Number of disaster prevention training courses he	eld	Disaster prevention courses
	3-3 Improvement of Administrative	Capacity building of local administrative		Training courses for administrative officers
	Capabilities for Environment	officers		× Development of business manuals for administrative officers
		onidere		
				× Supervision system for administrative officers
		Improvement of statistics on environment		Development of environmental research systems
				Development of monitoring systems
		Improvement of tax collection system		× Imposition of new taxes
				× Improvement of tax collection system
				× Tax privilege system for environmental conservation issues
		Devision of least finance		
		Revision of local finance		× Efficiency of finance
				<ul> <li>Expansion of budgets for environmental conservation</li> </ul>
4. Improvement of Political	4-1 Improvement of Central	Strengthening of Policy-making and		Strengthening of basic strategy for decentralization and policy-makir
Capabilities	Administrative Capabilities for	Implementation Capabilities		capabilities for execution
Capabilities	Decentralization			× Delegations of various authorities from central to local levels
				× Development of laws for decentralization
				Improvement of officers' mentality and knowledge on decentralization
		Improvement of Statistical Information		Development of various statistics
				<ul> <li>Promotion of budget allocation based on decentralization</li> </ul>
				× Improving efficiency of fiscal expenditure and cooperation on budg
				execution
				× Utilization of private funds through promotion of cooperation wi
				private sectors and NGOs
				× Improvement of application of funds through thorough auditing
	4-2 Strengthening of Local	Capacity Building for Local Government		Strengthening of policy-making capabilities of local officers f
	Administrative Capabilities for			community development
	Decentralization			Improvement of local officers' mentality and knowledge based
	Desentialization			decentralization
				Promotion of community's participation in development policy-making
		Development of Regional Statistics		× Development of various regional statistics
				× Establishment of tax collection system for local governments
				× Capacity building for revenue agents
				× Increasing annual revenue of local governments (e.g. local tax)
				Utilization of private funds through promotion of cooperation wi
				private sectors and NGOs
		Improvement of Local Administration System	Τ	× Simplification of decision-making process within local governments
				× Development of management manuals
				· · · · · · · · · · · · · · · · · · ·
		Expansion of Local Administration Service		x Establishment of various governmental facilities (e.g. municip
		Expansion of Local Administration Service Facilities		<ul> <li>Establishment of various governmental facilities (e.g. municip governments)</li> </ul>