Attachment-D

Report on Evaluation of Social Development Potentiality and Formulation of Local Social System Development Strategy

REPORT ON
EVALUATION OF SOCIAL DEVELOPMENT POTENTIALITY AND
FORMULATION OF LOCAL SOCIAL SYSTEM DEVELOPMENT STRATEGY

1.   Introduction

1.1   Background

This research started by asking questions on how local population can manage the natural resources (hereafter, NR) that they depend on for their livelihood and survival. The theoretical argument on which this research is based was attributed from the anti-thesis of "tragedy of commons." There have been a number of studies on the prerequisites and systems wherein the common NR are being managed collectively and sustainably despite that the "tragedy" theory rejected the possibilities. The presumption of this research is the possibility of community-based NR management, and this paper does not intend to discuss the validity of commons theories[1].

One of the keys for the appropriate community-based NR management is said to be the management "capability" of community. The motive of this research is attributed from the keenness to look into the detail requirements for community-based NR management to work. Therefore, this research focuses on the social conditionality that enables the sustainable community-based NR management.

This motive was further encouraged by a policy of donor agency, Japan International Cooperation Agency (JICA). JICA provides grant and technical assistance to developing countries and recognized the importance of direct assistance in enhancing the capacity of aid recipients. At the same time, the meaning of "capability" in JICA's policy has been widened from a strong emphasis on physical capacity within the society to human and social capability. These policy changes in international assistance are derived mainly from the disappointing results of efforts in physical capacity building in the past. On of the major findings in the causes of unsatisfactory outcome was found in the lack of capacity of developing countries to make best use of assistance. This deprived capability was related more to the quality of human resources and governance. In other words, the capability that is urged to be enhanced was "social" vis-à-vis "physical."

Along with this line of policy and thoughts, JICA decided to assist the CBFM Program of DENR of the Philippines through *The Formulation of Master Plan for Watershed Management in Upper Magat and Cagayan River Basin*, which sets the capability building of People's Organizations (POs) as a center of its concept, approach and implementation.

Professor Ohama, the member of Advisory Committee of this Master Plan Study emphasized the importance of understanding and analysis of stakeholders' abilities, experiences, consensus building processes, mutual cooperation mechanisms, value formation and social/cultural norms whereby the development potentiality of a community or society are determined. According to him, the understanding of

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[1] See M. Inoue and Y. Miyauchi (2001) "Sociology of Commons: Collective Management of Forest, River and Ocean (original text, Japanese)" Shinyousha, Tokyo, for the discussions on the commons theories.

development potentiality will provide key insights on the conditions and prerequisites of successful community-based NR management, or more specifically, the CBFM Program.

As a result of Professor Ohama's suggestion, the project decided to conduct a research on *Evaluation of Social Development Potentiality and Formulation of Local System Development Strategy*. At a series of meetings and his visit to the project sites during Advisory Mission between April 27 and May 4, 2002, Professor Ohama directly guided JICA and the Study Team pertaining to the activities through which said research could be accomplished [2]. Based on his teaching, this research was designed and executed.

This research mainly focuses on the three determinants of social development potentiality, namely social structure, social structural function and social norm of target community. Through the understanding of above factors, one should be able to estimate the social capacity of development for a given community (social development potentiality), and the understanding would allow us the designing of effective and efficient social development strategies for sustainable community-based NR management.

The survey was conducted on May 2002 for three week and the date of all primary data and information illustrated in this article corresponds to the time of survey.

1.2   Limitations

The research was based on existing theoretical premises developed by other researchers, and some of the theories refereed to are still underdeveloped. For example, the basic concept of this research is derived from the sociological theories of commons that are still criticized by some researchers, especially the ones influenced by the argument on neo-classical economics. Even though it has been critically viewed in the discourse, the basis of this research shall still be valid while the existing theories have been increasingly accepted as one of the standards in the field.

This research is also based on the sociological argument that the development potentiality, which is inherent in the social systems, can be measured or at least conceptualized. Similar to the criticism towards the very popular theories of social capital, the presumption that the development potentiality and the states of social systems can be measured is arguable. When fail to prove that they can be measured properly, the usefulness of this research becomes dim. However, there is a widely acknowledged notion that social systems can be measured with proper methods.

In terms of the research methodologies, organizations and associations, instead of individual community members as an analytical unit shall be one area of argument. One might claim that looking at the structural functions or social norms of both formal and informal community associations cannot be illustrate the whole picture of social systems of the community. When we are to understand the social systems and development potentiality, we shall also look at individual members of those association as well as the reciprocity of each associations so that we shall be able to understand the synergy of those individuals and association that is deemed to be one of the key element of social systems. Within the very limited time given for the research, choosing formal and informal associations and organizations, as discussed in the following section, may be the best

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[2]   The concept and methodologies of this research were coined by the author basing on the teaching of Professor Yutaka Ohama of Nihon Fukushi University. Therefore, the author of this article is responsible for any deficits, if any, on research tools or analytical methods to be used during this research.

option to achieve the objectives of this research, and more in depth study on the social network shall be executed in the future.

1.3   Target Areas
The target areas for the survey were 4 CBFM communities and 2 non-CBFM communities (the JICA pilot project sites). They were:

- Barangay Balligui, Maddela, Quirino
- Barangay Banila, Dupax del Sur, Nueva Vizcaya
- Sitio Dapiz, Barangay Sto. Nino, San Augustin, Isabela
- Barangay Haliap, Asipulo, Ifugao
- Barangay Makate, Diffun, Quirino
- Sitio Nunhabatan, Barangay Hapid, Lamut, Ifugao

2.   Definitions

2.1   Community
A community is a set of people bound together not only a geographical location but also by common interests, goals, problems or practices on a shared channel system. A community also means the common identity, ownership, liability or social intercourse that is shared by the set of people. Examples of community: territorial group (*sitio*, *barangay*, municipality, province), tribal/ethnic group, large political or interest group. For this research, *sitio* and *barangay* were the main unit as communities.

2.2   Social Development Potentiality
Social development potentiality is the endogenous capability of a community to pursue social developmental initiatives. The capacity would be represented by an ability to generate, utilize and manage both tangible and intangible resources effectively and efficiently. In this research, the capability were examined by looking at the quality of previous experiences of community members, and the levels of capability were speculated based on the evaluation of those experiences.

2.3   Local Social System
A local social system means a web of clusters of organizations or groups of people, all of which have a social, economic and political relationship with a discussed community. The image of local social system was created as shown in **Figure 1**.

Figure 1. Composition of Local Social System
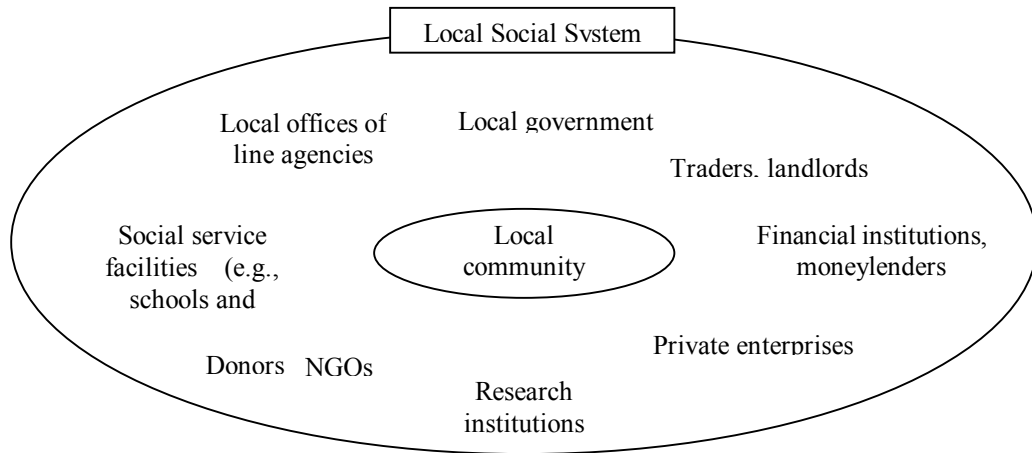
For example, when a community-based cooperative has an affiliation with a local office of the Cooperative Development Authority or Land Bank, those offices are a part of local social system of the community. The system includes the community itself.

The important part of its definition can be found that the local social system is not only the composition, but also the reciprocity of each composition.

2.4   Social Development Strategy

A social development strategy is a general plan for achieving development goals without a specific timeline or inputs. The development strategy for this study is mainly the descriptions of important concerns for the social development at a grassroots level in each target community. The concerns were drawn from the analysis of structural functions and social development potentialities of target communities.

2.5   Structural Function

Structural functions are the institutionalized roles and responsibilities of formal and informal groups of people who execute certain tasks that as a result define the economic and social characteristics of the community. For this research, the structural functions are classified into 9 categories, and the definitions of those structural functions are discussed in **Section 3**.

For external organizations and groups that have relationship with a community, their structural functions were analyzed in the relation with the community. External groups were classified into among the 9 categories when its services/activities aim at the introduction and reinforcement of one of the 9 functions of the community.

2.6 Social Norm

Social norms are a set standard of people's behaviors and attitudes that are derived from customs, typical procedures and authoritative models. Social norm itself is difficult to assess, and in this research, the degree of collectiveness among the participants of sub-community association over their activities and the degree of institutionalization of such activities were looked at as parameters to describe the characteristics of social norms as explained in **Section 3**.

The analyzed social norm of target communities was then incorporated into the identification of development potentiality with an assumption that the existence of high collectiveness, institutionalized management rules and evident receptiveness to change within the community was an important condition for development.

3. Conceptual Framework

The research was executed with a premise that there need to be certain local social systems established in order for the sustainable community-based forest management to take place. The social systems in that sense are a catalyst for sustainable exchange of goods and services. However, the social systems do not limit its function to the means of sustainable development, rather, the development of social systems is an important part of development ends.

The premise suggests two things to the research. First, to understand the social systems is important because it is an environment in which the sustainable development would be promising or unpromising. The understanding should help non-social development to put in place. Therefore, the survey results themselves have the values. Second, it is important to recognize the ways to develop the favorable environment (social systems) because the creation of such is one of the goals of sustainable development. For this, the research looks beyond the survey and analysis and produced concrete social development strategy.

The close link between social system analysis and sustainable community-based forest management, or NR management in general can be explained by looking at the three major components of NR management, namely the re-generation of NR, utilization of NR and supervision of the two components. And for re-generation, a community must have a production function of physical resources, human resources and information/knowledge, and for utilization, a community must develop consumption function of physical resources, human resources and information/knowledge. For supervision, a community must have a function on maintaining the three resources to be supplied to the management activities. These tree functions are called "structural functions" (Ohama, 1997), and the environment wherein the structural functions perform is called "social norm." A social norm coordinates the structural functions in this sense.

Figure 2. Components of CBNRM
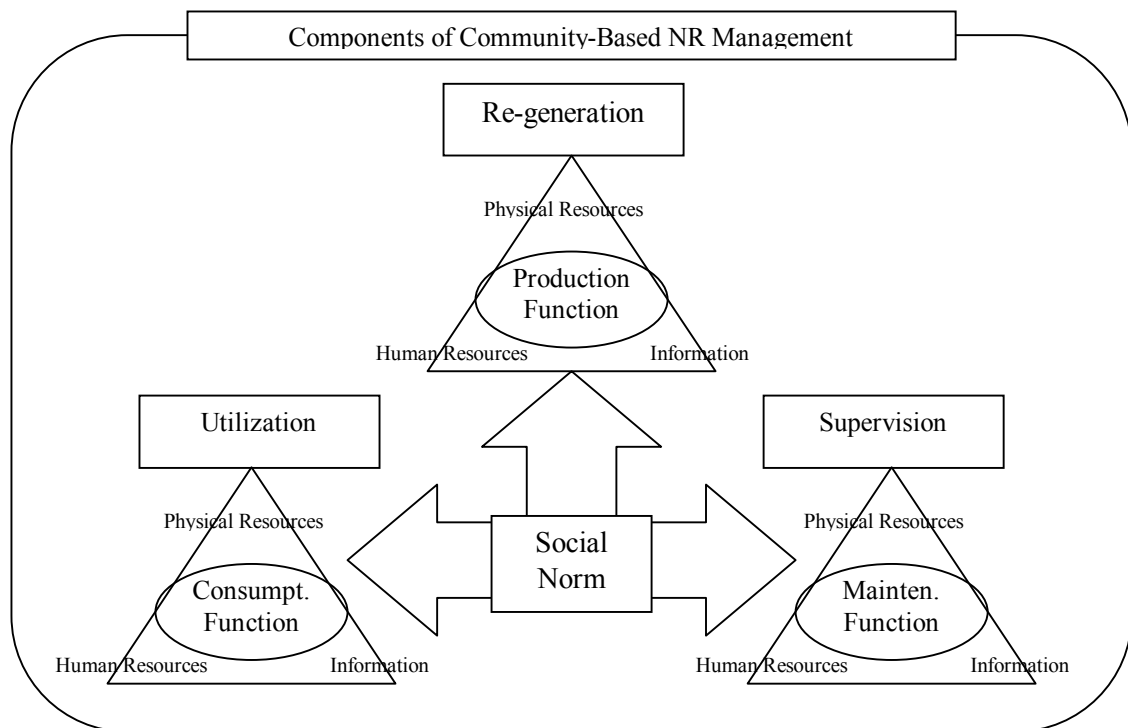
In order for us to understand development potentiality for CBFM Program assisted by JICA, the research was executed in the two fields described above: structural functions and social norms. The structural functions are classified into 9 types as shown in **Table 1**.

Table 1. Nine Types of Structural Functions

	Physical Resources	Human Resources	Information
Production Function	Is an embed function in a community to produce physical and monetary resources mainly using their own resources.	Is an established function to enhance both quality and quantity of mobilized labor forces within a community through the investment of internal resources.	Is an institutionalized function of community thereby information, indigenous knowledge and local technologies are produced by the community itself.
Consumption Function	Is an embed function in a community for the utilization and consumption of physical and monetary resources mainly coming from outside.	Is an established function to enhance both quality and quantity of mobilized labor forces within a community mainly using external resources.	Is an institutionalized function of community thereby a community receives and utilizes information, knowledge and technologies mainly coming from outside.
Maintenance Function	Is an embed function in a community fairly independent from external support to manage and maintain physical and monetary resources.	Is an established function fairly independent from external support to continuously enhance both quality and quantity of mobilized labor forces within the community.	Is an institutionalized function fairly independent from external support to continuously produce community's original information, knowledge and technologies.

This research attempted to survey the structural functions and social norms of selected communities in order to draw a conclusion on the requirements for the community-based forest management to work, as well as possible recommendations on the strategies for the develop of such systems. For this, the research first looked into social structures of communities wherein the social functions and norms were developed and organized. A social structure of community consists of both formal and informal associations of people as well as external organizations that have relationship with the community. The degree of influences that each composition of the social structure has determines the level of social function existing in the community.

The premise here is that the higher the structural function within the community, the more favorable for development to take place. The rationale of this premise is derived from the widely agreed notion that resources (physical, human and information) shall circulated vigorously in order for development to come by. Therefore, one aspect of development potentiality can be expressed as;

$$DP = \Sigma (dp_\eta (S, SF))$$

where, DP: development potentiality, S: social structure, SF: structural function

This survey was intended to look at the local social system as a whole (for the definition of local social system, see **Section 2.3**), and the social structure was classified into 2 categories: formal/informal associations within a community (A) and external supporting entities (E), both consist of local social society as defined. Therefore,

$$DP = \Sigma (dp_\eta (A, SF) + dp_\eta (E, SF))$$

For each association, informal group or external supporting entities, its influence over the welfare of community people was measured and used as a factor for the measurement of development potentiality. To measure the levels of influence of the social structure over the community welfare were rated from 1 to 4 using a "card sort method". The development potentiality can then be expressed as:

$$DP = \Sigma (dp_\eta (AI, SF) + dp_\eta (EI, SF))$$

where, AI: Influence of a internal sub-community association over the welfare of community people, EI: Influence of an external supporting entities over the welfare of community people

The development potentiality or social systems would also be determined by a social structure and social norm. A social norm is a set of standard wherein each segment of social structure interact, and reciprocal and coordinated interactions among the agents within the community shall create trust and minimize insufficiency in the transactions of resources and free rides. More importantly, the reciprocal and well-coordinated interactions "would intensify the internalization process of development at a community

and help a community to grow to a main development actor" (Ohama 1997, original Japanese text was translated by the author). It is generally agreed when the community becomes the main development actor and possesses a sense of ownership over the development initiatives, the development is to sustain and progress. Therefore, when a norm would be characterized with reciprocity and coordination, the development potentiality is high.

$$DP= \Sigma \left(dp_{\eta} \left(AI, N \right) + dp_{\eta} \left(EI, N \right) \right)$$

where, DP: development potentiality, S: social structure, N: social norm

A social norm has various determinants through which different dimensions of social norms are defined. **Figure 3** illustrates a simplified framework of social norm, and it is important to note that the sets of determinants and dimensions in the fgure are not exhaustive lists, but rather illustrative proximate.

Figure 3. Framework of Social Norm
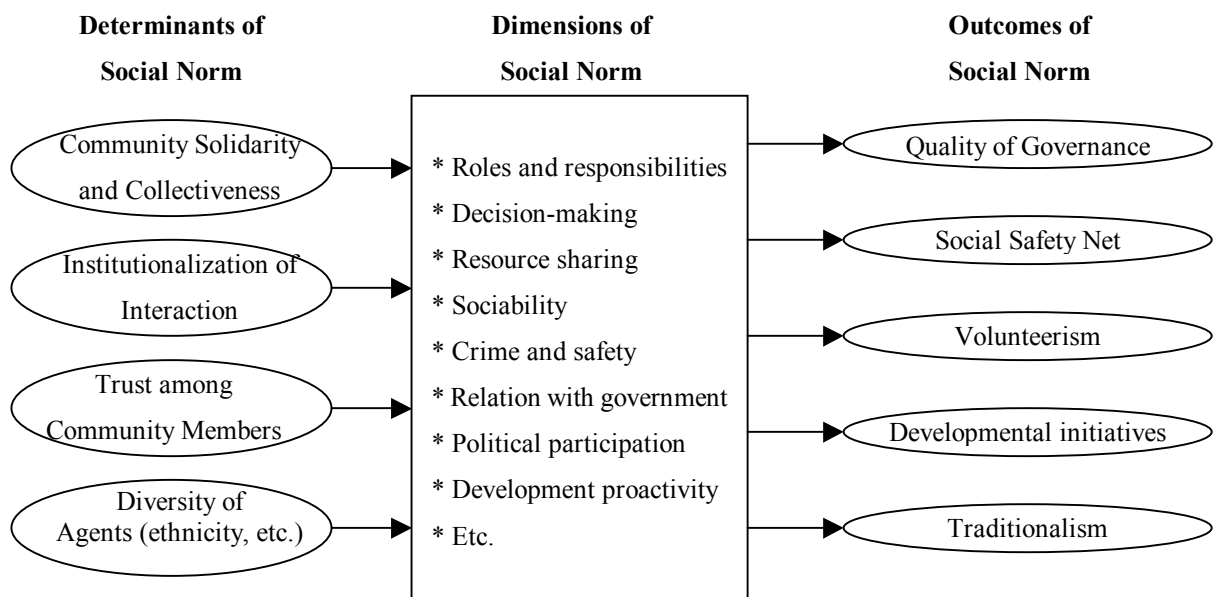
Instead of looking at all dimensions of social norms, this research focused on "collectiveness of participants of sub-community associations over their activities" and "institutionalization of such activities" to understand the social norms at the target communities. The selection of two determinants among others is difficult to justify, but the rationale behind it is the fact that the collectiveness and institutionalization are the most important elements for the collective management of common NR. The research arguers that for the NR that have a strong characteristics as a public goods to be managed by the individual local population, coherence and clear rules to be imposed to control "free rides" or opportunistic behaviors of local people. Also, it can be argued that the selected

two determinants are more fundamental than others. For example, "trust" or "diversity" can be surrogated by the selected determinants, though it is arguable. The possible surrogation is rationalized by the notion that when collective community activities take place frequently, the possibility for the agents within the community to interact is higher, which would influence the status of trust, reciprocity and diversity.

Based on the assumption discussed above, the development potentiality can be defined as;

$$DP = \Sigma \, (dp_{\eta} \, (AI, C) + dp_{\eta} \, (EI, C)), \, (dp_{\eta} \, (AI, I) + dp_{\eta} \, (EI, I))$$

where, C: collectiveness, I: institutionalization

To measure the levels of collectiveness and institutionalization of community activities were rated from 1 to 4 using a "card sort method".

To summarize,

$$DP = DP_1, \, DP_2 = \Sigma \, (dp_{\eta 1} \, (AI, SF) + dp_{\eta 1} \, (EI, SF)), \, \Sigma \, ((dp_{\eta 2} \, (AI, C) + dp_{\eta 2} \, (EI, C)), \, (dp_{\eta 2} \, (AI, I) + dp_{\eta 2} \, (EI, I)))$$

The research activities with regards to "A" are named LOCSA (Local Community System Analysis) and to "E" is LOSSA (Local Social System Analysis) in this paper. The conceptual framework of research is expressed graphically in **Figure 4**.

Figure 4. Conceptual Framework of Research
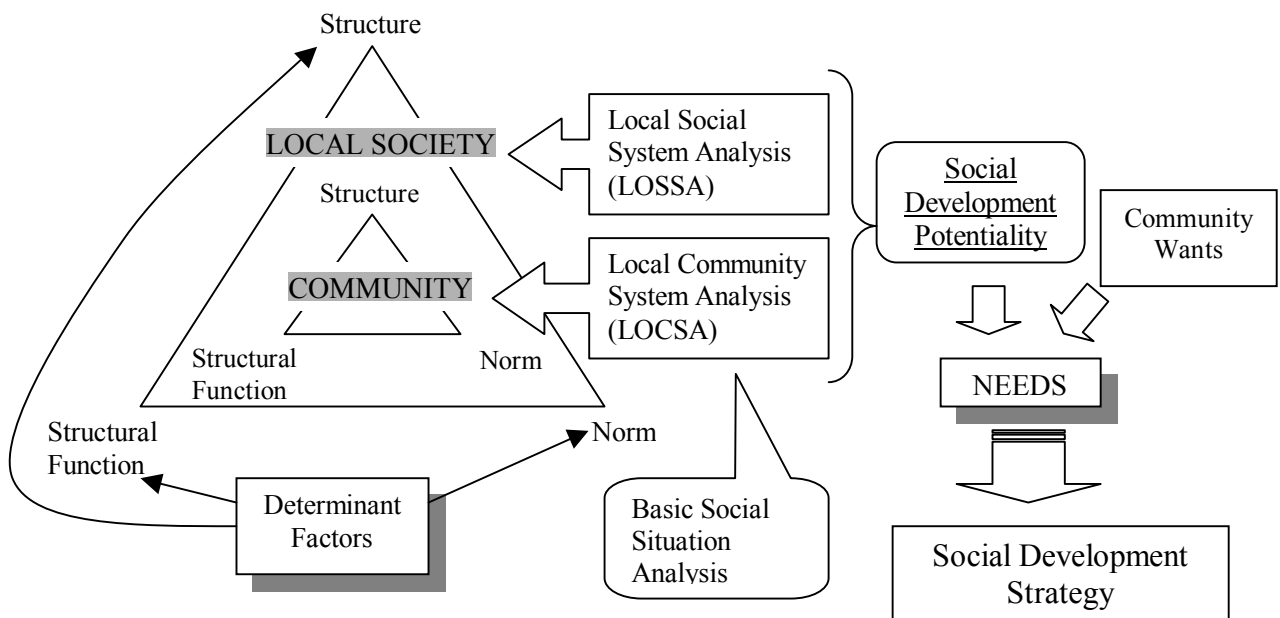
4. Analytical Units

As discussed above, this research is to understand the social development potentiality of a community. Therefore, the analytical unit is "community." To understand a community,

the research did not looked at a community directly, but instead, it focused on "internal sub-community associations" and "local society (external supporting entities)" explained below.

An internal sub-community association is either a formal or informal group of people consists of participants who voluntarily gathered for social, political and economic activities. The motives of gathering are derived from personal interests, kinship/territorial peer pressure or affiliation. An internal sub-community association usually exists within a community, and the gathering can be semi-permanent (e.g., an organization) or time bounded (e.g., social gathering). Examples of internal sub-community: cooperatives, associations, social groups (religious groups, school-related groups, neighborhood groups, etc), informal clusters (*bayanihan*, *amoyo*, *aboloyan* and other mutual aid mechanisms) and family clan. For this research, all examples above were looked into as internal sub-communities.

A local society is a web of contractual linkages among social groups that are purposely created by a set of people to execute a particular activity. The management bases of said social groups are located both inside and outside a community. Examples of components of local society: government agencies and private establishment, market (traders, distributors, suppliers and market outlets) and community. For this research, all examples above were looked into as components of local society.

The rationale for the two institutions as *de facto* analytical units can be found in the general advantage of inductive approach. It is effective and efficient especially for an exploratory research such as this. But the validity of this inductive process needs a further investigation, and conceptual basis of appropriateness of the two institutions being de facto analytical unit of a community requires a further examination.

5.   Survey Methodologies

5.1   Literature Review and Second:
"Barangay Profiling," "PO Inven
"Market Research and Pre-Feasib
Development" all of which were
addition, existing literature listed
the research.

5.2 Group Interview (GI) for LOCSA
Interviewers interviewed 1~5
information in accordance with t
were selected randomly from
members. The interviewers used
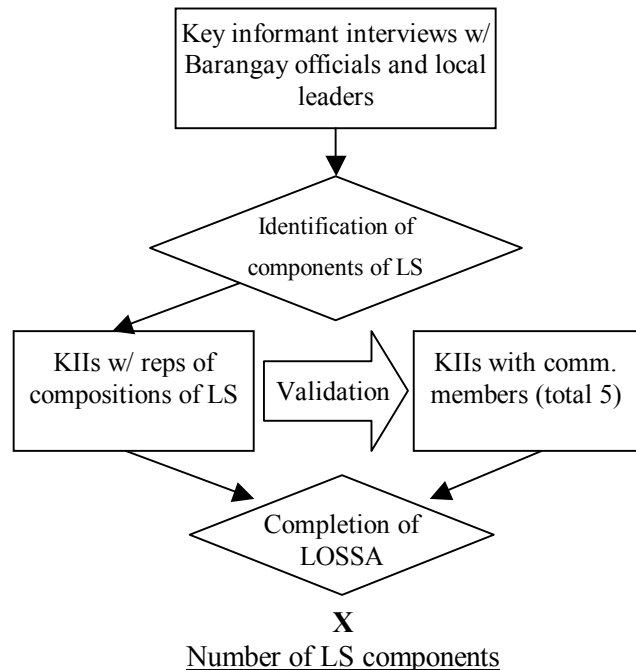
Figure 5. LOCSA Procedure
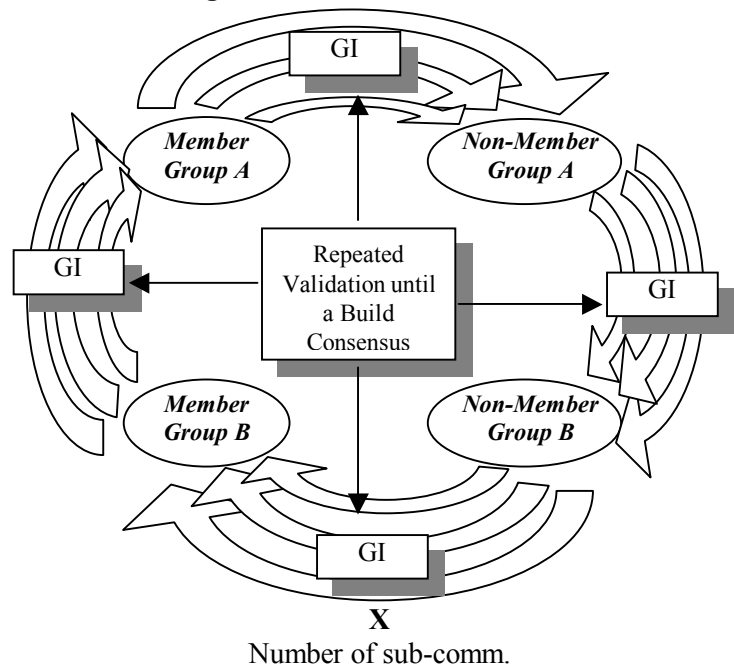
A set of Group Interview (GI) was executed at least with 4 members and 4 non-members per sub-community (e.g., if there are 10 sub-communities in the community, the total number of interviewees was at least 80. However, same people can be interviewed for different sub-communities, thus the actual number of interviewees should be lesser. The gender balance and education levels of interviewees needed to be treated carefully, and people from different gender or education background were appropriately segregate or mix depending on the situation.

A set of GI was repeated until all of the 16 interviewees reached to a consensus per sub-community. When the consensus was hard to come by, the facilitator has the authority to make own judgment. Same process shall be adapted to all sub-communities identified in the community as shown in **Figure 5**.

In this sense, the survey was executed along the basic philosophy and methodology of Rapid Rural Appraisal (RRA). The survey results were not statistically analyzed by experts but examined by local populations using semi-structured interviews and consensus building.

Figure 6. LOSSA Procedure

Key informant interviews w/ Barangay officials and local leaders

Identification of components of LS

KIIs w/ reps of compositions of LS → Validation → KIIs with comm. members (total 5)

Completion of LOSSA

X

Number of LS components

5.3 Key Informant Interview (KII) for LOSSA

The identification of components of local society (LS) whereby the target community exist was conducted with Barangay officials and local leaders.

For the key informant interview with representatives of all components of local society identified, at least 2 representatives per component were supposed to be interviewed. During the interview, the interviewer (Community Development Specialist) completed the tables and matrices explained later. The completion was based on the consensus among the interviewees.

After the key informant interview, the interviewer validated the result of interview (completed tables and matrices) through KIIs with community members as shown in **Figure 6**. The number of KII participants was 1~5, and total of at least 5 community members validated the result. These members were the same interviewees of GI for LOCSA. Any discrepant results of the interview with the representatives of local society were consolidated based on the facilitator's discretion.

5.4 Card Sorting for Rating

For the rating discussed above, the card sorting method was adopted. The interviewers prepare cards with rating scales written in local dialect (*Ilocano*) and ask interviewees to select a card that describe the most appropriate rating for the topic. Using the visual method would make the rating easier for interviewees, most of who have low educational attainment thus have little experience and understanding of "rating." The written scales also helped interviewees to rate since it was not easy them to remember all the scales it they are explained just verbally. The card method should improve the validity of rating by local population.

Figure 7. Card sorting rating method: interviewees were asked to choose one card with a rating scale written in local language.

6. Survey Results

During the 3-week survey, the total of 269 community members and representatives of local agencies were interviewed. The summary of respondents is shown in **Table 2**.

Table 2. Respondents of GI and KII for LOCSA and LOSSA

	Community members	Representatives of supporting groups	Total
Balligui	60	5	65
Banila	37	15	52
Dapiz	69	4	73
Haliap	30	6	36
Makate	14	7	21
Nunhabatan	17	5	22
Total	227	42	269

The one of the outputs of group interviews was a set of community resource maps. The maps would give information of location of *Sitio*, residences, public facilities and NR. They also show the micro land use in the community.

7. Findings

7.1 Social Structure

Within the 6 target communities surveyed, 101 internal sub-community associations, 51 of which are informal and/or ad hoc groups and gatherings were identified. Typical formal associations found in the communities were: political association (village parliaments), multi-purpose cooperative, farmer's association, irrigator's association, forest management association, saving and loan association, parents-teachers association,

women's association, village patrol and firefighting association. Major informal groups and gathering include the ones in **Table 3**.

Table 3. Informal Community Associations and Gatherings

Informal Associations	Holding Culture	Description
Bayanihan	General	Free labor. It has been traditionally used for public works to consume resources mainly from outside.
Ammoyo/Bataris	Ilocano	Exchange of labor. It has been traditionally used for farming and other livelihood activities.
Ubbo	Ifugao, Isinai	This is the Ifugao and Isinai version of *Ammoyo*.
Changa	Ifugao	Labor provision for construction of houses and other private facilities. The laborers will be compensated in kind.
Gamal	Isinai	Isinai version of *Changa*.
Fadchang	Ifugao	Voluntary contribution for ceremonial occasions such as funeral or wedding.
Hablag	Ifugao	Informal saving and credit associations.
Aboloy	Ilocano	This is the combination of *Fadchang* and *Hablag* for Ilocano tribes.
Clan leaders	Highlanders	Customary leaders who consults with individuals and groups in the community on wide range of issues.

For each association or entity, its influence over the welfare of community people was rated using the card sort method with the scale from 1 to 4 (1: Minimally influential over the economic and social welfare of the community, 2: Has a certain influence over the economic and social welfare of a part of local population of areas, 3: Has significant influence over the economic and social welfare of a part of local population of areas, or has a certain influence over the large portion of the community, 4: Significantly influential over the economic and social welfare of the large portion of community and people). The card sorting was continued until the consensus among the respondents was reached. The average rates of influence of associations over the welfare of people in the community were 2.65 for formal associations and 2.15 for informal groups.

Table 4. Internal Community Associations/Groups

Community	Formal Association		Informal Groups/ Gathering		Total/Average	
	Number	Influence Rate	Number	Influence Rate	Number	Influence Rate
Balligui	7	3.3	9	2.0	16	2.6
Banila	8	2.5	6	2.5	14	2.5
Dapiz	16	2.9	19	2.6	35	2.8
Haliap	7	2.0	10	1.6	17	1.8
Makate	4	2.0	3	2.0	7	2.0
Nunhabatan	6	2.5	6	1.5	12	2.0
Total/Average	48	2.65	53	2.15	101	2.4

For the external supporting entities, most of them found to be public service agencies including Municipal Health Office, Municipal Agriculture Office, Municipal Social Welfare and Development Office, National Irrigation Administration, Community Environment and Natural Resource Office, Department of Agrarian Reform, Department

of Education. They also include special project offices including CASCADE and CECAP, most of which were funded by foreign donors (CASCADE and CECAP were funded by EU). There were also some NGOs supporting the target communities, but their activities were generally small-scale and short term. Traders and organized landlord groups were also identifies in all communities.

**Table 5. External Supporting Entities**

Community	Total/Average	
	Number	Influence Rate
Balligui	6	2.7
Banila	9	2.7
Dapiz	25	2.4
Haliap	8	1.9
Makate	6	2.7
Nunhabatan	10	2.2
Total	64	2.4

The relationships and reciprocity of all sub-community associations and external supporting entities were not assessed during this research due mainly to the time constraints and technical difficulties.

7.2 Structural Function

The structural functions of each association, group or entity identified were classifies into one of the 9 categories of structural functions, based on the interviews regarding the types of activities and services and kinds of resources used for the activities and service that the association, group or entity executed in the community. The influence rate of each association/group/entity in one category was summed up to measure the level of classified structural function of the community. The aggregated result of measurement is shown in **Figure 8**.

Figure 8. Structural Functions of Selected Communities
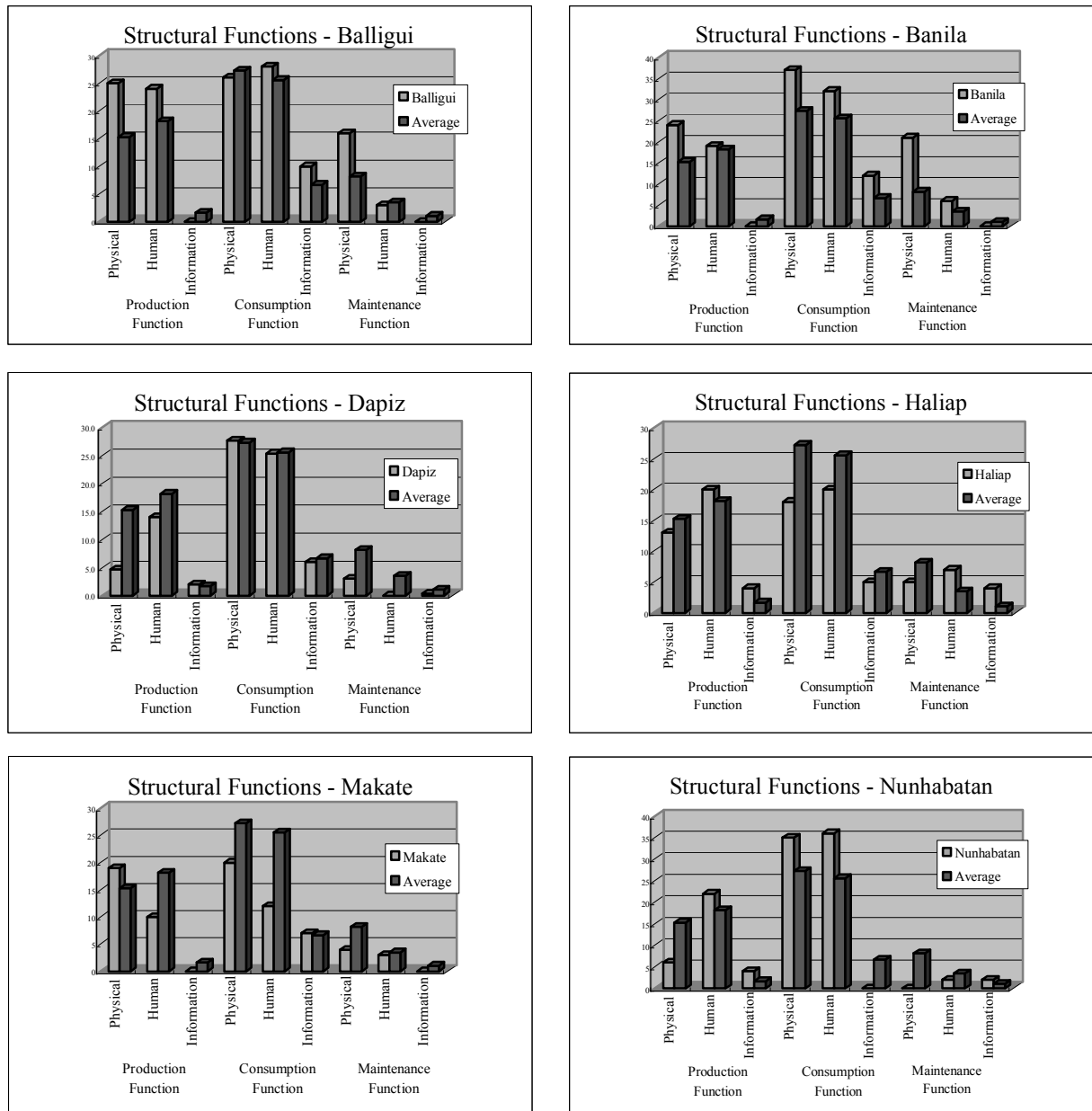
On average, the consumption function of physical and human resources are relatively well developed, followed by production function of human and physical resources. The function to either produce or consume information is poorly developed in all communities, and maintenance function for physical or human resources are also underdeveloped.

7.3   Social Norm

As explained in the previous sections, "collectiveness among the participants of sub-community associations over their activities" and "institutionalization of such activities" were examined as indicators of the status of social norms that are an important part of social systems. The survey respondents rated the two said parameters of each

inter-community association and groups by the "card sort" method, and the level of influence of each association or group was the factor for the assessment of potentiality. The results of assessment were shown **Table 6**.

Table 6. Rates of Collectiveness and Institutionalization of Internal Sub-Community Associations/Groups

Community	Collectiveness	Institutionalization
Balligui	3.2	2.9
Banila	2.9	2.7
Dapiz	2.6	2.8
Haliap	2.5	2.2
Makate	2.3	2.3
Nunhabatan	2.1	1.7
Average	2.6	2.4

Table 7 shows the scales used for the rating.

Table 7. Scales of Ratings

Scale for "collectiveness" rating	Scale for "institutionalization" rating
4: All decisions are made collectively, and most activities are conducted by a group.	4: There are existing organizational rules and regulations, and they are enforced by certain authority.
3: Some decisions are made collectively, and some activities are executed by a group.	3: Organizational rules and regulations are in place, but not enforced adequately.
2: Most decisions are made individually, and few individuals understand the purpose of the group.	2: Rules and regulations are yet to be established, and the group is governed by informal rules and authority.
1: Most decisions are made individually, and all activities are executed individually.	1: There is basically no systematic management mechanisms.

The rating of two parameters for external supporting entities was executed during the survey and failed to produce appropriate data due to insufficient survey time. The assessment of development potentiality was thus pursued considering only the social norms of internal sub-community associations and groups.

7.4 Development Potentiality (DP)

The translations of measured structural functions and social norms in the previous section ions in this research was completed in a rather simple way to understand the development potentiality (DP) of target communities. The averages of assessed rates of various parameters were adopted as the benchmarks for the translation. If the assessment was higher than the average, the development potentiality (DP) was deemed as "high." The outcomes of such translation of development potentiality are shown in **Figure 9**.
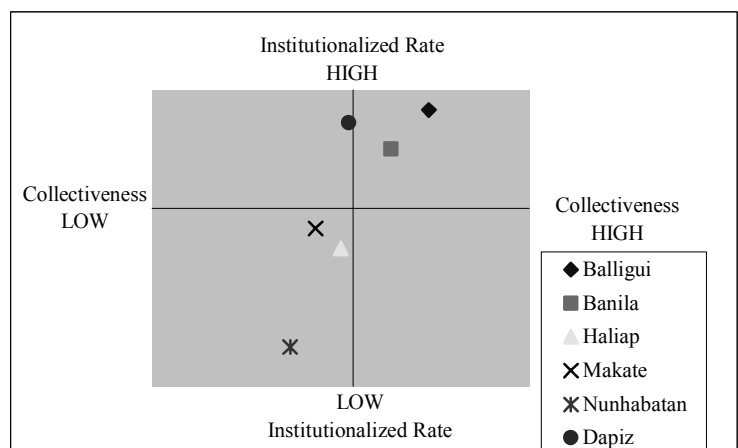
Figure 9. Development Potentiality from Structural Function Perspectives

DP from Structural Function Perspectives - Balligui

	Physical Resources	Human Resources	Information
Productive Function	HIGH	HIGH	LOW
Consumption Function	LOW	HIGH	HIGH
Maintenance Function	HIGH	LOW	LOW

DP from Structural Function Perspectives - Banila

	Physical Resources	Human Resources	Information
Productive Function	HIGH	HIGH	LOW
Consumption Function	HIGH	HIGH	HIGH
Maintenance Function	HIGH	HIGH	LOW

DP from Structural Function Perspectives - Dapiz

	Phisical Resources	Human Resources	Information
Productive Function	LOW	LOW	HIGH
Consumption Function	HIGH	LOW	LOW
Maintenance Function	LOW	LOW	LOW

DP from Structural Function Perspectives - Haliap

	Physical Resources	Human Resources	Information
Productive Function	LOW	HIGH	HIGH
Consumption Function	LOW	LOW	LOW
Maintenance Function	LOW	HIGH	HIGH

DP from Structural Function Perspectives - Makate

	Phisical Resources	Human Resources	Information
Productive Function	HIGH	LOW	LOW
Consumption Function	LOW	LOW	HIGH
Maintenance Function	LOW	LOW	LOW

DP from Structural Function Perspectives – Nunhabatan

	Phisical Resources	Human Resources	Information
Productive Function	LOW	HIGH	HIGH
Consumption Function	HIGH	HIGH	LOW
Maintenance Function	LOW	LOW	HIGH

Balligui, Banila and Nunhabatan have high development potentiality from the perspectives of production and consumption functions of resources and information, while Banila and Haliap have relatively well-developed functions in maintenance of resources and information. Balligui, Banila and Nunhabatan have extensive experiences produce and consume human resources, while Makate and Dapiz have limited mechanisms for developing or mobilizing human resources for their community activities.

Figure 10. Social Norms

The development potentiality from the perspectives of social norms was analyzed also using the average rates of collectiveness and institutionalization as their benchmarks. The result of analysis is expressed graphically in the **Figure 10**.

It shows that Balligui and Banila have high development potentiality while Haliap, Makate and Nunhabatan the low level of development potentiality. Dapiz has a social norm in which the community activities are well institutionalized thus coordinated and controlled effectively, while the collectiveness of participants to the activities is not significant.

8. Social Development Strategy

The results of analysis on development potentiality discussed above have distinct implications on the approaches and components of community-based NR management. For example, for the aspect of structural functions, the strength of existing structural functions within the community varies from one community to the other. A community might have the well-developed function of physical resources needed for re-generation of NR while the other community does not have. The presumption in this research is that the approaches and strategies for development initiatives in those two communities shall be different in accordance with the different social characteristics of communities, as discussed in the previous sections.

Table 8. Social Development Strategies from the Perspective of Structural Functions

	Physical Resources	Human Resources	Information
Production Function	**When relatively high**		
	* The external physical inputs could be at a minimal for a CBFM project. The project would focus on the equality in resource distributions and gender relations. * An intervention would emphasize the improvement of comparative advantage by increasing the production scales, bettering marketing and financial efficiency.	* A group of local people has knowledge and skills that allow them to re-generate NR effectively and efficiently. The development of second line leaders has high needs. * HR development should be designed to match their present levels of skills and knowledge and utilize existing formal or informal mechanisms of mobilizing manpower for NR re-generation.	* The community would have developed a system thereby information with regard to NR is generated, stalled and disseminated to community members. A development initiative would be most effective when tap the existing system and stored information.
	When relatively low		
	* The productivities of NR would be low and need improvement. * A development initiative should encourage sustainable production of NR and self-help, rather seeking than relief-oriented aid.	* The community would lack quality leaders, and a large portion of local population might be illiterate and has inadequate skills and knowledge needed for NR management. * The utilization of NR would be inefficient with such human resources. Training, education and campaign activities for general population, core and secondary leaders shall be emphasized.	* The community would have a little experience in the generation of their own information, and the sharing of information, both formal and informal would be limited. * It is important to establish information flow mechanisms, such as post training meetings with NR users.
Consumption Function	**When relatively high**		
	* Subsidized projects would have taken place in the community extensively, and the dependency and dole-out mentality would have been developed if the interventions were executed improperly. The needs analysis should be carefully executed. * Community counter-parting shall be emphasized to reduce the dependency and should be transformed from consumption into production activities.	* The mechanisms for mobilizing manpower on NR management would have been developed. A labor-intensive approach for development would be suitable. However, local initiatives to mobilize people for NR re-generation shall be strengthened. * The community might not have developed technical and managerial expertise. A NR project should emphasize the enhancement of the internal HR quality.	* People would be exposed to modern NR management technologies and information sharing among population. But information would have been oversupplied. A NR project should focus on the feasibility information to be introduced to the community. * Local people would have a notion that "modern technologies are always better than local ones (IK)." Revitalization of IK on NR management is important.

	Physical Resources	Human Resources	Information
Consumption Function	**When relatively low**		
	* The local economy would be semi-self sufficient. The infrastructure development would be the priority for a NR project. * The community would not have been spoiled by external subsidies, and people would have less dependency to outside inputs for NR management. A development initiative should reinforce their sustainable ways of NR management.	* The community would have a traditional mechanism of labor exchange for NR management in a small scale. A paid labor scheme could undermine their traditional values. The introduction of paid labor should be carefully examined. * The community would not be exposed to contemporary technologies but would have preserved IK. A development should start from IK.	* Only limited agencies would have disseminated information on NR management. The community would not have experienced the internalization of information, and a project should emphasize the wise utilization of information. * An NR project should carefully examine the indigenous patterns of information formulation in the area before introducing updated information.
Maintenance Function	**When relatively high**		
	* The community would have developed mechanisms thereby people would collectively generate resources needed for the maintenance of NR. The mechanisms would be both formal and informal. A development project should not undermine the existing mechanisms by providing unnecessary subsidies.	* The community would have recognized the importance of continuous education of local people to improve their HR quality. It has ability and means, and external interventions could be at a minimal. * The human resource development might have unequally benefited among local people. A NR project should focus on the equal opportunity of training.	* The community would have recording and documentation and established information management system thus capability to re-generate information. * A development initiative should start from the mechanisms of information re-generation on NR management.
	When relatively low		
	* The community has no substantial experiences in maintaining common NR. A development initiative should incorporate resource generation for NR maintenance. * Local population has not recognized the benefit of NR. An NR initiative should evaluate the real benefit of those resources, and socialization and education shall be emphasized in such a community.	* The effort for HR development would have been wasted without follow-ups. An NR project initiative should start from the re-education. * A development initiative should incorporate further research and investigation on existing indigenous and methods for HR development and make best use of them when exist.	* The community might be susceptive to new information coming from outside. A development initiative should include the research on cultural tolerance to new information on NR management. * The community has no information storing mechanisms. An NR project should focus on the establishment of such systems, e.g., the establishment of responsible bodies/personnel for information management.

Based on the result of analysis on development potentiality from a social norm perspective, communities can be classified into 4 types as shown **Figure 11**.

Figure 11. Community Types by Social Norms
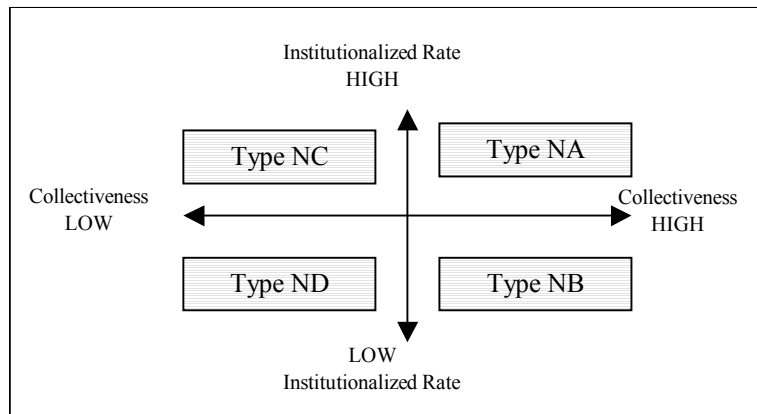
A community falls into the Type NA category has a high rating in collectiveness and institutionalization. Banila and Balligui are classified into this type. A community under Type NB can be characterized as high collectiveness and low institutionalization, while a community of Type NC has low collectiveness and high institutionalization. Dapiz falls into this category. A community of Type ND can be described as low collectiveness and institutionalization, and Haliap, Makate and Nunhabatan are categorized in this type.

The degrees (high or low) of collectiveness and institutionalization of each type of communities represent the distinct social characteristics that determine the potentiality of better NR management. Professor Ohama suggested that when communities are to develop, communities with different social characteristics have different needs thus require different approaches and strategies for NR management. The following table shows the typical needs of communities in each type characterized by their social norms and expected development strategies to fulfill the needs.

Table 9. Social Development Strategies from the Perspective of Social Norms

Type	Community	Typical Needs of Community	Expected Development Strategy
Type NA	Balligui, Banila	The needs may concentrate on the "non-social norm" aspects of development, such as physical inputs for reforestation.	* A development initiative can start from rural assessment and project planning. * Appropriate external inputs
Type NB		The community may be governed by customary laws, and have insufficient experiences/ knowledge in institutionalized and explicit management of common NR.	* A development initiative shall start from the research on the customary laws, and the community/ sub-community shall establish policies and regulations for NR management through community organizing. * Rural assessment, planning and inputs shall follow.
Type NC	Dapiz	The community lack established social norm that drive people to manage NR collectively, but may have rules and regulations that are possibly formulated by the government.	* A development initiative shall start from the social preparation (i.e., awareness raising on the importance of NR). * Rural assessment, planning and inputs shall follow.
Type ND	Haliap, Makate, Nunhabatan	The basic social norms needed for collective and institutionalized NR management is underdeveloped.	* A development initiative shall start from the social preparation. * After the establishment of social cohesion, community organizing shall follow to establish/ strengthen community organization with clear rules and structure. * Rural assessment, planning and inputs shall follow.

Based on the two sets of analysis on the development strategies discussed above (from the perspectives of structural functions and social norms), the social development strategies of six communities are summarized in **Table 10**.

Table 10. Summary of Development Strategies

Community	Summary of Development Strategies
Balligui	• Community re-organizing: The community has been relatively well organized already, but *Purok* 6 and 7 (western part of the village) need intensive CO works. The entering point of development initiatives could be the rural appraisal, but intensive awareness raising on the importance of NR is necessary in those areas. • Secondary leader development: The community already has a core leader group and widening of quality leader groups shall be the focus of an NR project. • Re-training: Certain training has been given to the members of community, but limited follow-ups. Re-training maybe needed. • Strengthening of information sharing: The information on NR is shared by a small group of people in Balligui. For a higher spillover effect, the communication channels in the community shall be widened. • Labor counter-parting: The community has ability to mobilize labor at a lower cost. Labor counter-parting of community shall be a part of NR project.
Banila	• Social type of Banila is similar to Balligui, thus the social development strategies of Banila are comparable to the strategies of Balligui described above. • Limits in provision of external inputs: The external support to the community seems to be reaching to the point that would undermine their self-help. External assistance shall focus on the technical support on NR management and limit its physical aid.

Community	Summary of Development Strategies
Dapiz	• Social preparation and community organizing: The community has yet to be organized to for collective NR management. Intensive awareness raising on the importance of NR and CO works shall be executed before the implementation of a project. • Limits in provision of external inputs: The external support to the community seems to be reaching to the point that would undermine their self-help. External assistance shall focus on the technical support on NR management and limit its physical aid. • HR development: The quality of leaders and NR managers is underdeveloped, especially in Bautista. Intensive HR development shall be a major part of development initiatives. • Strengthening of aces s to information: The community lacks access to updated information on NR. A network with extension services, research institutions and market information shall be is build deliberately. • Incentive: The community members may not have capability to be mobilized as laborer for collective NR management without incentives. The resources for incentive generation shall be prepared. • Democratizing development: Not only the political leaders but also wider general participation to the development shall be encouraged.
Haliap	• Social preparation and community organizing: The community has yet to be organized to for collective NR management. Intensive awareness raising on the importance of NR and CO works shall be executed before the implementation of a project. • Institutionalization of development: Community-based NR management must emphasize the explicit rules and policies that are acceptable to their customs. • Appropriate physical inputs: The community lacks is functions in re-generating, utilizing and maintaining physical resources. Certain physical inputs are required for successful CBFM project implementation. • Secondary leader development: The community already has a core leader group and widening of quality leader groups shall be the focus of an NR project. • Incentive: The community members may not have capability to be mobilized as laborer for collective NR management without incentives. The resources for incentive generation shall be prepared.
Makate	• Social preparation and community organizing: The community has yet to be organized to for collective NR management. Intensive awareness raising on the importance of NR and CO works shall be executed before the implementation of a project. • Institutionalization of development: Community-based NR management must emphasize the explicit rules and policies that are acceptable to their customs. • Appropriate physical inputs: The community lacks is functions in re-generating, utilizing and maintaining physical resources. Certain physical inputs are required for successful CBFM project implementation. • HR development: The quality of leaders and NR managers is underdeveloped. Intensive HR development shall be a major part of development initiatives. • Strengthening of information sharing: The information is shared by a small group of people in Makate. For a higher spillover effect, the communication channels in the community shall be widened. • Incentive: The community members may not have capability to be mobilized as laborer for collective NR management without incentives. The resources for incentive generation shall be prepared.
Nunhabatan	• Social preparation and community organizing: The community has yet to be organized to for collective NR management. Intensive awareness raising on the importance of NR and CO works shall be executed before the implementation of a project. • Institutionalization of development: Community-based NR management must emphasize the explicit rules and policies that are acceptable to their customs. • Limits in provision of external inputs: The external support to the community seems to be reaching to the point that would undermine their self-help. External assistance shall focus on the technical support on NR management and limit its physical aid. • Secondary leader development: The community already has a core leader group and widening of quality leader groups shall be the focus of an NR project. • Re-training: Certain training has been given to the members of community, but limited follow-ups. Re-training maybe needed. • Labor counter-parting: The community has ability to mobilize labor at a lower cost. Labor counter-parting of community shall be a part of development initiatives.

9. Conclusions and Recommendations

Despite of the shortage of survey time and technical constraints put on the research, the research was able to examine the structure, structural functions and social norms of target communities, all of which are deemed greatly to affect the process and outcome of

development initiatives. The analysis of development potentiality and development strategies on this paper were based on the examination, and it proved that the development potentiality could be measured using innovative research methodologies. The research also proved that the analysis of development potentiality could be transformed into development strategies.

However, the interpretation process and basis are subject to improvement. For example, the research adopted the "average ratings" as benchmarks for the measurement. The averages are based on the survey results of six selected communities, and for the benchmarks to be more relevant to the policy judgments, more sample communities shall be researched in the future.

Also, the research did not pay too much attention to the relationships and reciprocity among formal and informal community association and external supporting groups, due to the limited survey time and resources available for the research. In order for this research to complete the theoretical proposal of professor Ohama, the topic of "network" as an important part of the measurement of development potentiality needs to be looked into in the future.

It was found that the interviewers should be trained and qualified to conduct semi-structured interviews. They must understand in detail the kinds of information they need to extract from their interviewees. Intensive training for interviewers was given before the execution of this survey, but further training shall improve the quality of data and information to be gathered for the further research.

This research was by no means a pure academic research. This research was conducted in the context of the implementation of pilot project funded by JICA, thus inevitably impact oriented. As a result, the research had a "hidden objective", which was for the members Community Organizing and PO Capacity Building (contractor or PRRM) to widen the knowledge base on their target communities as for them to become more effective community organizer/developers for the pilot project, its achievement needs further investigation. Informally, the PRRA members (interviewers) expressed verbally after their survey that the activities were extremely useful for them to understand community and execute their community organizing work during the next 14 months. They said that the activities gave them crucial information a community organizer must know. They also stated, though, that the time for the survey and analysis was just too short. The impact of implementation of this kind of research on the improvement of the ability of community organizers shall be examined more carefully in the future.

The most critical challenge is still lying ahead of us. The usefulness of this research for the success of a development project, more particularly the initiatives on Community-Based Forest Management Program in the Philippines shall be continuously examined and proved during the JICA pilot project. Based on the result of examination during the remaining period of the pilot project, the research concept, theories, methodologies will be reviewed and revised. At the end of the pilot project (August 2003), the viability and usefulness of this research will be carefully studied. In this sense, this research has not been completed yet. This effort will continue until the end of the pilot project.