Philippines

Agrarian Reform Infrastructure Support Project

Report Date: March 2002
Field Survey: September - November 2001
Third-party Evaluator: Katsumi Nozawa, Professor, Asia University

1. Objectives

The 1990s saw the introduction of a new method of agrarian development in the Philippines with the positioning of Agrarian Reform Communities (ARCs) to support the Comprehensive Agrarian Reform Program (CARP) which was legislated by the Aquino government and has been implemented since 1987. ARCs were to be developed on a countrywide scale, with initial plans calling for the establishment of 2000 such communities. The principal components of the program to develop ARCs consisted of a project to support Land Tenure Improvement (LTI) and Agrarian Reform Beneficiaries (ARB), with the latter being formulated as a project to establish economic, physical, and social infrastructure. The Philippine Agrarian Reform Infrastructure Support Project – Phase 1 (ARISP-I) was devised to support the implementation of these tasks. In other words, ARISP-I aimed to provide a range of support services to the farmer-beneficiaries of agrarian land distribution under the CARP via the construction of basic economic infrastructure in the regions concerned, including irrigation, post-harvest facilities and farm-to-market roads, as a means of enhancing production and augmenting the income of farmers. Project implementation was commenced in 1995 (L/A) in 96 ARCs (actual number 79) scattered throughout the Philippines. Although this project had yet to be completed as of January 2002, third party evaluation focusing on case studies was undertaken in those ARCs where basic economic infrastructure support work had been completed, with the aim of obtaining lessons learned and recommendutions that would assist in the formulation of Phase II (ARISP-II) and future projects.

Outline of Loan Agreement

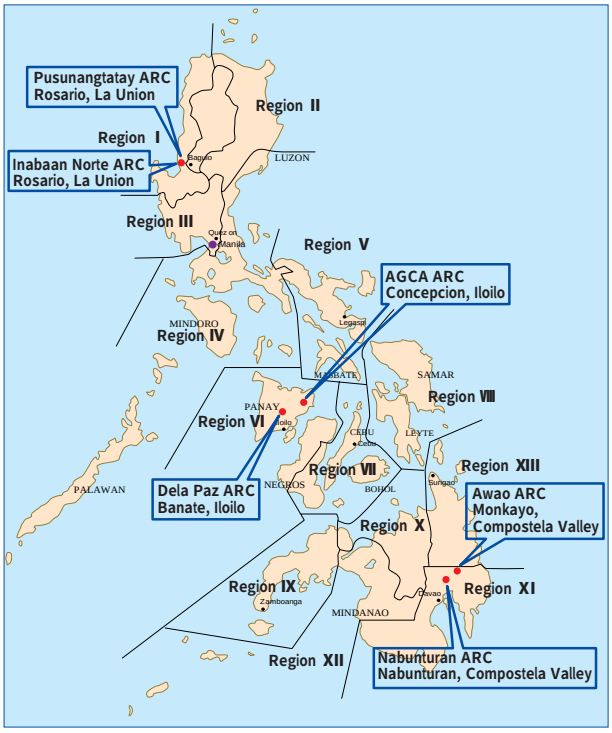
Loan Amount / Loan Disbursed Amount	6,151 million yen / 5,816 million yen
Exchange of Notes / Loan Agreement	July 10, 1995 August 30, 1995
Terms and Conditions	Interest Rate 2.7 % Repayment Period 30 years (Grace Period 10 years)
Final Disbursement Date	June 28, 2002

2. Methods

(1) Contents & Methods

ARISP involved the introduction of a method of synthesized regional development, with the scope of the project extending over a wide range of activities including the construction of infrastructure and the development of farmers' organizations. In

Layout of ARC where the Survey was Conducted



consequence, and in order to address the time limitations involved, the survey undertaken to evaluate the project focused on the impact of infrastructure construction on production and farmer income and the development of farmers' organizations. The survey was conducted with an eye to the issue of achieving sustainable development in infrastructure construction and farmers' organizations in order that the evaluation could be referenced in implementing ARISP-II.

(2) Implementation Methods

The survey comprised questionnaire-based interviews (questionnaire survey) of farm workers in the ARCs; interviews were conducted with members of farmers' organizations.

(3) Executing Agency

The questionnaire surveys were conducted by the University of the Philippines Los Baños, Institute of Agrarian and Rurban Development Studies (UPLB-IARDS), however, ahead of these interviews, a preliminary survey was conducted by Katsumi Nozawa between September 1-22, 2001 (22 days). Nozawa was accompanied by the official responsible for the UPLB survey and other concerned parties, enabling the members to achieve a shared understanding of socio-economic conditions in the areas covered by the survey and of the problems being confronted on the ground, which need to be surmounted. The questionnaire surveys were carried out in November 2001 and the final evaluation report was submitted in March 2002.

(4) Selection of Target Areas

Since the ARISP-I project was undertaken in communities scattered throughout the nation, three ARCs were selected from among those communities in which ARISP-I work had been completed (ARISP ARC) as the target areas for this survey. Two points were taken into consideration in this selection process, namely regional characteristics and project results. In terms of regional characteristics, ARCs were selected from Luzon, the Visayas region and Mindanao. While rice is the core crop in all three areas, agricultural diversification and the proximity of plantations were factored into the selection process. That is, Luzon was selected as an area in the grain belt where rice cultivation is central, the Visayas region as an area in which agrarian diversification has advanced, and Mindanao as an area where the expansion of plantations is progressing. Three scenarios were adopted for project results, namely: successful accomplishment of plans, unsuccessful accomplishment, and an intermediary case. In this instance, the survey to assess the level of development in ARCs (ALDA)[1] that was determined by the Department of Agrarian Reform (DAR) was referenced.

Pusunangtatay ARC (ALDA Level 5 in 2000) in La Union, Luzon was selected as the successful case, Nabunturan ARC (ALDA Level 4) in Compostela Valley, Mindanao was taken as the intermediate case, and Dela Paz ARC (ALDA Level 1) in Iloilo, the Visayas region was selected as the unsuccessful case.

Furthermore, due to the lack of sufficient benchmark data to assess the effects of the ARISP work in the three regions, the "with and without" method was adopted under which the three ARISP ARCs were compared with three non-ARISP ARCs in contiguous areas that have similar geographical, economic and social conditions. The three non-ARISP ARCs targeted were Inabaan Norte ARC, Awao ARC, and AGCA ARC. The Nozawa survey also included interviews with local agrarian communities that have yet to be designated as ARCs (non-ARCs).

(5) Survey Implementation

The UPLB-IARDS questionnaire survey targeted 50 people in each of the three ARISP ARCs and the non-ARISP ARCs, for a total of 300 individuals. Each group of 50 comprised 35 Agrarian Reform Beneficiaries (ARBs) and 15 non-Agrarian Reform Beneficiaries (non-ARBs). The latter were selected as being individuals not targeted by the government's CARP program, and included small-

Water Intake Dam Constructed by the Project

1 ALDA (Assessment of the Level of Development of Agrarian Reform Communities) comprises the six index-linked categories of Land Tenure Improvement (LTI), Organiz ation Maturity (OM), Economic and Physical Infrastructure Support Services (ECOPISS), Farm Productivity and Income (FPI), Basic Social Services (BSS), and Gender and Development (GAD), which are used to determine the level of development in ARCs. (Refer to DAR memorandum circular No. 3, 2001.)

scale landed farmers who had acquired their land by means other than the CARP.

(6) Summary of Results

The effects of the ARISP-I project are expressed in terms of increases in the production of unhulled rice (palay) (yield per hectare). These effects were particularly conspicuous in the La Union and Compostela Valley ARISP ARCs. In Iloilo, however, the results were inadequate in relative terms. Moreover, as the following paragraphs reveal, in all three ARISP ARCs, the issue of ensuring the sustainability of the developments implemented under ARISP-I is outstanding.

The crop yield increases in the ARISP ARC in La Union were underpinned by the provision of irrigation as a support operation provided under ARISP-I, which facilitated sufficient water supplies, combined with the adoption of High Yielding Varieties (HYV) and increased investment in fertilizers. The enhanced yield led to increases in on-farm income. The existence of Local Cooperative Development Advisors (LCDA) to provide guidance on increasing agrarian production was also influential. Efforts were also made to develop farmer organizations with a view to ensuring sustainable agricultural development and maintaining this propitious cycle. These efforts led to the integration of six existing cooperatives and the inauguration of a new cooperative, and plans have been laid to increase membership and strengthen fund raising ability.

Although developments are currently on track, in order to ensure sustainability renewed efforts are being made to tackle the issues such as entry into palay trading through the work of the cooperative. Generally speaking, the initial conditions in the La Union ARISP ARC were favorable. Finding ways to intensify the bonds of membership in the newly constituted cooperative organization on the basis of these conditions is an issue that remains to be resolved.

As with La Union, the combination of the use of irrigated water, HYVs, and technical guidance functioned to produce increased crop yields in the ARISP ARC in Compostela Valley, which in turn augmented on-farm income and produced favorable changes in the levels of both non-farm and farm income. One feature of the Compostela Valley is that the advisor in the farmers' organization has a highly developed entrepreneurial consciousness. The cooperatives have united their efforts under an oil palm cultivation program that makes optimum use of the geographical advantages of the Mindanao area, where plantation development has progressed, and technical agricultural know-how. Thus the cooperatives are highly motivated to build up capital. The level of organizational maturity is high, inclusive of the irrigation associations, and the bid to win the trust of members has been successful to date.

As compared to the other two ARISP ARCs, the crop yield increases generated by the community in Iloilo have been low. There are a number of compound reasons for this. In the first instance, the area has faced natural disasters and damage to crops by pests and diseases, and the necessary restoration work has been retarded. Secondly, it was not possible to generate sufficient water supplies using irrigation facilities. This was due to the fact that maintenance of irrigation and water distribution was not thoroughly executed, which was in turn influenced by the operational immaturity of the irrigation associations. The consolidation of irrigation associations, which is necessary if economies of scale are to be exercised, is also behind schedule. In the background is the issue of responsibility for the bad debts of irrigation association members. Efforts are being made to hasten the removal of the factors inhibiting the increased productivity → increased on-farm income → strengthened farmers' organizations scenario.

This survey identified the following three findings that are shared by the three areas. The first is that the agrarian reforms undertaken as a fundamental part of the ARISP project have become firmly entrenched. The second point is that non-farm income accounts for approximately half of farm household income. Thirdly, while the effects and impact of this support project are obvious, several basic problems remain outstanding, including the shortage of funds on the production side and the mediation of traders/middlemen on the distribution side.

3. Project Evaluation (Summary)

(1) Project Techniques

The following two points can be offered by way of consolidating the provisions that are salient to the concept of agrarian development. The first is the policy of agrarian protection, which is incidental to the green revolution, in other words, the rice price protection policy which aims to achieve self-sufficiency in food via a system that promotes the pro-

vision of seeds, fertilizer and agricultural chemicals, and which forms the basis of agrarian development. The other comprises the commercialization of agriculture, which emphasizes research into agrarian technologies, the agricultural credit system, infrastructure in rural communities, and the protection of tenancy rights, and which opens the way to entry into agri-business by augmenting the income of farmers. The latter aims to increase the income of farming households and is an approach that is advocated by international aid organizations[2]. The ARISP-I project adheres to this approach and its implementation was justified in these terms.

(2) Agrarian Reforms

As stated at the beginning of this report, the development of ARCs, which forms the nucleus of the ARISP-I project, was structured of two parts. These are land tenure improvement and the support of agrarian reform. The ARISP-I supports the latter work. Accordingly, the ARISP-I project is premised on land tenure improvement, in other words the development of agrarian reforms. Excluding the 73.3% figure for Iloilo, the current survey confirmed a high rate of success for the agrarian reforms. This is due to the fact that the selection criteria for ARISP-I target areas specified that agrarian reform beneficiaries should constitute 80% of the communities, and further, that land tenure improvements have progressed since the ARISP-I project was launched in 1996. The latter also applies to contiguous non-ARISP ARCs. The La Union community is characteristic, with leasehold ownership[3] accounting for two thirds of all farmers.

(3) Project Effects

Generally speaking, variations in rice production yields are closely correlated to productivity. The following explains increases in production based on a rough division into those generated by the cultivation effect (increases/decreases in arable land itself plus increases/decreases in the cropping ratio) and those generated by the yield effect (increases/decreases in the yield per unit area of cultivated land [unit yield])[4]. The key player in generating the yield effect is the adoption of high yield varieties (HYV), the so-called “green revolution”, the diffusion of which forms the basis for increased crop yields. As has frequently been pointed out in the literature, increased investment

A Network of Branch Irrigation Canals and a Market Access Road

in fertilizers is required if HYVs are to become established, and the increased investment in fertilizers necessitates a sufficient supply of water. In other words, there is an incontrovertible relationship between the rate of irrigation and fertilizer standards, with the shift in fertilizer standards that occurs as a consequence of the adoption of HYVs generating the increased yields.

In addition, maintaining the price of crops and subsidizing farm inputs are important economic factors that support the diffusion of HYVs. Gradual increases in the rice support price prevent price declines due to increased crop yields, while a high percentage of subsidies for fertilizers, agricultural chemicals and service water ensures the profitability of farmers introducing HYVs. This dual protection policy enables greater profits to be conferred on farmers who have large marketable surpluses. On the other hand, profits are relatively low among farmers in regions where a lack of basic technologies leads to difficulties in increasing farm inputs, farmers unable to produce large quantities of price-supported produce, and farmers with small marketable surpluses. Having evidenced the above, the following examines the productivity of farmers in the three ARISP communities selected for this survey.

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2 Rosegrant, Mark W., et al., Asian Development Bank (2001), Transforming the Rural Asian Economy: The Unfiinished Revolution, Oxford University Press, pp. 78~79.

3 The DAR ministerial ordinance No. 4 of 1988 stipulates that all shared tenancies shall be transferred to leasehold ownership by June 15, 1988 (the date the CARL became effective), and that ground rent should not exceed 25% of the average normal yield for the preceding three cropping years.

4 The explanatory equation is as follows:

$$\Delta Qi = Ati \cdot \Delta O_i + Ot_i \cdot \Delta A_i + \Delta O_i \cdot \Delta A_i$$

(yield effect) (cultivation effect) (residual)

where Q = production volume, A = cultivated land, O = unit yield, i = product (crop), t = time t, Δ = flluctuations

(Source) Hirashima, S., (1976), ‘Irrigated farmland in Pakistan’, “Irrigated Farmland in Asia: Its History and Theory”, Institute of Developing Economies, page 275.

1) Productivity and Yield Effects

In terms of the figures for palay yield per unit area, in La Union the figure for the ARISP ARC is 4.66mt/ha, that for the non-ARISP ARC is 2.85mt /ha. With the "with and without" method applied, the disparity of 1.81mt/ha is equivalent to the yield effect. According to a UPLB-IARDS survey conducted in 1997, this figure was 2.68mt/ha, with the difference of 1.98mt/ha being comparable to the data elucidated this time.

The yield per unit area in Compostela Valley is 4.29mt/ha for the ARISP ARC and 2.76mt/ha for the non-ARISP ARC. The disparity of 1.53mt/ha is equivalent to the yield effect. According to the UPLB-IARDS 1997 data, this figure was 3.46mt/ha with a difference of 0.83mt/ha.

In Iloilo, however, the figures are 2.82mt/ha for the ARISP ARC and 2.09mt/ha for the non-ARISP ARC, with the difference of 0.73mt/ha being equivalent to the yield effect. According to the UPLB-IARDS 1997 data, this figure was 1.84mt/ha with the difference of 0.98mt/ha, being comparable to the data elucidated this time. Some problems remain in terms of the consistency of these figures with the findings of the farmers' perceptions survey cited below, nonetheless, it is a fact that the level of yield per unit area is low, and that the yield effect is also relatively low.

2) Cultivation Effects

The cultivation effect would appear to have generated little expansion in the areas given over to the cultivation of rice. Moreover, there has been virtually no change in cropping intensity as compared to 1996. Average cropping ratios in La Union are 2.30 for the ARISP ARC and 1.02 for the non-ARISP ARC; however, the difference predates ARISP-I. In Compostela Valley the cropping ratios are 2.00 for the ARISP ARC and 1.98 for the non-ARISP ARC, and in Iloilo 1.98 for the ARISP ARC and 2.13 for the non-ARISP ARC, i.e. an inversion. In all three areas the cultivation effects generated by the introduction of the ARISP-I project have been low.

Warehouse and Sun-drying Facility

(4) Factors Underpinning Improvements in Productivity

1) Productivity and Irrigation Facility

The following explores the relationship between irrigation water and productivity. This can be examined in terms of a comparison between yield per unit area on irrigated farms and those where paddy fields are rain-fed. In the La Union ARISP ARC the yield per unit area is 4.65mt/ha for irrigated farms and 1.75mt/ha for rain-fed paddy fields. For the Compostela Valley ARISP ARC these figures are 4.14mt/ha for irrigated farms and 3.28mt/ha for rain-fed paddy fields. In the Iloilo ARISP ARC the figures are 2.48mt/ha for irrigated farms and 2.88mt/ha for rain-fed paddy fields. Excluding Iloilo, the productivity of irrigated farms tends to be higher than for rain-fed paddy fields. This evidences the higher numbers of rain-fed paddy fields in non-ARISP ARCs and the lower yields per unit area in these communities.

Furthermore, there is also disparity between the productivity of irrigated farms per se in ARISP ARCs and non-ARISP ARCs; in La Union, 4.65mt/ha for the ARISP ARC vis-à-vis 1.66mt/ha for the non-ARISP ARC; in Compostela Valley, 4.14 mt/ha vis-à-vis 2.69mt/ha; and in Iloilo, 2.48mt/ha vis-à-vis 1.77mt/ha. The reason for these disparities lies in the quality of the irrigation facilities. In other words, irrigation ditches in ARISP ARCs are concrete and are in good repair. On the other hand, in non-ARISP ARCs irrigation ditches are generally constructed with an earth lining, and surface/storage pump irrigation is the norm.

2) Forms of Tenure and Productivity

There has been much discussion and numerous surveys have been conducted in connection with the relationship between tenurial characteristics and productivity. It is commonly held

that the yield per unit area of cultivation of share tenants is lower as compared to land-owning farmers and leaseholders. This is countered by a survey adopting a neutral position on the issue of tenancy type and yield per unit area of cultivation[5]. The present survey did not identify any particular trends in this respect. The figures for land-owning farmers and amortizing farmers in the ARISP ARCs in La Union and Compostela Valley are 4.84mt/ha and 5.04mt/ha, respectively, with little disparity as compared to share tenants, at 4.55mt/ha and 4.89mt/ha, respectively. One reason that can be cited for this is the tangible effects of technical guidance on farming in the ARISP ARCs.

3) Factors Underpinning Improvements in Productivity

According to a survey of perceptions on current fluctuations in yield per unit area, as compared to 1996 when the ARISP-I project was commenced and excluding Iloilo, 72.0% of farmers in the ARISP ARC in La Union and 88.0% in Compostela Valley claimed that they had seen an increase in yield per unit area. Against which, 22.0% of farmers in La Union and 6.0% in Compostela Valley responded that they had seen no change in yield or that yields had decreased. In Iloilo this figure is 52.0% and exceeds half the total.

The increased yields can be attributed to the introduction of infrastructure and HYVs, followed by training in modern farming techniques. While natural disasters/crop damage due to pests and diseases, and the inability to use irrigation/insufficient water for irrigation can be mentioned in connection with low yields. The perceptions survey conducted in other ARCs for comparison reveals similar trends. On the whole, the introduction of infrastructure and HYVs was below par in Iloilo, where productivity was low.

Infrastructure development and the adoption of HYVs, together with training in modern farming techniques make a substantial contribution to increasing productivity. With the former, this role has been fulfilled by irrigation. In the latter case, the Farmer-Scientist Training Program (FSTP) has played a major role in disseminating farming technologies. This is evidenced by the fact that many farmers in La Union and Compostela Valley emphasized these aspects in the interview survey. In the ARISP ARC in La Union, increased investment in fertilizers has clearly resulted in increased productivity. In the Iloilo ARISP ARC, the low level of productivity has been caused by delays in repairs to superannuated irrigation facilities. It is also the reason why yields have failed to increase despite virtually identical levels of investment in farm inputs as in La Union.

The above is also evidenced by the degree to which the support project has been utilized. Among support services being utilized in ARISP ARCs, the highest take-up rate is for irrigation facilities with figures in excess of 80% in both La Union and Compostela Valley. In Iloilo, however, this figure stops at 44.0%. There have also been high take-up rates for training/seminars, and technology transfer. Farmers are using irrigation in combination with modern farming techniques. However, the utilization rates for storehouses are comparatively low and were found to be around 20% in both La Union and Iloilo.

Government organizations and the ARISP-I project have played a major role in technology transfers, training and seminars. It should be noted that the role of non-government organizations (NGOs) and people's organizations (POs) in the provision of support services has been almost zero.

With regard to the productivity issue, it is also necessary to mention that despite the fact that natural disasters and crop damage due to pests and diseases are negative factors, and crop insurance is acknowledged as being 100% useful, there are no organizations providing support services in this area.

Operating a Chicken Farm to Diversify Income Sources

5 Magahas, Mahar, et al., (1976), Tenants, Lessees, Owners: Welfare Implications of Tenure Change, Ateneo de Manila University Press, pp. 86-91.

(5) Project Impact

1) Productivity and Net On-farm Income

In terms of the relationship between agrarian productivity and the household income of farmers, generally speaking, increased productivity augments farmer income, which in turn is linked to enhanced livelihood among farmers. This survey revealed a positive correlation between rice yield per unit area and increases in net on-farm income. Notwithstanding, net on-farm income in the Iloilo ARISP ARC is at the lowest level even when productivity is high. Two reasons can be cited for this. The first is the low spot-sale price for palay; the second is the heavy cost of farm inputs.

2) Current Income of Farmers

The following paragraph looks at annual net on-farm income in farming households in ARISP ARCs. Average net on-farm income is 67,440 pesos in La Union, 43,470 pesos in Compostela Valley, with both figures being far in excess of those for non-ARISP ARCs. The ARISP-I project has had a substantial impact on augmenting farmer income. The income disparity evidenced by this survey is consistent with that elucidated by the UPLB-IARDS survey of 1997. According to that survey, average net on-farm income for Compostela Valley was in the 90,000 pesos range and high, but this was due to the fact that commercial farmers were also included in the computations. The figure for Iloilo has stagnated at 17,781 pesos. The level of net on-farm income is dependent upon the volume of the marketable surplus of palay. Marketable surpluses in ARISP ARCs exceed those in non-ARISP ARCs. The figures for ARISP ARCs and non-ARISP ARCs in Iloilo are virtually identical, and the volume of the marketable surplus per se, is somewhat less than half that in La Union.

In terms of average annual farm income in ARISP ARCs, the figure is highest for La Union at 157,083 pesos, followed by 102,989 pesos in Compostela Valley, and 108,002 pesos in Iloilo. The figures for non-ARISP ARCs are approximately 60% of those for the ARISP ARCs. The survey also revealed that non-farm income constitutes a relatively high proportion of average annual farm income. It exceeds half of average farm income in all three areas in both ARISP ARCs and non-ARISP ARCs. The main source of non-farm income is children employed in urban centers or as overseas contracted labor who make regular transfers of cash. As mentioned later, this enables the proportion of household expenditure spent on education to be increased and creates opportunities for investment in other projects. It also increases the opportunities for employment in modern sectors [6].

3) Factors Underpinning Fluctuation in Income of Farmers

According to the perceptions survey, 68.0% of farmers in the La Union ARISP ARC and 94% in Compostela Valley responded that their income had increased as compared to 1996. This figure was inverted in Iloilo, where 56.0% responded that they had seen “no change” or “a reduction”. The reasons given for the increases are diverse, but “sufficient water supply led to increased production” and “other sources of income” are conspicuous, with the former representing net on-farm income and the latter non-farm income. The perceptions survey conducted on farm income in other ARCs for comparison reveals similar trends.

Cultivaing Commercial Crops to Increase Income

Tomatoes : a Good Commercial Crop

4) Farm Household Expenditure

A comparison of household expenditure in ARISP ARCs and non-ARISP ARCs revealed virtually no disparities between the two. Nev-

6 In Southeast Asia, the proportion of farm income constituted by non-farm income is increasing. For details of the diversification of farm economics, refer to the following thesis, which cites the case of agriculture in Thailand. Kitahara, A., (2002), ‘ Agriculture and Agricultural Communities’, “Iwanami Lectures ~ History of Southeast Asia 9”, Iwanami Shoten.

ertheless, per household expenditure in La Union amounts to around 90 thousand pesos, to around 50 thousand pesos in Compostela Valley, and to 60 thousand pesos in Iloilo. Among expenditure items in both ARISP ARCs and non-ARISP ARCs, food outlay is fixed at around 40% in La Union, at around 50% in Compostela Valley, and between 40-50% in Iloilo. Although there is substantial diversity among non-food expenditure items, this survey revealed that total expenditure for education, health and household utilities, i.e. outlay to improve basic living conditions, amounts to approximately 30%. Moreover, average debt repayments account for close to 10%.

It becomes obvious that these items of household expenditure have been made possible as a result of supplemental non-farm income. Income from modern sectors is subsidizing the living expenses of farm households, so to speak. It is mapping out a new blueprint for farm household budgets. It is worth mentioning that suspicions that this income was being appropriated by affluent households in La Union as a means of accumulating land were not substantiated by this survey.

(6) Issues in Ensuring Sustainability

1) Production Issues

The issues of ensuring sustainability from a production perspective are heterogeneous. Some 70-80% of farmers in ARCs in all three areas are experiencing problems with production. Irrespective of the effects of the ARISP-I project, several basic problems remain unresolved, and while the problems are multifarious, more than half the farmers in ARISP ARCs cite natural disasters/crop damage due to disease or pests. The percentage in Iloilo is particularly high, followed by the problems of insufficient funds and the high cost of farm inputs. Schematically, many farmers are trapped by a lack of revolving funds, which has been caused by delays in the implementation of measures to address the problems of meteorological aberrations and crop damage due to pests and diseases. Farmers suffer from a lack of liquidity. As a result, the proportion of informal loan providers, including traders/middlemen, as a source of credit is high and exceeds 80% in all ARCs. The specific problems are high interest and the inability to make repayments.

2) Distribution Issues

The problems relating to distribution are more serious and basic issues have yet to be resolved. Farmers who cite low spot-sale prices amount to around 90% in all ARISP ARCs. Our results demonstrate that the spot-sale price in Iloilo is particularly low. This has its roots in the fact that palay is sold to traders/middlemen. In the Compostela Valley ARISP ARC 27.5% is sold to the cooperatives, however, with the exclusion of this, close to 90% of crops is sold to traders/middlemen in all ARC areas.

The survey revealed that the related parties are having a hard time breaking away from the configuration in which farm credit is procured at high rates of interest through informal financing and palay is sold to traders/middlemen.

(7) Aspects Requiring Future Assistance

1) Necessity for Future Assistance

In terms of assistance targeting increased productivity, ARISP ARCs require financial support and training/seminars in modern farming techniques, while non-ARISP ARCs are calling for infrastructure development. This is an extension of earlier statements. Both the assistance necessary to augment socio-economic conditions in farming communities and that to increase farm income are funding-based, and this is common to both ARISP ARCs and non-ARISP ARCs.

2) Organizational Participation of Farmer Household Members

Promoting participation is a means of developing support projects, and the level of participation in the project in ARISP ARCs has been very positive. However, participation in meetings/assemblies has not necessarily been adequate. Limiting this to the ARISP-I project alone, while levels of interest have surpassed 80%, the degree of participation is less than half. Moreover, while participation in meetings is occurring, participation in the planning stage of projects is below 50%. It remains necessary to find ways of ensuring the sustainability of the ARISP support project where it is most needed.

Farmers' Products for Sale (1)

(8) Organizational Development

The development of systems is indispensable if the projects that have been tackled under ARISP-I are to be appropriately effected. The aims of system development are threefold, to increase agrarian productivity, realize autonomous/functional organizations, and to establish basic companies in agricultural communities. The key program for undertaking this development has been formulated to cover the following four fields. To wit, infrastructure development, agrarian development, development of cooperatives, and project development / management. The following details the results that have been achieved in these areas.

1) Infrastructure Development

It goes without saying that ensuring the sustainability of project results through the maintenance/repair activities of related parties, in addition to promoting more satisfactory utilization of the infrastructure provided under ARISP-I by the farmer-beneficiaries, is indispensable. Finding ways to incorporate the related parties into the framework of the ARISP-I project remains an issue.

Regarding infrastructure, there are cases in which it is necessary for the local governments of the ARBs (municipalities <towns> and barangays <villages>) to bear the burden of equity for ARISP-I. This is similar to the World Bank's Agrarian Reform Community Development Project (ARCDP), and there is optimism within local governments. Specifically, most local governments divert the appropriation of the Internal Revenue Allocation (IRA) development budget that is distributed by the central government as subsidies. Breaking local government dependency on IRA is currently under discussion; however, this will be difficult in light of the need to enhance the profits of local government enterprises and develop independent sources of tax revenue.

In terms of the maintenance of infrastructure that has been fully transferred, as has been evidenced in the case of the construction of farm-to-market roads, the infrastructure is being managed on the basis of the exchange of memorandum circulars between the Department of Public Works and Highways (DPWH) and the local barangays. In reality, barangays have meager development budgets, and within individual ARISP ARCs, damage/repairs are carried out according to the Bayanihan method (mutual cooperation), which involves joint operations by mobilizing the community. There are some questions concerning how to eliminate free riders, for example, and the effectiveness of introducing the method in terms of the ambiguities inherent in its execution.

The amortization of construction costs is applicable to irrigation facilities, and in this instance the role of the Irrigation Associations (IA) is crucial. Even when Development Contingency Costs (DCC) are born by the work force, funds are required to maintain and conduct partial repairs to irrigation facilities, and thus the effective levying of Irrigation Service Fees (ISF) is crucial. However, the collection ratio of ISF in the La Union and Iloilo ARISP ARCs is low. Ensuring the sustainability of irrigation will be problematic if such basic problems cannot be overcome.

2) Agricultural Development

Strengthening agrarian production skills can be cited in connection with the ARISP-I project. Specifically, cooperative programs involving central government ministries such as DAR and the Department of Agriculture, NGOs and the University of Agri-Science, etc., play a central role. In addition, the Philippine Rice Research Institute (PhilRice), which is an auxiliary organization of the Department of Agriculture, has been undertaking training/practice in production techniques. The adoption of improved varieties is also progressing. Although such activities constitute the expansion of existing programs, in the Pusunantatay ARB MPC (La Union) and Nabunturan Agrarian Reform Community Integrated Cooperative (NARCICO) (Compostela Valley), the Farmer-Scientist Training Program (FSTP) and utiliza-

tion of irrigation have combined to produce increased productivity.

3) Development of Cooperatives

The development of cooperatives is ranked as an important item in augmenting ARISP-I related organizations. A fundamental objective of this work is to render the cooperatives as operationally viable, functional organizations. A method involving five stages of development has been introduced as a means of facilitating this development. These are social preparation (stage 1), capability building (stage 2), building/strengthening the organization (stage 3), building the alliance organization/network (stage 4), and building the fund raising ability of the cooperatives (stage 5). Cooperatives cannot progress to the next stage until they have cleared the one preceding it.

The development of a new project is progressing in NARCICO (Compostela Valley) and the cooperative has already reached stage 3. Meanwhile, in order to achieve rapid results at the Pusunantatay ARB MPC (La Union), the cooperative has advanced from stage 1, which involves selecting the main organization and settling plans for the organization, to stage 3. Since the organization advanced without the existing moral hazards being cleared, the opportunity to win the trust of new members has been lost. The Dela Paz MPC (Iloilo) is at stage 1. This is due to the unresolved issue of integrating the cooperative with existing IAs.

The achievement targets for cooperative development are index-linked to each of the following: number of cooperative members, capital build-up, savings mobilized, guidance skills, policy systems/procedures, project planning, accounts ledgers, projects being undertaken, financial status, and associated higher organizations. The following paragraphs examine the important items among those cited above.

In order to strengthen the organization of the cooperatives, the people building the cooperative, credit and guidance skills are basic formation conditions. In terms of people, the numerical targets for cooperative membership have been met in the Pusunantatay ARB MPC and NARCICO. However, in the Dela Paz MPC (Iloilo) membership in the agrarian cooperative has stopped at the minimum level of 60 required to obtain credit from the Land Bank.

Regarding capital build-up (CBU), NARCICO has managed to achieve constant success in its credit activities, with CBU amounting to 450 thousand pesos at the end of fiscal 2000. This success resulted from the fact that the operation of a sari-sari store (miscellaneous goods retail), a business involving the supply of food stuffs, and a farm support business, which have all been sources of income creation, have all taken off, albeit on a small scale. In the Dela Paz MPC, profits from rice milling businesses are substantial, but priority has been given to the Patronage Fund and CBU has stopped at 220 thousand pesos. In terms of savings mobilized, the figure for NARCICO stands at 25 thousand pesos, however, that for the Dela Paz MPC has stopped at 27 thousand pesos.

In terms of project planning, palay trading can be cited for all ARISP ARCs. These plans are aimed at eliminating credit borrowing for production based on trader/middleman intervention and sales of palay at low prices. However, effectuating the plans is proving difficult. The financial status of the cooperatives is poor resulting in a lack of progress in obtaining new credit through the Land Banks. The Dela Paz MPC has an outstanding loan of 1.31 million pesos from the Land Bank and is unable to obtain approval for new financing of 1 million pesos. In contrast, in NARCICO the cooperatives are shouldering the responsibility for the loans of cooperative members.

4) Project Development/Managerial Reinforcement

The establishment of basic rural enterprises in regional communities can be cited as one of the problems relating to the mid- to long-term development of organizations under ARISP-I. This move was planned in line with augmented farm income and constitutes the establishment, operation and management of rural enterprises both on-farm and off-farm. Progress in this field has been particularly tangible in the oil palm cultivation project in NARCICO. The project aims to promote local industry that incorporates multinational corporations by utilizing the operational know how of plantations in Mindanao. There are plans to fund the project using loans from the Rural Farmers and Agrarian Reform Support Credit Program (RASCP) of the Land Bank[7]. The project is

being undertaken under the technical/managerial guidance of the Local Cooperative Development Advisor (LCDA). The LCDA is under a two-year contract, but there have been vociferous requests from local farmer-beneficiaries for this term to be extended.

Farmers' Products for Sale (2)

4. Issues and Recommendations in Ensuring Sustainability

(1) Expanding/Intensifying Target Areas

The selection of the regions to be targeted by the ARISP-I project was carried out at the time of the project's launch; in consequence, conditions in the regions selected were comparatively favorable. The ARCs were all in the top ranks of the ALDA criteria and had various geographical advantages including proximity to major cities and so on. This created an advantageous cost-benefit relationship. There are limitations on target areas for ARISP-II, thus it is difficult to anticipate results solely in terms of their cost-effectiveness. There are calls to formulate new evaluation criteria. These should focus on identifying agrarian developments that heed the diverse circumstances of present-day farmers including their livelihood, employment and income. In other words, the project has been developed with an eye to improving the livelihoods of residents in contiguous areas as well. The project undertaken on Cebu by the World Bank in the 1980s (Central Visayas Regional Project) was an integrated project that covered developments in several regions simultaneously. It revolved around the development of flatland agricultural communities but also encompassed farmers in contiguous mountainous areas and subsistence fisherman in coastal areas. Such perspectives must also be referenced.

(2) Expanding Risk Countermeasures

In terms of production-related issues, one key issue that emerged from the current survey is the problems caused by abnormal weather conditions, including damage due to natural disasters, and the losses inflicted by pests and diseases. Such problems were particularly conspicuous in the Iloilo region. The establishment of the Philippine Crop Insurance Corporation (Presidential Decree 1467) in 1978, and the launch of a crop insurance program in 1981, were designed to address risks in agriculture. In its early days, this program covered rice crops under the "Masagana 99" program[8], but in 1982, its coverage was expanded to include corn crops. Under this scheme, farmers who take out crop production loans from a financial institution automatically become eligible for insurance and their premium payments are deducted from the loan. Findings from the Nozawa survey, however, reveal that few farmers are utilizing the crop insurance program. The primary reason for this is that many farmers are unable to cope with the complex documentation that is required to prove that a poor harvest was caused by force majeure. Added to which, it takes time for insurance payments to be made and in some instances, farmers receive no benefits at all. In consequence, many self-financed farmers opt not to utilize the program. Thus a reinvestigation of the current crop insurance system is indispensable.

(3) Measures to Address Diversity in the Structure of Agricultural Employment

One of the areas clarified by the present survey is the scale of non-farm income. Findings revealed that in all three districts, earnings from non-farm sources accounted for half of all household income. An increasingly large proportion of household expenditure is being used for investment in education as supported by non-farm income, with the result that the children of farmers are taking up modern, white-collar jobs in major cities. The edu-

7 The RASCP is an agrarian reform support credit system that is being executed by the Land Bank and DAR, and supported by JBIC. The RASCP program involves (1) advice to cooperatives, (2) training for cooperatives, (3) strengthening of the DAR organiz ation, (4) supply of materials (computers, two-wheeled vehicles), and (5) monitoring of programs.

8 The "Masagana 99" program was launched in the 1970s under the Marcos government as a program to increase rice production. It aimed to increase palay production to 99 cavans per hectare (4.95 tons) via the use of modern farming techniq ues such as HYVs, agricultural loans, and rice cultivation technology. The program resulted in the Philippines achieving self-sufficiency in rice in 1978.

cated young are moving away from agriculture to live in major urban centers or are emigrating overseas to take up work as contracted laborers. The Nozawa survey also highlighted the conspicuous aging that is taking place among the farming population.

Generally speaking, households with high earnings purchase farm machinery, which they then rent out to other farmers. In some instances, wealthy farmers become mortgagors for other farmers who are having difficulty raising operating capital, pledging their own funds as collateral. According to a survey conducted by UPLB in 2000, 10% of ARBs in ARCs have invested in farmland, while 3% have invested in non-agricultural lands. The present survey did not identify any such cases of disadvantageous land tenure status for farmers (i.e. mortgaging) resulting from advances in the commercialization of agriculture. However, there is potential for this type of situation to arise, and similar cases have occurred in other regions. In this sense, the ARISP-II project will need to include a survey of changes in the employment structure of farmers, and concomitantly, of the actual status of non-farm income.

(4) Role of Sustainable Infrastructure

The infrastructure facilities provided under the ARISP-I project have fulfilled a definite role. Ensuring the sustained viability of these gains so that they do not end up as merely a temporary phenomenon will contribute to the development of autonomous agricultural communities. Calls are being made for the beneficiary organizations to take responsibility for the sustainability of the infrastructure. The organizations will thus need to take up their financial obligations. While the ARISP-II project is moving in this direction, conscientious efforts will be needed in order to solicit the involvement of the provincial governments in the more complex aspects and so forth.

Utility rates for post-harvest facilities were particularly low. The warehouse in the ARISP ARC in Iloilo is predominantly unused. While there are various problems in terms of storage capacity, location, and the shouldering of storage costs (interest rate arrangements), the fundamental issue at stake is trader/middleman intervention in rice production and distribution. Capital build up is needed to undertake projects. In this case, however, it is necessary to establish conditions that will energize the business activities of the cooperatives. In this case, however, it is necessary to give the cooperatives a competitive edge over existing traders and rice polishing traders. It is necessary to investigate new methods of ensuring the sustainability of the infrastructure support services that are to be provided under the ARISP-II project. This method involves the cooperatives purchasing unmilled rice, having it polished at highly efficient, privately owned rice mills that have been authorized by the local governments, transporting it to the markets, then engaging in retail sales. In this instance, the local governments (municipality) will become the base for the cooperative federations, and it will be their role to organize the loans to fund rice purchasing. This system is currently under development in the province of Ilocos Norte.

Community Residents

(5) Ensuring Sustainability of Farmers' Organizations

Insufficient funds and the lack of liquidity are production-related issues that will affect the sustainability of the farmers' organizations. The problem with distribution is that rice has predominantly been sold to traders and middlemen. However, the cooperatives are finding it difficult to break away from these problems. In this respect, it is imperative that the cooperatives procure capital in order to be able to initiate palay trading activities and other projects. However, these cooperatives are confronted with the bad debts (overdue accounts) of their members and are experiencing difficulties in obtaining new funding from the Land Bank. The farmers' organizations are not venturing into new business activities and remain unable to build capital or mobilize savings; thus sustainable development is problematic. The Land Bank's decision to ease the conditions imposed on the RASCP program was well-advised. This included reducing numerical membership targets, decreasing the min-

imum CBU amount, and easing the conditions on new loans to cooperative members. The formulation of basic countermeasures is indispensable in order to further ease the conditions. Blacklisted debtors must be precluded from becoming new members of the cooperatives. However, it is also necessary to consider handling such debtors as associate members. If the cooperatives succeed in building up capital this will open up the route to paying off their bad debts.

(6) Agricultural Development toward South-South Cooperation

As is evidenced by the oil palm cultivation project that is under development in Mindanao, the development assistance being provided by the Japanese government is paving the way for advances in private investment in developing nations. To date, projects such as the construction of the Davao Fish Port Complex have also been effective in promoting the coastal fishery operations of Taiwanese enterprises. The ARISP-II project aims to promote agrarian developments incorporating such forward-thinking perspectives.

(7) Promoting Community Participation

The extent of voluntary participation in the group operations being undertaken by the farmers' organizations is not wholly satisfactory. This is a manifestation of the "wait and see" attitude that has been adopted by farmers towards the development of the cooperatives. It can also be attributed to the fact that the cooperative projects have not been developed in a manner that is suited to accomplishing understanding of the project goals among farmers. Findings also indicate that the interviews with local residents conducted during the selection of ARISP ARC target sites were not always appropriate. Mobilizing the beneficiaries to participate in the maintenance and operation of infrastructure facilities and other group activities is indispensable to ensuring sustainability. It is imperative that ways be found to create tangible incentives for participation in the community.

(8) Issues of Responsibility

In addition to building capital, the strengthening of managerial level members is also crucial to boosting the farmers' organizations. Establishing cohesiveness among the members of the cooperative will be vital. In this respect, the leadership guidance of advisors, mutual understanding among cooperative members, and the development of trust between the advisors and the organizations are all essential. It is therefore necessary to identify the basic circumstances of the cooperatives during the social preparation stage of the ARC development strategy. Moreover, an appropriate advisor who has experience of coordinating the farmers' organizations and external organizations must be present in order to address issues relating to the management of the cooperative.

Under the ARISP-I project, this role was performed by the Local Cooperative Development Advisors (LCDA) who was responsible for the operation of the RASCP program. A specialist in agricultural management, who has achieved results in various regions in Southeast Asia, undertook comprehensive consolidation of the cooperatives in Compostela Valley. He was contracted to work in the community for two years, but it is hoped that this period can be extended.

In addition, the mobilization and participation of the Municipal Agricultural Technicians (MAT), who have been transferred to the municipalities by the Department of Agriculture in connection with the implementation of the ARISP-II project, is likely to prove effective.

It is hoped that the above points will be taken into consideration in the process of developing the ARISP-II project.