

Mato Bato

**Solving a Water Problem
On Negros Island Through
Community Action**



Chapter 1

PAPPA: Participatory Tools for Conducting Community-Based Assessments

The charts, tables, and maps in this field guide represent the results of a three-day needs assessment conducted in October 2003 in Nagbinlod Barangay, Santa Catalina Municipality, Negros Oriental, Negros Island, The Philippines. Sponsored jointly by the Unitarian-Universalist Church of the Philippines (UUCP) and Clark University (USA), the assessment represents an experimental approach in which the UUCP helps a community to settle its differences of opinion and build consensus about its highest priority needs. It is patterned on the PAPP (Policy Analysis for Participatory Poverty Alleviation) method developed in Kenya and Ghana, jointly with Egerton University (Kenya) and the Ghana Organization for Volunteer Assistance (GOVA). The approach has a number of effective strategies that may be helpful for community-based development in the Philippines.

What is PAPP?

PAPP is a planning tool that offers a new approach to community mobilizing, enabling village institutions to help themselves. It also assists local groups to influence national policy. Drawing on the combined experiences of Participatory Rural Appraisal (PRA) and household economic analysis, PAPP integrates strengths of qualitative information associated with PRA and quantitative data derived from household surveys. It functions at two levels. At the macro level, PAPP community-derived data inform and shape national policy on matters of pricing, subsidies, incentives, and taxes. At the local level, PAPP uses village household data to anticipate economic and environmental impacts of Community Action Plans (CAPs), which help villages solve their highest priority needs. PAPP bridges development gaps between local and national, quantitative and qualitative, and policy and practice.

PAPP community-based tools help to:

- " **build village consensus on public issues**, using conflict mediation techniques
- " **create action plans**, based on community consensus about highest priority needs and ways to address them
- " **assist local institutions to mobilize their own resources** to focus on these priority needs
- " **form partnerships** with external government, NGO, and private sector agencies
- " **integrate databases and village monitoring** to link village priorities with district plans and national policy.

Getting Started

The PAPPA method brings a fresh perspective to mobilizing communities. PAPPA leads to a Community Action Plan (CAP) that belongs to the community. The addition of household income data produces an economically viable plan that community groups can follow. Armed with a CAP, the community no longer needs to wait for governments or NGOs to come to its “assistance.” Village institutions can take initiative on their own. PAPPA can also be a powerful tool for informing national policy on poverty alleviation to reflect local realities.

There are three benefits in the PAPPA approach that more traditional design tools lack. First, PAPPA uses participatory methodologies to engage communities and to draw out voices not always heard in a community deliberations. The PAPPA CAP therefore becomes internalized within the community in ways that centralized decision-making and planning cannot achieve. Second, the PAPPA method is carried out in a public and transparent mode. Issues are debated. Those who feel that a possible solution may favor one interest group in the community at the expense of another can say so. Discussion enables all to ask questions and come to consensus about what should be done. Village fears that the chief or the chair-lady of a woman’s group will “eat the money” are less likely to occur because participation increases transparency. Third, public discussion informs local government and political officials of issues of priority to the community. It reduces possibilities of local politicians high-jacking projects (and project money) and claiming the patronage for themselves.

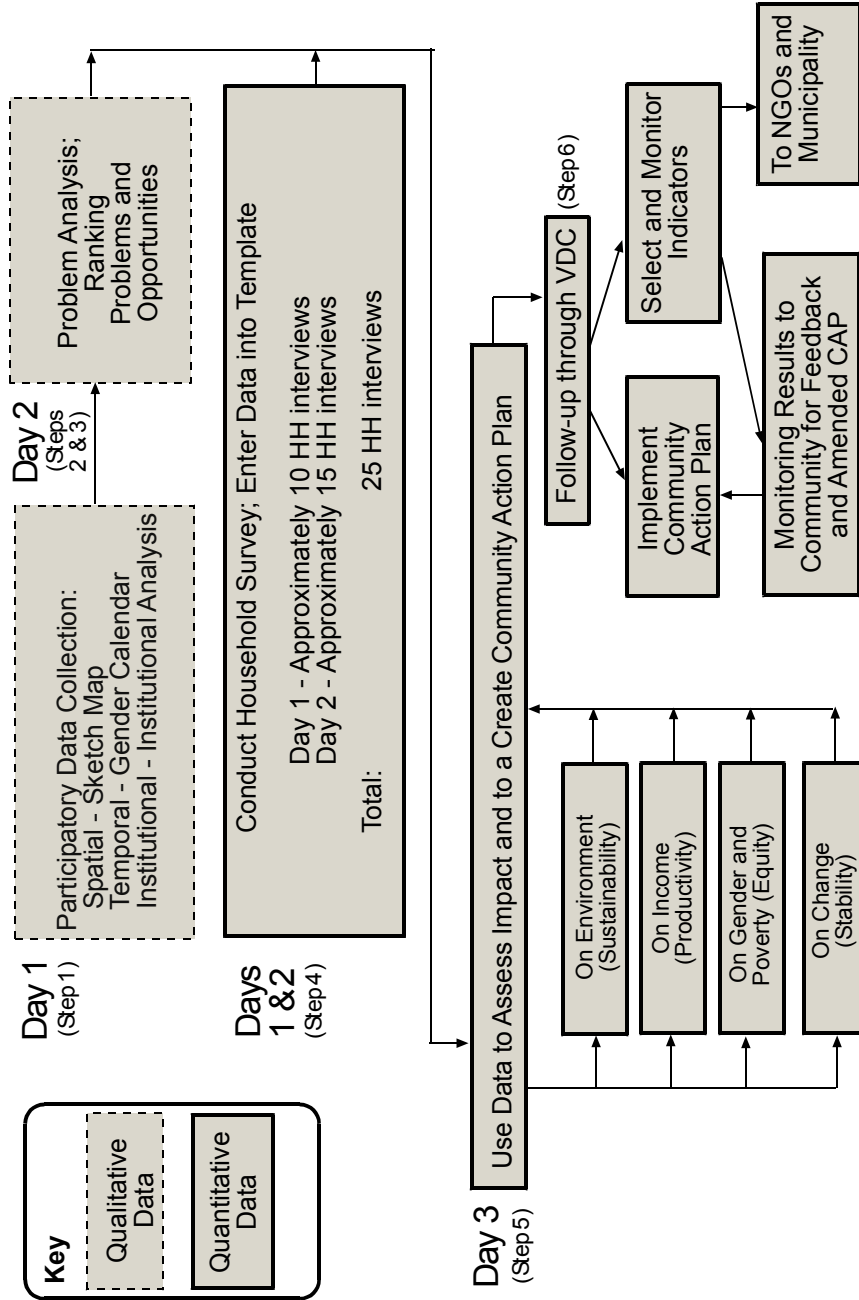
Formal Steps in the PAPPA Community-Level Process

The following pages offer one way to carry out a PAPPA three-day appraisal, as noted in Figure 1. If it is the first time the team has used the method, it may be helpful to follow these steps carefully. As the team becomes comfortable with the tools, it is strongly recommended to take liberties with the routine and adapt it to fit the local situation. There are dozens of different data-gathering tools and many different ways to develop a profile of household income and livelihood systems. This field guide offers one possibility. Local adjustments are strongly encouraged. To review options, you may wish to examine some of the handbooks and manuals listed in the bibliography at the end of this guidebook.

PAPPA Step One: Gathering Data (Figures 2 - 4; pp. 8 - 13)

While there are many participatory data gathering tools from which to choose, the Clark-UUCP team finds three of particular value: the community sketch map, gender calendar, and institutional analysis. The sketch map opens community dialogue on a subject about which everyone feels “expert.” The gender calendar pays particular respect to the women of The Philippines who have not always had a significant voice in decision making. The institutional analysis helps the community to see itself through a microscope and to consider how best to organize itself to achieve its goals. Think through the goals of your initiative and select tools that you think will best help to achieve them. For source books of participatory tools, see the bibliography at the end of this booklet.

Figure 1
Steps to Conduct a Three-Day PAPA Assessment, Leading to a Community Action Plan



PAPPA Step Two: Problem Analysis (Figure 5; pp. 14 - 15)

The data gathering tools unearth problems and needs the community has experienced in recent years. They offer opportunities for all members of a village to analyze what is causing a problem, why previous attempts to solve it have been ineffective, and what steps the community recommends to correct it. Problem analysis offers an additional step to pass ownership of the plan and eventual action to the entire community.

PAPPA Step Three: Ranking Problems and Opportunities (Figure 6; pp. 16 - 17)

Ranking is probably the most important tool in the entire PAPPA assessment. It encourages open and transparent discussion about the core needs of the community. Note that pairwise ranking seeks consensus and therefore STRONGLY discourages voting. Casting ballots creates winners and losers. PAPPA seeks to make the entire community winners and to build solidarity to implement action. Voting can be a distraction or even defeat the purpose of carrying out a PAPPA activity.

PAPPA Step Four: Household Survey (Annexes 1 and 2)

The household survey parallels the first three steps. You can begin collecting interviews as early as the morning of the first day and continue throughout the second. If you complete interviews by the end of the second day, you can tabulate all data using the PAPPA template and have a printout (Annex 2) by Day 3. This information will enable the community to assess potential impacts at the same time as they prepare their CAP.

PAPPA Step Five: Using Survey Results to Create a Community Action Plan [CAP] (Figure 7; pp. 20 - 23)

To create a Community Action Plan (CAP), you should: (1) review data from the spatial, temporal, and institutional exercises, (2) re-examine the problem analysis chart, and (3) integrate household data from the survey into the ranked priorities. A well-prepared plan is critical if a community is to record and formalize the consensus they have achieved during the previous two days. It also makes concrete the contributions the community will make as a means to negotiate partnership agreements with external groups.

PAPPA Step Six: Follow-up (pp. 24 - 25)

Follow-up is the hardest part of the PAPPA process. Some communities use local leaders to manage follow-up through a Village Development Committee. Others use an accepted authority figure such as the Barangay Captain. Some have special relationships with a local NGO or CBO or have access to an *animateur*. Still others work directly with municipality technical officers. Regardless of the structure, it is important for a community to discuss and agree on how they will follow up to implement their Community Action

Plan.

Building the PAPPa Team

In theory, it is possible that all of the skills needed to conduct the PAPPa method could be found in one individual and that the PAPPa “team” could be only one person. It is more realistic to have a bare minimum of two and, ideally, three to six persons to constitute the PAPPa field team. An effective team will have among its members:

- " participation/group facilitator - responsible for leading the team
- " household survey manager - responsible for leading the household survey, entering data into the CD template (included with this field guide), and assessing findings
- " gender specialist - responsible for assuring that all members of the community participate in the assessment process, and
- " village residents - leaders from communities already active with the PAPPa approach to bring a village perspective to the team.

It is assumed that the team will have language compatibility with the community. Team members should be experienced in community-based development as well as some of the technical skills needed in rural development.

Initial Field Visits

Before beginning the PAPPa appraisal, the team should observe a number of preparatory protocols. These include meeting with government officials, sometimes including prominent politicians in the area, as well as having thorough discussions with local leaders (formal and informal) about the planned PAPPa assessment. The PAPPa team should explain what people can hope to accomplish as a result, and what things the PAPPa appraisal will not accomplish. It may be helpful to photocopy Figure 1, which provides a quick overview of the community assessment process and represents the procedures involved. This is a good time to explain that PAPPa brings **NO MONEY** to the community. Rather, it provides something more powerful: a plan that the entire community has agreed upon, will support, and can implement.

It may also be helpful to distribute a few copies of the sample questionnaire (Annex 1) as an example of the kinds of questions that the team will be asking. The team should also find out if there are people in the community who are already skilled in some of the data gathering techniques and who might be helpful to facilitate the data gathering, take notes, prepare visual materials, or help out in a variety of other ways.

If the situation allows and a laptop computer is available, the team might also sit with small groups of community leaders and review the PAPPa PowerPoint presentation contained on the CD that accompanies this booklet. You can go slowly with the PowerPoint as well as translate the main points into local languages. This form of orientation for the community leaders will be most important as the appraisal goes forward. Finally, it is a good idea to review the CAP (page 23) with community leaders so they will see how the plan is formulated as well as ways

Villagers as Facilitators and Animateurs

One portion of a PAPPAs community assessment identifies village leaders who demonstrate skills and attitudes for helping communities to organize information they already know and mobilize resources they already have. Identifying and training such gifted village leaders creates a *cadré* of local “experts” who can assist other communities to carry out their own assessments. There is wisdom in this approach.

Building a community-based *cadré* strengthens capacities at local levels to gather and analyze data, mediate conflicts, build consensus, initiate partnerships, and implement action to solve a community’s highest priority needs. Long-term and sustainable solutions to poverty alleviation are rooted in helping local communities to solve their own problems and maintain these solutions. For example, in Ghana, Mary Amoah, a resident of the village of Bamenase, was an active participant in the community’s PAPPAs assessment in June 2002. Although limited in formal education and lacking experience in mobilizing communities, during Bamenase’s assessment she recognized that PAPPAs’s participatory tools could help her community to help itself. She worked with existing leaders, the village chief, government extension officers, and local NGOs to implement an action plan that built a secondary school, constructed a cassava processing factory, introduced commercial snail farming, launched a tree nursery for commercial trees, and created ponds for fish farming. Mary’s impressive accomplishments as organizer of community groups has now created a demand for her mobilizing and facilitating services in neighboring villages. She also continues as a strong leadership force in Bamenase.

Helpful Hints on Participatory Data Collection

Opening Meeting

The initial PAPPAs meeting is very important. It is a time to announce to the full community what they can expect. Think carefully about how to conduct this meeting. Work on getting good attendance, especially the local leadership that goes beyond the immediate village. It is often a good time to do the sketch map, as the map is easy and community residents enjoy the activity.

PAPPA Brings No Money

Stress early in the discussions that the PAPPAs team brings no money. Instead they deliver something more powerful: a community action plan and a village unified to implement it.

Gender

Think about starting out the data collection with women and men meeting separately and pursuing some of their perspectives in an environment in which all feel comfortable.

Conflict Mediation

The best tools to mediate conflict are those that help all parties to understand that all will benefit by negotiating a shared action plan. It is a plan in which there are no losers, only winners.

Regional and District Opinion Makers

The final step in the PAPPAs assessment (Day 3) is a Community Seminar to which district and regional government, business, NGO, and professional opinion makers are invited. Remember to keep everyone informed about the progress of the workshop as you carry out your exercises. This will help them to feel as if they too are part of the process.

NGOs Already Present

If your PAPPAs team is new to the community, remember that there are already formal and informal groups working there. Find out who they are and enlist their collaboration as partners in the PAPPAs assessment. If they do not become partners, they will eventually become antagonists.

LIPs

Every village has LIPs — locally influential people. Just as lips speak for an individual, so LIPs often speak for villages. Be aware of the LIPs in your community. While one cannot keep the LIPs silent, you can help others in the group have their turn as well.

Simultaneous Exercises

There are many different participatory exercises to carry out. With limited time and small staff, there will not be opportunity to conduct a large number of exercises. Think about conducting two or even three exercises at the same time. While one group is doing a sketch map, another can prepare a gender calendar. However, be careful not to end up with some data sets in which only men or only women have been involved. That may skew the reliability of the data.

Team Residence During the Exercise

Some of the most effective participatory assessments have taken place when the team lives in the community. Their presence brings small income to the families where they stay; evenings provide time to tell stories or sit about a fire. It also expands the levels of trust and friendship between community and the team. The residence may even lead to a PAPPAs team vs. village youth football match.

Chapter 2 Data Gathering

PAPPA Step 1A SPATIAL DATA: Village Sketch Map

Objectives:

- " To open a development dialogue within the community and between the community and the PAPPA team
- " To announce to the community that there is an opportunity to tell outsiders something about their accomplishments as well as needs
- " To begin building a data base to help community groups rank problems and consider solutions that they can undertake themselves.

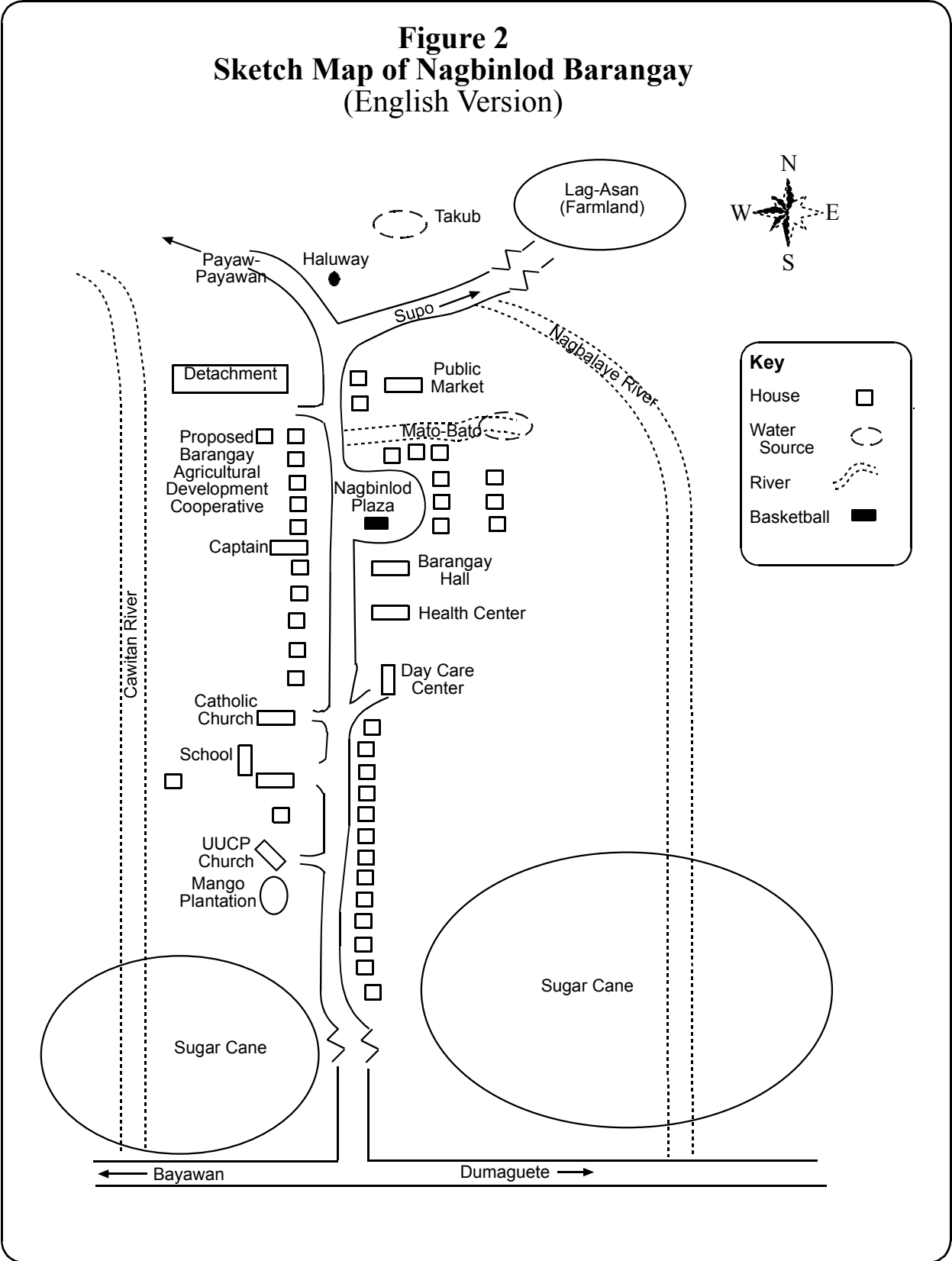
Instructions:

Explain that the best way to start a PAPPA assessment is to draw a sketch map that locates the village's development successes, failures, and continuing problems. It may be helpful to have smaller groups prepare their own maps — perhaps men, women, and youth. Groups can draw their map on the ground, build three dimensional models, or simply draw it on paper. At the end of the exercise, one person should make a clear copy of the map(s) on flip chart paper to report back to the community later that day or the next.

Comments:

The sketch map has proven to be a durable tool to encourage residents to talk to each other as well as to offer views about the community's accomplishments and needs. With the PAPPA assessment, it serves an additional purpose. In Nagbinlod, the map established baseline data for all subsequent exercises and enabled the people to point out some of their accomplishments: health clinic, day care center, public market, two churches as well as their unranked needs (see page 15.) Making the map and then analyzing its contents also provided time to discuss the deteriorating school and impassable roads. The map also pulls in many members of the community. We met in the school because of the pelting rain. There were only 10 or 15 villagers present when we began. In spite of the rain, people began to drop by to see what was happening. Halfway through the exercise there were 40 residents present. While the men were slow start, the women and youth were superb. The final map, a composite of all three produced, helped to stimulate discussion of the community's assets and needs.

Figure 2
Sketch Map of Nagbinlod Barangay
(English Version)



**PAPPA Step 1B
TEMPORAL DATA:
Gender Calendars**

The second data set are time-related characteristics. Just as differences from one location to another are important, it is equally significant to assess change over time. There are several temporal tools including timelines, trend lines, gender calendars, and seasonal calendars. All help a community to examine changes in their use of time. This booklet includes only gender calendars.

Objectives:

- " To encourage villagers to reflect on which gender carries out which functions in the community, especially those tasks related to production
- " To open conversations on whether the duties of each gender are equitable
- " To ask whether reconfiguring community duties would help to increase productivity.

Instructions:

Have men and women meet separately and compile a list of how they spend an average day. A variation on this task is to ask men to create their own daily calendar as well as what they *think* may be a typical day for women. The women do the same. Lively discussion is guaranteed when the groups come together to report their findings to the full assembly. Meaningful conversations have emerged that have had significant influence on the shape of the Community Action Plan.

Comments:

Gender matters. Most communities have experienced major changes in technologies, crops grown, marketing, availability of labor, size of plots, and much more. Many of these changes have a direct influence on gender-based divisions of labor that have sometimes remained the same over many generations. This exercise helps communities to rethink gender-based roles and consider alternative strategies more suited to the newer means of production. The exercise also documented that men help with domestic tasks such as collecting water and fuelwood. They also work together with women in the fields.

Figure 3
Men's and Women's Gender Calendars: Nagbinlod

Women's Views on Men	Women's Views on Women	Men's Views on Men	Men's Views on Women
<p>Group 1</p> <ul style="list-style-type: none"> • Plowing • Collecting water • Carpentry • Volleyball • Basketball • Gathering fuelwood • Grinding corn 	<ul style="list-style-type: none"> • Breast feeding • Doing laundry • Cooking • House cleaning • Weeding • Grazing livestock • Gathering fuelwood • Collecting water • Manogway og hayop • Child care • Bathing • Praying before sleep • Grinding/winning corn 	<ul style="list-style-type: none"> • 6 am - noon: Kabo Tubing; Farm work • 12 pm: Dinner • 1 - 5 pm: Farm work • 6 - 7pm: Eating supper • 7 - 8 pm: Vata • 9 - 4 am: Sleep 	<ul style="list-style-type: none"> • 6 am: Cooking, Sweeping, Breakfast • 8 am: Laundry • 10 am: Cooking • 11am: Eating lunch • 12 pm: Sleeping • 2 pm: Manghipos sa hinalay • 3 pm: Ironing • 4 pm: Loto • 5 pm: Sweeping • 6 pm: Supper • 7 pm: Resting • 8 pm: Sleeping
		Saturday - Market Day	And so the work continues the next day and the next day after that.
<p>Group 2</p> <ul style="list-style-type: none"> • 6 am: Bathing, Breakfast • 7 am - 12 pm: Farm work, Collecting water and fuelwood • 12 pm: Lunch • 1 - 5 pm: Farm work • 7 pm: Supper • 8 pm: Sleeping 	<ul style="list-style-type: none"> • 5:30 am: Maglong-ag para pamahaw dayon pag mata sa mga bata paligon dayon pailison pakanon pag kahumau paik-wilahon. Maligo • 7:30 am: Washing clothes, cleaning the house • 12 pm: lunch • 1 - 5 pm: gardening • 8 pm: Sleeping 	<p>Sunday</p> <ul style="list-style-type: none"> • 6 - 7 am: Bathing • 9 - 11 am: Church • 1 - 3 pm: Cuha-caha • 4 - 5 pm: Snack 	<p>Men's schedule prepared by E. Saldua and members</p>

PAPPA Step 1C
INSTITUTIONAL DATA:
Institutional Analysis

Objectives:

- " To determine which institutions in the community are the most significant and why
- " To assess villagers' perceptions about which groups cooperate most effectively with each other
- " To identify missing elements in a village's institutional capability and how these gaps might be corrected.

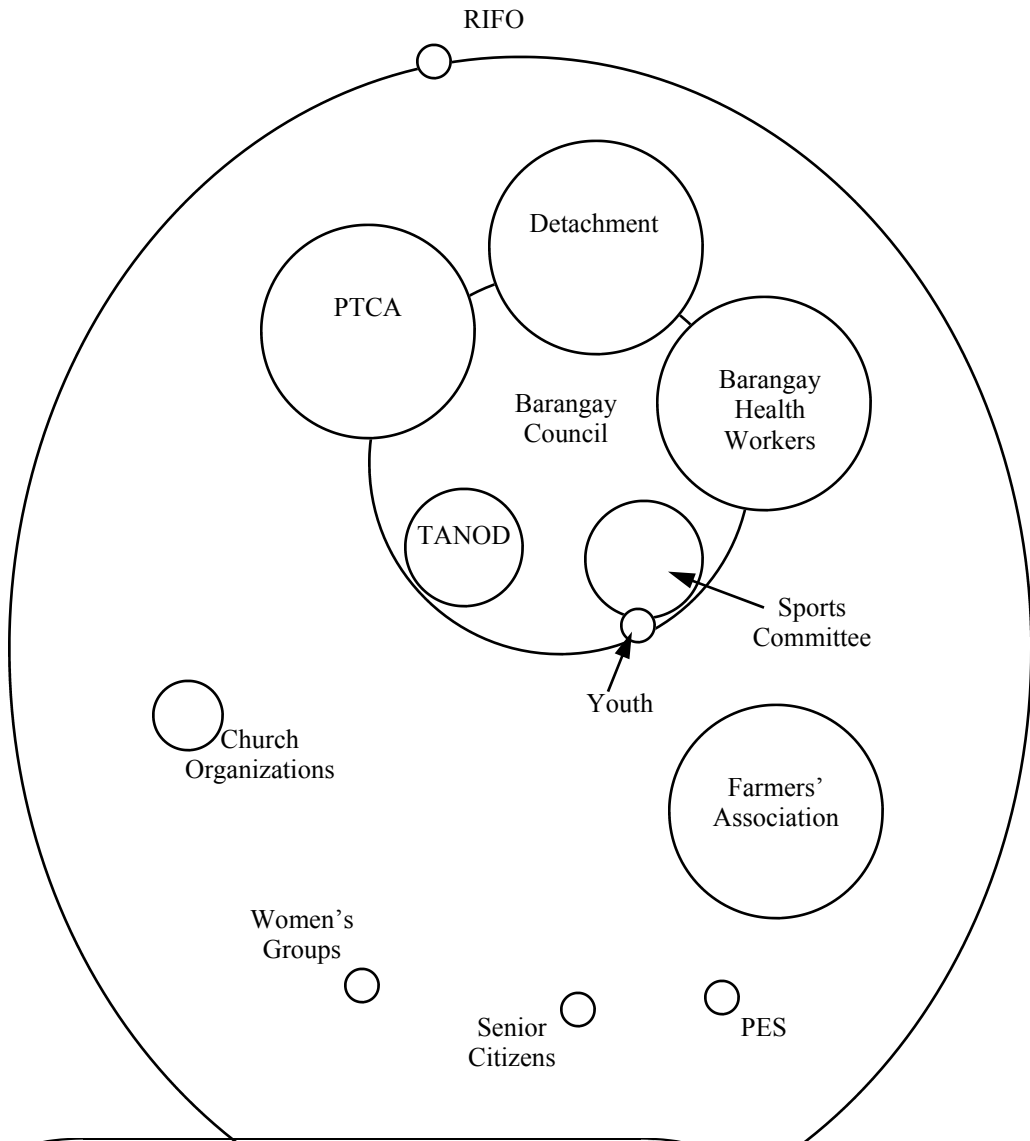
Instructions:

Show villagers an example (Figure 4) of an institutional analysis, noting how the larger circles represent the more important institutions and the smaller circles the less important. You might want to prepare different-sized circles of paper for villagers to use in the exercise. Or you may prefer simply to have people draw in the sand or on a chalkboard in a schoolroom. Some prefer to list all of the institutions first and use pairwise ranking to determine precise rank order of importance. Others feel that the ranking will emerge during preparation of the graphic. Another option is to code the chart by gender, using circles to represent groups dominated by men and squares to identify groups in which women are active. Once you have the size of the figures established, have group members arrange them so that overlaps represent the groups that cooperate with each other in the community.

Comments:

Measuring the importance and degree of cooperation among community groups is critical if a village is to implement its own Community Action Plan (CAP). Preparing this chart helps villagers to see their own capabilities in ways they might not normally consider. It also helps outsiders to understand tasks that the community can perform for itself as well as those for which outside assistance may be helpful. For example, there was a great deal of discussion about the relation of the Barangay Council to other groups in the community. While there appears to be close cooperation with the clinic, sports, and community associating, there is less linkage with the farmers' association, women's groups, day care, and the churches. One issue to monitor during CAP implementation will be how effectively the Barangay Council can draw in the farmers' association and women's groups.

Figure 4
Institutional Analysis: Nagbinlod (English Version)



Key:
PTCA - Parent Teacher Community Association
PES - Day Care Center
TANOD - Barangay Peace and Order Committee
RIFO - Farmer's Cooperative Organization
Detachment - small military unit to preserve stability in the area

PAPPA Step 2 PROBLEM ANALYSIS

Objectives:

- " To assist community residents to identify the causes of its most important problems in their community
- " To assist villagers to comment on why previous efforts to solve these problems have not worked
- " To consider new or altered strategies that might be more effective in helping the community to meet its basic needs.

Instructions:

Ask residents to compile a chart modeled on the example in Figure 5. The example provides information on only three of the community's problems. Many villages complete the exercise for 10 to 12 problems. While small group work may be helpful to provide this kind of information, it is recommended to complete this chart with the full community present or with representatives of ALL constituencies of the community. At this point in the process, it is critical that as many villagers as possible buy into both explaining why the problem has gotten out of hand and what are possible solutions. If portions of the village feel that the eventual plan of action represents a minority opinion of the community or if it appears to be a plan engineered largely by outsiders, they will probably boycott village action and certainly will not contribute money or other resources to support it.

Explain for the last column (opportunities) that it will be possible to add additional options later, especially from technical people who may be specialists in water, forestry, credit, or other technical needs. Note also that the problem analysis chart prepares the community for the ranking (Figure 6) that will be the next exercise.

Comments:

This is the first exercise that focuses on solutions. The three data columns (Causes, Previous Coping Strategies, Opportunities) are offered in sequential order. The process encourages the community to think first about the causes of its problems, then try to remember previous attempts they have made to solve them, including why they did not work, and finally to reflect on these points before offering new options.

Note that the villagers conducted their problem analysis BEFORE ranking. This is one way to proceed. Others prefer to do the analysis AFTER ranking. This field guide recommends that the problem analysis precede the ranking.

Figure 5
Problem Analysis (Three examples): Nagbinlod

Problem	Causes	Previous Coping Strategies	Opportunities/Solutions
Roads	<ul style="list-style-type: none"> • Heavy rains destroy the road • Limited government budget to maintain roads • Heavy trucks destroy the road 	<ul style="list-style-type: none"> • Several requests made to government • No community labor offered as local contribution 	<ul style="list-style-type: none"> • Committees meet to work out a plan • Offer counterpart labor • Raise funds • Petition Municipality
School	<ul style="list-style-type: none"> • Lack of funds • Classrooms neglected with no maintenance for last three years • Increase in number of pupils 	<ul style="list-style-type: none"> • Several requests from Barangay Council to Government with no success • No counterpart labor offered 	<ul style="list-style-type: none"> • Create committee • Provided community labor as local share
Water	<ul style="list-style-type: none"> • Open well is unsafe and unclean • Long distance to walk to bring water to houses • Source of clean water is limited 	<ul style="list-style-type: none"> • It is already budgeted by the Municipality but funds have not been made available 	<ul style="list-style-type: none"> • Volunteer labor • Purchase pipe to bring water to the Barangay

Unranked Needs for Nagbinlod (English and Cebuano)
October 2003

Needs	Gikinahanglan
Medicine Roads Agricultural Marketing Additional School Building Additional Teachers Water Tank Water Distribution Completion of Day Care Center Building Learning Materials for Day Care Center Rice Mill Consumer Cooperative Credit Cooperative Farmers Association Tree Planting Volley Ball Court Livelihood for Women	Tambal Dalan Pamaagi pagbaligya produkto aa uma Dugang eskwelahan Dugang magtutudlo Tanke sa tubig Tubo tubig para balay Pagtiwas Sa Day Care Center Building Galamiton pagpahanas sa bata Day Care Center Rocera Consumer Cooperative Credit Cooperative Grupo sa mga mag-uuma Tree Planting Volley Ball Court Alang sa kababayen-an

PAPPA Step 3 Ranking Problems and Opportunities

Objectives:

- " To enable the community to come to consensus about which problems are the most severe and which possible solutions may be most feasible
- " To employ pairwise ranking to help community residents carry out full discussion of their preferences.

Instructions:

Prepare a grid for pairwise ranking. Start with a matrix on a large flip chart or in the sand, such as the one in Figure 6. List the problems to be ranked (preferably no more than 12) in the left hand column and then again (in the same order) across the top. Block out each cell in which the same problem meets, e.g. roads and roads, schools and schools, or water and water. Also block out all cells below the line of the intersecting cells to avoid duplicate ranking. Then ask the group assembled to compare one pair at a time, and select which is the more severe problem. For example, to start with the first pair, ask which is a higher need, medicine or access roads? The people of Nagbinlod said roads, so the facilitator inserted an "Rds" in the cell where roads and medicine intersect. Complete the matrix so that each possible combination has been compared. Then count the number of times each preference was recorded. For example, Figure 6 shows water appeared 8 times and the rice mill 9. These numbers indicate that people ranked the rice mill as a need more frequently than water. This ranking technique enabled the PAPPA team to tell the villagers that they ranked roads and school rehabilitation as their highest need, the rice mill second, and water third. If you have not conducted a pairwise ranking before, it would be a good idea to have an experienced ranker conduct it the first time.

Comments:

Ranking may be the most critical of all the PAPPA tools. It gives the community the opportunity to discuss its preferences. If making a decision about one cell is difficult, skip it for a few minutes and go on to other cells. Come back later and see if it is any easier a second time. If there is still disagreement, do not try to settle the conflict by voting. PAPPA seeks to build unity and consensus in a community. Voting creates winners and losers and may disrupt community unity at some later date. If after all of these attempts there is still disagreement over a particular cell, put 1/2 point for each of the choices — indicating that it is a tie. That will have no adverse impact on the eventual ranked order. We did this in Nagbinlod when they could not agree on roads or schools as their #1 need.

Figure 6
Ranking of Problems: Nagbinlod

Problem	Med	Rds	Mrkt	Sch	Wat	DCC	Rice	Coops	FA	Trees	VB	WL	Num.	Rank
Medicine		Rds	Med	Sch	Wat	Med	Rice	Med	FA	Med	Med	WL	5	5
Roads			Rds	R/Sc	Rds	Rds	Rds	Rds	Rds	Rds	Rds	Rds	10.5	1
Marketing				Sch	Wat	DCC	Rice	Coops	FA	Mrkt	Mrkt	WL	2	7
School					Sch	Sch	Sch	Sch	Sch	Sch	Sch	Sch	10.5	1
Water						Wat	Rice	Wat	Wat	Wat	Wat	Wat	8	3
Day Care Center							Rice	Coops	FA	DCC	DCC	DCC	4	6
Rice Mill								Rice	Rice	Rice	Rice	Rice	9	2
Cooperatives									FA	Coops	Coops	Coops	5	5
Farmers' Assoc										FA	FA	FA	7	4
Tree Planting											Trees	WL	1	8
Volley Ball												WL	0	9
Womens' Livelihood													4	6

Ranked Order: Nagbinlod

- | | | |
|----------------------------------|--------------------------------|------------------------------|
| 1. Roads | 4. Farmers' Association | 6. Day Care Center Materials |
| 1. School | 5. Medicine | 7. Agricultural Marketing |
| 2. Rice Mill | 5. Coops (Credit and Consumer) | 8. Tree Planting |
| 3. Water (Tank and Distribution) | 6. Women's Livelihood | 9. Volley Ball Court |

Chapter 3

Building Community Capacity with Quantitative Data: The Household Survey

Reader's Guide: *If your PAPPA team is already skilled in conducting household surveys and using Excel, these instructions are unnecessary. Those with experience should feel free to design their own survey. To run the PAPPA Data Collection Template, you need Excel 97 or newer and a working knowledge of Excel. You do not need experience in sophisticated Excel, statistics, or SPSS.*

The household survey is a new component in participatory approaches. It enables the community to anticipate the impact on household income of their Community Action Plan, thereby bringing quantitative precision to community-based planning. It also helps national planners and policy makers to measure changes that the CAP is achieving in the village. Aim for a sample of at least 20 percent of the village. Work out with village elders (men and women) the varieties of the community's make up (gender, age, social class, size of farm, religious groups, ethnicity, levels of education, size of herds, etc.) and be sure to have proportional representation in your sample. Talk over these categories with the community to assure that your sample includes the full diversity of the village. Alternatively, if the chief or an elder has a list of community members, choose every fourth or fifth name to achieve a 20 to 25 percent sample. Review the sample questionnaire (Annex 1) and discuss it with community members to confirm that the questions are relevant. If not, change some of the questions, depending on your needs.

Instructions for use of the template to enter results of the questionnaire are available in the PAPPA handbook, *Listening to the People*. It is available from Clark, UUCP, or other PAPPA partners. Nagbinlod results appear in Annexes 2 and 3.

Preparing the Questionnaire for the Survey

Open the "Questionnaire" file on the CD (identical to Annex 1). This is an Excel file and can be printed on your computer's printer. It is intentionally short and limited in scope. It is not designed to develop detailed information about the community. Instead, it seeks only economic and production-related information that can help to pinpoint the nature of poverty in the community and identify the impacts that the Community Action Plan interventions will have on the poorest members of the village.

PAPPA Step 4 Conducting the Household Survey

There are standard procedures to administer surveys. Number the surveys before giving them to enumerators. Train your enumerators, asking them to administer the questionnaire to each other as a learning process. **STRESS** that they must explain to respondents that all individual information will be kept confidential. Arrange interviews at times convenient for the villagers' schedules. Try to meet people in their homes where they will be more comfortable. Avoid interviews in which many of the household children are lingering along the side of the room. Explain what is meant by "Household Provider," and look closely at the notes on the side and bottom of the questionnaire. The first time an enumerator administers a questionnaire will take a bit more than an hour. Subsequent interviews will take about 45 minutes.

Comments

It is important that the community see survey results as quickly as possible after conducting the survey. With a turnaround time of one or two days, the community can join with the PAPPA team and participate in the review of the survey findings. The community is already familiar with the information they have compiled through the participatory exercises. Returning the statistical data to the community and identifying community-based action strategies reaffirm local ownership of and responsibility for the CAP. This integrated data and action plan then becomes a tool with which the village communicates its needs to policy-makers and politicians. You can find strategies to use the survey results in assessing options in the Community Action Plan in the next section.

PAPPA Step 5A **Using Results of the Household Survey***

Objectives:

- " To assess impact on livelihood and environment of each CAP high priority options, with particular focus on income, productivity, ecological condition, and equity.

Instructions:

There is no magic formula for assessing impact. Rather, the assessment calls for your best judgment to anticipate impacts of the highest priority opportunities. Discussions in Nagbinlod involved the PAPPA team, government officers, NGO staff, and villagers. Previously, the ranking exercise indicated that the road and school were the highest priority for men and women, and the rice mill and water supply second and third (see the ranking section on pages 16-17). Because the road and school were both very large projects involving a lot of time, money, and resources, and because the community was not yet expert in the PAPPA method, we opted to go to another of the high priority issues — the third-ranked need of water. The community then embarked on three assessment activities for the water supply: reviewing the rationale for choosing water; learning the government's position; and assessing the economic and social impact that an improved water supply would have on health, safety, labor saved, and livelihood enhancement.

Rationale for Selecting Water as the First Project

The PAPPA team reviewed why water was among the highest priority needs. To start, the team worked with the villagers in a large meeting (about 40 people were present) and reviewed the comments made during the ranking exercise the previous day (Step 3, Figure 6). The women had said a great deal at that time. They had described their current system of collecting water and noted that there were three problems, and perhaps a fourth. The first issue was distance to carry the water. Both the men and women described how much time they spent carrying water. The second was the safety issue. The Mato Bato well had no protective fence. It was possible for children to fall into the well. To protect their children, the women wanted a different way to access water. Third, because there was no protective wall or fence on to the well, dirt and other debris often fell into their drinking water, making it unsafe. A fourth issue was the health factor resulting from the unprotected water supply.

For all of these reasons, the group — especially the women — determined that

* **Note:** The household interviews do not constitute a representative sample because the typhoon prevented the team from visiting households in the outlying parts of the community. The survey results are presented here for illustrative purposes.

water was a high priority. Then the discussion began about who in the community would take the lead to solve the problem and what would they do. Here several men entered the conversation. The Barangay Captain also became involved. They noted that there had been a commitment from the Municipality some months before to provide money to build a water tank adjacent to the well. While that would solve the problem of safety and keeping the water clean, it did not address the problem of distribution. It would still be a long distance to carry the water. The Barangay Captain explained that the money would pay only for the tank, not for any distribution system. Because the funds would accomplish only part of the job, the Municipality had been lagging in making the appropriation — and the Nagbinlod people feared that other politicians would reallocate the money to another Barangay.

Then the conversation turned to distribution. Several described need for a gravity-fed pipe to bring water to a standpipe in the middle of the village. They noted that while present funds were insufficient to pay for the pipe, there were different approaches they might explore. One was to raise additional money for the pipe and install it with their own volunteer labor. The second was to provide labor to help construct the tank. This would reduce costs of the tank, and the money saved could purchase the pipe. They would then use community labor to dig the trench to bury the water pipe.

It became apparent that solutions were available but needed further study, technical analysis, cost estimates, and discussion. The meeting concluded on a positive note with agreement that the Barangay Council and Captain should contact appropriate technical and administrative people and report back to the community. A date was set for November for these reports, and then the village would decide how to proceed.

Government Position

No representative from the Municipality was available, given the heavy rains and difficulties of transport. As a result, the government position was to be part of the Barangay Council's inquiry. The community assumed that the Municipality position could be flexible and that the above noted negotiations could take place.

Project Impact on the Community

The people anticipated two benefits from the project. First they would get improved water quality and quantity. That would be a major improvement over the present situation. Second, the process would provide an opportunity for the people to try out the community-based approach and see how effective it would be to solve their problems. They were fully prepared to provide labor and even to raise money to buy the pipe. But they had not previously tried that approach. The water experiment would help them learn whether the new strategy could work on roads and their school.

PAPPA Step 5B Creating the Community Action Plan (CAP)

Objectives:

- " To integrate the ranking, household survey analysis, and impact assessment exercises through adoption of a Community Action Plan (CAP)
- " To consider which portions of the CAP can be provided by members of the community and which will need outside assistance.

Instructions:

Bring a technical person (e.g. water engineer, health specialist, or planner) to scope out the needs in material, labor, management, and money for the highest priority options. Start with the technical needs. Then find out who or which groups in the community can provide materials, time, or money. If one of the needs is training (for example, in leadership), ask whether anyone in the village knows of organizations that provide such services. Finally, consider schedules. If the list of projects is small, you may be able to combine the CAP with selecting indicators to save the community from meeting another time.

Comments:

By this time the Nagbinlod villagers were becoming comfortable with setting their own priorities, planning how to solve them, and setting a course of action that would involve their own contributions as well as counterpart funds from partner agencies. Figure 7 presents Nagbinlod's CAP. The group wrote out the details of their discussion, along with dates and who would be responsible for taking action, as a means to create a written record — something like a community contract — representing their understandings. The CAP also included indicators that the Village Development Committee or Barangay Council could monitor to determine how progress they were making toward achieving their goals. The discussions ended on an extremely positive note and a resolve to get on with solving their own problems.

Figure 7
Community Action Plan: Nagbinlod

Problem	Suggested Activity	Analysis, Specifications, Estimates	Needed Labor, Material, Money	Who will act? Who will follow up?	When	Indicators	Other
Roads							
School							
Rice Mill							
To be completed by the community when the water priorities are met and problem solving process fully learned.							
Water	• Purchase 450 meters of pipe	• Secure estimate of total costs	• Pipe, fittings, pipe cement, teflon	• Barangay Captain and Council with Infrastructure Committee	• Nov/Dec 2003	<ul style="list-style-type: none"> • Amount of time spent collecting water • Change in illness • Change in amount of water available for special occasions (e.g. festivals) 	
	• Build tank	• Engineer from Municipality	• Contact engineer	• Community labor to install pipe			
	• Install pipe	• Engineer from Municipality	• Contact engineer				

PAPPA Step 6 Follow-up

Choosing (or Training) a Village Development Committee (VDC) or Barangay Council

The community may have an existing committee with explicit responsibility to implement action. If so, make sure that the existing committee represents all parts of the community — elders, other men, women, youth, ethnic groups, religious groups. In the case of Nagbinlod, the Barangay Council met these criteria. If such a committee does not exist, work with leaders to appoint such a group. There are often leadership training opportunities already available through the Municipality or other organizations. Help members of the committee take advantage of such training. There may also be retired teachers or civil servants in the village who could help implement the CAP. The main point is to identify a group of about seven residents who will take specific responsibility for implementation.

Selecting and Using Indicators

One task of the implementing committee will be to select and monitor indicators to determine how well CAP implementation is proceeding. Figure 7 contains a list of indicators (last column) that measure change in the community related to the CAP. For example, measuring the time that people spend collecting water is one indicator. Another is looking at health statistics from the clinic to see if water borne disease are decreasing. It is high priority that the committee designate one or two people to keep track of these numbers and periodically report back to the community.

Securing Competent Technical Assistance

Projects falter for many reasons. One is poor technical advice. The committee needs to work with the Municipality or appropriate NGOs to make sure that the water system, school, or roads are well planned, that issues such as drainage are considered, and that realistic designs are adopted. Most Municipalities have staff skilled in the basic technologies of development. If staff members are not available, work through village and district networks to find people knowledgeable in technical areas.

Holding Meetings and Keeping Records

Nagbinlod's CAP was created through participation. It is critical to sustain involvement of the entire community. One way is to assign a resident (ideally a member of

the committee) with the task of recording decisions taken at committee meetings and village discussions. One of the inevitable outcomes of community-based planning and action are rumors about leaders stealing money, placing wells and clinics next to their own homes, or adding all their relatives to the payroll of a community project. The best way to control rumors is to make all decisions public. Record keeping is critical. Making the records available to the entire community is essential to maintain community energy and morale.

Forming Partnerships

Community groups can do a great deal for their own development, but they normally cannot do it all. Working through the Municipality, the committee needs to learn about NGO, government, and international programs that can help with their CAP. Initially it is usually difficult to attract attention from external groups. The difference that enables a community to break out of its isolation is its CAP. The tactic that has worked in virtually every PAPPAs community has been: (1) creation of a plan — the CAP; (2) community initiatives to begin implementing the CAP; (3) good monitoring of indicators to show change; and (4) sustained community consensus in support of the plan. These four steps are within the grasp of any community and committee. Think carefully about how a community can use these four tactics to transform its CAP into development partnerships with external organizations.

Managing Money

Another basic management need is a transparent and fully accountable money management system. Individual communities have different systems, depending on local needs and traditions. At the core of any system lie three principles: (1) multiple signatories, ideally with one being from the Municipality or an NGO; (2) public reporting on a regular basis, including itemized expenditures and sources of income; and (3) an independent referee in case of disputes. With these procedures established and respected, funds should be well managed in ways that benefit the entire community.

Stimulating Additional Activities

All of these follow-up strategies are designed to create a physical infrastructure and an institutional capability to support additional projects. Building infrastructure and improving roads, education, health, water, and resource management benefit the entire community by enabling individuals to pursue more productive livelihoods. Strong communities support successful livelihoods; strong livelihoods help to build successful communities.

Annex 1

Household Questionnaire for Nagbinlod (Santa Catalina) (Consult Handbook for Instructions)

PROFILE OF RESPONDENT

- Questionnaire Code Number
1. Gender Male Female
2. Age 1 - 20 21 - 40 41 - 60 61 +
3. Completed Education None Primary Secondary Post-Secondary
4. Marital Status Single Married Widow/er Divorced
5. Household Provider Yes No
6. Years in community 0 - 5 6 - 10 11 - 20 21+
7. Adults in Household Male Female
8. Children under 18 in HH Male Female
- 8a. Of line 8, number in school Male Female

PROPERTY OF HOUSEHOLD

9. Type of Land Holdings Title Deed Family Permiss'n Rent
10. Amount of Land Owned (ha) Hectares
11. Amount of Land Hired Hectares
12. Amount of Land Farmed Hectares
13. Number of Livestock Owned Goats Cows Bulls Fowl
 Donkeys/Mules/Horses Sheep Pigs

Notes:

Questionnaire code should be affixed before given to enumerator; GIS code for special use only

3. Post -Secondary = post-secondary education of any form.

8. Data Entry Template will calculate total population of youth and adults in the household.

9. Title Deed = Land privately owned by the household; Family = land owned by a member of the family outside the household; Permission = Land used with permission (no rent) of someone outside the household; Rent = Payment of cash or portion of harvest for permission to use land.

page 2 Household Survey

HOUSEHOLD LIVELIHOOD

14. Major Source Livelihood Farming Wages Business Remittances

15. Farming

15.a. Crops Sold/year Pesos

15.b. Animals Sold/year Pesos

15.c. Forest Products Sold/yr Pesos

15.d. Fish Products Sold/yr Pesos

15.e. Do your crops meet the yearly household consumption? Yes No

15.f. If no, how many months do you need to buy food each year?

16. Wages/Salary (all HH)/year Pesos

17. Trading and Business/year Pesos

18. Remittances/year Pesos

Notes:

15.a. Includes fruit, vegetables, cereals, tubers
15.c. Includes forest products foraged from private or public lands
15.e. This question is intended to provide insight into the levels of food security of the community.
16. Includes casual labor
17. Includes handicrafts and village markets
18. Includes pensions

HOUSEHOLD EXPENDITURES (Annual)

19. Land Preparation Method Hand Ox Team Machine

20. Farm Costs/per year

- 20.a. Paid Labor Pesos
- 20.b. Land Preparation Cost Pesos
- 20.c. Fertilizer Pesos
- 20.d. Pesticides/herbicides Pesos
- 20.e. Food Storage Pesos
- 20.f. Artificial Insemination Pesos
- 20.g. Seeds Pesos
- 20.h. Irrigation Pesos
- 20.i. Livestock Health & Feed Pesos

21. Family Costs/per year

- 21.a. School Fees Pesos
- 21.b. Food & Consumables Pesos
- 21.c. Health Pesos
- 21.d. Transport and Fuel Pesos
- 21.e. Clothing Pesos
- 21.f. Housing Pesos
- 21.g. Social Events Pesos
- 21.h. Religious Contributions Pesos

Notes:
21.f. Includes rent and household furnishings.
21.g. Includes weddings, funerals, association fees, and community assistance funds

DISTANCE FROM AMENITIES

22. How many hours do you travel for items below

- Gather Fuel hours/per week
- Collect Water hours/per week
- Buy Household Items hours/per week
- Sell Farm Produce hours/per week
- To health services/clinic hours/per week

HEALTH

23. Diseases (choose three)

- Malaria
- Denge Fever
- Coughs, Flu and Colds
- Pneumonia
- Problems in Pregnancy
- HIV/AIDS
- Tuberculosis
- Malnutrition
- Skin Diseases
- Diarrhea
- Other (Specify)

Notes:

22. Time walking both ways.

23. Indicate which three of the list are most common in your community.

25. If your locally adapted measures of well being are unreadable in the template, shorten the question and re-enter it in the "parameters."

24. Work Days Missed Due to Sickness

MEASURES OF WELL-BEING

- 25. **MWB #1** - How do your land holdings compare with others in the community? below avg. about avg. above avg.
- 26. **MWB #2** - How do your livestock numbers compare with others in the community? below avg. about avg. above avg.
- 27. **MWB #3** - How does your food storage capacity compare to others in the community? below avg. about avg. above avg.
- 28. **MWB #4** - How does your house construction compare with others in the community? below avg. about avg. above avg.
- 29. What is the status of your household's well-being? going up steady dropping

Annex 2

PAPPA Data Collection Workbook

Version 1.1 (beta) - Kabe Ghana Special Edition: prepared by Kai Chi Leung, Clark University, 13 June 2002

(page 1)

Village Name:**Nagbinlod**

Note: These results are presented for illustrative purposes only. The typhoon prevented the team from conducting sufficient household interviews to obtain a reliable sample.

Population of Interviewed Households:
Households interviewed:

54
14

Profile of RespondentGender

	Total	Percent
Male	8	57%
Female	6	43%

Marital Status

	Total	Percent
Married	13	93%
Single	0	0%
Widow/er	0	0%
Divorced	1	7%

Age Group

	Total	Percent
0-19	1	7%
20-39	6	43%
40-59	4	29%
60+	3	21%

Head of Household

	Total	Percent
Yes	12	86%
No	2	14%

Education Level

	Total	Percent
NIL	0	0%
Primary	8	57%
Secondary	5	36%
Technical	0	0%

Years in Community

	Total	Percent
0-5	0	0%
6-10	1	7%
10-20	2	14%
20+	11	79%

Adult Population

	Total	Average
Male	15	1.07
Female	17	1.21

Under 18 Population

	Total	Average
Male	4	0.29
Female	18	1.29

Household Size

	Total	Average
Population	54	3.86

Under 18 Population With Schooling

	Total	Average	Percent
Male	3	0.21	75%
Female	7	0.50	39%
Total	10		45%

Household Livelihood

Major Source Livelihood

	Total	Percent
Farming	11	79%
Wage	1	7%
Business	1	7%
Remittance	0	0%

Farming Earning/Yr

	Total	Average
Crops	72750	5195.4
Animals	6850	489.29
Forest Products	0	0.0
Fish Sold	0	0.0

Crops Meet Yearly Household Consumption

	Total	Percent
Yes	8	57%
No	6	43%

Number of Months Food Purchased/year

Average: 28

Wages of All Household Members/Yr
Average: 5900.0

Trading and Business Earning/Yr
Average: 0.0

Income from Remittances/Yr
Average: 300.0

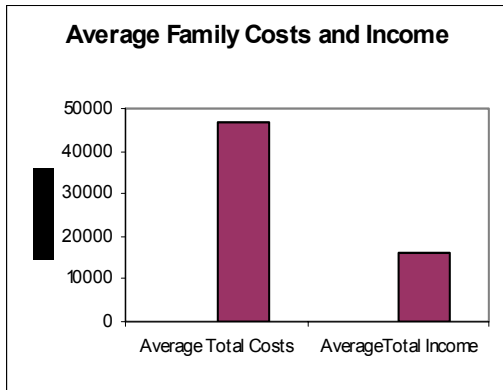
Total Income/Yr
Average: 16288.3

Household Expenditures					(page 3)
<u>Land Preparation Method</u>	Total	Percent	<u>Family Costs</u>		
Hand	8	57%	School Fees	Total	Average
Ox Team	5	36%	Food & Con	16470	1176.4
Machine	0	0%	Health	184900	13207.1
			Trans & Fuel	66200	4728.6
			Clothing	49600	3542.9
Farm Costs			Housing	131500	9392.9
	Total	Average	Social Events	19600	1400.0
Paid Labour	71300	5092.9	Religious	8200	585.7
Land Prep	11900	850.0	Total Family Cost	5770	412.1
Fertilizer	64898	4635.6		482240	34445.7
Pesticides / Herbicides	7000	500.0			
Food Store	0	0.0			
Artificial Insem.	0	0.0			
Seeds	6100	435.7			
Irrigation	1500	107.1			
Livestocks	13000	928.6			
Total Farm Cost	175698	12549.9			
Distance from Amenities and Health					
<u>Travel Distance</u>		Average	<u>Common Diseases</u>	Frequency	Rank
Gather Fuel		111.1	Malaria	0	9
Collect Water		283.8	Denge Fever	6	4
Buy Household Items		245.6	Coughs and Colds	14	1
Sell Farm Produce		31.5	Pneumonia	9	2
Clinic Visit		19.4	Problems in Pregnancy	1	7
			HIV/AIDS	0	9
			Tuberculosis	2	5
			Malnutrition	0	9
			Skin Diseases	7	3
			Diarrhea	2	5
			Other	1	7
			<u>Work Days Missed due to Sickness</u>		
			Average:		1.3

Measures of Well-Being			(page 4)	
How do your land holdings compare with others in the community?				
	<i>Frequency</i>	<i>Percent</i>		
Above Average	0	0%	<p>Note: Even though the sample is too small to provide a valid representation of the community, a few points can at least be mentioned. Water collection is consuming less than an hour a day of the households sampled. This is not a large amount of time and conflicts with the expressed needs of the community — water as third highest priority. Additional information should be collected here.</p> <p>Costs of farm and household management vastly exceed income — Pesos 47,000 total costs VS Pesos 16,300 total income. While it is common in rural household surveys for costs to be 50% higher than stated income, Nagbinlod's ratio of costs three times higher than income is unusual. Again, additional checking is needed. The initial explanation is that a combination of small plots, very low wages, isolation from markets, and a weak educational facility suggest multiple factors at work to keep income low. That Nagbinlod is, simultaneously, attacking four causes of poverty — road, schools, income generation, and water — indicates that the choice of priorities is generally consistent with needs.</p> <p>Finally, note the very last item (household well-being) that only 14% of the sample find that their well-being is declining. This figure suggests that the community feel positive about their well-being and may be ready to invest their own time and resources to make their community even better. It is not a community filled with despair.</p>	
About Average	8	57%		
Below Average	6	43%		
How do your holdings of animals compare to others in the community?				
	<i>Frequency</i>	<i>Percent</i>		
Above Average	4	29%		
About Average	2	14%		
Below Average	8	57%		
How does your food storage capacity compare with others in the community?				
	<i>Frequency</i>	<i>Percent</i>		
Above Average	4	29%		
About Average	4	29%		
Below Average	6	43%		
How does your house construction compare with others in the community?				
	<i>Frequency</i>	<i>Percent</i>		
Above Average	0	0%		
About Average	7	50%		
Below Average	7	50%		
What is the status of your household's well-being?				
	<i>Frequency</i>	<i>Percent</i>		
Going Up	3	21%		
Steady	9	64%		
Dropping	2	14%		

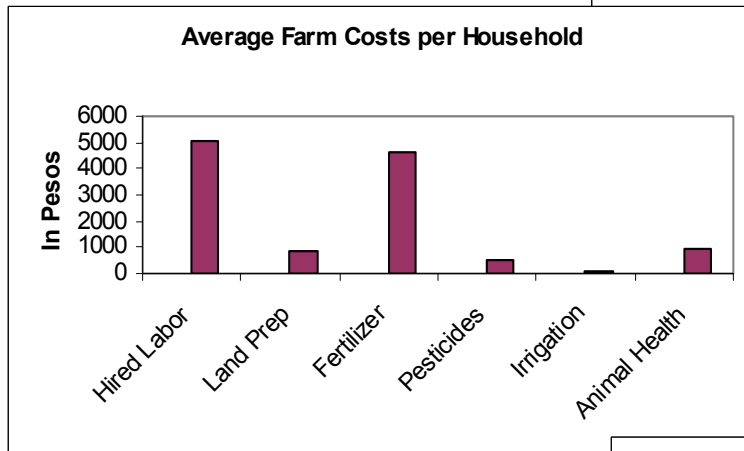
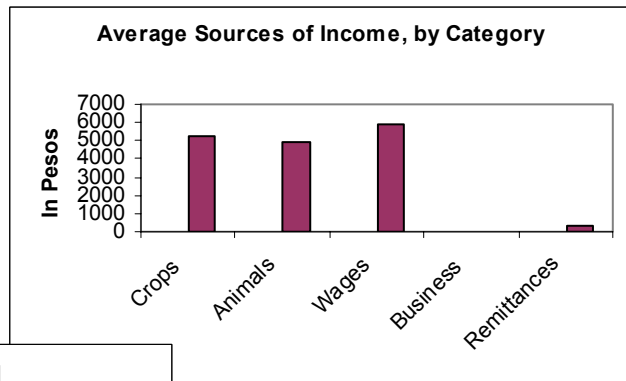
Annex 3

Charts Derived from the Household Survey Data



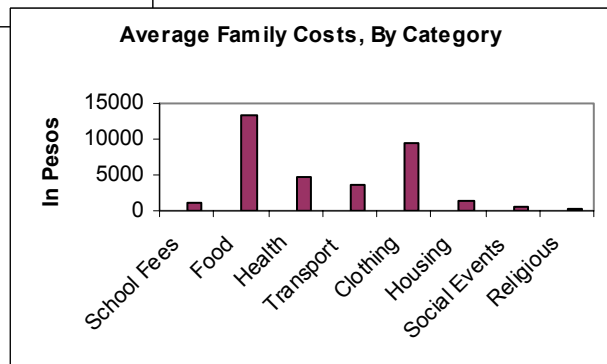
The relationship of family income to costs is revealing for the people of Nagbinlod. While many rural surveys report expenses in excess of income, the figures for Nagbinlod are excessive. They indicate that average cash income is very small and not nearly enough to cover expenses. Projects in the community that focus on building infrastructure or on increasing income will definitely help to solve the problem of low income.

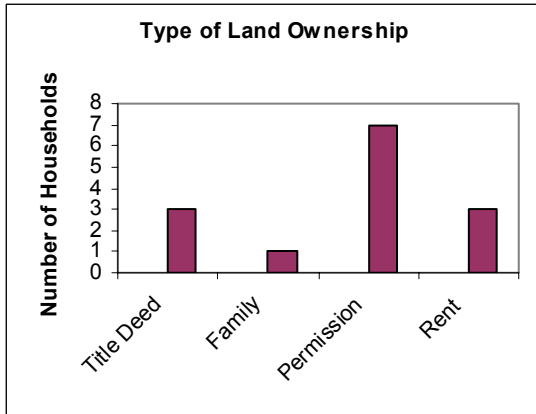
Note that income from crops and animals equals about 10,000 pesos and wages provides only an average of 6,000 pesos per household. These figures confirm that agriculture is the single largest source of livelihood for the community.



Farm costs of 10,000 pesos for labor and fertilizer are equal to the income from crops and animals (see above). This suggests that the farms are not profitable. This situation would be acceptable if the farmers grew enough food for their families. The next chart suggests that the farmers do not grow enough food to feed themselves.

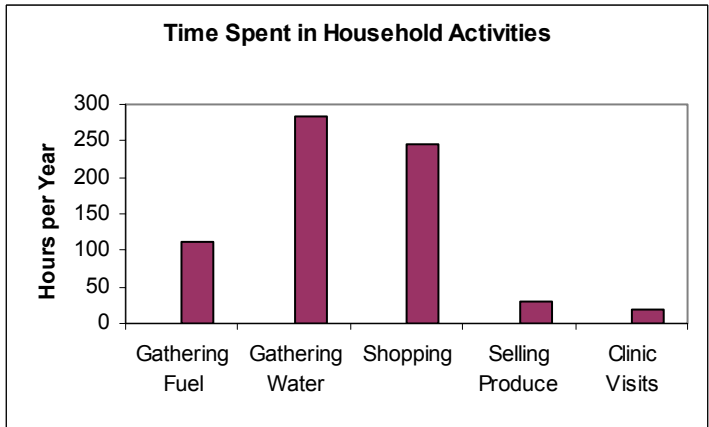
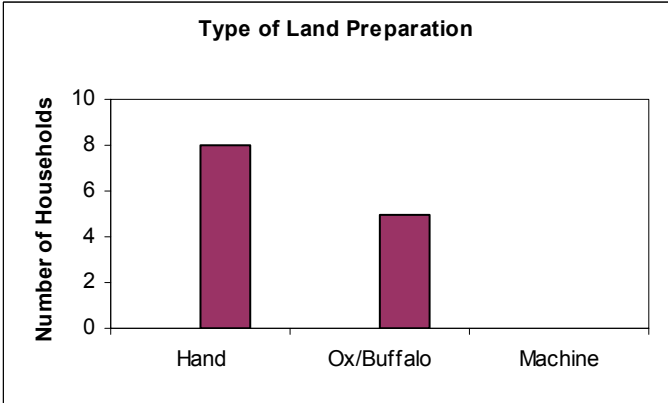
Food costs of more than 13,000 pesos per household are greater than income from crop and animal sales. Here is the nub of Nagbinlod's problem. Farm costs are equal to farm income yet families are spending an average of 13,000 pesos per year over and above any profit from their farms. The data suggest that the key to solving the community's problems are emphasis on income-generating infrastructure and direct income-generating activi-





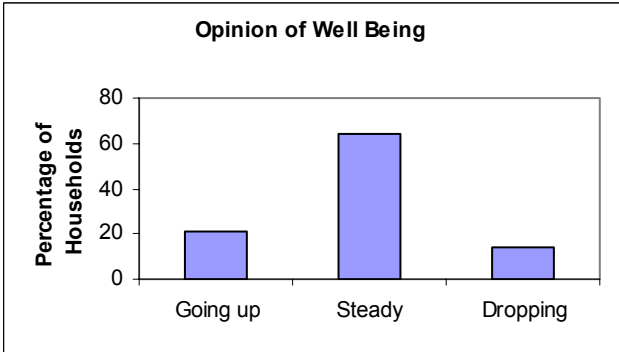
Few families interviewed (3 out of 14) own title deeds to their land.

Most families prepare their land by hand; some use animal power; none uses machinery.



Village households spend most time collecting water and buying household goods (shopping). Even though they spend less than a day to collect water, it is still a large item for the community. It suggests that the water priority is sound. They spend little time selling produce, thus confirming that their farm income is low. Given the fertility of the soils, focus on road improvement might make marketing crops much easier.

Nagbinlod residents feel good about their community and their lifestyle. Eight percent of the community feel that their well being is either rising or at least remaining steady.



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