DMMMSU

INSTITUTE OF AGROFORESTRY
AND WATERSHED MANAGEMENT

CATC | Canolfan Astudiaethau Tir Cras
CAZS | Centre for Arid Zone Studies

Strengthening the Institute for Agroforestry and Watershed Management, Philippines.

VISIT REPORT AUGUST 2004

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Contents

Executive Summary

1. Progress against milestones

Progress on each set of activities has concentrated on development of course outlines and module contents. Less progress has been made on the production of teaching materials, although ideas have been discussed. It was not possible to discuss the progress of dissemination and outputs, although areas of work needed to develop academic papers were identified.

2. Surveys

The data analysis process for each of the surveys is to date limited. The reports written cover the basic points raised by the data and provide simple tables of frequencies illustrating the sample characteristics. There has been no attempt to look for relationships. This is particularly telling in the case of the farmer survey.

Suggestion 1. Senior Staff are provided with EXCEL, ACCESS and SPSS literacy and skills training, to the point that they are able to design analyses, instruct junior staff and maintain quality control.

Suggestion 2. Once conversant with the software packages senior IAWM staff should take a more 'hands-on' approach to data analyses which develops and takes them beyond their current practice.

Suggestion 3. Careful storage of 2 read-only copies of each of the survey datasets stored on two separate CDS should be produced, after final corrections have been made. In the case of the Farmer Survey this should be done before any extended analysis is undertaken. These two copies should serve as i. a master reference copy from which any analysis is undertaken, and ii. a back-up copy of the reference master. All other copies should then be deleted.

Suggestion 7. A formal evaluation of each of the survey methodologies should be undertaken with the purpose of documenting lessons learned and changes for the future. This will also be an important aspect of any academic papers written.

THERE IS A NEED TO SUPPLY IAWM WITH A COPY OF SPSS!!

3. Farmer survey

A summary report has already been prepared. Because of the limited understanding of the use of ACCESS and EXCEL the data has not been analysed as far as it could be. The original intention was for the Farmer Survey – *viz.* Farmer Participatory Problem Analysis - to provide detailed information about the technical, economic and social problems farmers faced in their everyday use of watershed resources. This detailed information could then be used to focus teaching attention on 'real' farmer problems.

However, the final result of the survey is something a little different which rests at the level of more general generic problem issues. It is more difficult to see how these might guide the curriculum and what teaching materials might come forward from this until extended analyses have been undertaken.

Suggestion 4. There is potential therefore to use the experiences of the survey process to address issues and produce teaching materials in:

- ***i. computer literacy and communication skills;***
- ***ii. research design and analysis;***
- ***iii. participatory processes: what they are as research and process building, how to implement them and which techniques to use;***
- ***iv. farmer priority problems (? see suggestion below).***

There are a number of steps in the data analysis process which have not yet been paid any attention. The standard series of steps in data analysis are:

1. Data entry
2. Data exploration – checking and cleaning
3. Data aggregation – categorisation and coding
4. Data exploration – checking and cleaning
5. Data exploration – pattern identification
6. Data analysis – descriptive stats, and application of SE/statistical tests, production of charts and graphs

The farmer survey database has to date progressed as far as step 2. A significant amount of effort what put into reorganising and aggregating the databases during this trip. A full report of the IAWM work done what was changed is given in Section 3.2. and Annex 3 below. A list of tasks to be completed is given in a separate report which has been distributed to the JRTs for action. A copy is Appended here.

Suggestion 5. The farmer survey analysis is extended with support from CAZS beyond the original plans presented in the Intermediate Report.

Suggestion 6. IAWM staff develop a list of Farmer Survey 'Questions and Hypotheses' for testing as a first step in the extended analysis.

4. Agreed Actions

The following actions were agreed:

1. To discuss with Paul Smith the need/timetabling to produce extended analyses of the farmer survey
2. For Christine Turaja to develop a list of questions/hypotheses for the extended farmer survey analysis
3. To discuss with Paul Smith the need/timetabling to produce extended analyses of the student/graduate survey

4. To extend analysis of the student/employer survey on the basis of experiences with the farmer survey
5. After discussion with Paul Smith to agree a short training programme for senior staff and junior staff in EXCEL, ACCESS, SPSS and POWERPOINT as a formal project activity
    - Where for BAO details the form of training required
    - And Dr Antolin to identify persons within IAWM/DMMMSU able to deliver this training
6. For a data management protocol to be agreed
7. After agreement with Paul Smith For IAWM staff to organise a formal evaluation of the different survey methodologies that stands as a record of the methodological:
    - Strengths
    - Weaknesses
    - Lessons learnt
    - Changes for the future

1. Introduction

This document stands as a record of a visit to IAWM-DMMMSU between 23rd August and 3rd September 2004, by Bianca Ambrose-Oji of CAZS University of Wales, Bangor.

The objectives of the Asia Link project are to strengthen the teaching, training and extension activities at IAWM so that the institute is able to contribute more effectively to improving rural livelihoods and enhancing watershed management strategies in the surrounding areas and beyond. The main activities include participatory curriculum development and preparation of teaching and rural extension materials in topics relevant to agroforestry and watershed management.

The objectives of this visit to IAWM-DMMMSU were:

1. To check general progress towards the Intermediate Report activity milestones;
2. To review and discuss the form and scope of current outputs from the survey activities;
3. To develop further analysis of the survey datasets;
4. To discuss and develop an action plan prior to the November meeting.

This report is divided into four sections, each one of which reports on progress against objectives.

Work at IAWM / DMMMSU during this visit was particularly challenging since heavy rain and storms prompted the closure of the University, there was no power during the first week neither was there an internet connection. Because of the severe weather conditions staff were not available to work during the weekend. During the second week IAWM staff were called on for other unexpected university duties which took them away from the IAWM offices. A significant amount of time was spent supporting Ronald Estoque obtaining his visa to attend his MSc course which included extra travel to Manila.

2. Progress Towards Activity Milestones & Other Issues

2.1. Activity 2. Students and employers survey.

The survey summary reports are completed. Extended analysis can be undertaken after learning from further data analysis of the farmer survey has been undertaken. This should act as a model for how more substantive conclusions can be drawn from the dataset. Further ideas concerning the reporting format (i.e. for whom and for what) will then be possible.

Ideas about how this material can then be fed into the curriculum will then be developed.

2.2. Activity 3. Review of technologies

The database is complete. No further analysis will be undertaken. Ideas concerning input into the curriculum are covered in point 2.6. below…..

2.3. Activity 4. Bibliographic database

There are no problems with the CARDBOX database. Generation of the matrix has not progressed further.

2.4. Activity 5. Farmers survey

A summary report has already been prepared. Because of the limited understanding of the use of ACCESS and EXCEL the data has not been analysed as far as it could be. Some of the background information to the problem analysis is missing. Some of the database tables are incomplete. Plans have been made to develop the analysis and a significant amount of work was undertaken during this visit to extend the functionality of the databases. A full report is given in Section 3.2. and Annex 3 below. A list of tasks to be completed is given in a separate report which has been distributed to the JRTs for action. A copy is Appended here.

2.5. Activity 6. Task 4. Workshop to decide on module contents etc.

There is progress on this task following on from the workshop with Paul Smith in June/July. A refined list of possible module titles and module contents is being developed in discussion with other Faculty and University sections. There has been a significant amount of thinking and effort placed in resolving how the perspectives of students and employers can best be integrated into future course contents and how this can be 'concretised' in the IAWM / Philippines context. Further discussion concerning the social aspects of the course were supplemented with BAO's course material serving as an example of teaching at CAZS/UWB. The hope is that ideas and draft module contents will be ready for the meeting with the Board of Regents for approval in October, but if not a more fully developed package can be presented at a meeting in March 2005.

2.6. Activity 8. Developing teaching materials

General discussions with IAWM members outlined that thinking concerning how/what to develop is ongoing. However no concrete proposals as of yet. The role of various partners concerning their input over the provision of content and editorial functions needs to be revisited. Again senior IAWM staff need to understand better how to use EXCEL and POWERPOINT to develop materials, and need further support extending their presentation skills. These are issues that will need to be revisited.

2.7. Dissemination and outputs

Antonio Ogbinar was on leave and therefore not available for discussions concerning publications and flyer/poster production.

There was no time during the second week to visit Juana Peralta in San Fernando concerning potential radio broadcasts.

2.8. Miscellaneous

A computer logbooks detailing software and hardware purchases has been prepared and is in use. This logbook also records who uses which machines on which days and for what purpose so that there is a record of achievements against task lists.

3. Survey Outputs and Suggestions

3.1. General Comments

3.1.1. Software literacy, skills and data analysis

The data analysis process for each of the surveys is to date limited. The reports written cover the basic points raised by the data and provide simple tables of frequencies illustrating the sample characteristics. The datasets for each of the surveys have not undergone extensive analyses, and there has been no attempt to look for relationships attributable to either social and or bio-geographic variables.

The reason for this is a general lack of computer literacy and appreciation of the function and capacity of the computer software supplied/available. There is also a lack of awareness concerning conventional data analyses procedures and the need to mix and match the use of different software packages according to the task in hand and the questions or analyses being undertaken.

The 'chain-of-command' approach to working, whereby senior members of staff rely on junior members or other faculty staff to undertake separate data entry and analysis tasks, entrenches a position where quality control and analytical development is hampered.

Suggestion 1. Senior Staff are provided with EXCEL, ACCESS and SPSS literacy and skills training, to the point that they are able to design analyses, instruct junior staff and maintain quality control.

Suggestion 2. Once conversant with the software packages senior IAWM staff should take a more 'hands-on' approach to data analyses which develops and takes them beyond their current practice.

3.1.2. Survey outputs

Survey reports
Although the analyses presented in each of the survey reports may be limited, the reports themselves are well structured and comprehensive.

Assuming that further analyses are undertaken the reports provide a more than adequate basis from which to develop some interesting academic and other papers.

It would be useful if the reports included a section on the data analysis techniques and also a section evaluating the methodologies employed.

Survey databases
The databases themselves require a further iteration of development and then a more substantive set of analyses can be undertaken.

Best Practice now needs to be encouraged in the management of the data.

Suggestion 3. Careful storage of 2 read-only copies of each of the survey datasets stored on two separate CDS should be produced, after final corrections have been made. In the case of the Farmer Survey this should be done before any extended analysis is undertaken. These two copies should serve as i. a master reference copy from which any analysis is undertaken, and ii. a back-up copy of the reference master.

Teaching materials and curriculum development

It is more than obvious how the graduate and employer surveys can be used for the development of MSc modules. However, it is less obvious how the farmer survey can be used for teaching within the current IAWM teaching modules.

The original intention was for the Farmer Survey – *viz.* Farmer Participatory Problem Analysis - to provide detailed information about the technical, economic and social problems farmers faced in their everyday use of watershed resources. This detailed information could then be used to focus teaching attention on 'real' farmer problems.

However, the final result of the survey is something a little different which rests at the level of more general generic problem issues. It is more difficult to see how these might guide the curriculum and what teaching materials might come forward from this.

What was clear from this experience is the need for graduates to be able to:

i. Be conversant with, and be able to use EXCEL, ACCESS, SPSS properly;

ii. Improve their communication skills to be more able to converse with farmers in the field;

iii. Move away from seeing social surveys as simply questionnaire based or 'descriptive';

iv. Undertake a range of participatory action planning and research techniques;

v. Improve questionnaire design towards OBJECTIVES rather than 'standard' formats which collect basic descriptive demographic/socio-economic;

vi. Understand the importance of sampling and keeping records of the sample;

vii. Undertake comprehensive data analysis including simple non-parametric statistical tests on data contained in the correct format.

Suggestion 4. There is potential therefore to use the experiences of the survey process to address issues and produce teaching materials in:

v. computer literacy and communication skills;

vi. research design and analysis;

vii. participatory processes: what they are as research and process building, how to implement them and which techniques to use;

viii. farmer priority problems (? see comment below).

It may be clear after further development of the survey analysis how the research outputs might be used in the watershed management subject specific modules.

Suggestion 5. The farmer survey analysis is extended with support from CAZS beyond the original plans presented in the Intermediate Report.

Suggestion 6. IAWM staff develop a list of Farmer Survey 'Questions and Hypotheses' for testing as a first step in the extended analysis.

3.1.3. Evaluation of survey methodologies

Although some of the evaluation issues may have been touched on during the workshop with Paul Smith, there does not seem to be a formal evaluation of the survey methodologies. This would help for future survey design and will be an important aspect of any academic papers written. A convincing evaluation will only come from a discussion of experiences when these are still fresh in people's minds.

Suggestion 7. A formal evaluation of each of the survey methodologies should be undertaken as soon as possible with the purpose of documenting lessons learned and changes for the future.

Evaluation of the Farmer Survey methodology

From a CAZS point of view the participatory problem analysis was diluted because of changes to the original methodology and an increasing emphasis on completing the questionnaire survey. The breakdown of 'causal problems' into more focused intermediary problems was not as detailed as hoped. The reasons for this are:

i. no further support to IAWM staff from CAZS/ICSL after the initial introduction of a new and challenging methodology;

ii. field modification of the methodology to suit the capabilities of JTRs responsible for carrying out the survey work;

iii. no exchange of research outputs between UK and IAWM during the course of the work to provide support and development capacity.

3.2. Farmer Survey: Comments and Suggestions

There are a number of steps in the data analysis process which have not yet been paid any attention. The standard series of steps in data analysis are:

i. Data entry

ii. Data exploration – checking and cleaning

iii. Data aggregation – categorisation and coding

iv. Data exploration – checking and cleaning

v. Data exploration – pattern identification

The farmer survey database has to date progressed as far as step 2. The main reasons for this have been noted above.

During this visit a significant amount of effort was put into re-organising the database and developing the potential for further analysis. Annex 3 outlines the main changes made.

A separate document appended as Annex 4. Lists the tasks still to be completed to the farmer survey data and databases.

This is not the end of the database editing and analysis process. However, further work can only be justified if the research questions and hypotheses to be tested can be made explicit.

4. Agreed Actions

The following actions were agreed:

8. To discuss with Paul Smith the need/timetabling to produce extended analyses of the farmer survey

9. For Christine Turaja to develop a list of questions/hypotheses for the extended farmer survey analysis

10. To discuss with Paul Smith the need/timetabling to produce extended analyses of the student/graduate survey

11. To extend analysis of the student/employer survey on the basis of experiences with the farmer survey

12. After discussion with Paul Smith to agree a short training programme for senior staff and junior staff in EXCEL, ACCESS, SPSS and POWERPOINT as a formal project activity

    - Where for BAO details the form of training required
    - And Dr Antolin to identify persons within IAWM/DMMMSU able to deliver this training

13. For a data management protocol to be agreed
14. After agreement with Paul Smith For IAWM staff to organise a formal evaluation of the different survey methodologies that stands as a record of the methodological:

    - Strengths
    - Weaknesses
    - Lessons learnt
    - Changes for the future

Annex 1. Itinerary

Date	Am	Pm	Notes
Mon 23rd August	Travel UK	Travel UK-Amsterdam - Manila	
Tues 24th	Travel to Manila	Travel Manila – Bacnotan/Sn. Juan	
Wed 25th	Meet with Dr Antolin & Dr Turaja for progress report and fix visit objectives	Read survey documentation and reports	No electricity or internet connection
Thurs 26th	Farmer survey ACCESS database examination	Work on ACCESS files and report writing	No electricity or internet connection – flooding at Bacnotan. DMMSU shut.
Fri 27th	Travel into DMMMSU	Work at Sunset Beach – visa issues. Discussion to resolve ACCESS queries with Nelly and Christine	No electricity or internet connection – flooding at Bacnotan
Sat 28th	Work on Farmer survey ACCESS database	Work on Farmer survey ACCESS database	*TOIL to claim*
Sun 29th	Work on Farmer survey ACCESS database	Work on Farmer survey ACCESS database	*TOIL to claim*
Mon 30th	Work on report and Farmer Survey	Travel to Manila	IAWM staff out am to field at short notice for a new DMMMSU Agroforestry initiative *TOIL to claim UK Bank Holiday*
Tues 31st	Appointment at the British Council and Delegation of the EU Manila	Travel back from Manila	
Wed 1st September	discussions concerning teaching materials, exchange of files, demonstration of ACCESS, agreement on report contents	Travel to Manila	
Thurs 2nd	Visit British Council	pm Travel Manila - UK	
Fri 3rd	Travel Amsterdam – UK		

Annex 2. Documents & Data Consulted / Exchanged

Consulted:

Farmers Survey Activity 5: Resource Mapping and Problem Scoring – original datasheets

Farmers Survey SIAWM: Research site, summary transcripts

Bibliographic Database Activity 4, Summary Report

Graduate Survey Activity 1, Summary Report

Farmer Survey Activity 5, Summary Report

Complementary Projects Activity 3, Summary Report

Exchanged:

Monitoring and Evaluation documents a selection for M. Turaja

BAO Social Research MSc teaching module

BAO Social Issues in NRM MSc teaching module

BAO Project Management MSc teaching module

PDS Course 556 MSc teaching module

Collected:

Write-up of the workshop with Paul

Electronic copy of each of the latest activity reports (1, 3, 4,5)

Copy of the latest version of the bibliographic database on CD

Annex 3. Farmer survey ACCESS database - comments

4.1. General comments

All of the farmer survey data needs to be included in one database file. This means that both the farmer questionnaire data as well as the problem scoring data need to be included in ACCESS *Table*s. The reason for this is to allow for linkages between the 'meta data' and summarised data between the different *Table*s.

Any survey data should not be kept as Micro-soft PUBLISHER documents as these can not be analysed.

Information about the farmer respondents in the scoring exercises has not been included, and needs to be retrieved and added into the database.

The data entry issues and missing data that need attention are documented as a list of tasks to be completed in a separate document as attached below.

4.1.1. Data analysis process

There are a number of steps in the data analysis process which have not yet been paid any attention. The standard series of steps in data analysis are:

7. Data entry
8. Data exploration – checking and cleaning
9. Data aggregation – categorisation and coding
10. Data exploration – checking and cleaning
11. Data exploration – pattern identification
12. Data analysis – descriptive stats, and application of SE/statistical tests, production of charts and graphs

The farmer survey database has to date progressed as far as step 2. Data from the questionnaire sheets has been entered directly into 5 different ACCESS *Table*s using data

entry *Form*s. The data has been cleaned. However, the current format of the data is not amenable to data analysis and further aggregation, coding and organisation is required if substantive analyses are to be performed.

The reason for analysis so far ending at step 2 lies in IAWM staff unfamiliarity with the ACCESS program and its functionality as a relational database. Staff perceptions seem to be that ACCESS works in the same way as EXCEL, which it does not. ***There is a need for senior IAWM staff to familiarise themselves and/or receive training with ACCESS, it's capacity, and to undertake their own analyses rather than leaving this to junior staff.***

The advantage of a relational database such as ACCESS, is the program's ability to generate Queries which put together diverse sections of the data base for substantive analysis. There is no need to cut and paste between ACCESS and EXCEL.

The convenience of using forms detracts from the logical organisation of data for analysis. Once data has been entered staff should realise that further steps (as outlined in the list above) need to be taken before substantive analysis can be undertaken.

4.2. Data Entry and Formatting

1. There should be NO blank cells.

Conventionally a blank cell notates that the data has not been entered. It has no meaning. The following should be used:

0 = an integer i.e. a number which has some value

X = where data is missing or where the data was not given

2. There should be one variable per column

As a rule there should therefore be **One variable** per column please! It is totally impossible to run any analyses unless variables are separated!

3. A few well chosen variables should be used as the links between *Tables*

Queries can not be run unless ACCESS is given a set of unique numbers which link together information held in the different *Tables*. Usually this function is performed by a unique

household/respondent identity code, and some code which links the household to a particular location. ***The Primary Key does NOT perform this function.***

A household code and 'Gazetteer' code have now been entered into the *Table*s to perform this function. The HH Code is unique to each individual household, and likewise the Gazetteer code to each research site by Sitio.

4. Primary Keys are confusing and are better ignored

ACCESS forces the user to accept primary keys as a preferred default option. Primary keys are confusing. They may have some utility when entering complex multi-level data, but by and large this ACCESS function tends to confuse and complicate matters rather than aiding in the analysis of data. Primary keys definitely obstruct the novice user when generating *Query* tables. My recommendation is that they should not be used. If they are used during data entry they should be deleted from the final database before analysis is undertaken.

5. Coding systems, abbreviations and definitions should be recorded

A new record of all the codes used has been produced as an ACCESS *Table*. It is the convention for all codes and definitions to be recorded so that anybody using the survey database at any time understands what the data represent.

Recording the definition of variables in this way avoids the need to include words such as 'peso', 'km', 'ha' etc. in the actual data cells. When these words and abbreviations appear alongside numeric data they stop numeric analyses from being undertaken.

There are terms that still need to be defined and units that need to be clarified. See the document detailing tasks attached below.

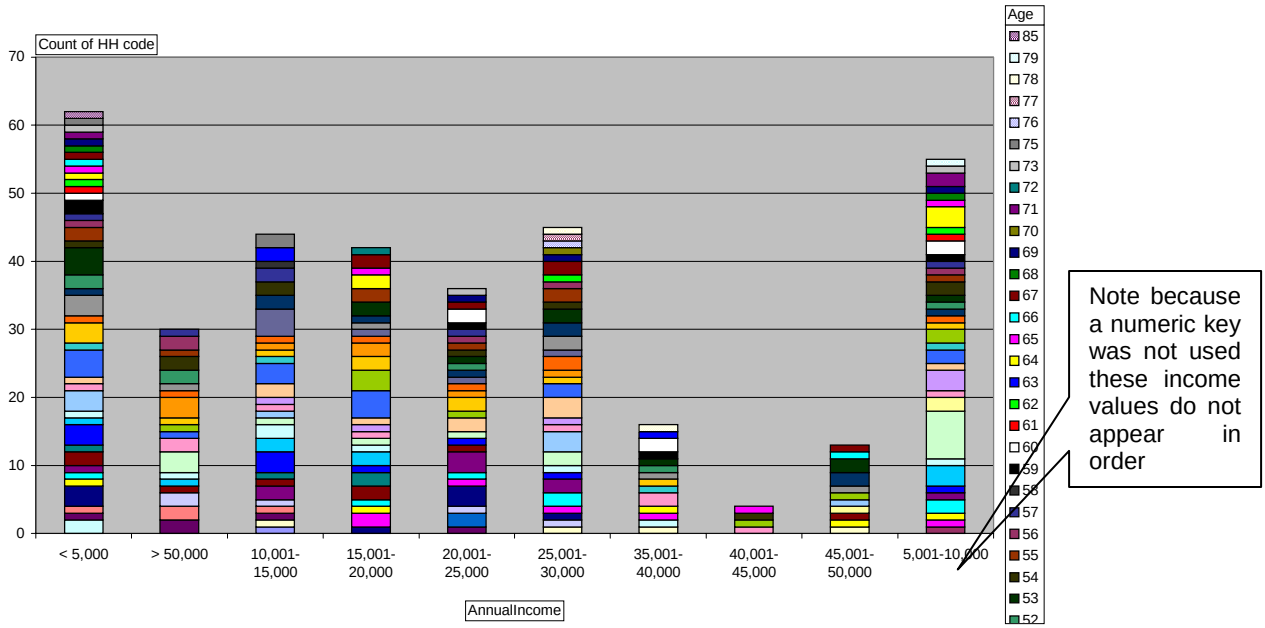
6. Data should be split into separate Tables containing similarly formatted data or subject data

ACCESS is a package which is designed to mix and match data held in different *Tables*. It is better to keep data of the same sort dealing with the same subject matter together in separate *Tables* rather than creating very large and difficult to follow *Tables* with mixed data types.

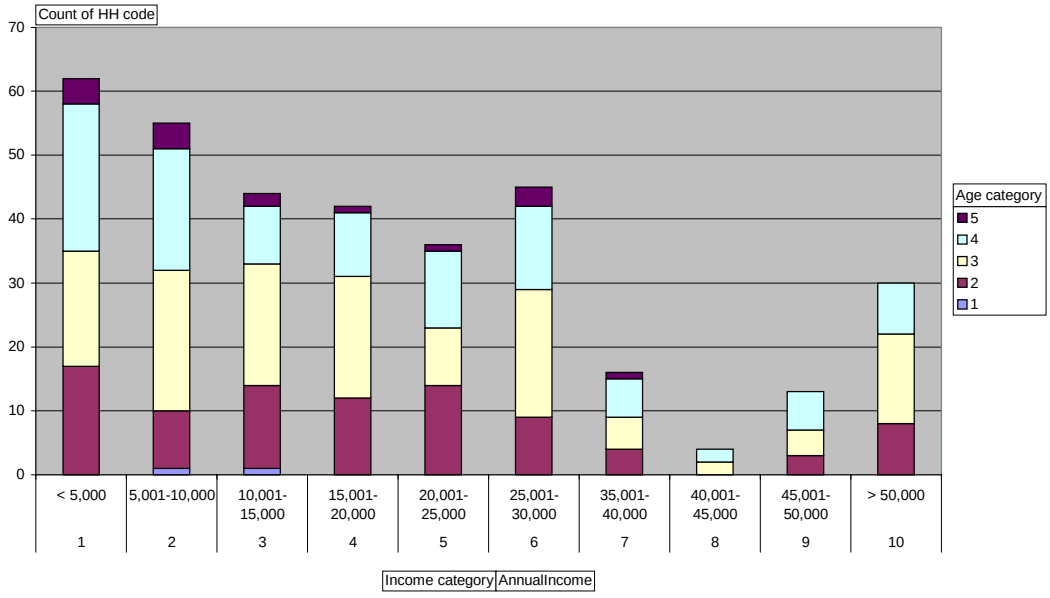
7. Data Aggregation

Once the data has been added into ACCESS Tables it needs to be aggregated into categories so that worthwhile analyses can be carried out. Too much variety stops analyses from being undertaken, FOR EXAMPLE:

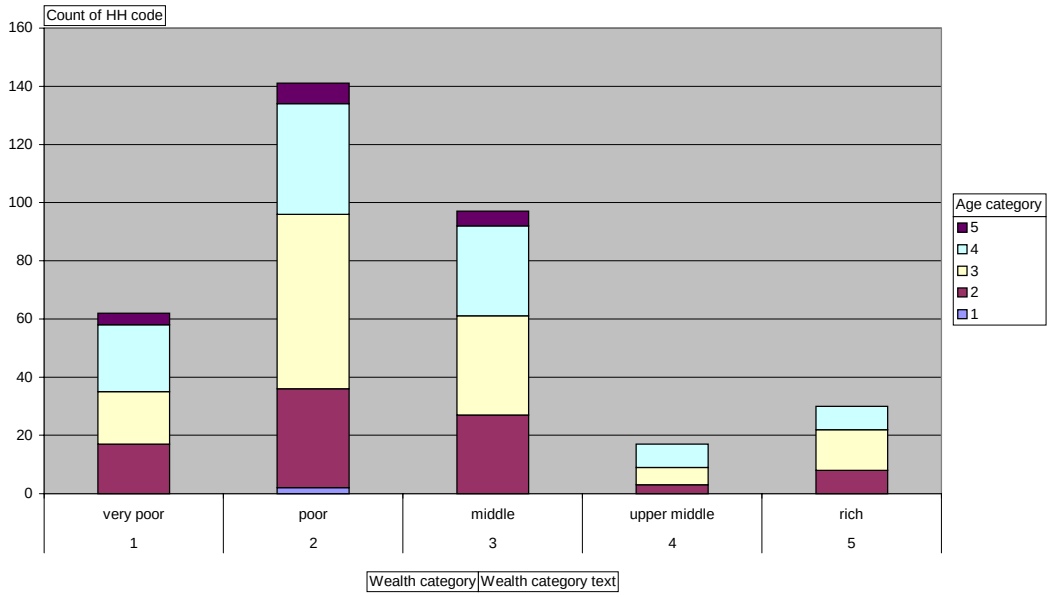
This chart is produced with the data as IAWM put it into ACCESS;



This chart shows the same data after aggregation into sensible categories;



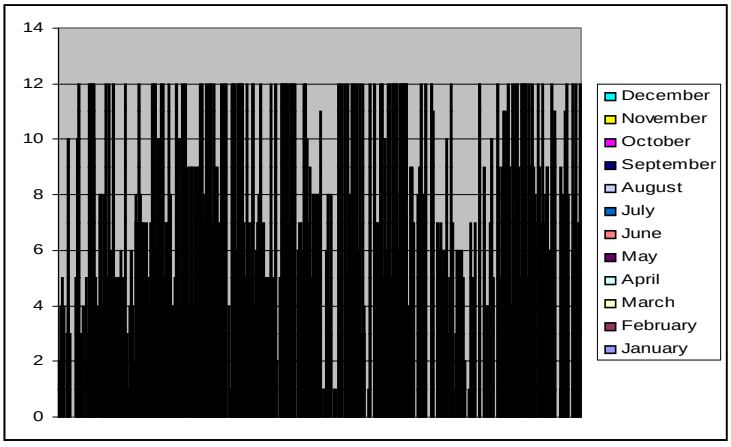
and this chart using further aggregation is perhaps the clearest of all.



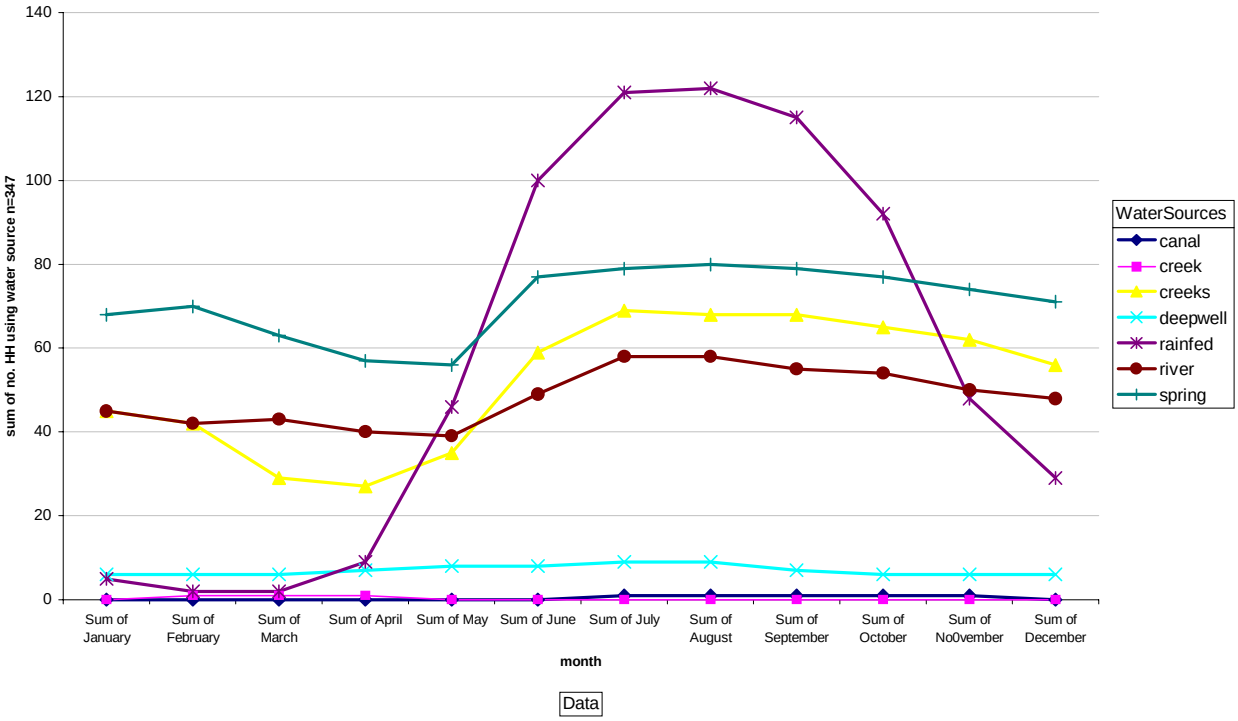
New categories need to be added, e.g. age classes and income classes as shown above. It may be that intermediate analysis has to be undertaken to add categories which answer analysis questions and hypotheses e.g. months of water availability

The process may require the generation of ACCESS Queries and may also necessitate the use of EXCEL to complete processes ACCESS can not undertake, e.g. where data is contained over a number of columns rather than one. FOR EXAMPLE:

This chart is how ACCESS reads the water source data as inputted by IAWM in its 13 column format!!



It is by using EXCEL functions that the same data in the same format can be analysed like this;



Data aggregation and categorisation has been undertaken as described below.

PLEASE NOTE THIS IS NOT THE END OF THE PROCESS!!!!

4.3. Changes Made

NEW TABLE: BAO M1 Master List of Farmers

A list of all the farmers included in the questionnaire survey showing their unique HH code number and their location.

NEW TABLE: BAO M2 LOCATION CHARACTERISTICS

This Table acts as 'meta data' and records the information about the survey sites including information about the watersheds. The farmer profile and farm location data can now be linked to this *Table* so that analyses looking at relationships between farmer practice at for example different altitude can be undertaken.

An example of what this table contains:

BAO M2 Location characterisitics												
Watershed	Watershed status	Watershed code number	Gazeteer	Watershed area (Ha)	Municipalities served	Region	Province	Town	Barangay	Sitio	Altitude	Distance to nearest market
not yet resolved		0	0	0	0				not yet resolved			
Daeng	unproclaimed	1	1			1	La Union	Tubao	Daeng	Macabato	high	
Naguilian	WR	2	2			1	La Union	Naguilian	Centro Casilagan	Niog	low	
Naguilian	WR	2	3			1	La Union	Naguilian	Centro Casilagan	Malam-ik	mid	

NEW TABLE: BAO M3 CODE RECORDS

A record and explanation of abbreviations and coding notes

Table 1. BAO 1D Farmer Demographic Profile

Remove ID primary key

Add unique HH code number
This is the unique identifier and a full record is kept in the Farmer Master List File

Remove FerLocation column – replace with GAZETEER
This is now linked into the ***Location*** where that place is located in terms of watershed the town, Province etc. ***Characteristics*** *Table*. The GAZATEER column (variable/field) provides the link to show

Add categories to aid analysis:

- Age category
- Education category
- Family size category
- Income category
- Wealth category
- Wealth category text
- Wealth category dummy
- Farmer type by background
- Land tenure category
- Organisation membership type
- Number of organisations membership
- Farming experience code
- Farming experience text

Corrections of data format in cells to remove ‘P’, ‘ha’ etc. Corrections still to complete:

- Occupational others – no data as of yet
- Gazeteer codes for currently unresolved HH
- Other Group types to resolve.

The contents of this table are illustrated below.

BAO 1D Farmer Demographic Profile																
HH code	Gazeteer	Age	Age category	Gender	CivilStatus	Education	Education category	Family size	Family size category	Annual Income	Income category	Wealth category	Wealth category text	Wealth dummy	Occ background	Farmer type code
1	42	26	2	Male	Married	Elementary or Below	1	1-3	1	25,001-30,000	6	3	middle	2	Full-time farmworker	1
2	42	23	2	Female	Married	Elementary or Below	1	4-6	2	10,001-15,000	3	2	poor	2	Full-time farmworker	1
3	42	34	2	Male	Married	Elementary or Below	1	7-9	3	15,001-20,000	4	2	poor	2	Full-time farmworker	1
4	42	22	2	Male	Single	Undergraduate College	3			35,001-40,000	7	3	middle	2	Full-time farmworker	1
5	42	30	2	Female	Married	High School	2	1-3	1	5,001-10,000	2	2	poor	2	Full-time farmworker	1

Continued ……

Farmer type text	Occothers	Ltenure	Land tenure code	Samahang membership?	Federation of Farmers membership?	Other organisation membership?	Other organisation category	No of groups member	Experience	Farming experience code	Farming experience text
fulltime farmer		Land owner	2	No	No	Jungle farmers	farmers co-op	1	more than 10 years	3	> 10 years
fulltime farmer		Tenant	3	No	No			0	3-4 years	1	< 5 years
fulltime farmer		Land owner	2	No	No	jungle sagip	farmers co-op	1	more than 10 years	3	> 10 years
fulltime farmer		Land owner	2	No	No			0	1-2 years	1	< 5 years
fulltime farmer		Land owner	2	Yes	No	CDCC		2	9-10 years	2	5-10 years

Altered Table 2. BAO 2D Farming Practice

Relevant farmer data and farming practice data in one *Table* as below.

Additional categories inserted:

- Distance code
- Experience code
- Experience text

Still to be done:

- Insertion of Gazeteer codes for HH not yet resolved
- Re-organisation of checkbox data …. According to analysis questions yet to be developed

HH code	Gazeteer	Annual Income	Income code	Wealth code	Wealth text	Land Tenure	Land Tenure code	Distance	Distance code	Experience	Experience code	Experience code text
2	42	10,001-15,000	3	2	poor	Tenant	3	less than 1 km	1	3-4 years	1	< 5 years
3	42	15,001-20,000	4	2	poor	Land owner	2	less than 1 km	1	more than 10 years	3	> 10 years
4	42	35,001-40,000	7	3	middle	Land owner	2	less than 1 km	1	1-2 years	1	< 5 years
5	42	5,001-10,000	2	2	poor	Land owner	2	3 - 4 kms.	3	9-10 years	2	5-10 years
6	42	10,001-15,000	3	2	poor	Land owner	2	less than 1 km	1	more than 10 years	3	> 10 years

Labour hiring	Hiring rarte										TSOthers
Family & Hired Labor	100	Followed by check	Yes	No	No	No	Yes	No	No	No	
Family & Bayanihan		boxes for Land Use,	Yes	No	Yes	No	Yes	No	No	No	hybrid rice
Family & Hired Labor	150	Practices, SN,	Yes	No	No	No	Yes	Yes	No	No	
Family & Hired Labor	100	SV,SC, TS	Yes	No	Yes	No	No	Yes	No	No	hybrid, kasakalikasan
Family & Bayanihan	100		Yes	No	No	No	Yes	No	No	No	

New Table. BAO 3D Farmer Livestock

Farmer data and livestock data in one *Table* as below.

Still to be done:

Insertion of Gazeteer codes for HH not yet resolved
Reorganisation of checkbox data

BAO 3D Farmer livestock

HH code	Gazeteer	Income category	Wealth category	Wealth category text	Wealth dummy	Ltenure	Land tenure code	AR poultry	AR cow	AR goats	AR swine	AR carabao	AR sheep	AR Others
1	42	6	3	middle	2	Land owner	2	No	No	No	Yes	No	No	
2	42	3	2	poor	2	Tenant	3	Yes	No	No	Yes	No	Yes	
3	42	4	2	poor	2	Land owner	2	Yes	No	Yes	No	No	No	
4	42	7	3	middle	2	Land owner	2	Yes	Yes	No	Yes	No	No	horse
5	42	2	2	poor	2	Land owner	2	Yes	Yes	No	No	Yes	No	
6	42	3	2	poor	2	Land owner	2	Yes	No	Yes	No	Yes	No	
7	42	2	2	poor	2	Land owner	2	Yes	Yes	No	Yes	No	No	

New Table. BAO 4D Source of Water

Relevant farmer data and water data in one *Table* as illustrated below.

Categories added

Gazeteer
Water availability code
Water availability text
Seasonality code
Seasonality text

Still to be done:

Insertion of Gazeteer codes for all HH inc. those not yet resolved
Explanation of the derivation of this data

BAO 4D Source of Water

HHcode	Gazeteer	WaterSources	Water availability code	Water availability txt	Seasonality code	Seasonality txt	January	February	March	Ap
2		creeks	0	none	0	none	No	No	No	N
3		spring	0	none	0	none	No	No	No	N
6		spring	0	none	0	none	No	No	No	N
8		spring	0	none	0	none	No	No	No	N

New Table. BAO 5D Farmer Perceptions of Trees

Relevant farmer data and water data in one *Table* as illustrated below.

Categories added are copied over from others

Still to be done:

Insertion of Gazeteer codes for all HH not yet resolved
Reorganisation of checkbox data

BAO 5D Farmer perceptions of trees												
HH code	Gazeteer	AnnualIncome	Income category	Wealth category	Wealth category text	Ltenure	Land Tenure category	Experience	Farming experience code	Farming experience text	Per construction	Perspective
1	42	25,001-30,000	6	3	middle	Land owner	2	more than 10 years	3	> 10 years	…with a continuation of the checkboxes of perceptions.	
2	42	10,001-15,000	3	2	poor	Tenant	3	3-4 years	1	< 5 years		
3	42	15,001-20,000	4	2	poor	Land owner	2	more than 10 years	3	> 10 years		
4	42	35,001-40,000	7	3	middle	Land owner	2	1-2 years	1	< 5 years		
5	42	5,001-10,000	2	2	poor	Land owner	2	9-10 years	2	5-10 years		

New Table. BAO 6D Crops Raised

This Table is Incomplete. No changes were made.
What is the derivation of this Table?

There is important information here about farm size which needs to be inserted into Farmer Profile or Farmer Practice *Tables.*

New Table BAO 7D Asst and Support

No changes made.
This is the format that the checkbox data needs to be converted into!!

Still to be done:

Check all HH data present
HH codes to be entered
Gazeteer codes to be entered

New Table BAO 8D Problems Encountered

No changes made.
This is the format that the checkbox data needs to be converted into!!

Still to be done:

Check all HH data present
HH codes to be entered
Gazeteer codes to be entered

New Table BAO Problem Scoring

This Table includes the problem scoring information taken from the MS PUBLISHER files as shown below.

Still to be done:

Identification of respondents / groups characteristics
Resolving Gazeteer issues
Addition of last Augusts scoring data
Entry into SPSS

BAO problem scoring									
notes	ID	HH code	Respondent number	Respondent code	Gazeteer	Lack of capital	Lack of technical knowledge	Deforestation	with a continuation of all the problems listed
	1	0	1	0	30	30	50	20	
	2	0	2	0	30	40	35	25	
	3	0	3	0	30	55	30	15	
	4	0	4	0	30	35	40	25	
	5	0	5	0	30	55	20	25	
	6	0	1	0	29	20	25		
	7	0	2	0	29	20	25		
	8	0	3	0	29	15	25		
	9	0	4	0	29	20	20		
	10	0	5	0	29	15	25		
	11	0	6	0	29	25	25		
	12	0	7	0	29	20	20		
	13	0	1	0	38	20			
	14	0	2	0	38	10			
	15	0	3	0	38	5			
	16	0	4	0	38	15			

IAWM ASIA LINK PROJECT

FARMER SURVEY

JOBS TO COMPLETE AUGUST 2004

Bianca Ambrose-Oji

Farmer Survey Jobs to complete. August 2004

1. Resolve the locations of some of the questionnaire households – see attached master list of farmer households. Those which require identification are listed as 'unresolved'. The information missing refers mainly to the Sitio location. This is important because there are differences in the altitude of different Sitios and the data is being analysed by these differences.

2. Find missing information for water sources section of farmer survey and input into **NEW** database file (this is required because all the data from the original file is already entered and needs to be separated from the data that is missing) – see attached sheet of missing household numbers which provides the list of missing information (cross reference these to farmer household master list for more information on farmer names etc.).

3. Find problem scoring data from last August 2003 and pass on a copy to BAO for insertion into databases. Please locate the problem scoring data from Daligan and Tubao from last years fieldwork.

4. Find social characteristics information for those respondents taking part in problem scoring exercises. The original instructions were to collect the demographic details of the respondents taking part. If this was not done is it still possible to identify which farmers took part and what their respondent number was? If so this information needs to be compiled in a new WORD document, and where possible the Household number of that respondent should be identified and recorded. If it is not possible to compile the information about individual farmers then a description of the group of farmers needs to be added. These descriptions should identify the general demographic and socio-economic status of the farmer respondents. For example, "*mixed group of land owners and tenants of middle age and mixed income*". If it is not possible to either identify individual characteristics or group characteristics a note should be made "*data not available*".

5. Within the BAO Database copy

Table 1. BAO 1D Farmer Demographic Profile

i. Occupational others – no data as of yet – can this be located and entered?

ii. Gazeteer codes for currently unresolved HH – please add these in when Task 1 above is completed.

iii. Other Group types to resolve. What kind of groups as those listed in this table? Please see list below.

iv. Please add the farm size data to this Table using the information stored in Crop Raised Table – you will need to cross check the HH Master List to be able to do this.

6. Definitions

Please define the following terms:

A. On the farmer profile table

i. Annual income. Is this cash income earned from wage employment? Cash income from sales of farm goods?? Please give a specific definition.

ii. Land tenure. What is the difference between the different tenant types. Please give a specific explanation.

B. On the farmer practice table please define each of the terms in the check boxes.

C. Water sources

How was this data collected?

Do these data refer to water for all purposes or just for farming?

D. Crops Raised

How was this data collected?

Households Missing from Water Sources section of Farmer Survey

(the household numbers can be found on the 'Farmer Household master list')

Household No.	Checked & entered?	Household No.	Checked & entered?
22		169	
52		231	
77		233	
86		234	
91		237	
104		238	
110		245	
111		258	
115		296	
116		301	
118		323	
119		324	
120		327	
121		330	
128		332	
130			
158			
160			
161			
162			
163			
164			
165			
166			
167			
168			

Problem Scoring respondent data

Location of scoring exercise (see Gazeteer list)	No. of respondents	Individuals identified by name against respondent number?	Group characteristics (e.g. wealthy land owners, mixed, tenants etc.)
0			
8			
9			
12			
13			
14			
15			
19			
20			
23			
24			
26			
29			
30			
32			
34			
35			
36			
37			
38			
42			
43			
45			
46			
47			
48			
51			
52			
53			

Gazeteer Location list. Gazeteer numbers refer to specific locations as shown.

Gazeteer	Watershed	Province	Town	Barangay	Sitio
0	not yet resolved	Pangasinan	Mabini	De Guzman	**WHICH ONE???**
8	Santol	La Union	Santol	Sasaba	Tico
9	San Gabriel	La Union	San Gabriel	Lon-oy	Genned
12	Lidlidda	Ilocos Sur	Lidlidda	Suysuyan	
13	Lidlidda	Ilocos Sur	Lidlidda	Poblacion Norte	Pusel
14	Lidlidda	Ilocos Sur	Lidlidda	Carcarabasa	
15	Lidlidda	Ilocos Sur	Lidlidda	Bugui	
19	Suyo Proper	Ilocos Sur	Suyo	Suyo Proper	Kinapian
20	Suyo Proper	Ilocos Sur	Suyo	Suyo Proper	Longboy
23	Libunao Spring	Ilocos Sur	Sinait	Nagkollooban	Caset
24	Libunao Spring	Ilocos Sur	Sinait	Nagkollooban	Centro
26	Bigbiga Spring	Ilocos Sur	Narvacan	Marozo	Mata
29	Metropolitan	Ilocos Norte	Pasuquin	Salpad	
30	Metropolitan	Ilocos Norte	Pasuquin	Sulbec	Agat
32	Madongan	Ilocos Norte	Dingras	San Marcelino	San Jose
34	San Roque Dam	Pangasinan	San Nicholas	San Felipe West	Mantidtid
35	San Roque Dam	Pangasinan	San Nicholas	San Felipe East	Lagpan
36	Cagubay	Pangasinan	Bugallon	Cayanga	
37	Baracbac	Pangasinan	Mangatarem	Malabobo	District 2
38	Baracbac	Pangasinan	Mangatarem	Centro Lawak-langka	Amianan
42	Aguilar	Pangasinan	Aguilar	Laoag	Mapita
43	Lower Agno	Benguet	Tuba	Sn. Pascual	Apni
45	Ambuklao Dam	Benguet	Atok	Abiang	Caybong
46	Ambuklao Dam	Benguet	Atok	Abiang	Aponan
47	Ambuklao Dam	Benguet	Tuba	Tadiangan	
48	Ambuklao Dam	Benguet	Tuba	Nangalisan	
51	Busol	Benguet	La Trinidad	Beckel	Lamot

52	Subic Bay	Bataan	Hermosa	Pastolan	
55	Busol	Benguet	La Trinidad	Ambiong	Upper

Organisation List

Where organisation category types are missing - Please identify those organisations on the list as to what type they are

BAO 1D Farmer Demographic Profile	
Other organisation membership?	**Other organisation category**
Abiang Consumer Center	
aso	
Association of Farmers	farmers association
Babon Organization (Agriculture)	farmers association
Baguio Ancestral Land Asso.	
Balikatan	
Baracbac-Magalang Irrigators Asso.	irrigation
Barangay Captain	administrative
Barangay Council	administrative
Barangay Secretary	administrative
Barangay Works Asso. (BAWASA)	adminstrative
Bayanihan	
BHW, RIC, Ladies Circle	
BHW, Rural Improvement Club	
Brgy. Chairman	administrative
CBFM	
CBFM, Mabiga Com. Farmers Asso. Inc (MACFAI)	
COCC	
Cooperative	farmers co-op
Cooperative - KMPCI	farmers co-op
Cooperative, Rural Improvement Club	
Cooperative, Womens Asso.	
Coperative, Rural Improvement Club	
Credit/Tubao Cooperative	farmers co-op
Damayan	
DENR-Safe Water	developmental
dog, cat	interest group
Drivers Association	union
Farmers Asso.	farmers association
Farmers Asso., Lon-oy Micro hydro Dev't Origin	
Farmers Association in Irrigation	irrigation

BAO 1D Farmer Demographic Profile	
Other organisation membership?	**Other organisation category**
Farmers Indigenous Asso.	farmers association
Farmers Upland Association	farmers association
Farmers Users and Irrigators Asso.	irrigation
Federated Pres of BHW	union
Green valley MPCI	
IPM, SGFA	
Irrigation Asso.	irrigation
Irrigation/Cooperative	
Irrigators Users Association	irrigation
Jungle Farmers Cooprative	farmers co-op
jungle sagip	farmers co-op
Kapit Bisig Association	farmers association
La Union Ladies Association	womens group
Ladies Circle	womens group
Lamut MPCI	
Mabiga Farmers Asso.	farmers association
Mapita Tribal Council	cultural
mata Swip Irrigators Association	irrigation
MPC	farmers co-op
MPCI (cooperative)	farmers co-op
MPCI, RIC	
NCIP	
NCIP	
NIPAS, Cooperative	
Northern Food Center (NFC)	
NTA	
Pastolan Organization, Coop.	
PTCA	
PTCA, Federations of Senior Citizen	
PTCA, Womens Asso.	
Reforestation	environmental
RIC	developmental
RIC	developmental
RIC and all organizations in Daligan	developmental
RIC, Rural Improvement Club	developmental
RIC, Salpad MPCI	developmental
Rural Improvement Club	developmental
safe water	developmental
Safe Water Association	developmental
SAGIP Coop. Jungle Farmers Association	farmers co-op

BAO 1D Farmer Demographic Profile	
Other organisation membership?	**Other organisation category**
SAGIP cooperative(farmers) , Jungle Fa. Association	farmers co-op
Samahan ng Katutubong Aeta	
Samahan ng Katutubong Aeta sa Pastolan	
Samahan ng Katutubong Aeta, CBFM	
Samahan ng Katutubong Aetas sa Pastolan	
SAMARCA	farmers association
SAMARCA	farmers association
SAMARCA- Upland Farmers Asso.	farmers association
Saranay	
saranay, Anti Drug Abuse Council	
Saranay, Badian Farmers Trumbine Users Associaton	
Saranay, Cooperative	
saranay, Farmers Organization	
Saranay, MPCI	
Senior Citizen	interest group
SUFAI	
Tico MPCI	
Tribal	cultural
Tribal Asso.	cultural
Tribal Asso., Baguio Ambiong La Trinidad Asso.	cultural
Tribal Council	cultural
Tricycle Drivers Asso.	union
Womens Asso, BHW	
Womens Asso.	womens group
Womens League	womens group
Womens Organization	womens group
Youth and Student Organization	interest group