

87-F-9

THE IMPACTS OF JAPANESE AID ON BENEFICIARIES
Observation in Southeast Asia

by

Akira TAKAHASHI

Faculty of Economics
The University of Tokyo

October 1987

PREPARED UNDER
THE PROJECT ON DEVELOPING ECONOMIES
RESEARCH INSTITUTE FOR THE JAPANESE ECONOMY

Paper presented at the conference on "The US and Japan in North-South Relations: Looking to the Future", May 14-17, 1987 at Missoula, Montana and May 19 at Washington, D.C.

I. Growing Aid and Japanese Mass: Introduction

Japan started international cooperation in 1954 when she joined the Colombo Plan, though at the time Japan had not yet achieved economic expansion in full scale. Since then Japan has been enlarging contribution to the developing countries of the third world, and recently she reached to the second position among the donor nations, next only to the United States.

There seems to be two major reasons for such a rapid increase of the official development assistance (ODA) of Japan. One is the structural necessity of the national economy. It is rather imperative for Japan to circulate resources to the developing nations in order to secure market for steady demands to Japanese product, for stable supply of raw materials, and for reliable investment.

The other is the consensus of all Japanese determined to assist the peoples in the third world who are suffering from poverty and hunger. Such a naive feeling of the Japanese no doubt has been the basis of the constant growth of the ODA, in spite of the mounting trends of difficulty in the public finance, especially

in last decade, which resulted in decrease of budgets in most items like social welfare, education and other governmental services, except the defence expenditure. Majority of Japanese taxpayers simply believe that their goodwill has been trickling down to reach to the areas in needs, and benefiting people for betterment of their lives. So that they agree to approve huge appropriation for external cooperation, though good deal of Japanese still live in modest and austere way in comparison to the people in other donor countries and to some in the recipient nations.

Therefore, when I start the chapter on economic cooperation as a part of my course of developing economies with the title 'Economic aid: Virtue or vice?', most students get puzzled if the aids could be bad for the people in the third world.

But in recent years Japanese are getting aware of the reality that the donor is rather benefited out of the aid, and economic cooperation often results in disparity of wealth among the people of recipient nation, as the privileged elites monopolize advantage in one hand, and the mass are deprived of their traditional rights on the other. Now the Japanese realized that

their goodwill has not necessarily been welcomed by the peoples of the recipient countries.

We can count two principal reasons for this situation. First, so-called Marcos corruption reported almost daily by mass media of the US and Japan gave serious impact on Japanese view on aid. Besides the opposition groups protested to the Japanese government at the end of the previous regime of the Philippines claiming that Japan's economic aid strengthened dictatorship in the country and fortified suppression on the people. Many of Japanese felt as if they were betrayed.

Secondly, as Japanese became little affluent than before, and as value of yen rose, the number of Japanese traveling abroad increased in recent years. Many of them, especially the younger generation, fostered concerns on the realities of Asian societies through direct contacts with Asian neighbors. Negative aspects of Japan's aid are observed and reported along with basic problems of economies and societies by civic groups, labor unions and voluntary organizations. This is the new trend in Japanese history of association with the Southeast Asian mass, and resulted in stronger attention on the effects of Japanese aid on them.

Hitherto Japan tends to collaborate with and follow to western donor nations and international institutions in practice and conceptualizing of development cooperation, but it is now requested to have distinct philosophy and determination in building firm consensus among the nation. This paper is aimed at examining the impacts of Japanese aid on the beneficiaries of the receiving nations and to have perspective on new dimension in this regard.

II. Economic Aid, For Whom?

Economic cooperation is supposed to help the countries suffering from low income, technological stagnation and insufficient capital formation. Through the technical and financial assistance the northern countries can provide food and shelters for the hungry poors, smoothen transfer of modern technology, and fill the gap in trade imbalance and capital shortage to prepare productive basis for economic growth.

It is natural and reasonable that donor nations give emphasis on the humanistic aspects of aids when

they discuss the economic cooperation. We admit that in some countries the aid certainly represents such ideals. But in general, aid is offered not only from the humanistic motivation, but from their own advantages brought forth as effects of aid programs. It is not uncommon that donor nation receives much more benefit than the countries which are given.

In some countries, aid is rather a tool to enhance politico-military influences over important parts of the world from strategic viewpoint. So called aid-giving race in the 1950's and 60's was the simple reflection of the east-west issues. In others, aid is used as the means to maintain and to prolong the countries' cultural influence in former colonies that have achieved independence.

In Japan's case, officially government leaders stress Japan's responsibility as an advanced country to extend a helping hand to less fortunate countries, but Japan is often criticized that aid is too much linked to expansion of presence of Japanese business. The business leaders are more open and forthright: they admit that foreign aid is a boon to the Japanese economy.

I cannot forget a scene at the international convention on economic cooperation in Kobe, where a president of Japan's leading trading corporation expressed boldly that for them economic cooperation comes next to profit, and a high ranking official agreed to that statement candidly. Japan's posture is also reflected in the fact that reparation is counted as a part of the ODA, though it is just to compensate diseconomy caused by Japan during the World War II, and not the resources transferred additionally to the countries in Southeast Asia.

When Japan offers financial aid, loan or grant, it is usually followed by expansion of shipment of products and investment as well as know-how, through institutionalized mechanism. It cannot be denied that, at least until recent years, aid is aimed at promotion of export, securing of natural resources, and transfer of Japanese technology.

At the same time, companies involved in overseas projects turn handsome profits. Without doubt, the funds transferred to developing countries under the capital cooperation program have generated additional demand for Japanese products at the expense of taxpayers

in both Japan and recipient countries. Important fact is that the payment is guaranteed by the government. That is why manufacturing and trading corporations as well as engineering consultants and construction firms are so eager to take part in development-aid projects. The recent rash of scandals involving Japanese firms taking part in development projects, who have been accused of offering kickback is clear indication of how profitable these projects are. (1) Technological cooperation, too may spearhead economic penetration of developing regions. I remember vividly the scene at the site of one agricultural development project in a Southeast Asian country: hundreds of Japanese-made small cultivating machines lay idle in rows, abandoned after just two years' use. Both sides of donor and receiver claimed that the equipments did not match to the soil of the area, and certain parts were not obtained due to slow response of the dealer. But real reason was obviously negligence to take good care once those were delivered.

Moreover, it is often reported that procurement relating to aid involves overpricing. This was allegedly very common in transaction for the reparation, but is still said to be not uncommon even now. The

writer is not in the position to judge but, at least, those cases were debated at the Diet. Questioned by an opposition party member, a Bureau Director of the Ministry of International Trade and Industry admitted that a trading company of Japan earned 42%, as commission, of value of Japan-made turbo-prop passenger plane when it was delivered to a Southeast Asian country as a part of reparation.⁽²⁾ In other case, when Japan offered a huge loan for construction of an integrated steel mill in a northeast Asian country, materials were procured at the prices 2 to 5 times (in extreme case 13.6 times) higher than usual export prices.⁽³⁾

On the other hand, commodity aid is utilized by Japanese business as a regulatory device for balancing supply and demand in the domestic market. In 1978, for example, iron bars and billets worth 8.2 billion yen were scheduled to be put into the programs for nine countries in South Asia and the Middle East. Steel makers using electronic furnaces were then in a slump, so the MITI arranged to have them provide the material. Before they could do so, however, the domestic market recovered, and it became more profitable to sell domestically. As a result, the aid program was scaled down, and the commodities were provided instead by the

blast-furnace steel makers.

Another example is canned tuna, which was in over-supply in 1978 as a result of speculation related to the issues of the 200 nautical miles fishing waters.⁽⁴⁾ The tuna industry succeeded in having its product included in the food aid program for Southeast Asia. Though this solved the industry's problem and made fish available to recipient at low prices, it resulted in the curious situation of Japan selling to Southeast Asian nations fish that had been caught in their own waters. How much better it would have been if we had shown the people of those countries how to catch fish themselves.

III. Aid to Help or Aid to Harm?

More serious problems are the social stratum in the local community benefited by the aid program and the reverse effects of the foreign aid. The US, the IBRD and other international agencies made clear their stance in the early 70's that they would concentrate their effort to those areas which could directly contribute to the welfare of the lowest 40% of the recipient nations.

However, Japan remained ambiguous regarding the target group to be benefited by the ODA. Instead, Japanese seemed to believe in simple and obsolete filtration theory. The construction of infrastructure such as road, canal, wharf and so on is thought to increase welfare of the people of the local community universally. For example, assistance to develop telecommunication network is generally believed to be blessing for everyone in the region. It must be so, in a sense, and rural telecommunication development in the third world is being planned by multinational corporations in the north. We can predict that it will bring forth advantage for the government as it may fill communication gap between the center and local areas. It also gives profit for local elites such as merchants handling grains and other agricultural products, as now they can easily sense trends of world market.

But then what will happen with small farmers? In rural society of Asia where economy has been somehow traditional and compartmentalized, farmers were isolated and protected from the drastic effects of business cycles in the modern world. But with the innovation in communication network will results in their direct in-

volvement and exposure to the economic violence of the market economy.

Depression in a certain part of the world now instantly affects the selling price of local products. Of course, in other aspect, at the time of sickness or natural disasters, villagers may have greater use of the network. Still we must be careful with varied features of the communication development. It is necessary to have thorough assessment of the ecological and socio-economic effects of such development. Unless we are sure that we can prevent ill effect, we should not go on easily.

Other example is the irrigation systems in agricultural development projects. To provide water for the farmers suffering from shortage of precipitation seems to be universal benefit for the people in the areas, and Japanese engaged in planning and implementation believed in infrastructure building, such as dams, canals, pumps and so on.

In an agricultural development project in the northern Philippines, under which new pump station was built to lift up river water to paddy field on the river

terrace and irrigation canals were constructed. But, when the writer interviewed a farmer in the heart of the beneficiary area, he complained about what was done by Japanese aid. He said the canals brought considerable economic benefits to the owners of paddy fields, but tenant farmers were subsequently forced to surrender their fields to the owners, and were given inferior land in inconvenient locations. The farmer who is supposedly a beneficiary of Japanese aid program expressed, "I hate Japan!"

This case is reflection of socio-institutional problems of the local society. The effects of development projects are no longer uniform, but stratified. Few decades ago, when many of infrastructure development projects like clearing of forest land and construction of dams and roads were carried out in frontiers, benefit diffused to local people generally, no matter what their social stratum. In 1980's, however, an increasing number of projects are implemented in densely populated areas where land rights and the socio-political situation are highly complex. Development projects undertaken without adequate understanding of local conditions can easily widen the gap between rich and poor and intensify social conflicts in the community.

IV. Asian Peasants: Mere Recipients of Dole Out?

Such a discrepancy between intention of donor and perception of recipient seems to occur from basic posture of northern experts as well as central planners of the country who tend to look at peasantry of the third world as mere recipients of dole out from above. For them, Asian small farmers are ignorant, irrational and resistant to change. They usually do not give proper attention to the initiative and creativeness of small farmers. In case of transfer of new technology, if farmers do not show positive response, northern and central agriculturists tend to judge that it is because of low initiative of peasants to rise level of their productivity and their lives. But, as an intensive observer of small farmers in Southeast Asia, the writer is strongly impressed by rational behavior of them who are striving to survive under the pressure of landlordism.

Let me introduce a case of farmers' response to the new system of farming under development program in a rice growing village in Central Luzon. In Central Luzon remarkable changes in agriculture and life took place in

the later 1960's, especially 1968-69, owing to technological innovation and institutional reforms. Diffusion of new varieties of paddy started together with renovation of irrigation facilities and extension work of improved farming techniques. Yield of paddy was almost doubled, though stability of yield remained to be solved. Tenurial conditions of cultivators were converted from share rent to fixed rent by the presidential decree in 1969. Furthermore, under the new agrarian reform program started in 1972, all tenanted paddy-lands owned by landlords holding 7 hectares and more were ordered to be transferred to the hands of cultivators. Rise in productivity, decrease in land rent, favorable price of farm products and enhanced inflow of credit resulted in betterment of level of income and living of cultivators. (5)

From the end of the 1960's use of family labor on the farm increased, because they now intend to economize farming cost. Farmers' attachment to the land and the crop was obviously observed. "Peasantization" is the term the writer chose to describe such process of farmers' acquiring traits of conventional small farmers, as they prove their initiative in farm operation to maximize income from the farm. (6) It seems that farmers

changed their behavior, but what really changed was socio-economic conditions surrounding them. The basic pattern of their behavioral choice remained same as before.

The rationality of farmers was also demonstrated when a large-scale extension program was implemented by a government team which consisted of 19 Taiwanese and 41 Filipino experts in 1966-67. Farmers responded so poorly to the program, so that the members of the Taiwanese Mission were deeply disappointed by local farmers' attitude toward new technology. When the writer met them personally in 1970, he conceived that Filipino paddy farmers had little aspiration to improve their productivity. The Taiwanese left the area with distrust to the Filipino farmers, but a few years later the local farmers started to apply the new technique they had learned from the Taiwanese. They are now grateful to the extension works carried out by them. (7)

This strange reaction of Filipino farmers toward the new technology can be understood only when we realize their position under socio-economic circumstances. The land reform program was expected to reach there soon. New fixed rental was supposed to be determined on

the basis of average yield of the land. Farmers were unwilling to follow the advice of the Taiwanese, because they were aware of the truth that only the landlords would gain fruits of the innovation if they adopted new technology before conversion of their tenure status.

One of significant changes is that size of the village was doubled, reflecting steep increase and high mobility of population, and landlessness is cumulating rapidly. There were 44 households in 1964. In 1979 total number of households increased to 86, and 46 households (53%) were engaged in hired work on and off the farm. The increase was made up of new households of younger generation and inflow of marginal families from peripheral area of the plain and other poverty areas of the country.

Another example of Asian farmers initiative and rationality was demonstrated by Thais in the mid-70's. At the time the ruling Socialist Action Party government led by Kukurit Pramoj distributed 2.5 billion Baht of fund to 5,000 districts (tambon) of the nation and each district was allocated about 500 thousand Bahts. With this money district people were requested by the central government to carry out development program on their own

planning and implementation.

Usually in Asian countries farmers are not trusted by their elites, and always the development programs have been given from the top to the bottom. So that this program was the first experiment in Asia which tried to depend on initiative of local farmers. Of course there were lots of failures and corruptions, but in general villagers were successful in accomplishing the program and in generating their own resources for supplement the government fund.⁽⁸⁾ We may say that Asian community has its own regulatory functions for effective use of common resources and to prevent misuse. This program is described by Thai novelist Nimit Phumitawon in "The Finance Ministry in the Paddy." ⁽⁹⁾ Nimit tells many funny stories about the response of villagers toward the fund, but in his novel we find that fund is appropriately expended for village development.

What is needed for the proper use of communal fund in Asian setting is not the auditing but exposure to the member of the community.

v. Lacking Evaluation of Impacts

One of most essential problems implied in Japan's development aid is that both government and taxpayers have not been so serious about the evaluation of impacts of the projects on the recipient community, though they are very strict regarding auditor like control of the fund. Infrastructure completed is carefully examined, account book is checked, stubs of air tickets for invited overseas trainees are counted, but what sort of impact was given to the people, what kind of effects were generated in the region, who received the real benefit out of the program, what was the negative aftermath...those points were hardly investigated.

Therefore, recipient countries look at Japan as generous donor in providing aid but with little concerns on the result. What has been lacking for us in economic cooperation is proper evaluation of impacts of the projects on the people and society of the locality. Though the amount of the ODA has been rapidly rising, and the Ministry of Finance is trying hard to quicken the pace of disbursement, the government does not seem to care whether the programs are accomplishing their objectives, and the effects are trickling to the people.

Evaluation of programs is too often undertaken by insiders, for instance the staff of the implementing agency themselves. Rarely the third parties--such as certain group of the host country--asked to appraise result. It is a case of the right hand checking what the left is doing. One might say the current system lacks quality control, ironic enough, in view of Japan's reputation for quality control. As a result, the Japanese people have no way of knowing whether they are getting their contribution's worth. (10)

Root of the problem is lack of communication between planning and implementing personnels of Japan and the people of the recipient countries. Staffs of Japan's aid agencies certainly communicate with politicians and bureaucrats of the recipient countries. But as to the communication with the common people of the project areas, the situation is grave. In many countries of South and Southeast Asia, local languages are so varied, and are different from national or official language, so that language barrier is very serious even between central planners and local mass, not to speak of Japanese experts. But the aid agencies of Japan seldom encourage aid personnels to master the lan-

guage of the people they deal with.

Such a tendency is strengthened by insufficient expertise of specialists in the area studies. Contrary to the writer's observation in the USAID or other western agencies, Japanese emphasis is usually given to technical and economic aspects. Linkage with the area studies has been neglected, though in Japan that field of social science has been developing in recent years.

Thus after thirty years of experience in administering foreign aid, agencies still lack a profound understanding of the real needs of aid recipients. This results in their giving no consideration whatsoever to the socio-institutional effects of aid programs. Worse still, they attempt to justify what can only be called irresponsible behavior by arguing that they do not wish to interfere in the domestic policy of other government. As a consequence it is not uncommon that, under the current land relations, benefits of the projects falls only in the hands of the landed groups in the form of capital gains, while the mass is alienated from the customary welfare. Social disparity often follows aid programs.

Unlike western donor countries, Japan is timid in propagating her contributions to the recipient nations. In many cases, the beneficiaries of a development project are totally unaware of Japan's participation. Excessive propagation may cause anti-donor feeling among the people as we have seen in many corners of the world, but still it is not reasonable that the people are not given proper information on the resources inflowing from the foreign country. (11)

Development project undertaken without adequate understanding of local conditions may result in farther disparity and conflicts.

In northwestern Philippines, a large scale irrigation development project is going on to cover 12,000 hectares of paddy fields as the first phase. A network of diversion dams and irrigation canals were constructed with grant, loan and technical consultancy from Japan. Again the project was welcomed by landlords because the project will certainly enhance productivity of their land, and consequently the value of their property will increase. But the project was opposed by local farmers who complained that it raised the cost of irrigation and reduce the size of their fields for which they received

no compensation. The problem could have been avoided if Japanese development planners together with engineering consultants had realized that the area had a well-functionated communal irrigation systems to begin with, built and operated by local farmers, which while somewhat old-fashioned, was nonetheless quite effective.

Generally speaking, in Southeast Asian countries major irrigation systems were constructed by colonial regime; and are currently administrated by national agencies. Local farmers have little sense of attachment to the suystems, so that they show very reluctant posture in maintaining the system as well as in paying water dues.

But there are several areas where we can find communal irrigation systems effectively managed by local farmers. Subak of Bali, Indonesia, and Zanjera of Ilocos, northwestern Philippines, are two typical examples of such cases. We may call these systems as deomonstration of spontaneous development mind and creativeness of small farmers in Southeast Asia.⁽¹²⁾

In early 1980's the above-mentioned development project started, covering areas of 138 small zanjera

groups. Out of the project area, a portion of 1,000 hectares was chosen for the pilot project, and was given renovation of terminal irrigation facilities with \$4.1 million of grant aid from Japan. But when the construction started some 600 farmers cultivating 500 hectares located at the upper stream, which is about one half of the total land of the pilot scheme, complained on the program and finally they dropped out of the project. Such opposition tends to spread in the whole project area, and the project itself faced serious difficulty. But Japanese consultants and their counterparts from the local government attributed the cause of problem to the irrationality of local farmers.

The writer carried out observation with Filipino colleagues, and found that it was very rational and reasonable for farmers to oppose against the project. First of all the Japanese engineers as well as local counterparts did not give appropriate attention to the existing local systems. They tried to assess cost and benefit of the project not from the viewpoint of the farmers who were supposed to be the beneficiaries, but depending government sources based on face values.

For example, farmers are notified that they should

pay 250 kg of paddy as annual irrigation fee per one hectare which is universal for irrigated land under the national schemes. Farmers claimed the amount was beyond their capacity to bear, as they used to surrender a few days of voluntary labour for a season to maintain their zanjera systems. Another point regarding the irrigation fee was brought forth by misunderstanding of government economists who conducted cost-benefit analysis based on their survey. They tried to justify the new irrigation cost reasonable saying that increase of yield would be much higher than the fee. But those figures on current yield is considerably lower than actual one, because farmers under extensive share tenancy naturally tend to declare the yield lower. All the farmers say that de facto increase of productivity cannot cover additional expenses to be charged by the national irrigation authority.

As a student of rural development, the writer together with Filipino colleagues tried their best to bridge communication gap between farmers and both the governments of the Philippines and Japan. In the beginning, Japanese bureaucrats tended to resent provocative scholars, but later they realized that what the scholars claimed was not but the truth, and

gradually started to listen.

After all the national agency of the recipient country as well as the Japanese aid agency switched to a new policy which was structured on proper evaluation of the role of participation of local farmers in development project. Now the project is pursuing baseline involving farmers both in planning and in operation and maintenance, naming the new steps "participatory approach." (13)

From this case Japanese development agency staff are to learn that real beneficiaries are the local populace, and without acquiring the confidence of the target people there is no real implementation of project, and that the most indispensable are the deeper understanding of socio-institutional aspects of the existing systems and the evaluation of the project based on the impacts on local community.

VI. Concluding Remarks

For long Japanese believed in largeness of aids, and strived for expanding the ODA particularly in last

decade. Now Japan spares 0.35% of her GNP and reached the second position among donors, as I touched on at the beginning of this paper.

But when we look back our achievement, we cannot help doubting if the aid was far more for Japan's economy than for the welfare of suppressed mass in developing regions. If so-called economic cooperation provide gain for donor nations and a handful people in receiving countries, we cannot claim it a virtue.

In the later half of 1980's Japan's role and responsibility among donor groups are far heavier than before and it is most urgent for Japanese to establish firm philosophy to look for new horizon and to construct guideline in accordance with that.

Corresponding to grown scale of the ODA and to changing posture of Japanese mass, the government is now in search of new horizon of aid. A committee was organized in the government to reexamine scope and practice of the ODA. Country-wise review and policy formulation for aid has been started from this year choosing the Philippines as the first case with the writer in the chair. The report of the committee for the Philip-

piners released recently emphasizes the significance of the people below poverty line as the major target group in planning and executing aid program for the country.⁽¹⁴⁾ We may say that Japan has launched out on the new course.⁽¹⁵⁾

What is requested for Japanese now is to re-examine the present systems as well as philosophy of our foreign aids, and to evaluate impacts not only on national economy but on socio-institutional aspects of societies of the project areas. Otherwise our aids will be more obstacle than help for the people in the Third World who are struggling to achieve spontaneous and self-reliant development and equity. After all, the nation of donor country has to learn from the people of the Third World in search of proper path to reach goal of international cooperation.

In promoting and refining economic aid, Japan and recipient country ought to cooperate to meet certain criteria, namely, definite program for mobilizing its own internal resources, clear standards for accepting foreign resources, distribution with equity among the local populace, and respect on rights of cultural minority groups in the project areas. Otherwise

development project may further deteriorate antagonism not only between strata but between sub-culture groups.

As to Japan, we must pay more attention to the following four points. First, aid project has to contribute for mobilization of local resources as mentioned above. Secondly, Japanese must be sure that our aid is directly benefiting people at the lower end of the social scale. If a project only worsens their plight, it should be revised appropriately./ Thirdly, development aid programs should be designed to lessen the gap between rich and poor. Such an egalitarian aspect used to often absent in Japan's economic cooperation. Fourth, development program should be built on two-way communication between donor and the local mass of the recipient country, so that we could be more responsive to local needs. If a development project fails to meet any of these four conditions, we should give it up. (16)

Notes:

- (1) Special Team of the Asahi (Daily), Enjo Tojoukoku Nippon (Japan as Underdeveloped Donor), Tokyo, 1985. (Japanese)
- (2) The Asahi (Daily), January 27, 1977.
- (3) Ibid., February 5, 1980.
- (4) The Nihon Keizai (Daily), February 12, 1979.
- (5) Akira Takahashi, "Rural Labor and Agrarian Changes in the Philippines," in Hired Labor in Rural Asia. ed. S. Hirashima, Tokyo, 1977.
_____. "Tochikaikaku, gijutusinpo, Nouminka (Land Reform, Technological Innovation and Peasantization)," Ajia Kenkyuu (Asian Studies) Vol.20 (1974). (Japanese)
- (6) _____. "Peasantization of Kasama Tenants," in View from the Paddy. ed. Frank Lynch. Quezon City, 1972.
- (7) _____ et al. ed. Daisan Sekai to Keizaigaku (The Third World and Economics). Tokyo, 1982. (Japanese)
- (8) This aspect was discussed in a chapter of the Ranis Report based on Takahashi's draft. I.L.O. Sharing in Development. Geneva, 1975.
- (9) Nimit Phumitawon. Krasuwang Khlang Klang Na. (Thai).

Japanese translation by K. Nonaka, Tokyo, 1981.

- (10) Akira Takahashi, "Making the Most of Development Aids," Japan Quaterly Vol.30, No.4. (1980).
- (11) R. Hirono, A. Takahashi, et al. Economic Development of the Philippines and Japanese Economic Cooperation. Tokyo, 1979.
- (12) As to function and significance of zanjera communal irrigation system, see Robert Y. Siy. Community Resource Management: Lessons from the Zanjera. Quezon City, 1982.
- (13) Benito P. Visaya, "The Palsiguan River Multi-Purpose Project and the Zanjeras," (1982).
- (14) Lowest stratum of the recipient society as the main target group for Japan is probably first discussed in Japan International Cooperation Agency, "Report of the Countrywise Study Committee on Aid," (1987).
- (15) Akira Takahashi, "Food Security for the People," in Namboku Mondai (The North-South Issues). ed. Saburo Okita. Tokyo, 1984.