No. 293

### **Summary Report**

# Upgrading of Women's Technical Level for the Improvement of Rural Life

MARCH 1993



JAPAN INTERNATIONAL COOPERATION AGENCY

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#### **Preface**

In recent years, the importance of WID (Women in Development) has been increasingly recognized, and the promotion of WID projects in the field of international cooperation has become a priority task. Under such circumstances, the implementation of technical cooperation involves the recognition of women as a driving force for the development of agriculture, forestry and fisheries. Particularly, women play a vital role both in agricultural production and in rural life in the developing region. Improvement of the training of women through technical assistance in various aspects is essential for the expansion of agricultural production and improvement of the quality of rural life.

Against this background, in compliance with the proposal made in the report of the workshop for sector-wise assistance (WID) in 1990, our agency initiated a study program on the upgrading of women's technical level for the improvement of the quality of rural life. This program will cover a three-year period with a view to contributing to the implementation of cooperation projects in agricultural sectors targeted to women. This program consists of an overseas fact-finding survey and a study in Japan. The former mainly aims at analyzing the current situation of women's participation in agricultural activities and rural life as well as cases of cooperation by international organizations and other countries. The latter analyses various aspects relating to technical cooperation from Japan in this sector and guidelines of cooperation, based on the results of the fact-finding survey and the experience in agricultural extension programs and schemes for the improvement of the quality of rural life in Japan.

This report was compiled as a summary of the program for the second year, including the results of the survey on women's status in the developing region, current situation of rural women in Asia, Africa, Latin America, etc., and the results of studies on the problems and strategy required for improving the quality of rural life. It is hoped that this report will be widely used as a reference by those who are concerned with this problem.

Lastly, I would like to gratefully acknowledge the assistance extended by the Association for International Cooperation in Agriculture and Forestry and the members of the study committee, the staff of Japan Overseas Cooperation Volunteers and former field experts of our agency for the surveys, and overall support extended by the distinguished officers in the Ministry of Agriculture, Forestry and Fisheries.

March, 1993

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#### Introduction

Since the proclamation of the UN International Women's Year in 1975 and the following UN Decade for Women, efforts for improving women's status and integrating women in the development process have been made on a global scale. Along with the establishment of UNIFEM in 1976, the adoption of the Convention for the Elimination of All Forms of Discrimination Against Women by the UN general assembly, and the adoption of the "Nairobi Forward Looking Strategies for the Advancement of Women" during the World Women's Conference in 1985, countries have taken action to implement these conventions and resolutions. Though their approach varies, developing countries have also sought ways of maximizing women's potential in socio-economic development processes, and international agencies along with developed countries have extended their assistance to achieve these objectives.

In Japan, efforts have been made to upgrade women's status in various sectors. In particular, since the establishment of the "Headquarters for Formulating and Promoting Women's Affairs "chaired by the Prime Minister in 1975, new policies for upgrading women's status were implemented. In the recent "Domestic Campaign Programmes towards 2000 "with the first revision in 1991, international cooperation in terms of WID (Women in Development) has been promoted. In this context, although Japan has followed international guidelines to address women's issues in harmony with the Guiding Principles to Aid Organizations for Women's Role in Development enacted by DAC of OECD, our performance in this field is still far from comparable to the aid activities toward WID-related programs in major developed countries or from international organizations concerned. However after the "Workshop for assisting WID" sponsored by JICA and the provisions of "OECF Guidelines for WID "adopted in 1991, Japan has started to become actively engaged in women's affairs.

In the domestic agricultural and forestry sectors, based on the Forum for Medium-Long Term Vision on Women in Rural Communities, a report entitled "New women in rural communities towards 2001" was published in October, 1992. Also, in the field of assistance to WID-related programs in developing countries, JICA formulated a three-year plan in 1991 by entrusting AICAF with the task of undertaking a study

program to upgrade women's technical level for the improvement of the quality of rural life.

The study program deals with the following themes: (1) analysis of the situation of women's role in agricultural production and rural life in developing countries, (2) analysis and summary of the experiences in domestic extension services for agricultural activities as well as for improving rural life, with emphasis placed on women's involvement, (3) collection and analysis of information on technical cooperation projects implemented by international organizations and foreign countries and (4) in the light of the results of these analyses, considerations on the means of developing women's potential for the acquisition of useful skills/techniques for agricultural production and rural life, and formulation of guidelines on how to extend technical cooperation between developing countries and Japan, etc.

During the first year of the project, 1991, the subjects (2) and (3) were exclusively addressed and discussed. In 1992 the study was focused on (1) coupled with how to deal with subject (4). With regard to (1), the literature was reviewed as JICA carried out surveys on the upgrading of women's technical level for the improvement of the quality of rural life, covering six selected countries in Asia, Latin America and Africa. In addition, information obtained from the questionnaires on technical cooperation projects to be conduced by JICA, as well as interviews with former JOCV (Japan Overseas Cooperation Volunteers) staff members, former field experts of JICA and of NGOs was also analyzed. A preliminary debate was organized for subject (4).

The questionnaires mentioned above aimed at analysing the actual situation of rural women's routine activities in the project areas through interviews by JOCV staff members who were dispatched and worked in these areas. The surveys mainly consisted of interviews with rural people (including women) by JOCV staff covering 139 households belonging to 58 rural communities in 17 countries.

The report contains three chapters, as follows: introduction followed by I. Status of women in developing countries, II. Status of rural women's participation in agriculture and rural development activities in developing countries, III. Problems and strategies for the improvement of the quality of rural life.

Chapter I. "Women's status in developing countries" consists of four parts. The

major objective of this chapter is to analyse women's socio-economic status in various areas based mainly on the information and data collected from the Population Crisis Committee, with numerical data collected by the committee. It appears that women are generally disadvantaged worldwide as compared with men, but the degree of disparity is more serious in developing countries, in particular in the field of health, marriage and education, with a conspicuous lag in their participation in socio-economic activities or involvement in decision-making processes. Also, the extent of this inequality gradually decreases when the economic conditions of the country concerned improve. It thus appears that some economic development of the society concerned is required in order to improve women's status.

Chapter II. "Actual situation of rural women's involvement in agriculture and rural development in developing countries" describes the actual conditions of rural life and of women's participation in agricultural production through information based on statistics and publications of UN, ILO, etc. as well as on the questionnaires, surveys and results of interviews. The former half of this chapter aims at outlining rural women's routine life and social status in terms of health and hygiene, diet, living environment, women's access to rights and information, time use, gender-based division of daily activities in agricultural practices. This information points to the heavy workload, disadvantage in the management of household, few opportunities to take part in decision-making processes, etc. In addition to social customs, the lack of free time and money restricts their ability to improve their condition.

In the latter half of this chapter, examples of women's involvement in rural life and agricultural production, based on the basic survey conducted by JICA covering six countries in three regions including Asia, Latin America and Africa were presented. At the same time, WID-related projects underway in these regions, and the extent of assistance from the developed countries or from international organizations to these projects are described.

Chapter III. "Problems and strategies for the improvement of the quality of rural life" cover three categories, i.e., improvement of quality of rural life, agricultural improvement and both.

Also, issues relating to assistance programs and strategy are taken up.

#### I. Status of Women in Developing Countries

#### 1. Introduction

This chapter aims at analyzing the status of women as a whole in the developing countries, based on available statistical data.

Generally, it is difficult to obtain the statistics of the developing countries, especially, those dealing with the status of rural women. However, it is relatively easy to obtain statistical data of the status of women as a whole, including rural and urban areas. Therefore, the status of women as a whole and not limited to rural women is discussed in this chapter. The issues of rural women will be discussed in the next chapter.

We used the data of studies carried out by foreigners in the next three sections of this chapter, due to the limited number of studies carried out by Japanese. In section 2, we describe the status of women based on an integrated approach, using "Population Briefing Paper No. 20." In section 3, we introduce the concept of "missing women" of Ms. Amartya Sen. In section 4, we describe the status of women in various developing countries, using the publication entitled: "The World's Women 1970-1990: Trends and Statistics" by UN.

#### 2. Integrated approach

"Population Briefing Paper No.20" (issued by Population Crisis Committee in June 1988), provides the numerical ranking indicating the relative status of women in the world in 'The Country ranking of the Status of Women.' The evaluation of the status of women covers five sectors, including health, marriage and children, education, employment, and social equality. Four indicators\* selected from each sector were given scores. Although the details of the procedure are not presented here, if the total scores amount to 100 or full mark, then it is assumed that the position of women in the country concerned is equal to that of men.

In this system, Sweden ranks first among 99 countries, with a score of 87.

Japan ranks 34th with a score of 68.5. Some developing countries outranking Japan such as Jamaica ranked tenth (77.5), Barbados (22nd, 74), Uruguay (30th, 70), Costa Rica and Hong Kong (both 31th, both 69.5) and Cuba (33rd, 69).

The averaged total scores are analyzed by regions leading to the following comparison. Developed countries have a high average score of 75.8. East and Southeast Asia excluding Japan (61.6), Central America (61.2) and South America (60.1) have similar averages, West Asia (42.3), North Africa (40.3) and Sub-Saharan Africa (40) show comparable averages, while South Asia (36) the lowest.

The following conclusions are deduced from this ranking. Firstly, although high scores are given to one indicator, it does not necessarily follow that the position of women in the country under study is favorable. For example, Tunisia has a score of 5 with regard to the teen marriage but the total score is only 49. Nepal has a score of 5 with regard to the number of self-employed women but the total score is 37. These facts emphasize the importance of adopting an integrated approach.

Secondly, the developed countries have not achieved a complete equality free from gender gap and it is necessary to upgrade the position of women in every country.

Thirdly, if the ranking is considered from the sectoral point of view, every indicator under the employment sector is globally evaluated at about 2.5. Values of 3 or lower are alloted to indicators belonging to social equality in most of the listed countries. These data imply that the sectors of employment and social equality are global issues to be tackled. Three other sectors, i.e., health, marriage and children, and education, show a wide disparity between the developed and the developing countries, where the countries of Central America and the Caribbean as well as South America are closer to the developed countries, followed by East and Southeast Asia. However,

<sup>\*</sup> Each sector consists of the following indicators.

Sector of health - indicators of infant and child mortality, mortality and child-bearing years, life expectancy, and the differential life expectancy between female and male.

Sector of marriage and children - indicators of teen marriage, total fertility rate, contraceptive prevalence, and differences of widowed, divorced and separated women and men.

Sector of education - indicators of secondary school teachers, primary and secondary school enrollment, university enrollment, and differential literacy rate between women and men.

Sector of employment - indicators of the self-employed, paid employees, professionals, and share of paid employment between female and male.

Sector of social equality - indicators of the economic equality, political and legal equality, equality in marriage and family, and social equality between women and men.

in other regions the overall situation in these sectors remains low as a rule.

Fourthly, women's status is roughly proportional to the level of per capita GNP. East and Southeast Asia as well as Latin America ranked higher as compared with Africa and South Asia, except for West Asia. Thus, it is generally concluded from such an integrated approach that any improvement in women's position inevitably requires economic development in the very society in which they live. This is also equivalent to say that integrated strategies are required to alleviate the current inequality experienced by women in various fields, in which they are involved along with economic development.

#### 3. Missing women

It is generally recognized that the female population outweighs that of male by 5 to 7% in the developed countries, where as a rule no particular gender-based segregation is observed in the nutrition or medical access between female and male. On the contrary, the population ratio of women to men (usually given as female population against 100 males) in the developing countries is lower than that of developed countries.

For example, the ratio is 93.5 in India and 94.3 in China. Assuming that the ratios are equal to 105 as often encountered in the developed countries, where women and men are equal, it appears that the female population has lost 11.5 persons in India, while 10.7 persons in China. If the demographic figures are applied, around 50 million (=850 million  $\times$  11.5/(100+93.5)) in India, and about 62 million of women (=1,130 million  $\times$  1.7/(100+94.3)) in China may have died due to social inequality in these countries. The term "missing women" is used to express this hypothetical loss of female population.

The ratio of female population to male in the developing countries is highest in Sub-Saharan Africa (103), followed by Southeast Asia (102), Latin America (100), North Africa(99), East Asia (96), South Asia and West Asia (both 95). Sub-Saharan Africa with a low level of economic growth shows the smallest number of "missing women."

This curious phenomenon has been analyzed by Ms. Amartya Sen. She states

that the degree of "missing women" is more dependent on whether women can earn their own income, rather than on the level of national economic growth or cultural standards. Ms. Sen suggests that the higher the rate of women's participation in economic activities (paid labour), the higher the female population ratio to male, that is, the fewer the "missing women".

Sub-Saharan Africa and Southeast Asia, where the "missing women" are fewer, also show a high rate of women's involvement in economic activities, implying a higher level of disposable income of individual women.

As Ms. Sen underlines, though the figures are not perfect, the hypothesis, that when women enjoy on individual income their survival increases, is certainly convincing. This concept also underlines the importance of formulating income generation projects for women in the chain of WID measures.

#### 4. Women's status by regions

The UN Bureau of Statistics has made upmost efforts to provide statistics related to the status of women, in response to the requirements discussed during the World Conference in the International Women's Year in 1975, to put pressure on political authorities. The data were published in 1991 in the document "The World's Women 1970-1990: Trends and Statistics".

In the document, the position of women by regions in the developing countries over the past 20 years (1970-1990) was analysed as follows.

In Latin America and the Caribbean, women in urban areas made some significant gains according to indicators of health, child-bearing, education and economic, social and political participation. But there was little change in rural areas, and the serious macroeconomic deterioration of many Latin American countries in the 1980s undercut even the urban gains as the decade progressed.

In Sub-Saharan Africa, there was some improvement for women in health and education, but indicators in these fields are still far from even minimally acceptable levels in most countries. Fertility remains very high, and there are signs that serious economic decline - coupled

with rapid population growth - is undermining even the modest gains in health and education. Women's economic and social participation and contribution is high in Sub-Saharan Africa. But given the large differences between women and men in most economic, social and political indicators at the start of the 1970s, the limited progress in narrowing those differences since then and the general economic decline, the situation for women in Africa remains grave.

In North Africa and West Asia, women made gains in health and education. Fertility declined slightly but remains very high - 5.5 children in North Africa and 5.3 in West Asia. Women in those regions continue to lag far behind in their economic and social participation and decision-making.

In South Asia, women's health and education improved somewhat. But as in Africa, indicators are still far from minimally acceptable levels - and are still very far from men's. Nor has economic growth, when it has occurred, helped women - apparently because of their low social, political and economic participation in both urban and rural areas.

In much of Eastern and South-eastern Asia, women's level of living improved steadily in the 1970s and 1980s. Many of the inequalities between women and men - in health, education and employment - were reduced in both urban and rural areas and fertility also declined considerably. Even so, considerable political and economic inequalities persist in much of the region - because women are confined to the lowest paid and lowest status jobs and sectors and because they are excluded from decision-making (p. 1-2).

These differences of status of women suggest the differences of needs for development by local people including women and men.

#### 5. Conclusion

1. In general, women in the developing countries are more disadvantaged than women in the developed countries.

- 2. Integrated strategies are required for the solution of problems relating to the inequality experienced by women in developing countries in various fields.
- 3. Income generation is effective for the reduction of missing women.
- 4. It is essential to design a project in response to the needs of a target-group of women or women and men.
- 5. The concept of WID should be included in Japanese ODA policies.

#### References

- Amartya Sen, 1990. "Gender and Cooperative Conflicts," in Irene Tinker ed., Persistent Inequalities, Oxford Univ. Press.
- Amartya Sen, December 20, 1990. "More Than 100 Million Women Are Missing," The New York Review of Books.
- 3. Population Crisis Committee, June 1988. Population Briefing Paper No.20.
- 4. UN, 1991. The World's Women 1970-1990: Trends and Statistics UN.

## II. Status of Rural Women's Participation in Agriculture and Rural Development Activities in Developing Countries

#### 1. Outline

#### 1) Current situation of rural life

Available literature, results of surveys conducted by seven former members of JOCV and seven former JICA experts dispatched to developing countries, as well as questionnaires and surveys conducted through the cooperation of nearly 50 JOCV staff were used in this chapter.

The questionnaires and surveys were conducted in 1992 in 17 developing countries (five in Africa, six in Asia, two in Oceania and four in Latin America), covering 58 villages in which JOCV staff were extending their assistance. The surveys targetted 139 farm households within these villages.

Although the number of samples is not sufficient to describe accurately the common situation of rural women in developing countries, the surveys could serve as a reference to indicate the pattern of activities.

#### (1) Housing and related facilities

Village huts are built with wood, bamboo, stone, unburned brick, clay, etc., or readily available materials in the area concerned. Roofs are covered with dried grass, nipa leaves or sometimes with galvanized iron board. Various types of huts are found, some have very small windows and others are built with an elevated floor, suited to the local weather conditions. In some of them lighting or ventilation is not suitable.

Only part of the rural areas enjoys electricity. Even in the areas with electricity, frequent power failures occur (UN 1991).

As for the water supply, 60% of the total population in the developing countries does not have access to clean potable water. Although in some of the countries tap water systems are available, in the major part people rely on wells, rivers/streams or fountains and rainwater for their water supply (UN 1991).

Water quality is often deficient and the quantity decreases during the dry season(s) and in some cases the water supply becomes unreliable. In this connection, about 80% of the causes of diseases in the developing countries are attributable to unsanitary potable water and to inadequate sewage disposal leading to infant mortality (15 million children aged 0-14 years die each year).

Water sources are often located far from individual houses in many of the developing countries, and hence water must be carried over a long distance. Women are responsible for this task, and sometimes they spend six hours a day to carry water. The situation is even more critical in the Sahelian countries in Africa. For food preparation and cooking, women work under difficult conditions and improvement of fire-places, kitchens and furnaces is essential.

#### (2) Energy

Readily available sources of fuel, such as firewood, farm by-products like rice husks, cattle manure, etc. are used in the developing countries. Also, charcoal, gas, coal, briquettes, etc. are utilized in some of the countries. Mostly, housewives are responsible for collecting fuel materials assisted by their husbands and children.

Fuel collection is women's task in Africa. There is a typical pattern in which women and children gather firewood around their houses, while men collect a large amount of logwood for fuel from distant areas.

In the areas where firewood is scarce women spend 10-12 hours a week, walking 10km per day to carry 25-35 kg of firewood. Decreased availability of wood due to deforestation has made it increasingly difficult to collect firewood.

#### (3) Diet

The results of the questionnaires and surveys on the diet are summarized as follows:

Rice, maize and tubers, or main crop products are the staples in the developing countries. The breakdown by regions shows that in Asia, rice is the most common food followed by wheat and maize, in Africa the major staples consist of maize, millet and sorghum, in addition to cassava, yam and other tubers, and in Latin America,

maize and wheat account for the main staples. In some regions, plantain and cowpea also are important dietary components. In addition, pulses, vegetables and fruits are mainly consumed.

Staples are mostly self-supplied in rural areas. The majority of the farm households subsist on self-supplied foodstuffs for more than half of their requirements. Cooking oil, meat, fish and spices are among the foods that are hardly self-supplied. As for vegetables, only half of the consumption is self-produced.

Rural populations mostly depend on their own production for the supply of staple food, but in some cases farmers fail to meet their own requirements only from their own production. It is considered that vegetables and such protein sources as meat, fish and milk products are in short supply from the nutritional point of view. As available food protein sources, pulses, eggs, fish and crustacea as well as meats, are common in this order. As for the frequency of protein intake, most of the rural populations can not always receive protein on a daily basis (FAO Yearbook Production 1991).

According to the results of an interview with former JICA experts once dispatched to rural areas in the developing countries, rural populations used to eat cooked rice with fresh sesame oil and chilli as routine meals, but only on special occasions fresh water fish and coconut milk were added to this routine diet.

The need for nutritional improvement in the developing region is also self-evident judging from the per capita daily ratio (FAO Yearbook Production 1991). In some areas male family members usually take an early turn for meals followed by female members. Especially when food shortages arise, this custom may result in malnutrition for women. In addition, in some regions a religious taboo is being placed on certain kinds of foods, which exerts a detrimental effect on the nutritional balance.

#### (4) Health and hygiene

Based on the results of the questionnaires, health and hygienic conditions are as follows:

Diseases, senility and complications of deliveries, etc. account for the major causes of death. In some areas clinics are available within communities, but usually as modern medical facilities are located far from rural areas, many patients do not have access

to hospitals. As mentioned earlier, the problems of clean potable water supply, sewage disposal and latrines remain to be solved. In some cases, rural hygienic conditions have improved through the role of health control offices or municipal authorities.

As regards deliveries, the number of deliveries at home and at hospitals is equal. During deliveries, more than a half of the women are taken care by doctors or midwives. Also, many women take a postpartum leave for more than ten days after childbirth. However, many women experience abnormal deliveries leading in some cases to the death of neonates.

On the other hand, unsatisfactory hygienic or nutritional conditions at home, hard working conditions, paucity of basic knowledge on medical treatment, lack of access to health and medical services result in abnormal deliveries or infant mortality.

Besides, the diffusion of family planning practices is indispensable for maintaining women's health adequately. High population growth occurs in the developing region, in the poorest countries *inter alia* resulting in a heavy burden on health and medical services, education, food, environment, resources, etc.

Lack of information is considered to be one of the factors affecting population growth. According to the questionnaires, nearly 30% of the women replied that they practiced family planning. In addition, a considerable number of them were aware of family planning but did not apply it.

Children are taken care of mainly by their mother with the assistance of other family members like brothers or sisters, and grandparents.

#### (5) Decision-making

Based on the questionnaires, decision on the participation in meetings inside the community or on the selection of representatives is mainly made by men. However, a fairly large number of groups/organizations have been established exclusively by women, within their communities. As for marriage, decision by individuals is usually respected.

Less than half of the housewives are consulted by their husbands about household expenditures. Besides in some cases even income earned from labor outside the house cannot be used by themselves. Their own revenues are too often appropriated to a part of the household budget for purchasing food or clothing, indicating the limited

involvement and weak position of women in household management. Also, women are responsible for the expenses on food and pocket money for children, while men are in charge of farm expenditures and others, according to other data. (Knudson, B. and B.A. Yates 1981).

Men are usually responsible for decision-making on farm practices, such as schedule of practices, selection of varieties/crops, application of farm machinery. Even radios which are not often available in many areas are used by men, and women are in a disadvantageous position for access to information.

There are differences among the regions or depending on the conditions. For example, in the decision-making process regarding farming in rural communities in Peru, decisions made by the mother only or mother and children account for nearly 50% in the case of poor farmers, while those made by the father only or father and children account for about 50% in the case of middle class or rich farmers indicating that the poorer the household or the longer men leave their home for migrant labor, the heavier the responsibility of women for economic activities (USAID 1986)

#### (6) Education

Access to education constitutes a basic requirement in promoting women's self-reliance and accelerating the development of the entire society. Lack of education is often referred to as a major constraint leading to the lower social and economic status of women. Larger illiterate populations occur in the developing region, a larger part of which being female (UN 1991).

The higher rate of women's illiteracy is attributed to their lower school enrollment. Women's access to education is restricted as the parents expect that their daughter will perform routine work such as domestic tasks or carry water. It is also feared that housewives with a higher education level than that of their husbands may disturb the domestic harmony due to their critical attitude.

On the contrary, it is sometimes considered that women's education will enable them to be engaged in better jobs, and their higher education level acts as a substitute for dowry to be paid for the marriage. However, parents do not usually expect a direct benefit from education for their daughters, and generally show a conservative attitude towards women's education in rural communities.

In Africa, although primary education especially that for literacy has made remarkable progress during the past two decades, there is still a wide gender gap.

In Latin America, the region has surpassed other developing regions in the diffusion of women's primary education and the degree of literacy. However, the rate of women's participation in the middle and higher levels of education has rapidly decreased.

In the Asia and Pacific region, one third of the total countries in the region has attained a rate as high as 90% for girl's enrollment in primary schools. Women's illiteracy, however, is higher than that of men in spite of this enrollment. A wide difference is found between South and Southeast Asia. In South Asia, most of the women are illiterate, whereas in the Philippines or Thailand, women's illiteracy level ranges from 20 to 30%.

#### (7) Time use pattern

According to the questionnaires, 4-6 hours are allocated to farming practices and 3-6 hours to routine housekeeping. The time spent for farming is generally longer than that for domestic tasks, except for Latin America. Breakdown of labor differs with the regions and types of farming.

Threshing, pounding and milling of cereals, as a preparatory process of meal require hard work and are time-consuming. Also, fairly long hours are spent on washing. The total labor hours a day amount to eleven hours. (Momsen, J.H. 1991).

#### 2) Participation in production

#### (1) Current status of women in participation in production

#### 1) Gender division of farm practices

In developing countries, men are in charge of such physically hard work as forest clearing, burning, tillage, land leveling, etc., while women are responsible for weeding, watering, harvesting, etc. When agricultural machinery is used, men are responsible for the operation of the machines. Seeding and planting are performed by both men and women (JICA 1991).

Rearing of large-sized livestock like cattle is considered as men's work, but catering for smaller livestock such as goats, pigs and fowls is taken care of by women. However, a part of rearing of large-sized livestock, including roughage feeding and cleaning of barns is undertaken by women.

In general, as previously mentioned, women are in charge of fuel and water collection while men are in charge of making decisions on the selection of varieties, schedule of farm practices and other matters relating to agricultural production. However there are differences depending on the countries and crops.

In Nigeria, sowing of millet and sorghum is mainly practiced by men, while planting of cassava and yam is usually performed by women. Men and women equally share harvesting labor for rice, millet and sorghum (Mueller, R.D. 1985)

In the south-eastern part of Botswana, men are responsible for sowing and planting and they rear small-sized animal species. Also firewood is usually collected by men (Mueller, R.D. 1985).

In Botswana, women are mainly engaged in vegetable cultivation, and they are exclusively involved in local beer brewing.

In Bangladesh, one of the Islamic countries of Asia, almost all the farm practices except for harvest of chilli are men's tasks. Also in livestock management, men are responsible for watering and pasture management, cleaning of barns / drylots and harvesting of forage (Mueller, R.D. 1985). Selling and purchasing are also men's tasks. Thus almost all the outdoor activities are carried out by men.

Women's tasks include rearing of domestic fowls, grinding of pulses, treatment and milling of rice as a domestic task (not post-harvest treatment), cooking, washing dishes and laundry work. The activities of women limited to tasks in and around the homestead are based on the religious belief whereby women should be kept out of limelight.

Another example from Latin America indicates men's leading role in almost all the farm activities. In the relationship of labor with land holding, farmers with large-sized holdings are only engaged in farm practices on their own land, while small holders are hired in wage-based labor in parallel with their own practices. Furthermore, landless farmers' activities virtually consist of paid-labor. As for women's labor, in the case of small-holders and landless farmers, women are also mostly engaged in wage-based, hired labor though not to the level of men (Mueller, R.D. 1985).

According to the questionnaires, farming practices such as land preparation, weeding and harvesting as well as fodder collection, feeding, watering and cleaning stables for raising animals are ranked as heavy labor. The term "heavy labor" as defined herewith does not necessarily refer to back-breaking toil requiring physical strength but work requiring a long time for completion.

The above-given discussion on women's participation in agricultural production in terms of labor suggests that such heavy works by women should be fully considered to improve women's production techniques so as to alleviate the labor strain.

#### (2) Land holding

In the rural areas of the developing region where traditional land holding still prevails, the hereditary patriarchal system is common, and land is very often owned by men. However hard women may work with their male partners, the product or income earned therefrom eventually belongs to men.

In Asia and Latin America, farm plots owned by a farm household are rarely allocated between husband and wife for cultivation, though women in farm households may grow vegetables and fruits in their homestead lots. In the Sub-Saharan countries, a plot will be allocated to a newly married wife in a farm household where she is engaged in food production for the family. She participates in farm labor on the family plot where her husband is raising mainly cash-crops and she is also responsible for cultivating crops for subsistence on her own parcel. The usufruct right to exclusive use of the given plot which is evidently imputed to her matrimony is likely to be lost if she divorces her husband.

In addition, men enjoy relative advantages compared to women in the succession, an event closely related to hereditary ownership of land. In some areas, land belongs to all the inhabitants of a community, and here again men generally are in an advantageous position for availing or leasing rented land. Also, in some areas where livestock are an important asset to be kept, men are in a more advantageous position for owing livestock herds. Besides, access to agricultural extension, credit facilities, farmers' organizations, etc. is also closely linked to land holding.

Since settlement/reclamation projects are implemented in terminal units, i.e., settler households, land registration procedures select a single person who represents

the family, and generally men are selected as heads who are eligible to hold reclaimed land.

Regarding the agrarian reform, although men and women are legally equal, women are virtually not allowed to own land even though they were actual heads of households, which indicates that the reform is far from successful from the women's point of view. It has also been reported that in some African countries women have been deprived of the land they had been guaranteed to cultivate due to land reform procedures.

Nevertheless, land registration has been accepted in an improvement project for agricultural production in Gambia under the sponsorship of the International Fund for Agricultural Development (IFAD), so that women were able to acquire the allocated land. This incentive has enabled them to increase production through double cropping coupled with the introduction of high yielding varieties and fertilizer application. Also, successful examples have been reported in which the improvement of women's economic status through the sale of surplus farm products has alleviated hard labor due to the improved efficiency of farm practices and promoted the improvement of the living conditions.

#### (3) Agricultural extension

In general, rural women have few opportunities to benefit from agricultural information or extension services, because men usually leave home to attend the meetings and participate in the negotiations as representatives of their households. As women's contribution to agriculture tends to be centered on domestic tasks, the target of extension activities is confined to men, as household representatives. Sometimes men fail to share the information they obtained with women. In some other areas, women can be only taken care of by female extension workers. However, in such areas the difficulty may arise from the starting point, namely employment or assignment of female extension workers itself.

The rate of female extension agents to the total staff accounts for only 8.5% in Latin America, 2.9% in Africa and the Middle-and Near East and 0.7% in Asia. This under-representation is not favorable for women's problems in extension projects in the developing region (Gabriel, T. 1991).

Based on the results from the questionnaires, the households replied that they considered agricultural extension agents as instructors for the improvement of farm practices, and also as information source for agricultural techniques. However, as for the frequency of visits of farm households, over a half of the farm households replied that extension agents had "never visited", or they felt that "no useful instructions" were delivered by the extension workers to women.

The high rate of illiteracy among women is a constraint on their access to information based on booklets, and the low rate of availability/dissemination of radio hampers the diffusion of information through broadcasting, indicating that information services through these media may not readily function, either. Thus, information is mainly verbal from a person to another, within a kindred or neighborhood.

Therefore, labor-saving techniques and productivity resulting from the extension activities tend to favor men. Use of new techniques associated with the introduction of machines such as tractors and tillers, has increased the efficiency of plowing or levelling practices performed by men, while the number of women's labor hours has in some cases increased in an opposite way.

#### (4) Agricultural credits

Providing women with credits may enhance the productivity of women's labor. However, women are seldom endowed with credit facilities. Granting of agricultural credits in a number of countries requires land ownership as mortgage if one desires to apply for agricultural loans. As stated in the paragraph on land holding, farmland is registered under the name of male household heads, and if the husbands are reluctant to authorize their wives' borrowing, women may hardly be accepted as credit-worthy by loan suppliers no matter how hard or efficiently they actually work for production and sales.

Based on the questionnaires, nearly 70% of the surveyed women stated that credit facilities were available to them, indicating that the conditions are more favorable than commonly considered. In their reply, banks were the major credit suppliers but in a few cases agricultural cooperatives also fulfilled this purpose. When they require borrowing without access to credit agencies, it is often met by the debts from their relatives, or reserve funds deposited by their groups.

The Grameen Bank in Bangladesh is a well-known financing institution that provides poor farmers with credits without requiring any mortgage or land. It is necessary for those who apply for credits to establish a solidarity group with a membership of more than five farmers prior to the application for credits to the Bank. Loans are granted from the Bank to individual applicants free from holding mortgage but with an interest at the annual rate of 16%. The applicants can use the loans for any productive activities, but have to appropriate them immediately to a definite purpose. The redemption thereof is based on weekly installments so that the loans can be settled within a year.

The loans provided for women are oriented to the investment in livestock, poultry, processing, manufacturing and selling of products. The loans not only provide incentives for developing economic activities but also enhance the awareness of women about children's education, nutrition, hygiene and family planning.

#### (5) Women's organizations

Efforts had originally been made in developing countries to set up cooperatives and farmers' organizations to provide advice, credit, inexpensive inputs, sale support and other services. However, land ownership is a prerequisite qualification to become a member of cooperatives.

This fact implies that the system of participation in organizations favors men and fewer female representatives belong to these organizations which are solely managed by men. It is difficult to reflect women's opinions through these organizations in rural areas where decision-making is entrusted to the male members. Such limiting factors as higher female illiteracy, lack of spare time due to the involvement in farm practices, domestic tasks, child-rearing and other works, make women's participation difficult.

Yet, there are some examples in Africa and Asia where women have formed their own groups to address problems such as health, saving for matrimonial fund, water supply, improvement of housing, etc.

In Kenya, such women's groups organize activities jointly with extension agents, saving time for them to move from a target village to another, so that they spend more time for guidance. At the same time, it has been reported that solidarity within

these groups is being promoted to follow the advice from the extension agents.

#### 3) Characteristics by regions

In Asia, women contribute 50% of the total labor input by farm household. In paddy areas, men are engaged in land preparation and plowing, while women are responsible for transplanting, weeding, harvesting and threshing. More women work for cotton cultivation in India and tea plantations in Sri Lanka. Traditional patriarchy tends to prevail and this system fosters men's initiative in farm management and expenditures. In many places the living conditions are poor, reflecting the hardship women face in fetching water and firewood.

In the Middle East and North Africa, Islamic religion is influential enough to limit women's activities. As a result the degree of agricultural contribution cannot be easily perceived. However, they are in charge of tasks such as seed selection, post-harvest operations, livestock rearing, etc. which can be performed within the homestead, in addition to in-door work including handicraft production, carpet weaving, etc. Also, in some countries like Jordan and Iraq, half of the farm practices are performed by women and in Yemen women are responsible for the production of subsistence crops. Despite such substantial contribution by women their status remains low.

In Sub-Saharan Africa, the rate of women's involvement in agricultural activities is remarkably high, because they are engaged in the production of subsistence crops in the plots allocated to them by kins of their husbands through the matrimonial procedure, while they help cultivate cash crops on their husbands' plots. Men undertake physically heavy works like plowing, while women are involved in such time-consuming works as weeding and harvesting. The women's usufruct right on the allocated plots only lasts for the matrimonial period, and may be cancelled if they divorce. Agricultural expenses incurred in their allocated land is met by themselves, but since the opportunities of earning cash are limited, women are compelled to be engaged in traditional, labor-intensive farming. Women are responsible for day to day household expenses, while men pay large sums of money for contingency expenditures. Their diet which depends mainly on maize, sorghum and millet and meal preparation requires hard work, including conditioning and milling. Their

literacy level is mostly low. In Latin America, where a major part of crop and animal production is generally derived from large-scale farming, female heads of households outnumber those in other regions, but the rate of women's participation in farming is the lowest in the world. In an ordinary period women are merely in charge of livestock or homestead garden management, but in the peak season their participation in various farm activities increases. Female agricultural laborers on an average account for 22% of the total labor force. In Honduras women account for 40% of the labor force required for tobacco harvesting and for 90% of the total labor for coffee harvesting. Management of plantation plots is usually entrusted to men, but more women tend to be employed in harvesting where a larger share of manual labor is required. It appears that women are more involved in decision-making in the poorest families. Maize is the staple food and a higher dependency on pulses for protein source prevails. Literacy level is high in general, and the region is relatively free from religious constraints.

#### References

- Association for International Cooperation in Agriculture and Forestry (AICAF)
   1993. Report of questionnaires and surveys on rural women's production and living situations in developing countries.
- 2. AICAF 1993. Report of an interview survey with former JOCV staff.
- 3. AICAF 1993. Report of an interview survey with former JICA field experts.
- Canadian International Development Agency (CIDA) 1989.
   Women in development. A sectoral perspective.
- 5. FAO. Yearbook Production 1991.
- 6. Gabriel, T. Women in the third world (Japanese version, published by Japan FAO Association in 1991)
- 7. International Center for Integrated Mountain Development. Women and the management of energy, forest and other resource.
- 8. International Women's Tribune Center 1990. Women and Water.
- 9. JICA 1991. Study on development assistance for women in development.
- 10. Momsen, J.H. 1991. Women and development in the third world.
- 11. Mueller, R.D. 1985. Women's work in the third world agriculture.
- 12. United Nations 1991. The World's women 1970-90. Trends and statistics.

- 13. UNDP 1988. Women in development.
- 14. USAID 1986. Gender issues in Latin America and the Caribbean.
- World Bank 1989. Women in development issues for economic and sector analysis.

#### 2. Activities for supporting women's participation in agricultural development

To formulate a new type of project cooperation, JICA initiated a study entitled "Basic survey for planning of living standard development program in rural areas" from 1989, covering in the same fiscal year Malaysia in Asia, then Sri Lanka in 1990. The study was renamed as "Basic survey for planning of women's living standard improvement program in rural areas" with an additional part on "Women in Development" in 1991, based on fact-finding surveys conducted in Bolivia and Honduras in Latin America in 1991 followed by Ghana and Kenya in Africa in 1992.

The above-cited studies are hereinafter referred to as merely 'Basic surveys.'

However, those countries do not necessarily represent the regions which they belong to. They were selected based on the following criteria: a) technical cooperation program(s) of JICA had been implemented, b) basic information required for planning to upgrade the quality of rural life is readily available, c) technical cooperation program(s) will be implemented in the near future, d) recipient countries are willing to cooperate with the basic survey team (in this connection, assistance program(s) presently extended by JOCV staff members at village level is highly appreciated), etc.

The current status of rural women reported through those basic surveys is more or less similar to that reported in the previous section (II-1). Therefore, this section focuses on the activities of government and other organizations supporting women's participation in agricultural development.

#### 1) Malaysia

Measures adopted by the Malaysian Government for Improving Rural Living Standards are as follows:

The Department of Agriculture, within the framework of the Malaysian Government, is responsible for extension. In Peninsular Malaysia, each of eleven states has its own State Department of Agriculture, with priority given to small-holders (most of them are Malays). For the improvement of rural living standards, the measures have focused mainly on the activities of women's groups (825 groups with a membership of 23 thousand registered in Peninsular Malaysia as of 1990), with objectives including increase of income, consumer education, hygiene and improvement of farm/rural environment. Departments of Agriculture have been established in the states of Sabah and Sarawak more recently than in Peninsular Malaysia and instructions for the diffusion of farming techniques among rural women and for the improvement of their living standards have been provided by the Department.

In addition to these activities, the Malaysian Government has promoted other extension activities through the Farmers' Organization Authority (FOA) that is in charge of the establishment of farmers' organizations. Administrative guidance for the improvement of rural life is supplied through the Ministry of National and Rural Development. Improvement of agricultural/rural living standards, consolidation of road networks, development of health and medical services as well as promotion of rural environmental hygiene are the main priorities.

The National Advisory Council on Integration of Women in Development (NACIWID) in charge of "Women In Development" was created in 1976, consisting of government officials and representatives of NGOs".

The Secretariat for Women's Affairs (HAWA) was established in the Prime Minister's Office, taking charge of WID. Subsequently a National Policy for Women was enacted in 1989 and HAWA was upgraded into a Division of the Ministry of National Unity and Social Development. As of 1992, 220 women's organizations were affiliated to NACIWID.

#### References:

- 1.JICA 1990. Report on the Basic Survey for Planning of Living Standard Development Program in Rural Areas of Malaysia (in Japanese).
- 2.Bawiah Mohd. Dahalan 1992. Country Report for Senior Officers of National Machineries for the Advancement of Women held in Tokyo in Nov. - Dec. 1992.

#### 2) Sri Lanka

Agencies in charge of Women's Affairs are as follows:

Women's Bureau of Sri Lanka established within the Ministry of Plan Implementation in 1978, is responsible for the collection of information relating to women's affairs, to determine whether equality for men and women guaranteed by law is respected.

The Bureau coordinates the activities of government agencies with NGOs involved in women's groups. It was reorganized into a new Ministry of Women's Affairs and Teaching Hospitals in 1983. Thereafter, the Ministry was up-graded to a State Ministry of Women's Affairs in 1989 under the State Secretary.

Employment opportunities in Sri Lanka still remain disadvantageous to women, as shown in the statistical data of the 1981 Census: female unemployment rate in 1981 was estimated at 31.8% against 13.2% for men. In rural areas also, housewives and women in farm households are engaged in different tasks and farm practices from those of men, and women's contribution is likely to be underestimated.

Under such circumstances, Women's Bureau has created vocational training services with a view to increasing female employment opportunities. Most women hesitate to apply for jobs different from those they used to be involved in (such as garment industry, beauty care, food processing, etc.).

Women's Bureau has given priority to rural women by implementing various programs to increase the income (home gardens, rearing of livestock, garment industry, handicraft industry, preparation of salt-pickled fish and dried fish, food and meat processing, etc.), coupled with the establishment of a revolving fund for efficiently promoting these programs. It has also provided training programs to transfer techniques to women. An important component of these programs involves adult education/training, including activities to improve the knowledge on health, hygiene and nutrition that is required for upgrading the living standards, and to the promotion of leadership cadres for organizing women.

The Bureau is also responsible for the Janasaviya Program for poverty alleviation. Besides, it has established counselling centres in Colombo and Ratnapura for women asking for assistance.

Funds required for the above-mentioned activities have been earmarked in the government budget as well as provided by Norway, Canada and UNICEF. They have been well managed by the Bureau.

#### References:

- 1.JICA 1991, Report on the Basic survey for Planning of Living Standard Development Program in Rural Areas of Sri Lanka (in Japanese).
- 2.Sugathadasa, I, 1991: Country Report for Seminar on Women's Issues in National Machinery held in Tokyo in Sept. Oct. 1991.

#### 3) Bolivia

The Government organizations and activities related to the improvement of the quality of rural life and women's participation in agricultural development are as follows:

#### (1) Ministry of Peasants, Agriculture and Animal Husbandry

The Ministry consists of three subsectors, namely (i) agriculture and animal husbandry, (ii) peasants and (iii) development of substitution crops. The Ministry organized a National Council of Investigation and Extension for technical innovation and diffusion of useful results of research. The Council is composed of members from the Ministry, IBTA (Bolivian Institute of Agricultural Techniques), CIAT (Tropical Agriculture Institute), Universities related to agriculture, each of the District Development Agencies and NGOs to which the World Bank provided financial assistance. FAO is involved in technical assistance.

#### (2) Ministry of Planning and Coordination

It established UDAPSO (Social Policies Committee), as a consultative committee consisting of ministers of the relevant ministries. UDAPSO also acts as an agency for social development assistance, with a background of involvement in a rural electrification project utilizing solar heat through the assistance of Switzerland.

#### (3) Development Agencies

Development agencies are established in each district and their activities are not confined to agriculture. The activities of these agencies reflect the financial situation of the district concerned, leading to considerable differences in the contents of activities between rich and poor districts. Small-scale irrigation projects in which 20 thousand households receive water from 2000 irrigation facilities are among the successful projects implemented by these agencies.

#### (4) WID related activities

- 1. Coordinado de la Mujer (Women's Coordination Committee)
- This committee was created in 1984 through the assistance of the Social Policy Bureau of the Ministry of Planning and Coordination, the World Bank and UNIFEM.
- 2. Comision Mujer Campesina y Desarrollo (Peasant Women and Development Commission)
- This commission was organized in 1991 under the sponsorship of the Ministry of Peasants, Agriculture and Pasturing. The membership consists of representatives from Women's Coordination Committee, NGOs, Government Authorities in charge, UNIFEM, FAO, and HCA (Inter-American Institute for Cooperation on Agriculture).

#### (5) Activities of NGOs

SEMTA started its activities in 1980, covering small scale development strategies, agricultural ecosystems, water resources and renewable energy, technical transfer and women; SETAM evaluates and offers advice for project implementation to women's groups and agencies concerned in rural communities; and Caritas Bolivianas implements a mother center project, etc.

#### Reference:

1.JICA 1992: Report of the Basic Survey for Planning of Women's Living Standard Improvement in Rural Areas of Bolivia and Honduras (draft in Japanese).

#### 4) Honduras

Policies oriented to rural development and WID enacted by the Government agencies concerned include:

#### (1) Ministry of Economic Planning

The Ministry stresses the need for a comprehensive approach to alleviate the poverty of the rural sector in terms of income and integrated development including housing, public hygiene and education, in which women's cooperation is particularly vital. It operates a maternal fund for unmarried mothers (PRAF) and a social investment fund for creating employment opportunities and developing measures against poverty (FHIS), etc.

#### (2) Planning Bureau of the Ministry of Natural Resources

The bureau is implementing development projects for rural women and youth, as well for farmers' cooperatives. As a supporting network for these activities by rural women, it established a Rural Women Research Center at the National Autonomous University in Honduras (Universidad Nacional Autonoma de Honduras).

# (3) Rural Women's Commission (CIRMA: La Comision de Integracion de la Mujer a la Reforma Agraria)

This is a commission directly attached to the President Office, whose members consist of representatives from the Land Reclamation Agency, Ministry of Natural Resources, President Office, Agricultural Development Bank, etc., to provide land for rural women.

# (4) Agrarian Reform Agency (INA: Instituto Nacional Agrario)

The agency was established to implement the agrarian reform. The currently enforced act of Agrarian Reform was approved in 1992, in which land ownership by women has been clearly guaranteed. Moreover, INA has been responsible for the organization of 328 women groups throughout the country for the past 26 years.

# (5) National Committee of Social Welfare (JUNTA: Junta Nacional de Bienestar Social)

The Committee attached directly to the President Office is chaired by the First Lady to promote a Program of Maternal Plan (Programa Empresas Maternales) in close coordination with the Ministries of Justice, Health and Welfare, Education, Natural Resources, Labor Affairs, etc. The program provides instructions for nutrition, health and hygiene and others for the improvement of the quality of life targeted to children aged six years or younger in the households without fathers, also providing their mothers with guidance for production activities. Besides, the committee gives instructions on management, production, processing and sales.

#### (6) Extension activities for rural women and life improvement

Rural population accounts for about 40% of the total nation, and 70 - 80% of the total rural households are poverty-stricken. Therefore, efforts have been focused on eradicating poverty. In terms of these activities, only the farm households falling in the category of medium to small scale land holding are selected as beneficiaries.

Currently, extension staff are affiliated to the Ministries of Natural Resources, Health and Welfare, Education as well as Agency of Agrarian Reform, while extension workers for rural life improvement are supported by JUNTA.

The Ministry of Natural Resources consists of five bureaus, i.e., planning, agriculture, water resources, mining and fisheries and the bureau of agriculture has an extension division. Each of the ten regional offices of the Ministry has an extension section in charge of local services, staffed with around 500 workers in total.

## (7) Domestic NGOs

NGOs have been very active in Honduras, as 5 - 20% of the total amount of foreign assistance is channeled through them. Activities of foreign NGOs are less conspicuous and in most cases Honduran NGOs make a significant contribution.

Reference: the same as for Bolivia

#### 5) Ghana

WID policies and administrative institutions are as follows:

#### (1) National Organizations

# i) National Council on Women and Development (NCWD)

The Council established in 1975 is attached directly to the Head of the State and responsible for the following duties: a) recommendation to the government on WID policies, b) coordination of policy-related measures and activities implemented by relevant ministries and agencies as well as international organizations, etc., c) provision of statistics, and collection and dissemination of information, and d) implementation of pilot projects. The Headquarters of the Council consist of the representatives of five Ministries/Agencies and 15 staff members. Although there are branch offices in all the regions, these offices do not have extension networks.

## ii) Department of Women in Agriculture (WIAD)

The Department was established in 1966 as a unit of Home Economics within the Agricultural Extension Department, Ministry of Agriculture. It was expanded and reorganized into WIAD due to greater priority on the role of women in agriculture when the Ministry was reorganized in 1987. The Department is responsible for assisting the Ministry in the formulation of relevant policy measures for rural women, and provides special programs for women farmers on nutritional improvement of

families, processing, storage and utilization of agricultural products and household economy.

The headquarters of the Department consist of six units and seven staff members. The branch offices are located at regional and district levels; the number of staff members is around five hundred. Two thousand assistants in addition to extension staff are available at field levels.

#### iii) Other authorities related to WID

Government authorities, respectively dealing with family planning, social welfare, water and sewerage, rural housing and cottage industries, non-formal education, community development, and cooperatives, participate in WID programs.

# (2) Activities of women's groups

In one of the villages the basic survey mission visited, a basic concept of group organization has been implemented since the literacy campaign organized in 1972. The needs for income generation became acute when the Ghanian economic situation deteriorated, and this, coupled with group activities led to the initiation of soap production using palm kernel oil extracted from oil-palm nuts. From 1983, ILO contributed to the financing of this project in cooperation with NCWD. At the same time, wells were dug by villagers using cement, etc. and this technology is being disseminated into the neighboring villages.

In another village, technical training for dyeing for batik has been provided to women's groups under the auspices of an NGO group in which a JOCV staff has been involved.

### 6) Kenya

WID policies and administrative institutions are as follows:

### (1) National Organizations

 Women's Bureau (Department of Social Services, Ministry of Culture and Social Services)

The Bureau was established in 1976 on the occasion of International Women's Year 1975, with the assignment of the following duties: a) formulation of WID policy measures, b) coordination of related policies/activities by the Ministries and NGOs, c) monitoring and assessment of projects related to women, and d) collection and analyses of data and information related to women.

The Headquarters of the Bureau consist of 15 members in six units. One staff member is stationed at the provincial, district, divisional and locational levels. Programs by the Women's Bureau are implemented at the grass-root and field levels by NGOs including Maendeleo Ya Wanawake (MYWO) and other influential groups, as well as by the official extension agents.

ii) Home Economics Branch (Agricultural Extension Service Division, Ministry of Agriculture, Livestock Development and Marketing).

The Branch was established in 1962; since then no radical change occurred even though the Ministry mentioned above was reorganized in 1993. The Branch is responsible for; a) farmers' nutritional improvement, b) promotion of efficient use of resources, c) dissemination of family planning, and d) support for income generation/improvement of women.

The Headquarters of the Branch consist of four units. One office is attached to the provincial, district, divisional and locational branches; the total number of staff members is 1,000.

#### iii) Other authorities related to WID

Government authorities, respectively dealing with family welfare, women's education, family health, technical training and advanced technology, planning and national development, and land reclamation.

## (2) Activities of women's groups

# i) Representative projects sponsored by the Kenyan Government.

Income generating program by fattening cattle is implemented in the dry zone inhabited by the Masai tribe. It was initiated with 15 members in 1981, and presently managed by a group of 40 women. Nine cattle per member are purchased and fattened in drylots for 18 months.

Housing improvement program from traditional to modern with upgraded sanitary conditions for the Masai tribe's houses by widening windows and other measures.

Model cases of extension activities in Nueri District are successfully implemented through the improvement of farming techniques and upgrading of living standards with the participation of 536 women's groups consisting of 13,538 members.

## (3) NGOs' activities

Maendeleo Ya Wanawake (MYWO), representative NGO of women in Kenya, has 30 thousand groups consisting of 500 thousand members. The organization identifies the needs of villagers through exhaustive discussions at the substructure or grass-root level; it examines those needs and formulates projects to approach the government authorities or donors for funding the projects; the government and/or donors examine the project proposals and provide assistance in terms of funds or expertise if they find that assistance may enhance the efficiency of the projects.

# III. Problems and Strategies for the Improvement of the Quality of Rural Life\*

A series of problems and strategies to address these problems is tentatively presented in this chapter. The former are the problems, which should be immediately tackled to improve rural life in the developing countries in terms of women's role in development, and for which improvement is considered to be possible. The latter are the strategies, which should be implemented to solve the problems and which are recommended based on the instances of technical cooperation programs by the developed countries and international organizations, as well as the experience joined from extension activities in Japan.

These strategies are presented only as a tentative conclusion of our analysis and as the materials to suggest model of technical cooperation.

A chart system was employed here, because the relationship among problems, background and measures can be briefly and clearly displayed. In the column of background, the conditions of the problems frequently encountered in the developing countries were selected. The strategies for the solution of the problems were divided into two parts, primary measures and complementary measures.

The problems and strategies are classified into three categories, which are presented in each chart. Chart 1 shows the problems and strategies for improving the quality of rural life in the developing countries, to which rural women are related as housewives in farmhouses. Chart 2 deals with the problems and strategies for the improvement of agriculture in the developing countries, to which rural women are related as female farmers. Chart 3 presents the problems and strategies commonly adopted to address both issues of improvement of quality of rural life and agriculture in the developing countries.

The Japanese edition, moreover, covers the problems and strategies for the improvement of Japanese technical cooperation programs in terms of participation of women in development.

<sup>\*</sup> The Japanese term "Nou-son" is translated into "rural areas" in English. However, in Japanese, the term is used for the areas where crop and/or livestock farming is practiced, excluding forestry and fisheries. The term rural life refers to the living conditions of farm households, and the term rural women refers to women in households engaged in crop and/or livestock farming.

Chart 1 Problems and Strategies for Improvement of Living Conditions of Farm Households

Problems	Background	Primary Measures	Complementary Measures
Improve- ment of Diet	*Shortage in staple food and subsequent famine may occur in disaster- stricken areas due to drought or floods. When food shortage	*Emergency aid to provide food or drugs.	*Storage of food through increase of production.
	arises, women feed firstly their children.		
:	*Food shortage or malnutrition may arise chronically among destitute strata. Meals tend to be served to	*Promotion of social welfare services for the poorest people.	*Increase of food production through sustainable agricultural development
	males.  *Though staple food is available, there is a limited supply of other food products.	*Promotion of intake of vegetable and protein sources through cooking courses for improving the menu and nutrition. When materials are abundant, preparation of preserves is advised.	*Promotion of vegetable cultivation. To secure protein sources, poultry, pisciculture and legume production could be promoted. Research on breeding of crop varieties with high protein content.
Improve- ment of Cooking conditions	*It takes a long time to prepare meals.	*Time-saving conventional meal could be prepared. Group cooking during labor peak could be	*New dishes matching local taste. Cooking courses for improving nutrition.
	*Position of cooking for women is often uncomfortable.  *Efficiency of fuel	organized.  *Kitchen or cooking places should be improved so that comfortable cooking is possible.  *Oven/fire-places should be improved.	*Improvement of oven, water tanks and food storage bins/rooms.  *Improvement of kitchen.
	consumption of ovens is low.	be improved.	Kitchen.

*Rat foo Africal *It ta pro (co etc *Wo responder is con sour section of the sect	omen are mainly ponsible for the cessing of harvested ps. Higher cendency on pulses	*Rat traps rather than chemicals are recommended. Also, food storage could be improved.  *Food processing by utilizing wind or waterflow energy. Development of inexpensive processing of pulses will lead to higher income or improved.	species, they are useful for farm households. Agroforestry system should be promoted. Wind breaker trees can also be planted with firewood trees. Provision of devices, credits to buy devices should be available. *Related to housing improvement. Provision of credits for improved food storage facilities.  *Cultivation of food crops or vegetables, poultry and pisciculture should be encouraged for providing materials.  *Related to research and development of crop varieties with high protein content.
Food Processing *It to pro (co etc *Wo responders of source of sou	damage occurs in od storage huts in rica.  Askes much time to occss foods inditioning, milling, .).  The men are mainly ponsible for the occssing of harvested ps. Higher bendency on pulses	firewood supply within homestead/owned land could be promoted. Devices for carrying firewood (wheelbarrow, etc.) could be developed.  *Rat traps rather than chemicals are recommended. Also, food storage could be improved.  *Food processing by utilizing wind or waterflow energy. Development of inexpensive processing equipment.  *Technical assistance for processing of pulses will lead to higher income or improved	also fruit or fodder tree species, they are useful for farm households. Agroforestry system should be promoted. Wind breaker trees can also be planted with firewood trees. Provision of devices, credits to buy devices should be available. *Related to housing improvement. Provision of credits for improved food storage facilities.  *Cultivation of food crops or vegetables, poultry and pisciculture should be encouraged for providing materials.  *Related to research and development of crop varieties with high protein content.
Food Processing  *It tapped (coeff (c	akes much time to ocess foods anditioning, milling, .).  omen are mainly ponsible for the ocessing of harvested ps. Higher ocndency on pulses	food storage could be improved.  *Food processing by utilizing wind or waterflow energy. Development of inexpensive processing equipment.  *Technical assistance for processing of pulses will lead to higher income or improved	improved food storage facilities.  *Cultivation of food crops or vegetables, poultry and pisciculture should be encouraged for providing materials.  *Related to research and development of crop varieties with high protein content.
Processing pro (co etc *Wo respro cro dep is o sou	ocess foods anditioning, milling, .).  omen are mainly ponsible for the accessing of harvested aps. Higher bendency on pulses	utilizing wind or water- flow energy. Development of inexpensive processing equipment. *Technical assistance for processing of pulses will lead to higher income or improved	crops or vegetables, poultry and pisciculture should be encouraged for providing materials.  *Related to research and development of crop varieties with high protein content.
Securing *Wa Clean tim Potable har	ponsible for the ecessing of harvested ps. Higher bendency on pulses	*Technical assistance for processing of pulses will lead to higher income or improved	development of crop varieties with high protein content.
Clean tim Potable har	observed for protein arce.	status of women, if the processed products can also be sold.	Provision of equipment for processing and credits for purchasing the equipment.
Clean tim Potable har			Cooking courses for use of processed foods are recommended.
Water	ter collection is a e-consuming and d work.	*Installation of tap-water system or well digging is recommended.	*Management and repair of wells should be taken care by both women and men. Procurement of spare parts is required.

Problems	Background	Primary Measures	Complementary Measure
	*If people live in scattered areas, the use of wells is limited to the inhabitants in the vicinity of the wells.  *Women carry water on their head or back or by hand, then store it in water tanks in their houses.	*In some cases, it may be preferable to concentrate water collection sites in rivers or springs (pavement of access roads and sites, etc.).  *Improvement of water-carrying implements (containers, wheel barrows, etc.) and devices to store water at home.	*As rivers can be used for multiple purposes (irrigation source, domestic or potable water source, washing, bathing, angling, watering of livestock etc.), comprehensive methods for river development and management are required.  *Related to improvement of rural roads fitted to means of transportation (bicycles, trailers, etc.). Improvement of water tanks to enhance sanitary and convenient use is a part of improvement of kitchen.
Housing Improve- ment	*Houses are often not resistant to wind of flood damage, since they are built with only locally available materials. However, model houses designed by foreigners may not be acceptable to local people.	*In reference to local customs, housing should be improved in terms of durability, cleanliness, and functional efficiency.	*Related to improvement of oven, water tanks, food storage facilities and kitchen. Credits should be provided for housing improvement.
Improve- ment of Launder- ing	*Washing chores in areas without tap-water facilities are exhausting.	*Riverside washing places can be made more convenient (pavement of access roads and washing platforms, etc.).	*As rivers can be used for multiple purposes, comprehensive methods for river development and management are required.
•	not used.	manufacture and sale of soap is encouraged from the sanitary point of view.	combined with measures like construction of sewerage systems and

Problems	Background	Primary Measures	Complementary Measures
Health and Hygiene	*Living effluent is discharged or spread over.  *In some countries, toilets/latrines are not sanitary, or they are directly evacuated into the river flow.  *Population is infested with pests or insect, i.e. cockroaches, flies, mosquitoes, etc.	*Construction of sewerage disposal systems. Promotion of public hygiene. *Installation of latrines in the areas where they not available. Promotion of hygiene to keep latrines clean. *Control and group eradication for harmful insects, such as cockroaches, flies, mosquitoes, ticks, fleas	*Sewerage systems must aim at the decontamination of river water. *The constructed latrines should be distant from wells or water collection sites on the riverside. *Related to the forecasting of outbreaks of insects and pests/diseases for plant protection.
	*People are affected by malaria, epidemic and contagious diseases, or parasitic worms.  *In some areas, medical facilities are too remote and drugs are not readily available.  *Use of contraceptives is limited to a small number of rural people.	*Relevant medical services with group health screening activities and dispatching of nursing staff for rural health care.  *Organization of first aid services. Early treatment and diagnosis of diseases by group health screening or travelling clinic.  *Promotion of family planning for both women and men, along	*Related to training of medical staff as well as campaigns of health and hygiene for rural people, improvement of rural medical facilities. *Training of medical staff. Development of local health-care systems.  *Family planning should be combined with maternal and child
	*Villages often lack midwives.	with the supply of contraceptive materials, in considering national policies, culture and customs.  *Training and dispatching of midwives,	health and hygiene as well as AIDS prevention. Ideal picture of a family acceptable to local population should be provided.  * Related to local health care service systems.

Problems	Background	Primary Measures	Complementary Measures
Clothing Improve- ment	*Too few/worn-out clothes are available.	*Clothes can be made using sewing machines. Machines should be supplied or credits for buying them be provided.	*Sales of clothes made by women. If stitching and dyeing are incorporated into dress- making, it may lead to the development of a cottage industry. Marketing channels are needed in this case.
Rural Cottage Industry	*Cash income is scarce, and few employment opportunities are available in rural areas.	*Light works that can be performed between domestic chores (dyeing, stitching, bamboo basket weaving, etc.) could be undertaken. Upgrading of skills of women in the cottage industries.	*Value can be increased, if the materials are produced by processors (sericulture, cotton cultivation, etc.).  Marketing channels are needed in this case.
Improve- ment of House- keeping	*Women are not always accustomed to keeping records, even if they manage daily household expenses, resulting in poor planning of household economy.	*Women should be encouraged to keep household accounts to improve the household economy.	*Adult education to teach how to write and calculate.
Extension Activities for Improve- ment of Living Conditions in Farm Households	*Extension activities concentrated on the improvement of living conditions have not yet become popular. Related official system for their promotion has nor been fully provided.	*Incorporation of improvement of living conditions into extension projects. Development of teaching materials for extension work. Increase in number of female extension workers.	*Research on the methods of improvement of living conditions as a base of extension activities. Provision of means of transportation for field activities of extension workers.
Research on the Methods for Improving Living Conditions	*No organizations or human resources are available for promoting research on the appropriate techniques for improving living conditions.	*Establishment of a research center for appropriate technology for the improvement of living conditions. Training of relevant researchers.	*Coordinating system between the research institutes and the extension services.

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Problems	Background	Primary Measures	Complementary Measure
Group Child Nursing Activities	*When women must look after their babies, their working schedule is disrupted, or they cannot attend courses.	*Joint nursing can be organized during the peak season of farm labor or during the training courses.	*Establishment of creche and training of licensed nurses.
Improve- ment of Energy Use	*Rural activities are often limited to the daytime due to the lack/scarcity of electricity and other energy sources. Fuel other than firewood is hardly available and also expensive.	*Inexpensive plans for rural electrification (using wind or solar energy, hydropower and biomass). In the case of hydropower generation, evacuation of inhabitants and destruction of ecosystems in the proposed basin should be considered.	*Rural electrification may have a positive impact on food processing, handicraft production, acquisition of information, etc.

Chart 2 Problems and Strategies for Agricultural Improvement

Problems	Background	Primary Measures	Complementary Measures
Consolida- tion of Infra- structure	*Increased production through irrigation is beneficial regardless of gender. But, when irrigation canals are lined with an em- bankment, use of rivers by women (washing, fetching water, etc.) becomes difficulty. * When agricultural machines like power- tillers are not avail- able, women are mainly responsible for carrying the harvested products from the fields.	*Setting of platforms for women's convenience along the irrigation canals, so that the use of water by women can be secured.  *Extension/enlargement or consolidation of farm roads, so that the products can be easily carried.	*Irrigation reservoirs are used as fish ponds. Farm roads can be constructed along canals. Extension of cultivation techniques under irrigation is required. Provision of credits for cultivation under irrigation.  *Coupled with consolidation of farm roads, improvement of means of transportation.
Alleviation of Work- load Related to Farming	*Women perform the following farm works: sowing, weeding, harvesting, storing and processing of crops, feeding and watering of livestock, cleaning of shed/barn, etc.	*Extension services should target both men and women for diffusion of laborsaving techniques. Farm implements must be improved and farm mechanization be promoted in considering the interests of both women and men.	*Research on useful techniques for increase of yield and alleviation of hard work in farming.  Provision of credits to buy agricultural machines or implements should be equally oriented to both women and men.
Promotion of Cultiva- tion of Food Crops	*In Sub-Saharan Africa, men tend to be engaged in cash crop production, while women tend to grow food crops. However, the extension services are too often directed to the cultivation of cash crops only.	*Agricultural extension activities should cover both cash crops and food crops.	*Research on food crops should be promoted. Provision of agricultural inputs for food crops and of credits to buy them.
Vegetable Cultivation	*Horticulture and vegetable growing are implemented mainly by women.	*Research and development and extension of methods of improvement of vegetable cultivation.	*A cooking course for teaching how to use vegetables properly.  Marketing for the sales of vegetables.

Problems	Background	Primary Measures	Complementary Measures
	*Fencing is needed to protect vegetables from the intrusion of	*Provision of barbed wire.	*Provision of credits to buy barbed wire.
	grazing livestock.  *It is necessary to secure a water source for watering vegeta- bles.	*Upland irrigation.	*Training programs on water management for upland crops. Provision of credits for irrigation.
Tree Crop Manage- ment	*Women are responsi- ble for growing fuel trees, fruit trees and fodder trees in home- steads. Fruits are sometimes sold at roadsides, bringing cash for women.	*Training on how to grow trees, coupled with the supply of saplings. Agroforestry is suitable, where tree growing is combined with the cultivation of vegetables or food crops.	*Women, who collect firewood, have been inconvenienced by deforestation. Since women are concerned with forest protection, they are eager to participate in afforestation schemes.
Sericulture	*Women's participation in sericulture is popular but the extension service is limited to men.	*Sericultural projects can be targeted to both men and women.	*Related to the promo- tion of rural handi- craft production. Requires the develop- ment channels of marketing.
Poultry or Pisciculture	*Women are commonly in charge of rearing of chickens, ducks, rabbits, etc. in homesteads.	*Promotion of poultry rearing (fed in roosts or cages). Provision of credits to buy chicks, equipment, etc.	*Cooking courses for the preparation of eggs, meat and offals/ entrails. Promotion of marketing of eggs. Containers for eggs should be available.
	*Fish farming in ponds near the house con- tributes to the intake of protein and may generate income if the products are sold.	*Promotion of pisculture. Provision of credits to buy fingerings, equipment, etc. and to dig fish ponds.	*Courses for fish cooking. Fish processing into dry fish or salt preserves. Promotion of marketing channels. Containers for fish should be available.
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Problems	Background	Primary Measures	Complementary Measures
Extension for Agri- cultural Improve- ment	*In the past, women's participation in agriculture had been overlooked and women had been excluded from the benefit of extension services.	*Extension services should include both men and women. Agents should be trained so that the role of women in farming can be reflected in their activities. A large number of female agents should be employed.	*Research on the role of women in the adoption of farming systems. Closer linkage between extension services and research. Means of transportation should be provided for the extension workers.
Agricul- tural Research	*Agricultural research has not been oriented to the study of farm practices executed by women or crops mainly grown by women.	*Promotion of agricul- tural research on farming by female farmers and farming systems including gender-based division of labor.	*Training of concerned researchers. Coordination between agricultural research and extension services.
Land- holding System	*In most cases, farm land is owned by male heads of farm households. Female heads can seldom own land, even if equality is legally stipulated in the acts of agrarian reform or settlement.	*Agrarian reform or settlement schemes should be implemented on the basis of equality regardless of gender. In the case of inequality, proper measures for correction should be taken.	*These schemes should be combined with the consolidation of land, construction of infrastructure, promo- tion of extension activities and provi- sion of credits.

Chart 3 Problems and Strategy for both Objectives

Problems	Background	Primary Measures	Complementary Measures
Extension Networks	*Extension system has not yet been estab- lished in any country.	*If extension services are currently not available, cooperation with the official or private organizations responsible for the diffusion of techniques and informations to farmers should be promoted.	* If such a system is implemented by an official organization, coordination with other official agencies should be promoted. In the case of NGOs, cooperation with the governmental agencies concerned is essential.
	*Even though extension networks have been available in many countries, few of them cover extension services including not only agricultural development but also improvement of living conditions in	*The existing networks should be reorganized so that they can cover both aspects of improvement.	*Training of staff for extension of techniques and informations on the improvement of farming and living conditions in the farm households.
	the farm households. *In some countries, no or few agencies are in charge of training of extension workers or provision of equipment and materials necessary for extension activities.	*Promotion of establishment and operation of an agency for training of extension workers.  Provision of equipment and materials necessary for extension services.	*Cooperation between the agency and research institutes.
	*Role of women in farming is not sufficiently reflected in extension activities. Training of extension workers on the subjects targeted to women is often neglected. Too few female extension staff are available.	*In the training of extension workers, the role of women should be emphasized. The number of posts for female staff should be increased.	*Establishment of an agency for training of extension workers and provision of equipment and materials necessary for extension activities. Organization of workshops to promote awareness among officials concerned.
	* Shortage of means of transportation for the activities of extension workers.	*Provision or local production of bicycles, motor cycles or cars for extension workers.	*Related to overall improvement of rural traffic or development of means of transportation for rural people.

Problems	Background	Primary Measures	Complementary Measures
	*Few or no materials required for extension activities in which the role of women in agriculture is well reflected.	*Local preparation of materials in which the role of women in farming is emphasized, using local language.	*Research on extension techniques covering the improvement of both agriculture and living conditions in farm households.
	*In some areas, people only speak the local language, while the official language may be different from the native one.	*Extension workers, who can speak the local language, can be hired, or extension workers can learn the local language.  Preparation of extension materials in the local language.	*Teaching of official language in informal education for rural adults. Strategies depend on the policies of the respective countries, whether priority is given to the unification of the country or to the protection of the minority tribes.
Means of Providing Information	in radio and televi-	*Effective application of mass-media to extension services.	*Promotion of rural electrification and diffusion of radio and television sets.
	sion. *Printed information is effective for those who are literate.	* Promotion of publica- tion and distribution of magazines or pamphlets as a chain of extension activi- ties.	*Literacy courses should be provided for both male and female adults. Information should be collected and arranged for publication.
	*Information on technical improvement is often obtained from relatives or neighbors.	*Training of key-farmers and area-based leaders. Utilization of existing information networks.	*Coordination among communication mass-media, printed materials and verbal means. Collection and organization of information.
Education for Adults	* Illiteracy of rural women still remains too high to utilize printed information.	* Promotion of literacy education for adults to the extent that it is useful in daily life.	*Related to effective use of printed information and training programs on house-keeping for women.

Problems	Background	Primary Measures	Complementary Measures
	* Women can not complete primary education.	*Promotion of adult education with em- phasis placed on practical aspects.	*Preparation of materials necessary for extension activities in a way that even illiterate people can use them.
Women's Organiza- tions	*In areas with low women's social participation, there are almost no women's organizations.	*Establishment of women's organizations for cooperation in projects.	*Provision of credits to manage the women's organizations. Construction of meeting halls in villages for the activities of the women's organizations.
	*The presence of a qualified leader is necessary for the effective operation of any organization.  *Shortage of facilities where women's groups can meet for the activities.	* Identification or training of qualified leaders in the women's organizations.  *Construction of community centers in villages. The management of a center should be shared by both women and men.	*Promotion of education and consciousness of all the members for support of leader.  *Collaboration with male partners in the same community is indispensable.
Cooperation from the Recipient Country	*Without the cooperation of local government, WID projects can not be put into practice.  *Cooperation with men in the same community is essential whenever women undertake activities different from their traditional routine.	*Holding of WID workshops/seminars for officers. Dispatching of WID advisers to the relevant organization within the government of the recipient country. *Campaigns for WID in the project areas.	*Organization of international meetings by the the authorities concerned from developed and neighboring countries and multinational assistance organizations.  *Propagation of WID by mass-media.

Problems	Background	Primary Measures	Complementary Measures
	*Projects oriented exclusively to women may not be able to get men's coopera- tion.	*Projects targeted to women only or those oriented to men and women should be promoted depending on the conditions in the community	*Efforts should be made to win men's cooperation through well-organized cam- paigns for WID.
	*Voluntary participation of women living in the project area is essential to implement any project to upgrade the technical level of rural women.	concerned.  *Awareness of women should be increased through campaigns.  If a successful pilot project is implemented nearby, an observation tour could be organized.	*Utilization of mass- media. Holding of workshops for WID.
Farmers' Organiza- tions	*Organizations for farmers to enjoy benefits as a group, such as farmers' groups, cooperatives, etc., are sometimes inexistent *Even if farmers' groups have already been organized, their members are too often men only. *In some cases, women's groups or youth clubs are not organized in agricultural cooperatives.	*Organization of farmers into a group that may adopt the use of agricultural inputs, techniques and credits.  *Action should be taken so that equal participation of men and women can be achieved.  *Establishment of women's groups or youth clubs within the agricultural cooperatives should be promoted.	*Coordination and cooperation among farmers' organizations, extension networks research centers and financial institutions. *Efforts should be made to win men's cooperation in WID projects.  *Suitable training for leaders of women's groups or youth clubs.
Provision of Credits	*As women do not own in many cases any propertys to offer for mortgage, they have a limited access to credits.	*Agricultural and rural credit facilities should be made available to rural women.	*Related to the appro- priation and manage- ment of funds as well as housekeeping.

Problems	Background	Primary Measures	Complementary Measures
Means of Transporta- tion	*Women are often responsible for the collection of water and firewood and for carrying harvested crops. They carry these loads on their head, shoulders or by hand.	*Lady's bicycles, trailers attached to bicycles, wheel- barrows, etc. should be provided to ease labor.	*Rural road networks should be improved to enable the use of bicycles, trailers, wheel-barrows, etc. Credits should be provided to purchase such an equipment.

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