

200-Village Project:

HOUSEHOLD SURVEY REPORT



The 200-Village Project is a regional initiative on food security, which aims to generate solid and community-based information to support policy advocacy on food security in Asia. It is an alternative demand-driven approach, which strives to localize what has been taken over by centralized structures in the rush to globalize. Through the process, ANGOC hopes to contribute in overcoming hunger through community actions.

This Regional Report is prepared for the first phase of the Project - *Baseline Survey and Community Planning*. It is based on the household survey conducted in the first five countries covered by the Project, namely, Bangladesh, Pakistan, the Philippines, Sri Lanka and Thailand. The first part contains background information about the 200-Village Project, its context, framework, management, scope and methodology. Part II presents the highlights of the household survey, which include the comprehensive profile of the household respondents, correlation analysis of major food security indicators and the household perception on factors that would ensure household food security. The last section describes the direction of the following phases of the Project, focusing on the implementation of community projects and policy advocacy at both national and regional levels.

Along with the household survey are two other equally important activities conducted for the baseline survey. One is the preparation of the *National Food Security Situationer* by the *Country Focal Points* and the other is *Community Profiling* by the local NGO partners. These sets of documents provide an understanding of the wider context of the village and the country from which the sample households for the survey were drawn. An integration of all gathered information at the household, community and national level thus renders a comprehensive picture of a household food security environment. The *National Food Security Situationer* and the *Community Profiles* are prepared as separate reports.

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- ◆ International Development Research Centre (IDRC)
- ◆ UK Food Group
- ◆ Action-Aid Vietnam
- ◆ Food and Agriculture Organization of the United Nations
- ◆ Partners in Rural Development
- ◆ Both Ends

PART I - THE 200-VILLAGE PROJECT

INTRODUCTION

Few people would seriously dispute the notion of food as a basic human entitlement. Food, like air and water, is indispensable to survival; hence, on humanitarian grounds, no person should have to go without it. From this perspective, the right to food is really no less than the right to life.

The matter becomes rather less straightforward when it comes to the means of securing this elemental right. In the 1960s and all throughout the '70s, hunger initiatives were prompted by Malthusian fears of an impending food shortage. The World Food Conference in 1974, which is widely regarded as a milestone event in the global campaign to reduce hunger, declared that the problem stemmed primarily from inadequate food production in developing countries and to a lesser extent from distortions in international commodity markets, and passed resolutions designed to address these concerns. In so doing, the conference endorsed much of the supply initiatives that were to dominate international hunger dialogue for at least a decade.

In the mid-1980s, however, international thinking on hunger began to take a different track. The failure of supply oriented approaches to stem the growth in the number of hungry people rendered them indefensible, and forced proponents to acknowledge the fact that aggregate improvements in food production will make no significant impact in reducing hunger if the hungry lack the resources to produce food, the income to buy it, or both.

In its 1986 policy paper on poverty and hunger, the World Bank said:

“...[I]ncreasing the food supply would not eliminate the problem [*i.e.*, hunger], since it would not necessarily improve the incomes and the purchasing power of the poor...[I]nternational support should [therefore] focus on policies and investments that would improve the distribution of benefits by raising the real income of the people facing chronic food insecurity...”

But while establishing the link between poverty and hunger is vital, it is by no means the last step in harmonizing hunger initiatives. Equally important and as yet unresolved is the division between sectors and institutions who think that national self-sufficiency in food is indispensable to food security and those who argue that a strategy that combines domestic production with food importation would do just as well.

Until the 1960s, it was generally assumed that each country should be aiming to produce all the basic food it required. However, as countries began to industrialize, the production of food for domestic consumption became less important than producing export crops in which they had a comparative advantage. Formerly food sufficient countries increasingly became importers of cheap food from food-exporting industrialized countries. This policy worked to the benefit of urban consumers, but dampened local production. Producing food became less and less profitable, sometimes impoverishing, for small farmers, fisherfolk, and other community based food producers.

A meeting of NGOs in the Asia-Pacific held in preparation for the World Food Summit in 1996 denounced this prevailing food policy, which undermines the viability of small farming and food producing communities and promotes a dangerous reliance on food imports.

In a statement issued by the NGOs, and which has since become known as the Bangkok Declaration, they called for a food security compact based on the integrity of local farming communities and national food self-sufficiency. The Declaration emphasizes that foreign trade is not vital to food security. At best, it should merely complement national production.

The World Food Summit Declaration does not reflect this NGO position. However, in the follow-up to the WFS, the Asian NGO Coalition for Agrarian Reform and Rural Development (ANGOC) formulated a strategy for grassroots-based action that adopts the basic principles laid out in the Bangkok Declaration. In 1998, ANGOC put the strategy to work through the **200-Village Project**, a combination of community-based projects and complementary initiatives to influence policy at the national, regional and global levels, all working towards improving household- and community-level food security in Asian villages.

OBJECTIVES

One of the recommendations in the World Food Summit (WFS) is to establish mechanisms to monitor and determine the extent to which WFS commitments have been pursued and fulfilled. ANGOC undertook the task at the village and household levels on the assumption that food security, or the lack of it, is clearly manifested and more accurately measured in the home and in the local community. The main objective of this initiative is to assess food security at the household and community level as basis for community-level planning and action and link these village-based initiatives with policy advocacy at the national and regional levels. Specifically, this initiative hopes to:

- develop a framework showing the interrelationship of fundamental factors affecting food security at the household and community level;
- develop and implement methodologies and skills for utilizing the above indicators as the basis for community-level planning and action by the local NGOs and the communities themselves;
- enable the grassroots communities to participate more effectively in identifying food related problems, plan actions to solve these problems, and to monitor progress in food security in the community level, through participatory approaches;
- utilize the obtained data as basis for linking local action with ANGOC's policy work with local and national governments and international agencies;
- encourage discussions and create opportunities to establish favorable policy environment in promoting food security;
- advance effective knowledge transfer and experience sharing among the ANGOC networks and strengthen the capacities of Southern NGOs, and;
- promote and help attain food security among the selected villages.

CONCEPTUAL FRAMEWORK

Food security, especially in the rural areas, is directly related to poverty eradication. It is most assured when rural households have access to land and other resources, when production and resource management practices are sustainable, and when people are allowed and able to participate in the local government system and community development processes.

Table 1. ANGOC's food security program and the 200-Village Project indicators.

PROGRAM	COMPONENTS	KEY INDICATORS	SUB-INDICATORS
F O O D S E C U R I T Y	SARM (Sustainable Agriculture and Resource Management)	- Land Tenure and Access to Food	- Self-sufficiency
			- Storage System
			- Productivity
			- Disasters
		- Purchasing Power	- Household Income
			- Access to Credit
			- Expenditure Pattern
		- Health and Quality of Food	- Government Food Subsidies
			- Diversity of Available Food
			- Source of Food
	- Drinking Water Quality		
	- Sustainability of Agricultural Practices	- Health Status	
		- Nutritional Status	
		- Planting materials	
	ARRR (Agrarian Reform and Resource Rights)	- Land Tenure and Access to Food	- Type of fertilizer inputs
- Chemical inputs			
- Purchasing Power		- Land Ownership	
		- Food Preference	
		- Household Income	
		- Access to Credit	
- Access to food		- Expenditure Pattern	
	- Government Food Subsidies		
PLG (Participatory Local Governance)	- Access to Food	- Poverty Threshold Level	
		- Food Distribution	
	- Community Participation	- Agricultural Product Flow	
		- Gender Equity (household)	
		- Social Stratification	
	- Membership in Organizations		
	- Mode and Mechanism of Decision-making		
	- Women's participation		

In the actual assessment of household food security status, the project has identified key indicators, which include land tenure and access to food, purchasing power, health and quality of food, community participation and sustainability of agricultural practices. These indicators are drawn from the 1996 WFS concept and definition of food security. The commitments set out in the WFS Plan of Action, the Asia-Pacific NGO Declaration, also known as the Bangkok Declaration and the ANGOC-organized Fifth Asian

Development Forum all helped to further define each indicator and identify the variables. The links between the indicators and ANGOC's food security program are presented in *Table 1*.

In analyzing the factors affecting household food security, major variables are correlated with the household's current level of food security. Level of food security is measured by asking the respondents to rate their consumption of a number of food items (i.e., *rice, wheat, corn, sorghum, root crops, legumes/vegetables, fruits, eggs, milk, cheese, fish/seafood, pork, beef, chicken and others [to be specified]*) as “sufficient”, “insufficient”, or “insufficient at times”. In the analysis of responses, three major food groups are considered in classifying the list of 15 food items (i.e., excluding water):

- Staples** - includes rice and root crops
- Vegetables** - includes vegetables and fruits
- Meat** - includes meats, fish, dairy, canned goods

Based on the responses, the current state of the household’s food security is categorized as follows: (*Refer also to Figure 1.*)

- Food Secure** - when all food items in each food group were described as sufficient by the respondent.
- Moderately Food Secure** - when at least one food item from each food group (staples, meats, vegetables) was identified as sufficient.
- Food Insecure** - when all food items making up at least one of three food groups (staples, vegetables, meats) were identified as insufficient.
- Highly Food Insecure** - when all food items making up two or all food groups (staples, meats and vegetables) were identified as insufficient.

This food sufficiency analysis is conducted to monitor trends and relationships between various indicators and the level of household food security.

Figure 1. Possible combinations of responses for each level of food security category based on a sample of three food items per food group.

Food Groups	Staples			Vegetables			Meat		
	<i>a</i>	<i>b</i>	<i>c</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>a</i>	<i>b</i>	<i>c</i>
Food Secure	✓	✓	✓	✓	✓	✓	✓	✓	✓
Moderately Food Secure <i>(few sample response combinations)</i>	✓	✓		✓	✓		✓	✓	
	✓		✓	✓		✓	✓		✓
	✓			✓			✓		
		✓			✓			✓	
			✓			✓			✓
		✓		✓			✓		
Food Insecure	✗	✗	✗	✗	✗	✗	✗	✗	✗
	✗	✗		✗	✗		✗	✗	
	✗		✗	✗		✗	✗		✗
Highly Food Insecure	✗	✗	✗	✗	✗	✗	✗	✗	✗
	✗	✗		✗	✗		✗	✗	
	✗		✗	✗		✗	✗		✗

PROJECT MANAGEMENT

The Project has three phases: (i) baseline survey and community planning; (ii) community project implementation and (iii) policy advocacy. (Refer to Figure 2) The process emphasizes participatory approaches through the involvement of the community, civil society, local governments and international agencies. **Baseline survey and community planning** consists of data gathering at household, community and country levels. **Community projects** designed to address food security will be identified and implemented as a follow-up phase and will be based on the results of the community planning and baseline survey. The **Policy advocacy** component complements the whole process. In the initial stages (first and second phases), it will take the form of national meetings, process documentation, use of participatory approaches and case studies. Towards the end, policy advocacy will be conducted via publications, issue papers, and national and regional dialogues. The overall process is designed to monitor the extent to which food security initiatives have been or are being undertaken within the framework of agrarian reform and resource rights, sustainable agriculture and resource management, and participatory local governance.

The ANGOC Board and its Regional Secretariat are managing the Project. Meanwhile, a *Project Advisory Committee (PAC)* and *Technical Working Group (TWG)* have been formed to assist and support project implementation. The *PAC* ensures that the Project conforms to the agreed framework. It also assists ANGOC in convening regional meetings, which serve as a venue for policy dialogue as well as for presenting the Project findings. The *TWG* is composed of institutions and organizations selected for their track record in participatory approaches. It provides technical assistance in, among others, finalizing the Project design, preparing the survey and planning tools, designing the database system; the application of participatory techniques; and preparing the criteria for selection of villages and NGO partners. At the national level, *Country Focal Points (CFPs)* are selected from NGO networks to oversee project implementation. The *CFPs* then choose local NGO partners to conduct the household survey, community profiling and community project planning. (Refer to Figure 3)

200-VILLAGE PROJECT: A Poverty Eradication Strategy through Promotion of Food Security in Asian Rural Communities

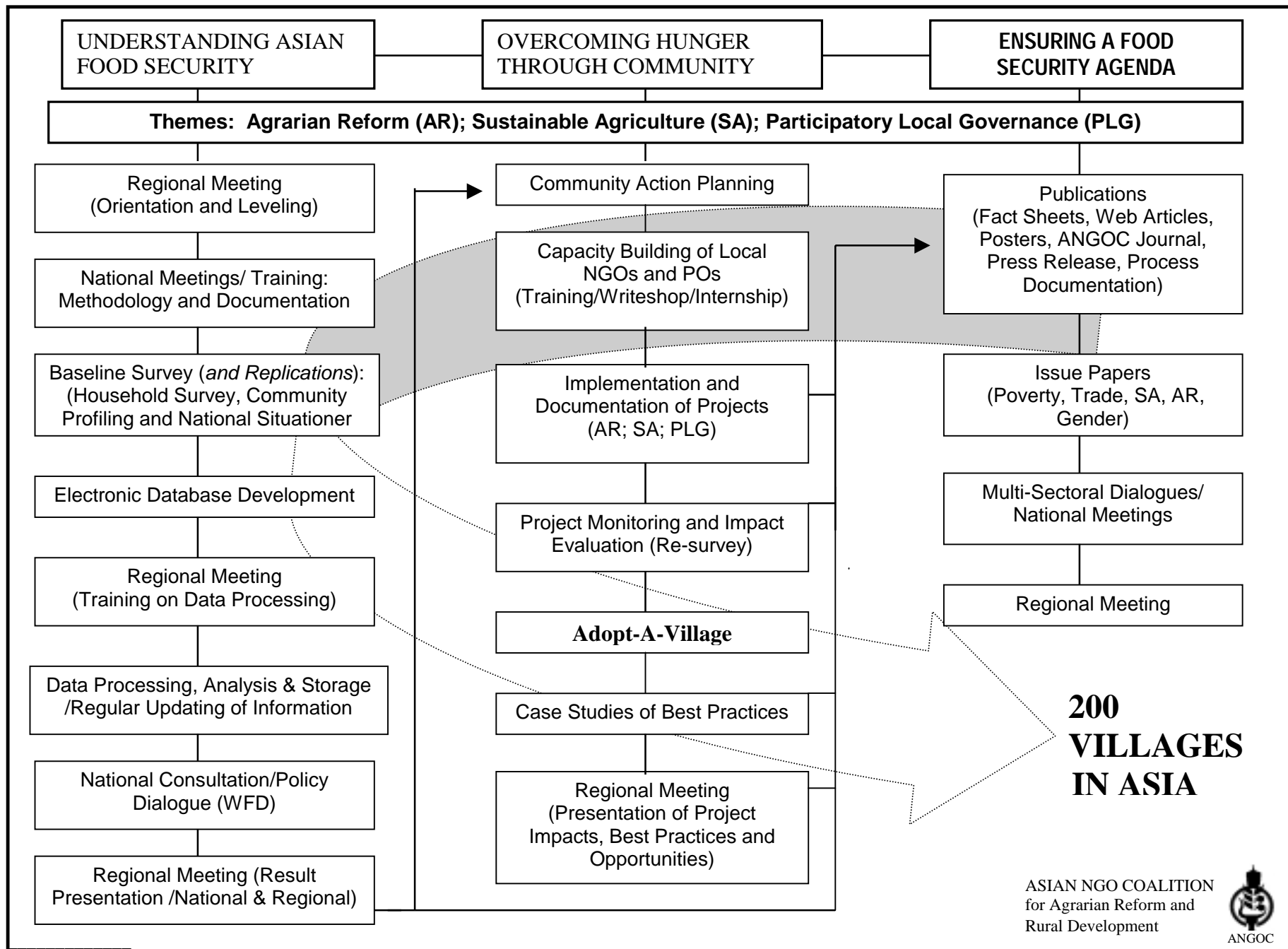
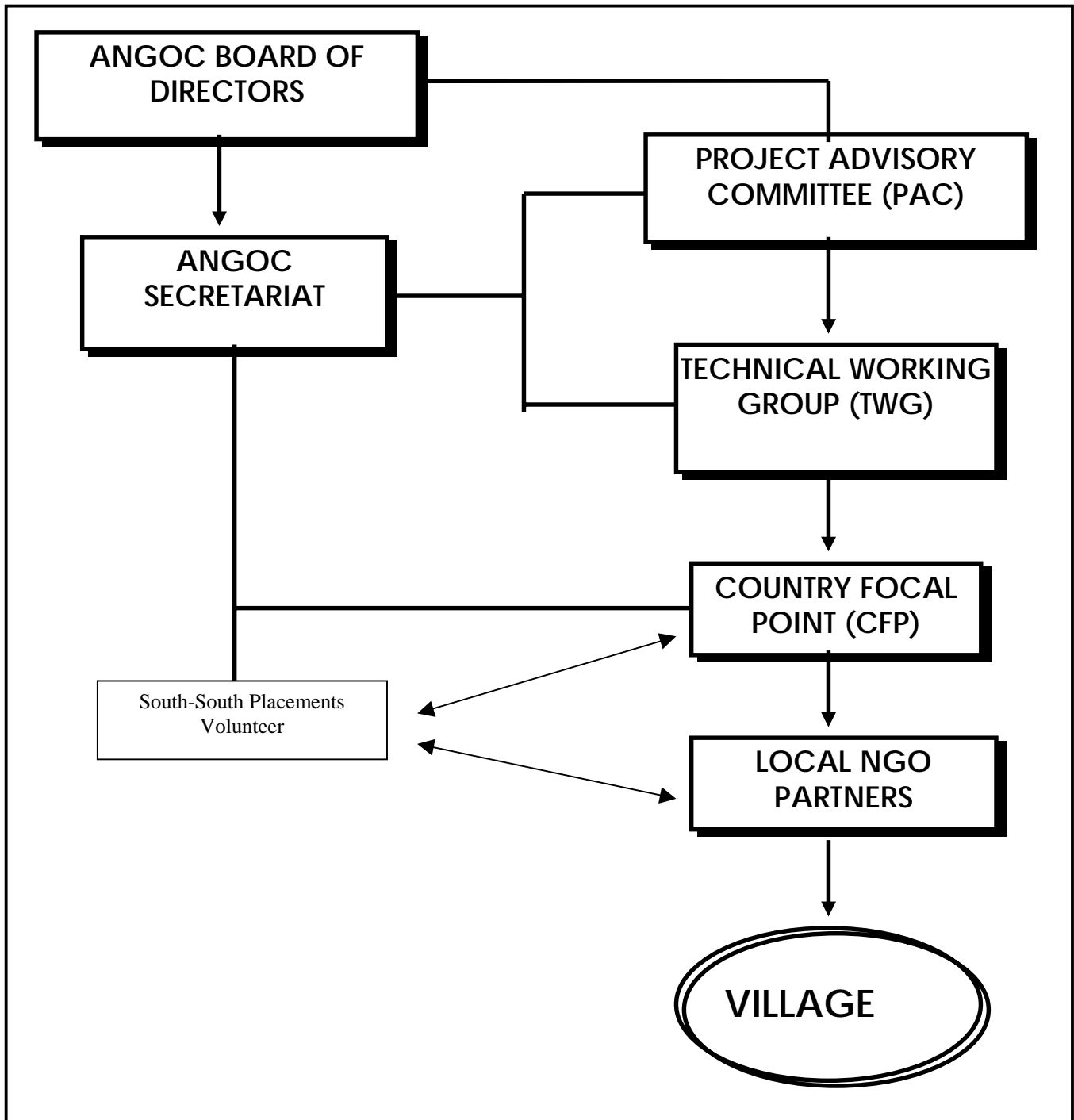


Figure 3. 200-Village Project Management



SCOPE AND METHODOLOGY

The Project intends to cover 200 villages from 10 Asian countries particularly those where ANGOC's members are operating. Ten countries are covered by the project at different stages. To date, a total of 5,670 households from 188 villages in nine countries have been surveyed, as shown in *Table 2* below. The CFPs were able to get the participation of more than 100 local NGOs and some POs as partners in Project implementation.

Villages were selected according to a number of criteria. Each one is relatively small, homogenous and accessible, shows good rapport with other agencies and communities, has the potential or capacity to replicate the gains made under the Project, and, preferably, has ongoing initiatives in food security. Provisions were also made for a fair representation of the various agro-ecological zones and other unique local conditions. Thirty sample households were selected from each village through systematic random sampling. A 200-VP electronic database system was especially developed for encoding, processing and analysis of household survey data. The analysis highlights the profile of the households and the relationship of key variables under each identified food security indicator through a simple correlation test, and basic household perception on factors that would ensure household food security.

As earlier noted this volume of the report covers a total of 103 villages selected initially from five countries, namely, Bangladesh, Pakistan, Philippines, Sri Lanka and Thailand.

Table 2. 200-Village Project: Countries, focal points and number of villages covered.

Country	Focal Point	Number of Villages
1. BANGLADESH	Association of Development Agencies in Bangladesh (ADAB)	20
2. INDIA	Association of Voluntary Agencies for Rural Development (AVARD)	20
3. INDONESIA	BINA SWADAYA	21
4. MALAYSIA	ERA Consumers	24
5. PAKISTAN	Rural Development Foundation of Pakistan (RDF)	20
6. PHILIPPINES	Philippine Partnership for the Development of Human Resources in Rural Areas (PhilDHRRA)	24
7. SRI LANKA	National NGO Council of Sri Lanka (NNGOC)	20
8. THAILAND	Rural Reconstruction Alumni and Friends Association (RRAFA)	19
9. VIETNAM	VAC VINA	20
10. CAMBODIA	Cambodia NGO Alliance for Cooperation (CNAC)	<i>Preparation stage</i>
Total Number of Villages		188
Total Number of Households		5,640

HIGHLIGHTS OF FINDINGS

1.0 Classification of the Respondents

Qualified respondents to the survey are male and female heads of household and eldest siblings. Respondents from the total of 3,097 households in five countries included in this report are mostly household heads, 84% of whom are male and 12% female. Only 4% of the respondents are eldest siblings. This trend is true for all countries except Thailand where the head of household respondents are almost equally male (45%) and female (47%).

2.0 General Characteristics of Household Respondents

2.1 Household structure. Sixty five per cent of the surveyed households are of nuclear type, *i.e.*, composed basically of the parents and the children. Twenty-one per cent is extended households, or has relatives staying on permanently as members. Seven per cent of the households have only one member, or are single households. Bangladesh has the highest number of nuclear households (93%) while extended households are found highest in Pakistan (36%). In the Philippines notably 25% of those surveyed are single households.

2.2. Household heads. Most of the identified heads of households are male (86%). Female-headed households are found in all five countries but are highest in Thailand (33%) and lowest in Bangladesh (6%). On the average, household heads range in age from 43 to 48 years.

2.3 Household size. The average household size is 5 to 6 members. Pakistan has the largest average household with 8 members. Bangladesh and the Philippines have about 5 to 6 members to a household, while Sri Lanka and Thailand have 4 to 5. The average number of children still living with their parents is from 2 to 5. The highest average is in Pakistan. Meanwhile, there is on average only one other household member (relative and/or helper) living with the family.

2.4 Household composition. More than half (58%) of household members are adults (18 years old and above), 40% are children (aged 1-17), and only a very small proportion are infants. Members are almost equally divided between male and female. About 70% of the adult household members are married. Twenty-three per cent are single and the rest are widowed and separated.

In Sri Lanka and Thailand adult members make up 66% and 68% of their respective household populations. In the Philippines, Pakistan and Bangladesh, the adult population is a little over half of the population.

2.5 Religious affiliation. Forty-four per cent of all households practice Islam, making the latter the most dominant religion among the respondents. In Pakistan, all the members of surveyed households practice Islam. In Bangladesh, 75% of household members subscribe to the Islamic faith while only a few household members do in Sri Lanka and Thailand. Buddhism is the second most prevalent religious practice, at 28 per cent of all households surveyed. The proportion of Buddhist households is highest in Thailand

(86%) and Sri Lanka (84%). Roman Catholicism ranks third, and is practiced almost wholly in the Philippines (82%) and by only a few in Sri Lanka (1%). Hinduism (3%) and Protestantism (1%) are among the other religions cited.

2.6 Educational attainment. The respondents are characterized by relatively low educational attainment. A little more than half of household heads had at most six years of formal education, 16% had 10 years, and as much as 25% did not go to school at all.

Most of the household heads had six years of formal schooling: 78% of those in Thailand, 70% in Sri Lanka, and a little over half in the Philippines. In Bangladesh and Pakistan, 58% and 46% of household heads, respectively, had no formal education. Similarly, almost half of all spouses and children had only six years of formal schooling, while 32% and 25%, respectively, completed no formal education at all.

Households in Bangladesh and Pakistan have the highest number of heads, spouses and children who had no formal schooling.

2.7 Ownership of dwelling unit. In all five countries, most households own their homes. The number of owners among the surveyed households is lowest in the Philippines with 63% and highest in Thailand with 98%. A very small percentage of the households occupies units for free (5%), renting (1%), paying mortgage (1%) and squatting (1%).

2.8 House structure. The dwelling units in all the surveyed households are almost equally grouped among the different types of housing structures (*i.e.*, permanent, semi-permanent, temporary and semi-temporary). However, at the country level 97% of households in Bangladesh occupy temporary (*made up of light materials, e.g. bamboo and nipa*) and semi-temporary dwelling units (*made up of light materials mixed with wood/lumber*) while in Thailand 93% of households dwell in semi-permanent (*made up of combined lumber and concrete with nipa roofing*) and permanent (*made up of concrete and well-finished structure with galvanized roof*) units.

2.9 Household facilities. The households commonly use electricity and kerosene for lighting; only a few use LPG, oil and batteries. Kerosene is used by households surveyed in Bangladesh, and by about a third of those in the Philippines and Sri Lanka. On the other hand, electricity is most widely used for lighting by households in Pakistan and Thailand. The largest number of users of LPG and oil for lighting purposes is found in Sri Lanka (16%) while battery users are found mostly (5%) in Thailand.

For cooking, firewood is still the most commonly used fuel, except in Thailand where 68% uses charcoal. Ninety-seven per cent of respondents in Bangladesh, 81% in Pakistan, 59% in Thailand, and 60% in Sri Lanka uses firewood. The Philippines has the fewest firewood users (47%) because most of its households use LPG and kerosene.

About 9% of all households have no sanitary toilets, and these are found mostly in Pakistan (25%) and the Philippines (14%). Water sealed (35%) and open-pit (22%) toilets are the two most common types of toilet facility used by the surveyed households.

2.10 Migration. Most of the households are native residents of the community. Except for those in the Philippines and Thailand, about two-thirds of the households surveyed have

been at their present residence for at least 11 years. Some 23% have been there for more than 40 years. Most of these households are found in Bangladesh (35%), Pakistan (50%) and Sri Lanka (14%). Meanwhile, of those who are new to their present residence, 30% had just moved from another house but within the same community.

3.0 Households' Land Tenure and Access to Food

3.1 Producers of agricultural crops. More than half (52%) of the total household respondents in five countries produce various agricultural crops. Thailand has the highest proportion of households (about 80%) engaged in agricultural production, followed by Pakistan (72%). In Bangladesh and the Philippines, less than half (49% and 42% respectively) of the households engage in crop farming and only a small proportion (17%) of households in Sri Lanka.

3.2 Involvement of household members in agriculture. The household head, spouse and at least one (1) of the siblings in each of the households are involved in agriculture in half of the surveyed households. This situation is most prevalent in Thailand (70%), followed by the Philippines (54%), Bangladesh (53%) and Pakistan (52%). In Sri Lanka, these members are engaged in agriculture in only 27% of the households; more households are engaged in non-agricultural activities.

3.3 Land tenure. Across the five countries, 63% of farming households are owner-cultivators. The rest are share tenants (15%), leaseholders (7%) and claimant-cultivators (4%), among others.

Desegregating the land tenure data by country, majority of the producers of agricultural crops in Thailand (79%) and Pakistan (77%) are owner-cultivators. However, settlers are prevalent in Pakistan (61%). In Sri Lanka, 61% of the agricultural producers are owner-cultivators; while 38% are share tenants. Similarly, in Bangladesh, more than half of the agricultural producers are owner-cultivators while about one-fourth are share tenants. In the Philippines, an almost equal proportion of the agricultural crop producers is owner-cultivators (33%) and share tenants (31%). There are more kinds of land tenure arrangements in the Philippines than among its Asian neighbors.

3.4 Land tenure instrument. In Pakistan, 82% of agricultural crop producers held land titles as proof of land ownership. In Bangladesh and Sri Lanka, share-tenancy contracts are the most common land tenure instruments, along with land titles. In Thailand, land titles (38%) and stewardship contracts (36%) are common. These instruments are held by those who consider themselves as owner-cultivators. Meanwhile, Philippine agricultural crop producers have the most varied range of land tenure instruments, as follows: land title (37%), tax declaration (13%), share tenancy contract (10%) and leasehold contract (8%), among others.

3.5 Mode of acquisition of tenure. Most agricultural crop producers in the five countries simply inherited their land tenure arrangements from their parents. Others took up farming following a verbal agreement with the landowner. Some rent or squat on their land, or just occupied it after clearing it. A number bought the rights to their land or inherited the same from parents or close relatives. Still others acquired their lands as a result of an agrarian reform program.

Inheritance is the most common mode of acquisition of tenure in Pakistan (63%) and Thailand (58%). In the Philippines and Bangladesh, about one-fourth inherited their tenurial arrangements from their parents. In Sri Lanka, 58% of agricultural crop producers purchased their land. (*It will be recalled that the most prevalent land tenure arrangement in Sri Lanka is owner-cultivatorship.*) On the other hand, more than a fourth of the producers of agricultural crops in Bangladesh and the Philippines took up their current tenurial arrangements on the strength of a verbal agreement. Because of the lack of documents to detail the terms and conditions attached to farming, land tenure is insecure in these two countries. In the Philippines, meanwhile, a significant proportion (17%) acquires land through the Comprehensive Agrarian Reform Program of the Philippines.

3.6 Land classification. Most of the farms in Bangladesh (86%), Pakistan (75%) and Sri Lanka (75%) are irrigated and predominantly found in the lowlands. In the meantime, farms in the Philippines (62%) and Thailand (76%) are primarily rain-fed and situated in lowland areas.

3.7 Cropping system and crops planted. Mono-cropping is the prevailing cropping pattern during both wet and dry seasons in all the five countries.

During the wet season, rice is the major crop in Thailand (81%), Bangladesh (76%), Sri Lanka (75%) and the Philippines (63%). In Pakistan, wheat is planted in 83% of the farms, making it the principal crop. The other crops grown in the Philippines are corn, sorghum, banana and vegetables. In Thailand, some of the farms are planted to coffee and rubber.

During the dry season, rice is still a major crop in Bangladesh and Pakistan where it is planted to about half of the farms. In the Philippines and Thailand, a smaller proportion of farmers consider dry-season rice as a major crop (18% and 9%, respectively). Meanwhile, wheat is planted to a third of farms in Bangladesh. Cotton is cultivated on 27% of farms in Pakistan. Corn, sorghum and vegetables are just as popular in the Philippines in the dry season as in the wet.

3.8 Equipment used in farming. The most common farm equipment used by households engaged in agriculture are the plow (29%) tractor (22%) and harrow (21%). Only a few reported using post harvest facilities, the most common of which is the rice thresher. Forty-two percent of farming households in Thailand, 17% of those in the Philippines, and all of those in Bangladesh said they use no such equipment. In Sri Lanka, 27% used a few post-harvest facilities, like the rice mill and thresher. In Pakistan, 60% used the thresher.

3.9 Livestock raising. Backyard raising of cattle and goat is common in Pakistan, Bangladesh, the Philippines and Thailand. In Pakistan, livestock are raised primarily for home consumption, while in Bangladesh, the Philippines and Thailand, they are sold to augment the household income. In the Philippines, the major livestock include carabaos, raised to provide farm help, and swine (either piglets or fatteners), which are meant to be sold.

3.10 Poultry raising. Broiler chickens are a common poultry product in Bangladesh (41%). They are also raised in the Philippines and Pakistan (primarily for home consumption)

by some 25% and 19% of the households, respectively. In Bangladesh, some 16% of households raise chicken for their eggs. The other animals raised in the four countries by a small percentage of the household respondents include turkey and fighting cock.

3.11 Households engaged in fishing. Only 5% of the household respondents in the five countries are engaged in fishing activities for consumption or commercial purposes. Thailand has the highest proportion of households (12%) engaged in fishing as an occupation.

3.12 Backyard gardening. More than half (57%) of the surveyed households was keeping a home garden. It was most common in Sri Lanka and Thailand where 89% and 81% of the households respectively, were into backyard gardening. These households in all five countries were mostly growing vegetables and ornamentals while some also raise fruit trees and herbal plants in addition.

3.13 Marketing. The two most common buyers of produce are retailers and traders, each group getting 30% of the produce of households selling their products. In Bangladesh, more than half (55%) of the households sell their products to retailers while 60% of those in Thailand pass on their products to traders. In Pakistan, the Philippines and Sri Lanka, about 50% of households deal with retailers and traders in disposing of their produce. Other buyers considered by households for their produce are direct consumers, wholesalers, Government buying stations/agencies and cooperatives.

3.14 Purpose of storing produce. It is common practice for most households to keep some of their produce, particularly rice, wheat and corn. Households in Bangladesh, Pakistan and the Philippines usually store some for future home consumption. Other households save part of their produce as input for the next planting season or in anticipation of higher prices in future.

3.15 Food consumption. Rice is the staple food of most households in both wet and dry seasons. In Pakistan, however, wheat is more commonly eaten during the wet season. Occasionally, other food items are eaten alongside rice and wheat, among them corn, eggs, fish-seafood, fruits, legumes, meat, milk, poultry and root crops in Bangladesh; beef, eggs, chicken, fruits, vegetables, and gram in Pakistan; corn, fish/seafood, meat, milk, vegetables and root crops, among others, in Sri Lanka. Generally, eggs, fruits, root crops, beef, chicken, pork and vegetables are occasionally available to all households. Food items in the other food groups are eaten occasionally by a fourth or less of households surveyed.

The availability of certain food items seems not to be affected by the change in season. For instance, fish/seafood are available to about two-thirds of Philippine household respondents regardless of the season. Households in Thailand eat corn eggs, fish, fruits, meat, poultry, root crops and seafood, in both wet and dry seasons, albeit occasionally at both times. Vegetables are more regularly available (according to about two thirds of the households) during the wet season.

3.16 Eating pattern. Most of the households surveyed say that the members of the family eat at the same time, but their number is highest in Sri Lanka (73%), followed by Thailand (67%), the Philippines (64%), Pakistan (63%) and Bangladesh (42%). Among

the rest of the households, members either do not eat all at once, or do so only occasionally. In such cases, either the father or the children eat first.

3.17 Source of food consumed by the households. Most of the surveyed households in Bangladesh, Pakistan, and Sri Lanka buy their food, including rice and wheat, in both wet and dry seasons. In the Philippines and Thailand, rice is grown by almost 50% of the households. Also, majority (55%-77%) of the households in Thailand produces their own root crops, legumes/vegetables, fruits and milk. A very small proportion of household food intake is procured from non-cash exchanges in all the five countries.

3.18 Food selection and preparation. Households generally select food on the basis of price (41%), preference (37%) and availability (20%). Eighty three percent of all the surveyed households prepare the same food for every household member.

4.0 Households' Purchasing Power

4.1 Number of income-earning household members. The average number of individuals who earn income per household is one or two only. However, note that most households are engaged in farming where unpaid labor was provided commonly by household members themselves. The average number of income-earning individuals per household in Sri Lanka and Thailand is one while the average is two for Bangladesh, Pakistan and Philippines.

4.2 Primary occupation. About 52% of all surveyed households are engaged in agriculture. Close to half of households in Bangladesh (49%) and the Philippines (43%) are farming households. Thailand has the highest proportion of farming households, at 80%, followed by Pakistan, at 72%; Sri Lanka has the lowest, at 17%.

Household heads, in particular, generally depend on agriculture as a primary occupation, except in Sri Lanka. However, the proportion of household heads engaged thus varies from country to country. It is highest in Thailand at 82%, and about 67% in Pakistan, Bangladesh, and the Philippines. Sri Lanka has the lowest proportion of household heads employed in agriculture and related activities.

4.3 Secondary occupation. Agriculture is likewise the secondary source of income for most household heads, especially in Bangladesh (52%) and Thailand (35%). The same is true of the spouses, although not many of them are engaged in a secondary occupation. Siblings are most commonly engaged in non-agriculture sources of income, particularly in Pakistan and Sri Lanka while in Bangladesh, agriculture is still the most common source of income of the children.

4.4 Average household income and sources. The average annual household income in 1998 among the five countries was \$ 1,097.00, or about \$3 a day. Of this amount, 60% was obtained from agricultural sources, such as farm production and other farm employment activities. About 34% was earned from non-agricultural economic activities. The remaining 6% came from sources such as pensions, retirement benefits, and income of children working overseas, among others.

Among the five countries, the average household income was highest in Thailand at \$ 2,167.00. Pakistan, which ranked second, had an average household income of \$ 1,098.00, or half of Thailand's. In both countries, however, the bulk of the income (69% and 68%, respectively) came from agriculture-related sources. Sri Lanka ranked third with an average household income of \$ 938.00. More than half (55%) of this income was acquired from non-agricultural and other sources (10%). The Philippines reported an average household income of \$ 878.00, which came from agricultural (59%), non-agricultural (32%), and other sources (9%). Bangladesh had the lowest income, at about \$ 507.00, which was derived from agricultural (53%) and non-agricultural (42%) sources.

4.5 Proportion of income in cash and kind. The data revealed the economic significance of the households' non-monetary activities. For all countries, the value of income in *kind* or non-cash represents 21% of the total household income (i.e. income cash and kind). The proportion was even higher for surveyed households in Bangladesh (32%), Philippines (22%) and Pakistan (22%).

4.6 Income distribution. Thirty five per cent of households in the five countries belongs to the lowest income bracket, earning \$500.00 or less. Twenty-six per cent earn between \$501.00 and \$1,000.00. Meanwhile, some 17% of the households have income ranging from \$2001.00 to \$ 2,500.00, making them the highest earning income group. These data indicate a high degree of inequality in terms of income distribution among the five countries.

In Bangladesh, half of the households have incomes of \$500.00 and below. About one-third belongs to the next income bracket of \$501.00 to \$ 1,000.00. It will be recalled that Bangladesh reported the lowest average income among the five countries.

The Philippines also has a high proportion (43%) of poor households in the lowest income grouping while 23% falls under the next income class (\$ 501.00 to \$ 1,000.00). Only 11% of the households made it to the highest income bracket. In Sri Lanka, about one-third each of the households belongs to the two lowest income classes. Only 12% belongs to the highest income bracket. In Pakistan, households are more evenly distributed in terms of income categories. The lowest and highest income groups each account for a fifth of the households. Twenty-six per cent earn from \$501.00 to 1,000.00, while 18% earn \$1,001.00 to \$1,500.00. In Thailand, most (40%) of the households belong to the highest income bracket of \$ 2001.00 to \$ 2,500.00. Nonetheless, about 24% and 13% of the households, respectively, belong to the two lowest income groups.

4.7 Access to credit. Data on access to credit from formal and informal sources were obtained only for the Philippines and Pakistan. A higher proportion of households obtained credit in Pakistan (42%) than in the Philippines (36%). In both countries, however, more households borrowed from informal rather than formal sources. About three-fourths of borrowers in Pakistan and two-thirds of those in the Philippines borrowed from informal sources.

4.8 Amount and frequency of loan. In 1998, 46% of households in the Philippines took out loans of a hundred dollars or less, 18%, US\$100 -200, 11%, US\$ 200-300 and about

10%, US\$500 and above. Among households surveyed in Pakistan loan amounts were spread across the ranges of US\$ 100-200 (24.5%), US\$ 100 or less (21.5%), US\$ 500 and above (21%), US\$ 200-300 (15%) and 300-400 (10%).

4.9 Frequency, purpose and actual use of acquisition. Most households in Pakistan (77%) and the Philippines (48%) took out loans only once in 1998 and the money was used for the purpose for which the loan was taken out. In the Philippines, most households (41%) used the money for production expenses while in Pakistan, the amount loaned was mostly (55%) spent on basic household needs.

4.10 Household expenditure. The average household expenditure among surveyed households was \$ 1,075.00 for the year 1998. More than half of this (56%) was spent on food. The other major household expenses were for clothing (which accounts for 7%), education (7%) and health (6%). Thai households spent the most, at an average of US \$1,589.00, but still put away a little over US \$ 600 in savings. In the other countries, households generally spent more than they earned.

Note that the average amount of expenditure is only \$ 22.00 less than the average income of the surveyed households.

4.11 Household expenditure on food. Based on the 1998 total household expenditure, the average amount spent on food among households in the five countries was \$550.00, or 56% of the total household expenditure. The highest food expenditure was reported in Pakistan at \$ 629.00, followed closely by Thailand at \$ 620.00. These amounts make up 53% and 47% of the total household incomes in Pakistan and Thailand, respectively. The lowest food expenditure was noted in Bangladesh where a household spent just \$428.00. This amount however is already two-thirds of the total household expenditure. Sri Lankan households spent the same proportion of their household expenses on food, at \$592.00. In the Philippines, the average food expenditure amounted to \$ 493.00 or 47% of the total.

4.12 Income deficit. Sixty percent of the surveyed households reported experiencing income deficit in 1998. This is reflected by the two per cent difference between average household income and expenditure. These income deficit households cited poor harvest (22%) and low wage /income as the major causes of deficit. Some cited other causes like natural calamity (15%) and family emergencies (13%). In most such cases, households resort to loans to fill the gap.

5.0 Households' Health and Quality of Food

5.1 Regularly consumed food. As reported earlier in this report, rice is the staple food in Bangladesh, Philippines, Sri Lanka and Thailand. In Pakistan, wheat is the staple food and rice is eaten only in the dry season. Corn is also regularly eaten by households in the Philippines (60%) and Sri Lanka (33%). The other food items regularly consumed in both wet and dry seasons by at least 30% of households in each country are vegetables and milk in Pakistan; vegetables, root crops milk, fruits, eggs and fish/sea food in the Philippines; vegetables and root crops in Sri Lanka; and vegetables in Thailand. During

wet season, households in Thailand tend to eat more poultry, while those in Pakistan include gram and sunflower in their diet during the dry season.

5.2 *Quality of food.* In general, the respondents rate the quality of food they regularly consume (as specified above) during both wet and dry seasons as *very good*, *good* and *fair*. Very few reported eating poor quality food.

In Bangladesh, each of the food items identified as regularly consumed was rated *good* quality by 98% to 100% of the respondents for both wet and dry season. In Pakistan, 8%-32% rated each food item as *very good* quality, 47%-64% *good* quality and 21%-30% gave a *fair* rating during the wet season. The corresponding responses for food eaten during the dry season are: 5%-28% *very good* quality, 42%-100% *good* quality, and 24%-53% *fair* quality.

In the Philippines, 6%-48% of the respondents rated each food they consumed as *very good* quality, 10%-52% gave a rating of *good* quality, and 7%-16%, *fair* quality, during the wet season. Meanwhile, 5%-40% classified each food item as *very good* quality, 8%-49% gave a rating of *good* quality, and 8%-16%, *fair* quality, during the dry season.

Respondents in Sri Lanka gave a much higher rating: 17%-54% of respondents rated wet season food as *very good* quality, while 21%-56% of them gave the same rating to dry season food. On the other hand, wet and dry season food was rated *good* quality by 39%-70% and 38%-71% of respondents, respectively.

In Thailand, meanwhile, only 2%-13% rated each food item as *very good* quality, and a much higher proportion (57%-69%) adjudged both wet and dry season food as *good* quality.

5.3 *Source of drinking water.* The most common sources of drinking water for all surveyed households are artesian/pump wells (27%) piped-in water (20%) and rain water (20%). Other sources are springs and open wells. However, the countries vary in terms of major sources of potable water. About 86% of households surveyed in Bangladesh depend on pump wells, 36% in Pakistan use piped-in water, 22% in the Philippines draw water from open wells in the Philippines, 66% in Sri Lanka depend on spring and piped-in water, and 72% in Thailand use rain water.

5.4 *Storage facility/methodology for storing food and water.* Households, particularly in Pakistan, usually store drinking water in clay jars (40%). Others, especially in the Philippines and Thailand, use plastic jugs (29%). On the other hand, food is stored mostly in ordinary food containers (43%) and refrigerators (21%). Others resort to buying processed food (22%) and boiling (22%) to keep food for later consumption.

5.5 *Morbidity.* The health problems most commonly experienced by household members in all five countries are cough/colds (24.6%), fever (18%), headaches (12.1%), toothaches (8.3%), diarrhea (6.2%), malaria (6.1%) and fatigue (5.5%). Respondents attribute these problems to climatic conditions, work/overworked, nutrient deficiency/poor quality food, aging, and bad eating habits or lack of awareness of proper health and nutrition. A number of them (11%) were identified as symptoms of more serious ailment.

5.6 Mortality. The leading causes of death identified by the households in five countries were not directly related to food consumption, except for heart-related disease in Pakistan (11%) and the Philippines (24%) and diarrhea also in Pakistan (7%). Other leading causes include cancer (14%), accident (43%) and AIDS (14%) in Bangladesh, tuberculosis in Pakistan (7%) and Thailand (23%), maternal death (9%) in Pakistan, pneumonia (12%) in the Philippines, old age in the Philippines (14%) and Sri Lanka (45%) and ulcer (14%) and diabetes (9%) in Thailand. A lot of deaths reported by households in all five countries have unknown or unidentified causes.

6.0 Agricultural Practices of Farming Households

6.1 Labor input per farming household. Based on the reported composition of farm workers by household, the contribution of women and children to agricultural activities were accounted and found to be relevant. For all five countries, the survey revealed that 32% of total farm workers were women and 9% were children (both sexes). Apparently, 60% were adult male. The highest number of female farm workers was found in Thailand at 49% while the number of children engaged in farm labor was highest in Pakistan at 17%.

6.2 Types of Input. Of the total number of respondents, 41% still practice traditional farming, 40% use less chemical inputs, and 19% have shifted to high-input conventional agriculture.

To differentiate the farming practices, three major categories were identified: high-input conventional agriculture, low chemical input farming system and traditional farming system. The categories are based on three variables: (1) planting materials used; (2) method of crop protection; and (3) type of fertilizer applied. High input conventional agriculture represents the farming system using hybrid varieties, pesticides and inorganic fertilizer. Low chemical input farming system uses only one of the three inputs associated with high-input conventional agriculture. The traditional farming system uses traditional varieties, natural crop protection methods, and organic fertilizers.

6.3 Mode of Acquisition of Production inputs. Data on the mode of acquiring major production inputs (*i.e.*, chemicals, fertilizer, irrigation, labor and planting materials) in all five countries show that rice and wheat production requires a greater proportion of capital as most of the inputs are bought by the farmers. Specifically, the survey made the following observations in each country.

In Bangladesh, more than 90% of the rice farmers buy chemicals, fertilizer and water for irrigation, for both wet and dry seasons, while the rest depend primarily on landowners. Half of the farmer respondents are provided with their labor requirements by the landowner, and about a third of them are provided with planting materials, also by the landowner.

Wheat production in Pakistan seems to require less capital especially during the wet season when most farmers (30%-90%) get their chemicals, fertilizer and planting materials from the landowner while some get these free of charge from other sources.

All these inputs, including irrigation and labor, are acquired by 30%-80% of households on cash and credit during the dry season.

In the Philippines all the inputs are bought by most of the farmers in both wet and dry seasons. About 80% to 86% of the farmers buy chemical and fertilizer requirements, and all of them pay for irrigation. Fifty to 55% of the farmers hired laborers while the rest depended on help from other household members. Planting materials are acquired from various sources but most households either buy or get it for free from the previous harvest or exchanged with other farmers.

In Sri Lanka, planting materials, and chemical and fertilizer inputs are bought on cash or credit by most of the farmers (65%-100%) while labor is usually provided by the landowner.

Farmers in Thailand, like those in the Philippines, need more production because a greater number of them (about 90%) buy chemicals and fertilizer. About half of them also pay for irrigation and labor, although a significant number are able to get these inputs for free and from other sources. On the other hand, 20%-30% of the farmers buy seeds while the rest get them from other unidentified sources.

7.0 Household's Level of Participation

7.1 *Membership of household members in organizations.* In all countries, majority of the household members (62%) are members of private/peoples organizations, followed by those (30%) involved in non-government organizations (NGOs). Only a small percentage (2%) is involved in government organizations.

In Bangladesh (97%) and Pakistan (72%), a significant proportion of household members is involved in NGOs. The majority of household members in Thailand (95%), the Philippines (80%), and Sri Lanka (49%) are members of private/peoples' organizations.

7.2 *Average number of years of participation in organization by male and female household members.* Among male household members in all countries, those from Thailand have the highest average of involvement in an organization at nine (9) years. Sri Lanka follows at eight (8) years, then Bangladesh at six (6) years, the Philippines at four (4) years, and Pakistan at four (4) years. The average length of membership involvement by male household members in all countries is 5.78 years.

On the other hand, among female household members in all countries, those from Thailand have the highest mean of involvement in an organization at 7.90 years. This is followed by Philippines at seven (7) years, Sri Lanka at seven (7) years, Bangladesh at four (4) years, and Pakistan two (2) years. The average length of membership involvement by female household members in all countries is four (4) years.

7.4 *Nature of involvement of male household members in organizations.* Majority of the male household members in all countries is plain members (40%). Nineteen per cent attend meetings, 15% receive benefits, 9% participate in discussion and planning, 7%

pay dues, 6% exercise leadership and decision making, while 5% join in the evaluation and help mobilize and recruit members.

7.5 Nature of involvement of female household members in organizations. Majority of the female household members in all countries is plain members (42%). Twenty-three per cent receive benefits, 17% attend meetings, 7% pay dues, 6% participate in discussion, 5% join planning activities, 3% join in evaluation, while 2% each exercise leadership and decision making as well as help mobilize and recruit members.

7.6 Activities conducted by the organizations. Provision of credit is the major activity conducted by organizations to which household members in all countries are commonly involved in. Other activities include crop production (17%), advocacy campaigns (10%), integrated programs (7%), livestock production, post-harvest production and health and nutrition (6% each), aquatic production (4%) and small scale manufacturing (1%) among others.

Household members in Bangladesh have the highest involvement (81%) in credit provision. Thailand is next at 45%, followed by the Philippines and Sri Lanka (13% each), and Pakistan (4%).

7.7 Assessment of benefits to household. Forty-one per cent of household members think membership in organizations is fairly beneficial, 38%, highly beneficial, while 3% see no benefit from it. Another 3% of the household members indicated that they could not assess the value of benefits received.

Those who are fairly satisfied with the benefits from membership in organizations are found highest number in Thailand (62%), followed by Bangladesh (58%), the Philippines (23%), Pakistan (19%) and Sri Lanka (8%).

7.8 Types of benefits. Access to credit is the major benefit identified by household members in all countries (39%). A fifth of the respondents (21%) receive training/participate in seminars, 11% find fulfillment in joining, 9% get discounts on goods and production inputs, 8% get production inputs free of charge, 5% get to use facilities for free, and 4% find work and get insurance. Fourteen per cent of the household members cited various other benefits.

Majority (77%) of household members surveyed in Bangladesh has access to credit, followed by Thailand (46%), Sri Lanka (27%), the Philippines (23%) and Pakistan (13%).

7.9 Assessment of the need for the organization in the community. More than half (51%) of all the household members rated the community organizations as *highly needed*, 31% said they are *fairly needed*, and a small percentage thought they are unnecessary. Another 2% could not assess the need for community organizations.

7.10 Factors preventing participation. In terms of factors that hinder participation in community organizations, most of the respondents lack time to participate (21%). Fourteen percent of the respondents feel they are not qualified to participate, 13% lack the resources needed, 10% are not aware of the membership campaign, 9% are not

interested in the program, and 3% regard the program as inefficient. A few respondents would have to be forced to participate (2% each) because of a bad experience with the program or a similar program, or because they see no need for the program.

7.11 Factors to improve community organization. When asked which factors facilitated community involvement, the majority of the household members in all countries have nothing to say. Eighteen percent suggested the need to allocate more financial resources, 15% batted for greater external support, 11% recommended catering to the needs of the community, 10% suggested increasing the membership, 8% thought it was necessary to generate more interest on the part of the participants. The rest cited factors like local leadership (6%) and involvement of other organizations (5%).

8.0 Household Food Security Assessment

The food security status of sample households in five countries in the region was assessed using four categories that correspond to varying levels of food security, as defined in the methodology. The “**Food Secure**” households are those that reported sufficiency in all food items consumed under each food group (*i.e.*, staples, vegetables, meats). The “**Moderately Food Secure**” households are sufficient in at least one food item from each food group. The “**Food Insecure**” households are insufficient in all food items in at least one of the three food groups. The “**Highly Food Insecure**” households are insufficient in all food items in two or all food groups.

Based on the above definitions, more than half (53%) of the households in the five countries are considered food secure. These include 40% of them who were classified as food secure and 13% who were moderately food secure. The rest were classified as food insecure (18%) and highly food insecure (26%). *Refer to table 3.*

Thailand reported the highest level of food security among surveyed households with 97% of them classified as food secure. Surveyed households in Sri Lanka also revealed higher level of food security with 71% food secure households and 17% moderately food secure households.

On the other hand, in Bangladesh, Pakistan and the Philippines, there are more food insecure than food secure households. Pakistan showed the highest level of food insecurity where more than half of the households (55%) are highly food insecure and a fourth are food insecure. In Bangladesh, 47% are food insecure, while 17% are highly food insecure. In the Philippines, 46% of the households are highly food insecure and 12% are food insecure.

Table 3 . Household food security classifications (wet and dry seasons combined).

Country	Food Secure	Moderately Food Secure	Food Insecure	Highly Food Insecure	No Response
	(Percent of households)				
Bangladesh (n = 600)	6%	30%	47%	17%	0%
Pakistan (n=600)	11%	8%	25%	55%	1%
Philippines (n=728)	23%	11%	12%	46%	8%
Sri Lanka (n=600)	71%	17%	7%	3%	2%
Thailand (n=569)	97%	1%	1%	1%	0%
All Countries (n=3,097)	40%	13%	18%	26%	3%

* No response refers to those households who did not answer the sufficiency question in some food items.

9.0 Food Security Indicators

Tenure and Access to Food

There is a positive correlation between food security and access to land.

Among the four categories of food security groups in the five countries, the food secure group has the largest percentage of owner-cultivators at 70% of respondents. The highest incidence of owner-cultivators in a food secure group is found in Thailand at 79%, while the lowest may be found in the Philippines at 29%. Conversely, the food secure category had the smallest number of share tenants and leaseholders among the four subgroups at 7%.

Even among the households who do not own their own land, the food secure groups have better leasehold arrangements than the other categories.

Forty-seven percent (47%) of the food secure groups in the five countries have leasehold arrangements that are better than a 65:35 sharing arrangement (65% to the farmer-tiller). The food secure group in Thailand has the highest incidence at 82%, followed by the Philippines at 59%. In contrast, the respondent-households in Bangladesh have the least favorable leasehold arrangements with some 73% of all respondents forced to endure a 50:50 leasehold sharing.

The predominant modes of land acquisition have been either through purchase or inheritance. Agrarian reform programs have had minimal impact on land acquisition by rural households.

Purchase and inheritance are the principal mechanisms for land acquisition by the majority of respondent-households. Twenty-one percent (21%) of food secure households acquired their lands through purchase while 48% acquired land through inheritance. Interestingly enough, 47% of the highly food insecure households also acquired their lands through inheritance.

With the exception of the Philippines, agrarian reform programs appear to have had minimal impact in terms of land acquisition. In the five countries, only 4% of the food secure groups

acquired their lands through agrarian reform while 8% of the highly food insecure category acquired their lands in the same manner.

Twenty-eight percent (28%) of the food secure group and 20% of the highly food insecure group in the Philippines acquired their lands through agrarian reform. This appears to indicate that agrarian reform has been relatively more successful in the Philippines than in the other four countries.

Relatively fewer food secure and highly food insecure households availed of loans in the past year compared to their peers in the two other subgroups.

This may indicate that food secure households prefer to self-finance their production and consumption requirements. On the other hand, the relatively fewer highly food insecure households who availed of loans may be indicative of this sub-group's limited access to credit.

Sixty percent (60%) of the Pakistan and 71% of the Philippine food secure households did not avail of any loans in the previous year, the highest among the four categories. At first glance, this may be considered surprising since, of the four sub-groups, it is the food secure group who would be expected to have the greatest access to credit. However, it is likely that the members of this group, as is typical of the conservative nature of rural households, are averse to loans and would prefer to self-finance their needs to the extent possible.

On the other hand, the failure of the majority of households belonging to the highly food insecure group (61% total for both countries) reflects the limited access of this sub-group to credit, perhaps even informal credit.

It is interesting to note, however, that among food secure households who do borrow, a significant percentage (24%) borrowed three times or more, the highest incidence among the four sub-groups. This underscores the strong access of this sub-group to credit sources.

In all five countries, mothers generally eat after the children and fathers have eaten.

This is true for all food security groups and is a reiteration of the gender bias against women within households that has been well documented in previous studies. It is important to note, however, that a higher percentage of women in the food secure group eat first compared to their sisters in the three other subgroups.

Twenty-one percent of women in food secure households eat first, compared to 5%, 2 % and 5% for their counterparts in the moderately food secure, food insecure and highly food insecure subgroups, respectively.

Conversely, only 32% of women in the food secure group eat *last*, compared to 71%, 77% and 70% for their counterparts in the moderately food secure, food insecure and highly food insecure subgroups, respectively.

This finding indicates a correlation between gender equity and food security and should be the subject of further studies in the future.

Purchasing Power

This implies a positive association between the level of food security and household income.

Food security increased with increasing household income levels in the five (5) countries for both the wet and dry seasons. In other words, the more food insecure households are those who obtained low household income.

Across countries, this relationship was significant in Bangladesh, Philippines and Thailand. In the first two countries, the predominantly low income earning households were the food insecure. In Bangladesh, of the 64% of households characterized as food insecure, 59% belonged to the two lowest income classes (i.e. up to \$ 1,000.00). In the Philippines, of the 58% food insecure households, 42% belonged to the two lowest income groups. In Thailand, the predominantly high income households were more food secure. In this country, of the 98% food secure households, 53% belonged to the two highest income classes.

The association between food security and household income is not significant in Sri Lanka and Pakistan. Nonetheless, the data would show that in Sri Lanka, even the poor households were food secure. Eighty-eight percent of the households were categorized as food secure. Of these, 58% belonged to the two lowest income groups. In Pakistan, the proportion of food insecure households were divided among the different income classes. For instance, 16% each of the households that are food insecure come from the lowest and highest income classes in the country.

In the five countries, a significant positive association between food security and expenditure on food was noted. Households that spent less on food were more food insecure. On the other hand, households that spent more on food are relatively more food secure.

Across countries, this relationship was significant only in Bangladesh. In this country, the lowest average expenditure on food was noted. Further, about half (49%) of the households spent \$ 500.00 or less on food and are food insecure/ highly food insecure.

The reverse was true in Pakistan where a significant negative association between food security and household expenditure on food was exhibited. In this country, households spending relatively less on food items were food secure. Nonetheless, some 38% of the households spent less than \$ 500.00 on food were food insecure / highly food insecure. Some 29% of the households spent who spent more on food (i.e., \$ 501.00 - \$ 1,000.00) were still food insecure / highly food insecure.

In Thailand, Sri Lanka and the Philippines, the association between food security and household food expenditure was not found to be significant. Nonetheless, the following trends were noted. In Thailand, half of the households were food secure despite spending only an average of \$ 500.00 for food. The same was true for Sri Lanka where 37% of households spent an average of \$ 500.00 for food and were found to be food secure. In the Philippines, 41% of the households spent \$ 1,000.00 or less for food and were categorized as food insecure/highly food insecure.

Households with higher food expenditure are more food secure than those that spend less on various food commodities.

Among countries, this positive correlation between food security and food expenditure is significant for Bangladesh and Pakistan. In these countries, 49% and 38% of their respective households are food insecure and spend only the minimum on food, *i.e.*, \$ 500.00 and less.

Households with fewer members engaged in agriculture are more food secure than households where more members are thus engaged.

There is ambivalence in the data desegregated by country. In the Philippines, the general observation holds true. In Pakistan, on the other hand, the more members engaged in agriculture, the more food secure is the household. Results of the analysis are not significant in the other countries.

There was a significant association between obtaining credit from the informal sources and the high level of food insecurity in the Philippines and Pakistan.

About one-fourth of the households in Pakistan obtained credit from the informal sources and were categorized as food insecure / highly food insecure. In the Philippines, 14% of the total households obtained credit from the informal sources and were categorized as food insecure / highly food insecure.

Quality of Food

Consumption of good quality food is not necessarily limited to food secure households.

Households in Pakistan, which are predominantly food insecure, reported higher quality food intake of certain items (such as rice, corn, eggs, fruit and cheese) than households in Thailand which are the most food secure.

Between Thailand and Sri Lanka, whose households reported comparable levels of food security, Thailand still reported lower ratings where food quality is concerned.

Food secure households are guided by preferences in choosing food.

Households in Thailand and Sri Lanka, which largely belong to the food secure category, mentioned preference as a basis for food selection. For Sri Lanka, 22% of the food secure household respondents, 5% of the moderately food secure household respondents, and 2% of the food insecure household respondents said their basis for food selection is preference. For Thailand, 3% from the majority food secure household respondents said that preference is their basis for food selection.

Inadequate income/purchasing power is at the heart of food insufficiency in the five countries.

Though there are several reasons cited for food insufficiency, they all ultimately affect household income.

The higher the incidence of disease in the family, the lower the level of household food security.

This is true for at least three countries: the Philippines – during the wet season; Sri Lanka – during both the wet and dry season; and Thailand – during the dry season.

Level of Community Participation

Households categorized as “moderately food secure” report the highest level of participation in organizations (i.e., are members in the most number of organizations) compared to their counterparts in the three other subgroups.

Private organizations are the most popular in all countries, except Bangladesh and Pakistan. Food secure households are members in an average of 1.9 organizations, while food insecure households average 1.45 organizations each.

Food secure households account for the largest proportion (40%) of respondents in all five countries, followed by the highly food insecure, with 26%, the food insecure with 18%, and the moderately food secure with 13%.

Length of membership in community organizations does not necessarily imply higher level of food security.

Membership to community organizations does not necessarily ensure improved level of food security particularly as revealed by the findings in Pakistan, Philippines and Sri Lanka. The length of membership of households members to community organizations were found to be inversely correlated with the level of food security, i.e. as the number of years of being a member increases the lower the level of food security becomes. However, for Bangladesh and Thailand length of membership of both male and female household members were found to be correlated with higher level of food security. The data further revealed that more food secure households consider membership to organizations as highly needed. The types of benefits mostly include loans, training seminars and access to facilities/equipment. On the other hand, while the respondents in the other three countries also cited the same types of benefits enjoyed from their membership to community organizations, they expressed that more time to participate, inviting more participants and more financial resources are needed to improve the organizations.

Food insecure households participate least in community programs.

However, they also accounted for the highest proportion of households that thought that non-government community organizations are highly necessary.

Males participated slightly longer than females in community organizations.

Males participated slightly longer than females in community organizations by an average of one year among food secure households while only an average of 8 months among those households categorized as food insecure. The data showed no major difference in terms of the nature of involvement to community organizations of male and female household members where most are either plain members or beneficiaries.

However, there are 4% more males who exercise leadership and decision-making activities in organizations than females particularly in Pakistan, Philippines and Thailand while 8% more females are recipient of benefits than males. Furthermore, more males are involved in attending meetings, participating in the discussions, join in planning and evaluation and help mobilize and recruit members. On the other hand, more females cited lack of time as factor that prevents participation.

Agricultural Practices

Shifting to high-input conventional agriculture is not a guarantee for food security.

Most farmers who shifted to high-input conventional agriculture are relatively well off compared to other farming households in the community. They have the capacity to buy external inputs. Most likely, they would also own “good lands” as hybrid varieties perform best in irrigated fertile lands. It is understandable therefore that 50% of those practicing high-input conventional agriculture are food secure. What is alarming is that 37% of these supposedly well off farmers are food insecure or highly food insecure.

For resource-poor farmers, shifting to high-input conventional agriculture is not a viable alternative. The situation requires a shift towards a more sustainable farming system utilizing local resources.

Forty-one percent of farmers practicing traditional farming system are food secure or moderately food secure. However, 58% are food insecure and would require external interventions. While shifting towards low-chemical input may slightly improve their situation (57% food secure as against 42% food insecure in this category), it begs for better alternatives. Similarly, shifting to high-input conventional agriculture does not only present pitfalls but may prove to be difficult, as it requires access to resources that they do not command.

Household Perceptions on Food Availability

1. Perceptions on availability of staple food

Food secure households are more optimistic than the food insecure ones regarding the availability of sufficient staple food for the household in the coming year.

As expected, more than 50% of food secure households and 38% of moderately food secure households are certain that a sufficient supply of staple food shall be available in the coming year, compared to a lower 29% of food insecure households and 35% of highly food insecure households. A higher percentage of food insecure (15%) and highly-food insecure (17%) households are also unable to assess the availability of staple food in the coming year.

Likewise, food secure households are more confident of their capacity to avail of a sufficient supply of staple food.

More than 60% of food secure households are confident regarding their capacity to avail of a sufficient supply of staple food, compared to only 44% of highly food insecure households. More important, 20% of highly food insecure households cannot assess their capacity; this percentage is double the percentage of food secure households who are also unsure of their capacity to avail of staple food in the coming year.

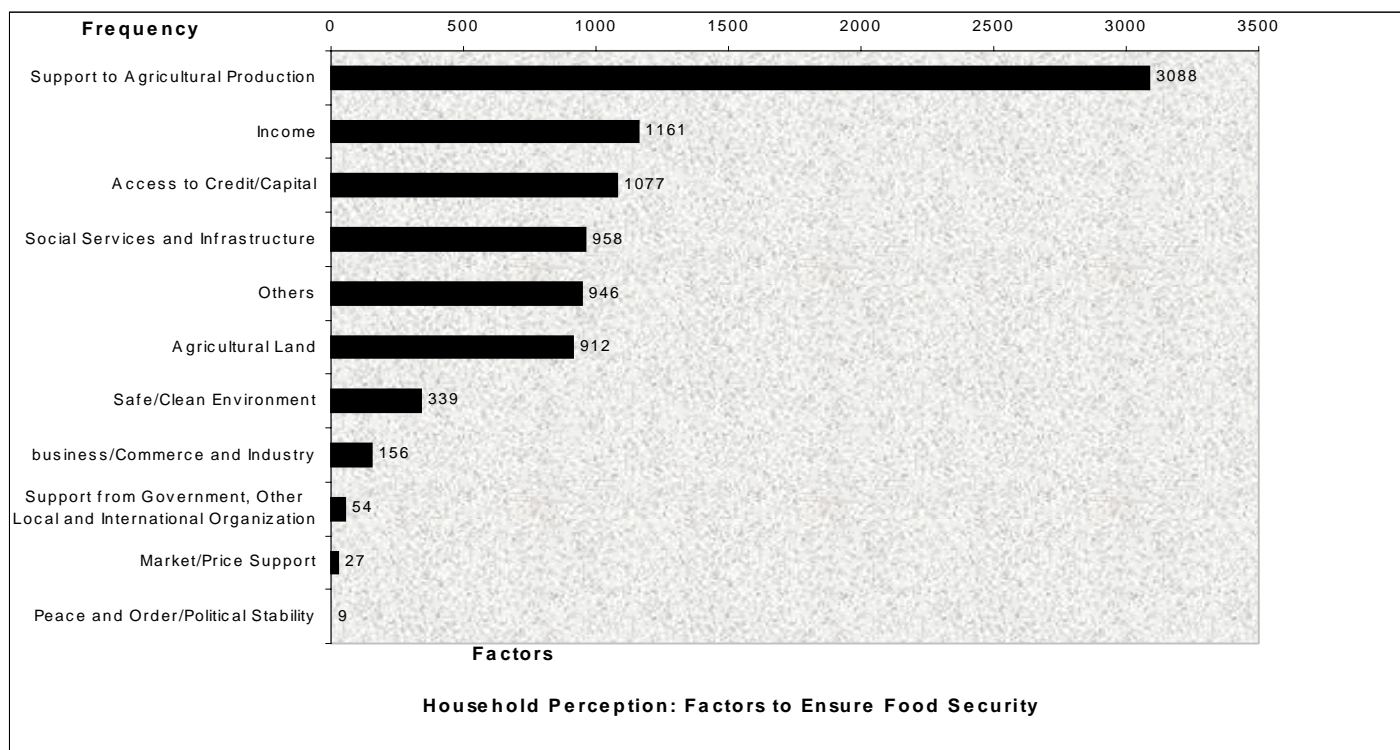
2. Perceptions on factors to ensure food security

Support to agricultural production ranked first among the factors identified by the households that would ensure food security in the future. Income, which ranked second as a perceived factor in ensuring food sufficiency, is also affected by the fact that most of the respondents

derive their income from agriculture. Notably, other factors include access to credit/capital, social services and infrastructure and access to agricultural land among others. Refer to the table and graph below.

Table 1.3 Household Perception: Factors to Ensure Food Security (All Countries)

Factors	TOTAL	Ranks				
		1	2	3	4	5
Support to Agricultural Production	3088	1063	1084	567	235	135
Income	1161	633	232	136	87	73
Access to Credit/Capital	1077	376	338	194	100	69
Social Services and Infrastructure	958	293	223	200	154	86
Others	946	262	248	188	129	116
Agricultural Land	912	420	230	159	75	28
Safe/Clean Environment	339	72	55	59	71	81
Business/Commerce and Industry	156	76	39	22	14	5
Support from Government Other Local and International Organization	54	25	18	9	1	1
Market/Price Support	27	6	10	6	3	2
Peace and Order/Political Stability	9	6	.	3	.	.



PART III - AREAS FOR STRATEGIC INTERVENTION

Building on the primary information gathered from the households and villages, preliminary results suggest certain areas for strategic interventions and possible initiatives that will address the issue at different levels, approaches and time frame. As stipulated in the project objectives and framework, the focus of intervention is on both the community and the policy environment. Operationally, these can be translated through interrelated activities that include participatory village-level planning, field project and policy advocacy.

Participatory Village-Level Planning

The gathered baseline information can best be used in community planning. Village information feedback is the most basic area of intervention. It will provide leads to a higher level and form of initiatives, including tools and approaches. The process will serve at least two important purposes. One, it would validate the findings from collective and varied perspectives from various sectors in the community, which in turn would feed into proper targeting of the type and magnitude of intervention and the focus group(s) for high impact projects. Two, the process of exchanging views and information will eventually encourage involvement and informed participation among members of the communities.

Valid appraisal of the household and village situation and community participation help in the formulation of strategic action plans which truly address the unique nature of the food security problems in every village.

Data on staple food consumption points to the occurrence of seasonal hunger in most countries. This requires planning at the community level for people to be able to effectively plan and address the nature of the problem at times where they have little or no access to staple food. Similarly, participation in community organization by both men and women, which is currently low, could be enhanced by providing them a venue where their contribution will be truly valued and where they could be involved in the process of translating their issues and concerns into implementable action plans.

Field Projects

Implementation of pilot field projects is apparently a direct way of improving the condition of the community while at the same time establishing key parameters for replication. The challenge is to identify distinct and innovative interventions that will effectively reach the rural poor and that would complement existing initiatives, which don't usually reach the target group. Building on the concept of food as a basic human right, projects should be designed to meet the basic food needs of every household. That is to say that the impact of projects should be primarily measured by how much it has improved the status of household food security. In this context not even the smallest percentage of food insecure households should be considered insignificant. Every hungry stomach counts.

Capacity building is a primary component of field project implementation depending on the need and nature of project activities. Similarly, an understanding of the interrelationship between and among various social, economic and cultural factors at play in the household and community life permits identification of key intervention points that would consequently lead to a target output.

Findings on the respondents' assessment of existing initiatives and organizations in the community suggests that current efforts hardly reach the appropriate target groups. Interventions to increase income and agricultural production consistently (for all countries) appear to be a priority in order to improve their level of food security. Possible projects might focus on capturing production surplus, i.e. increasing the proportion of yield/income from agriculture that remains in the hands of the farmers by eliminating unnecessary elements in the product flow such as the middlemen.

Policy Advocacy

In-depth examination of correlated factors combined with the lessons learned from community experiences during the planning process and project implementation are solid inputs in effective policy formulation and advocacies.

The direction of policy advocacy would be further defined by the results of previous activities. Gathering hard facts down at the household and community level, documentation of best practices in community project implementation, study/review of national and global issues critical to food security, village, national and regional consultations are all expected to shape and empower the policy advocacy component of the Project.

Among other policy issues highlighted in the results is the importance of access to land and improved local production in ensuring household food security and thus the need to address the issue of land tenure. This proves even more strongly that policy-shaping efforts towards land distribution is still a valid call, down at the village level. And that efforts for a sustainable increase in agricultural production is still a basic need for most of the farming households.

The framework of the 200-village project strikes at the heart of all efforts towards development by addressing the poverty and food security issues of the region and approaching it at the grassroots level. With trends pointing to a multi-stakeholder approach to respond to these issues, the project appropriately provides the framework for institutions to get involved and work together. This not only goes for NGOs but also intergovernmental agencies, governments, academe and the private sector as well.

This framework allows us to move forward. But primarily needed is reliable documentation of existing experiences and status of communities and effective sharing of information with other sectors as basis for well-targeted local actions and effective policy advocacy.