

Indigenous Peoples Development Project

SITE PROFILE 2:

**CADT 092 (CABADBARAN, SANTIAGO AND TUBAY)
AGUSAN DEL NORTE**

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ABBREVIATIONS

ABC	Association of Barangay Captains
ADSDP	Ancestral Domain Sustainable and Development Plan
ADO	Ancestral Domain Organization
CADC	Certificate of Ancestral Domain Claim
CADT	Certificate of Ancestral Domain Title
CLUP	Comprehensive Land Use Development Plan
DAR	Department of Agrarian Reform
DENR	Department of Environment and Natural Resources
DepEd	Department of Education
DILG	Department of Interior and Local Government
DND	Department of National Defense
DTI	Department of Trade and Industry
GPS	Geographic Positioning System
IFAD	International Fund for Agricultural Development
IPDP	Indigenous Peoples Development Project
IPRA	Indigenous Peoples Rights Act
LGU	Local Government Unit
MDC	Municipal Development Council
MIS	Management Information System
MOA	Memorandum of Agreement
MOE	Maintenance and Operating Expenses
NCIP	National Commission of Indigenous People
OSCC	Office of Southern Cultural Communities
PAMB	Protected Area Management Board
PDC	Provincial Development Council
RDC	Regional Development Council
RPDC	Regional Peace and Development Council
SEC	Securities and Exchange Commission

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SITE PROFILE 1: CADT 092 (CABADBARAN, SANTIAGO AND TUBAY) AGUSAN DEL NORTE

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Background of the CADT Area

A big portion of the area of Certificate of Ancestral Domain Title (CADT) 092 is in Cabadbaran, Agusan del Norte with parts located in the municipalities of Santiago and Tubay (Table 1). Its 268.81-square kilometer area is about half of the total municipal area of the Cabadbaran (535.50 square kilometer). The CADT area is constituted partly or wholly from a total of 10 barangays. Five barangays are in Cabadbaran, three in Santiago and two are in Tubay. The area has an approved CADT but it does not have an Ancestral Domain Sustainable Development and Protection Plan (ADSDPP).

Population and Ethnicity

Within the CADT area live the 6,498 indigenous peoples. Around 60 percent belongs to the Manobo ethno-linguistic group and 40 percent belongs to the Mananwa. There was no estimate on the percentage of the indigenous peoples in the CADT area as against the settlers. The settlers are migrants mainly the Cebuano-speaking Visaya. Although the Mananwa and Manobo have interacted for centuries, they are not genetically and linguistically related and have different traditional social and economic organization.

Traditional Social and Economic Organization

The Mamanwa has typically dark skin, kinky hair and pygmoid physical appearance. Northwestern Mindanao is considered their traditional homeland. They are traditionally organized as a band composed of family members and kindred kinfolks. They traditionally move from one campsite to another and mainly subsist on foraging, hunting, fishing and occasional gardening. Their enormous knowledge of the biology and ecology of their environment enables them to maintain this economic system. But seasonal availability of food is not the only determinant of their movement. External threats, internal conflicts and interpretation of events can prompt the abandonment of a campsite.

The Manobo group is associated with the Agusan river basin. They have lighter skin and straight hair. Communities are traditionally headed by warrior chiefs assisted by a council of elders. The community is composed of dispersed population clusters with varying size. The houses are usually in higher ground where shifting cultivation is engaged as main economic activity. Foraging, hunting and fishing supplement farming. They trade goods, manage inter-group relationship and maintain concept of property and territory much more extensively than the Mamanwa. Social stratification is marked but not rigid and allows person of the lower class to move up through wealth accumulation and prestige building.

Table 1 Selected Background Information on CADT 092: 2009

Item	Data
Status of Tenure Instrument	CADT Without ADSDPP
CADT No	092
Area	26,881 has
Status of ADSPPP	None
External Support	Not Applicable
Municipalities and barangays	Cabadbaran (5) Santiago (3) Tubay (2)
Total IP in CADT area	6,498 persons
Members' composition	Manobo (60%) Mamanwa (40%)
Percentage of IP in CADT Area	No Estimate

Methodology

The data used to compose the profile of the indigenous peoples in CADT 092 were obtained from primary and secondary sources. The primary sources were the results of a household survey and key informant interviews. The household survey was a conducted among 94 sample households from September to October 2009. The CADT area had a total of 1,160 households of indigenous peoples. The sample size was estimated to have 10 percent sampling error and 95 percent reliability level. The sample households were proportionately distributed among the 10 barangays where the CADT area was located. The key informants included indigenous people leaders and women as well as personnel of NCIP, municipal and provincial government. The secondary data were obtained from past studies, NCIP, National Statistics Office and Bureau of Agricultural Statistics. .

Demography

The size, composition and changes of the population strongly influence the interaction of individuals and groups and a determinant of the type and rate of the use of natural resources. For these reason, demography is a vital factor in development and must be fully taken account in planning and implementation.

Population Size and Growth

The ten barangays where CADT 092 is located had a total population of 20,101 persons in 2007 (Table 2). But the CADT area occupied only portions of these barangays. These barangays had a population growth of 1.5 percent between 2000 and 2007. This growth rate is much lower than the national rate of 2.3 percent during the same period.¹ Except for two barangays, all the barangays had a population growth lower than the national

¹ The national demographic figures used in the section of Demography were from the National Statistics Office. 2003. 2000 Census of Population and Housing. Philippines. Manila.

average. The natural increase (number of birth minus number of death) in these barangays seemed to be within the national average. The low population growth rate could only be attributed to a net migration that favored out-migration.

But in-migration seemed to favor the two barangays in Cabadbaran having high population growth. These were barangays Del Pilar and Putting Bato. The reason for the high in-migration is gold panning and small-scale mining.

Table 2: Population Size and Growth in Barangays Where CADT 092 is Located: 2000 and 2007

Municipality and Barangay	2000	2007	Annual Growth Rate
Cabadbaran			
Bayabas	1,205	1,182	(0.3)
Calamba	2,542	2,750	1.1
Del Pilar	2,352	3,262	4.8
Putting Bato	1,615	2,040	3.4
Mahaba	962	1,041	1.1
Santiago			
Curva	1,491	1,760	2.4
Jagupit	2,021	2,051	0.2
San Isidro	1,860	2,128	1.9
Tubay			
Tagmamarka	1,862	1,854	(0.1)
Dona Telesfora	2,133	2,033	(0.7)
Total	18,043	20,101	1.5

Source: National Statistics Office

In-migration

Although the barangays where CADT 092 area was located had mostly high out-migration rate, in-migration was continuing. In the CADT 092 area, around 19.3 percent of the population was not born there (Table 3). Close to 9.8 percent were born in other municipalities within Agusan del Norte. Another 9.5 percent were from outside provinces. They were from as far as Bohol, Agusan del Sur, Surigao del Sur and Misamis Oriental. The reasons for in-migration included marriage to a local resident and livelihood opportunities.

The continuing in-migration indicated that the population within the CADT area was dynamic in growth and composition. Given this trend, its population will continue to expand and will incessantly increase the pressure on the existing resources and services. This pressure means that even just to maintain the current status of the environment and the population-service ratio will require increasing investment far beyond any project term. The alteration of the population composition as a result of in-migration likewise creates pressure for the indigenous culture to filter, process and indigenize the introduced elements so that its integrity and the indigenous people will not be disadvantaged.

Table 3 Place of Birth of the Household Members of the Indigenous People in CADT 092: 2009

Place of Birth	Percent
Same municipality as present residence	80.7 percent
Another municipality but same province	9.8
Another province	9.5
Total	100.0 percent

Age Composition

Apart from in-migration, relatively high birth rate was also fueling the population growth in CADT 092 area. This was reflected by the average household size of 5.6 members (Table 4). This size was larger than the 2000 national average of 5.0 members. Such size indicated that the households in CADT 092 area were having more children than the national average.

The higher number of children in CADT 092 area was seen in the age composition. Around 37.3 percent of the population was below 15 years of age. The young (below 15 years old) and the very old (over 64 years old) are considered dependents of the economically active adults (15-64 years old). The percentage of the young and very old in CADT 092 area translated to a dependency ratio of 71 dependents per 100 economically adults. This means that almost every person of the labor force has to support one dependent. At the national level, dependency ratio is only 69 persons per 100 economically active adults.

The high dependency ratio means that the earning of the economically active adults is mostly if not wholly spent on basic needs. The amount of earning may not even suffice just to meet these needs. There is very little left if any for investment. This includes investment of education. On the part of the government, the high dependency ratio means smaller tax base and larger demand for basic social services. The young and the poor are not part of the tax base and are big users of health and educational services.

Gender Composition

The population in CADT 092 area was dominated by males. There were only 90.0 females per 100 males. This was much lower and much less balanced than the national gender ratio of 99 females per 100 males. The dominance of males in CADT 092 area reflected the nature of its economy which rested almost wholly on extractive industries. These industries included farming, fishing, forestry, hunting and mining. Such industries mainly require the use of physical strength which favors the male. There was no evidence that the numerical dominance of males was a result of patterned gender discrimination at the household level. It however indicated that the out-migrants were mostly women.

Table 4 Selected Characteristics of the Indigenous Peoples' Households in CADT 092: 2009

Item	Data
Average household size	5.6 members
Age Distribution	
Below 15 years old	37.3 percent
15-64 years old	58.4
Over 64 years old	4.3
Total	100.0
Number of dependents per 100 economically adults	71 dependents
Number of females per 100 males	90 females
Language used at home	
Bisaya	58.0 percent
Mamanwa	9.1
Manobo	1.1
Mamanwa and Manobo	1.1
Mamanwa and Bisaya	10.2
Manobo and Bisaya	18.2
Mamanwa, Manobo and Bisaya	2.3
Total	100.0 percent
Religion	
Catholic	34.1
Pentecostal	17.0
Born again	8.0
New Apostolic Church	2.3
Philippine Independent Church	27.3
Diwata/ Magbabaya	6.8
None	4.5
Total	100.0

Linguistic Composition

The language used within the household indicated the degree of change in the indigenous culture because it is the main instrument of a group to define and interpret the world. In CADT 092 area, only 9.1 percent still used Mamanwa. The users of Manobo and Manobo with Mamanwa were only 1.1 percent, respectively. A good percentage had gone bilingual or trilingual. About 10.2 percent spoke Mamanwa and Bisaya while 18.2 percent used Manobo and Bisaya. Bisaya is the language of most settlers. This language is already dominant among the indigenous peoples in CADT 092 area with 58.0 percent of them using it exclusively at home.

The percentage of households using Bisaya as a second language showed the extent of the penetration of the market, mass media and other change factors among the indigenous peoples. While using the language of the settlers which is presently the dominant group in Mindanao in outside transactions is for convenience, its use within the household indicated a drastic shift in cultural orientation.

Religious Composition

The shift in cultural orientation among the indigenous peoples in CADT 092 area was further seen in their professed religious affiliation. Only 6.8 percent reported that they still consider their indigenous belief (Diwata and Magbabaya) as their religion. The rest already identified introduced religion, mostly Christian denominations, as theirs. This percentage spoke not only of the aggressive conversion activities of outsiders but also of the effective use of religion in diluting indigenous culture. This trend pointed out that the complete loss of indigenous culture is only a matter of time.

Literacy and Education

The simple literacy rate among indigenous peoples in CADT 092 area was relatively high at 92.6 percent (Table 5). It was even slightly higher than the national rate of 92.0 percent (2000).² Simple literacy is the ability to read and write and comprehend a simple written message. It is differentiated from functional literacy which includes certain numeracy skills. It was pointed out earlier that the imbalance of the gender ratio is not a result of patterned gender discrimination at the household level. The higher literacy rate among women compared to men (94.6 versus 90.5 percent) was an evidence. The higher women literacy indicated that the educational system and maybe even the households tend to retain the females longer in school than the males.

Table 5 Literacy and Education of the Indigenous Peoples' Households in CADT 092 by Gender: 2009

Item	Data
Simple literacy rate (10 years old and over)	
Male	90.5 percent
Female	94.6 percent
General	92.6 percent
Average number of years spent in school (7 years old and over)	
Male	4.7 years
Female	5.8 years
General	5.2 years
Percentage of persons without any education (7 years old and over)	
Male	15.0 percent
Female	12.9 percent
General	14.1 percent

An average woman stayed in school for 5.8 years while its only 4.7 years for a man. This meant that the average educational attainment for women was about Grade 6 of elementary education while it was Grade 4 or 5 for men. The longer retention rate of the females in school compared to the males was also seen in the percentage of persons

² National Statistics Office. 2003. 2000 Census of Population and Housing, Philippines. Manila.

without any education. They composed 15.0 percent among men while it was only 12.9 percent for women.

Favoring women in education has many implications. One is on the population composition. Because more educated people tend to migrate out from their rural environment, the higher education for women will further offset the current gender imbalance. This has a bearing on the degree of internal conflicts due to competition among men, continuity of women-associated economic activities and cultural transmission through child bearing and rearing. Another implication is on the leadership quality among indigenous people particularly among the Manobo group where a leadership position is a male prerogative. If the leaders are less educated than their constituency, the gap can diminish trust and credibility necessary for effective leadership.

Nonetheless, education may have also inadvertently served as an instrument to dilute the indigenous culture in CADT 092 area. Regular curriculum and system were used in the schools and ran by non-indigenous personnel. There were no specific provisions for the indigenous culture and system.

Occupation and Income

The main economic activity of the indigenous peoples in CADT 092 was farming. Their labor force is concentrated on this sector and it was their main income source. But farming was done along with a number of other activities providing the household with a wide portfolio of income sources. It was also noted that employment opportunities were diversifying beyond farming.

Occupation

Around 37.9 percent of those aged 15 years old and over identified farming as their primary occupation (Table 6). The concentration was much higher among men at 59.9 percent. Only 12.4 percent of the women considered farming as their primary occupation. About 56.8 percent considered housekeeping as their occupation although they usually assisted the men in farming.

Around 8.3 percent of the male labor force had elementary occupation working as farm laborers and small scale miners. Around 13.6 percent of the men and 13.1 percent of the women reported being unemployed. The higher percentage of women reporting unemployment and identifying housekeeping as their occupation gave greater credence to the situation that the economy in CADT 092 favored male employment and female migration. Its economy still offered little employment diversification although 2.6 percent of women were working as proprietors of their own business enterprises. Further, 4.0 percent of men were working as machine operators mostly transport drivers. But still only very small percentages were working in non-farming occupations.

Table 6 Primary Occupations the Indigenous Labor Force in CADT 092: 2009

Occupations	Male	Female	Total
Officials, executives and proprietors	0.6 percent	2.6 percent	1.5 percent
Professionals	0.6		0.3
Technician and associated workers		2.0	0.9
Service and sales workers	0.6	1.3	0.9
Farmers	59.9	12.4	37.9
Fishers	0.6	-	0.3
Craftsmen	0.6	-	0.3
Machine operators	4.0	-	2.1
Elementary occupations	8.3	-	4.5
Housekeepers		56.8	26.5
Pensioners	0.6	-	0.3
Students	10.6	11.8	11.2
Unemployed	13.6	13.1	13.3
Total	100.0 percent	100.0 percent	100.0 percent

Income

The average household income in CADT 092 area was 32,066 pesos per year (Table 7). This is way below the 2007 rural poverty threshold for Agusan del Norte. The threshold was 13,147 pesos per capita or given the household size of CADT 092 area, it is about 73,623 pesos per household. This income level affirmed the fact that indeed the indigenous peoples are among the poorest of the poor.

Farming was the biggest contributor of the household income accounting for 54.7 percent of the total. Next to farming, salaries and wages were the second most important economic activity providing 20.6 percent of the total income. The relatively high percentage contribution of salaries and wages indicated that self-employment in subsistence household economy is very gradually shifting to off-home and even off-farm employment. The other income sources including animal raising and forest products extraction had minimal contribution. But it must be noted that the income from small scale mining made relatively substantial contribution at around 5.6 percent and recorded as other income sources.

A very low income has very high risk that the household would end up in hunger. The household maintained multiple income sources to hedge against that risk. A failure in one or two sources would not completely starve the household because there would still other sources to tap. The households in CADT 092 area had an average of two to three income sources. Almost all households were into farming and 20.6 percent received salaries and wages. Around 42.5 percent raised livestock and poultry as well. The rivers were still important income source relied upon by 19.0 percent of the households. It was still their main source of protein. The forest provided meat, tubers, timber, honey, wicker, orchids and medicines to 11.7 percent. Around 17.0 percent earned from small-scale mining.

Table 7 Income Composition and Household Distribution of Indigenous Peoples in CADT 092 by Income Sources: 2009

Item	Data
Average annual household income	32,066 Pesos
Income Composition in Percent	
Salaries and wages	20.6 percent
Fishing and aquatic resources extraction	2.1
Farming	54.7
Poultry and livestock raising	4.4
Rentals	0.0
Remittances	2.5
Share from land	0.0
Pension	4.9
Business proceeds	1.5
Forest resource extraction	3.7
Others	5.6
Total	100.0 percent
Percentage of Households by Type of Income Sources (Multiple Response)	
Salaries and wages	20.2 percent
Fishing	19.0 percent
Farming	91.5 percent
Poultry and livestock raising	42.5 percent
Rentals	0.0 percent
Remittances	9.6 percent
Share from land	1.1 percent
Pension	6.4 percent
Business proceeds	5.3 percent
Proceeds from forest resource extraction	11.7 percent
Others	17.0 percent
Average Number of Income Sources	2.2 Sources

Main Economic Activities

The operation of the main economic activities in CADT 092 is described in detail because of their importance to poverty reduction measures. These were farming, fishing and animal husbandry. The design of these measures requires deeper understanding of the characteristics of the activity to identify the impediments and the rationale of the households in adapting or rejecting certain measures.

Fishing

Around 19.0 percent of the households in CADT 092 area were engaged in fishing (Table 8). Although fishing was the main provider of protein to the households, it was

largely subsistence in operation. They usually only had one gear. For 83.5 percent of the fishing households, this was their only gear. A very few had hook and line or a net. Fishing was engaged 3.2 times per month and the average catch was only 2.7 kilogram per engagement.

The respondents reported a number of aquatic species that they caught from the rivers and other water bodies. These included a number of fish species, eel and shrimp. On the average 78.7 percent of the catch was eaten (Table 9). But the percentage of the amount consumed varied by species. Mudfish and shrimps were more likely to end up being eaten by the households compared to eel and carp. Around 15.5 percent of the tilapia and 22.5 percent of the carp were sold. But on average only 7.6 percent of the catch was sold.

The fishing households give away a substantial percentage of their catch. Around 15.0 percent of the shrimp and 50.0 percent of the eel ended up in the kitchen of relatives and neighbors. But only 3.4 percent of the tilapia and none of the carp and mudfish had the same fate. On the average, 13.7 percent of the total catch was given away.

Table 8 Selected Data on the Fishing Activities of the Indigenous Peoples' Households in CADT 092: 2009

Item	Data
Percentage of Households Engaged in Fishing	19.0 percent
Type of Fishing Gears Used	
Spear	83.5 percent
Hook and Line	5.5
Net	5.5
Electricity	5.5
Total	100.0 percent
Average fishing frequency per month	3.2 times
Average amount of fish catch	2.7 kilogram

Table 9 Percent Distribution of the Catch of Indigenous Peoples in CADT 092 by Type:2009

Type of catch	Consumed	Sold	Given Away	Total
Shrimp	85.0 percent	-	15.0 percent	100.0 percent
Tilapia	81.1 percent	15.5 percent	3.4 percent	100.0 percent
Mudfish	100.0 percent	0.0 percent	0.0 percent	100.0 percent
Carp	77.5 percent	22.5 percent	0.0 percent	100.0 percent
Eel	50.0 percent	0.0 percent	50.0 percent	100.0 percent
Average	78.7 percent	7.6 percent	13.7 percent	100.0 percent

Most of the respondents mentioned a problem in fishing. The main problem is the rampant use of poison, dynamite and electricity that has destroyed aquatic habitats and depleted the fish stock. About 81.4 percent of the respondents considered this as a problem in the fisheries in CADT 092 (Table 10). Around 6.2 percent considered low

catch a problem Another 6.2 percent thought their gear was inefficient. These problems dramatized the phenomenon of the increasing demand to extract amid declining fish stock and deteriorating fish habitat. This phenomenon has a predictable outcome of fish depletion as the extraction rate outstrips the natural ability of the resource to reproduce.

Table 10 Problems in Fishing Mentioned by Indigenous People Respondents in CADT 092: 2009

Problem	Percentage
None	6.2 percent
Inefficient gears	6.2
Low fish catch	6.2
Use of electricity, poison and dynamite	81.4
Total	100.0 percent

Farming

Farming among the indigenous people in CADT 092 area was the central economic activity. It provided the households its starch and cash requirements. But like all other aspects of their life, farming was undergoing change as they adapt to the pressure of diminishing resources, increasing number of users and the expanding market.

Land Ownership

Around 91.5 percent of the households were into farming (Table 11). But only 15.3 percent had a title to at least part of the land they tilled. Around 51.4 percent considered the land that they cultivated as their own but they did not have the title to it. Those who did not own the land they tilled composed around 30.5 percent. Around 20.7 percent were using for free the land owned by others. The rest were renting or working as tenants.

The average farm size was around 1.25 hectares. This size translated to a 0.21 hectare per capita of farmland. Although this is higher than the national per capita 0.14 hectare, this could be considered small given the fact that the economy of CADT 092 area was almost wholly agricultural and almost all households depended on agriculture.³

Cropping Pattern

The small farmland had a wide array of upland crops produced mainly to provide the household its starch requirement. The main crops in CADT 092 area in terms of the percentage of planters and size of the area planted were sweet potato and banana. Around 58.1 percent of the households were sweet potato planters and 80.2 percent was into banana (Table 12).

³ The figure on the national per capita of farmland is from the Bureau of Agricultural Statistics, 2009 Country Statistics. Quezon City

Table 11 Selected Data on the Farming Area of the Indigenous Peoples' Households in CADT 092: 2009

Item	Data
Percentage of households engaged in farming	91.5 percent
Percentage of households by type of land tenure	
Owner-cultivator with land title	12.5 percent
Owner-cultivator but no land title	51.4
Renter	1.4
Tenant	5.6
Occupant of land owned by others	20.7
Partly tenant and partly free occupant	2.8
Partly title-holder and partly owner-cultivator but no title	1.4
Partly title holder and partly tenant	1.4
Partly owner-cultivator with no title and partly tenant	1.4
Total	100.0 percent
Average Size of Area Farmed	1.25 hectares

Table 12 Cropping Pattern of the Indigenous People in CADT 092: 2009

Percentage of households by type of crop (multiple response)	Data
Sweet potato	58.1 percent
Banana	80.2 percent
Cassava	22.1 percent
Coconut	32.6 percent
Taro	7.0 percent
Corn	29.1 percent
Abaca	19.8 percent
Vegetables	8.1 percent
Timber Tree	4.7 percent
Average Number of Crops per Households	2.6 crops
Distribution of crops by land area	
Sweet potato	20.1 percent
Banana	29.2
Cassava	5.1
Coconut	19.7
Taro	1.6
Corn	11.5
Abaca	9.5
Vegetables	1.7
Timber Tree	1.6
Total	100.0 percent
Average area planted to crops (in hectares)	
Sweet potato	0.41 hectares
Banana	0.46 hectares
Cassava	0.29 hectares
Coconut	0.78 hectares
Taro	0.29 hectares
Corn	0.49 hectares
Abaca	0.60 hectares
Vegetables	0.27 hectares
Timber Tree	0.58 hectares

Around 22.1 of the household was cultivating cassava and 29.1 percent had corn. Comparatively, the percentage of the planters of commercial crops was relatively small. The coconut and abaca planters constituted only 32.6 and 19.8 percent, respectively. The percentage of vegetable planters was even much smaller.

The largest percentage of the farm land was likewise devoted to sweet potato and banana. Sweet potato had 20.1 percent and banana had 29.2 percent. Among the commercial crops, coconut had the largest share at 19.7 percent. But the actual area planted to sweet potato and banana by an average household was less than half hectare: 0.41 hectare for sweet potato and 0.46 hectares for banana. Around 0.49 hectares were devoted to corn. The average area planted to cassava and taro was much smaller at 0.29 hectares, respectively. The commercial crops had larger area to attain certain volume to make the operation profitable. It was 0.78 for coconut and 0.60 for abaca.

The crop composition and area of the households in CADT 092 area showed that their farm production was mainly subsistence. In many households, the farms were swidden gardens where crops were mixed with small spaces devoted to each. An average household had about two to three main crops growing simultaneously. Some planters would even leave crops like taro to the nature after planting and would only return to harvest it after a period.

But the percentage of households planting commercial crops although still very limited indicated that many were gradually veering away from shifting to sedentary agriculture. This was apparently a way of coping with the increasing population pressure and land scarcity that shortened the fallow period. It was also an indication that they were gradually responding more intensively to the market demands and a change of their consumption patterns from subsistence to consumerism.

Amount of Yield

Harvesting among the households in CADT 092 area was staggered. It was done not only based on the maturity of the crop but also on the need of the household for food and cash. In this manner the crops stored the resource of the household and enabled it to withdraw as needed. Sweet potato was harvested 7.4 times a year. The harvest for banana was 5.5 times a year. Coconut and abaca were harvested 3.9 and 1.8 times a year, respectively (Table 13). Cassava was harvested 4.3 times a year on average.

But the average yield was generally low. A hectare of sweet potato produced 297 kilogram per harvest or 2,198 kilogram per year (versus 4,917 kilogram at the national level).⁴ Every harvest of banana yielded 758 kilogram per hectare or 4,169 kilogram per year (versus 19,808 kilogram at the national level). The yield for cassava was 422 kilogram per hectare or 1,815 kilogram per year (versus 9,173 kilogram at the national

⁴ The figures on national average for yield per hectare per year are from the Bureau of Agricultural Statistics, 2009 Country Statistics. Quezon City

level). Only 718 kilograms of corn was obtained per hectare for very harvest or 1,580 kilograms per year (versus 2,603 at the national level).

Table 13 Number and Amount of Harvest of the Indigenous People in CADT 092: 2009

Item	Data
Average number of harvest per year	
Sweet potato	7.4 times
Banana	5.5 times
Cassava	4.3 times
Coconut	3.9 times
Taro	2.6 times
Corn	2.2 times
Abaca	1.8 times
Vegetables	3.0 times
Average amount of harvest per hectare	
Sweet potato	267 kg
Banana	758 kg
Cassava	422 kg
Coconut	3464 nuts*
Taro	200 kg
Corn	718 kg
Abaca	384 kg
Vegetables	50 kg

*Equivalent to 577 kilograms of copra at 6 nuts per kilogram of copra

The yield was likewise low even for coconut. A hectare of coconut produced only 577 kilograms of copra per harvest or 2,250 kilograms per year (versus 4,533 kilogram at the national level). But the yield for abaca, a traditional crop of many indigenous groups in Mindanao was higher than the national average. The yield was 384 kilogram per harvest for a hectare or 691 kilogram per year (versus 487 kilogram at the national level). Abaca is indigenous to Mindanao.

The farm production level in CADT 092 area was a result of low input and maintenance operation that characterize upland swidden farming. It may also reflect the lower soil fertility resulting from shortened fallow period or continuous cultivation prompted by increasing land scarcity and sedentary lifestyle. Except for abaca and maybe banana and taro, the cultivation of these crops was introduced to the indigenous people.

Yield Distribution and Sufficiency

On the average, 59.6 percent of the farm production in CADT 092 area was for home consumption (Table 14). The crops which met the starch requirements of the household were mainly consumed. Around 88.7 percent of the sweet potato, 83.4 percent of cassava, 90.0 percent of taro and 86.4 percent of corn were consumed at home. The percentage of the yield that was consumed at home ran as high as 100.0 percent for vegetables although only 27.0 percent for banana was similarly used.

Table 14 Yield Distribution of the Indigenous People in CADT 092: 2009

Crop	Consumed	Sold	Given Away	Total
Sweet potato	88.7 percent	9.0 percent	2.3 percent	100.0 percent
Banana	27.0 percent	67.1 percent	5.9 percent	100.0 percent
Cassava	83.4 percent	9.4 percent	7.2 percent	100.0 percent
Coconut	1.5 percent	98.5 percent	0.0 percent	100.0 percent
Taro	90.0 percent	10.0 percent	0.0 percent	100.0 percent
Corn	86.4 percent	10.7 percent	2.9 percent	100.0 percent
Abaca	0.0	100.0 percent	0.0 percent	100.0 percent
Vegetables	100.0 percent	0.0 percent	0.0 percent	100.0 percent
Average	59.6 percent	38.1 percent	2.3 percent	100.0 percent

But almost all of the cash crops ended up in the market. Around 98.5 percent of the coconut and all of abaca produced were sold. Among the sources of starch, only banana was sold at high proportion. Around 67.1 percent of the produce was sold

The sellers in general managed to get prices higher than the average farm-gate prices in Caraga. For instance, their average selling price for sweet potato was 13.25 per kilogram but its average farm-gate price as of September 2009 was 8.54 pesos (Table 15). For abaca, their average selling price was 36.70 but the average farm-gate price in Caraga was only 34.40. But it is likely that the households sold their produce in the urban centers and not at the farm-gate. In this case, they spent for the transport of produce which was rather costly.

Table 15 Average Selling Price of Harvest of the Indigenous People in CADT 092: 2009

Crop	Selling Price per Kilogram	Average Farm-gate in Caraga (September 2009)*
Sweet potato	13.25 pesos	8.54 pesos
Banana	5.50 pesos	4.72 pesos
Cassava	10.71 pesos	5.81 pesos
Coconut	3.00 pesos**	not available
Taro	3.20 pesos	6.24 pesos
Corn	12.00 pesos	9.79 pesos
Abaca	36.70 pesos	34.40 pesos
Vegetables (String Beans)	10.00 pesos	10.68 pesos

* Source: Bureau of Agricultural Statistics

** Coconut in CADT 092 area was sold per piece and not as copra

On the average, only 2.3 percent of the farm production was given to relatives and neighbors. The percentage that was given away was as high as 7.2 percent for cassava and as low as 2.3 percent for sweet potato. This percentage confirmed that sharing of resources was still very much practiced among the indigenous peoples in CADT 092 area although at much smaller scale than in other CADT areas. None of the yield of the

commercial crops was given away. It seemed that produce with good market value was rather sold than given away.

The yield of crops providing the indigenous peoples starch should be enough to meet their food requirement. An average person in the Philippines consumes around 100 kilogram of starch a year. Given the total production of starch-source crops (sweet potato, banana, cassava, taro and corn) and average household size of 5.6 members in CADT 092 area, the per capita yield was about 388 kilogram per person.

Around 147 kilograms were as sold to earn cash for other household requirements and another 24 kilograms were lost in processing the raw produce into ready-to-cook food. The result is a balance of only 217 kilogram per person. With such food surplus, there should not be a cyclical hunger unless distribution of land and food was extremely skewed. This computation assumed that the amount of produce given away was offset by the amount received.

Problems in Farm Production

Only 2.8 percent of the respondents did not mention any problem (Table 16). But for 36.1 percent, insufficient capital was the main problem. Another 30.6 percent considered thief as a problem. But for 8.3 percent, it was the poor roads and transport that have prevented the further development of farming. The high cost of fertilizer was mentioned by 4.2 percent. An improvement of roads and elimination of thief could reduce the risk of losses and motivate the farmers to raise their own capital, acquire their own equipment and produce more.

Table 16 Problems in Farming of the Indigenous People in CADT 092: 2009

Problem	Percent
No problem mentioned	2.8 percent
Landlessness	2.8
Insufficient capital	36.1
High cost of fertilizer	4.2
Poor roads and transport	8.3
Thief	30.6
Lack of labor	6.9
Lack of work animals	4.1
Total	100.0 percent

Poultry and Livestock Operation

Only 42.5 percent of the households in CADT 092 area were domesticating animals (Table 17). Production included small and big animals although in small quantity. Around 67.5 percent of the households who were raising animals had pigs. Only 40.0 percent had chickens. Around 25.0 percent had cows and 35.0 percent had carabaos. The goat raisers compose 5.0 percent.

Table 17 Selected Data on the Livestock and Poultry Operation of the Indigenous Peoples' Households in CADT 092: 2009

Item	Data
Percentage of households raising animals	42.5 percent
Percentage of households by type of animal raised (multiple response)	
Chicken	40.0 percent
Pig	67.5 percent
Goat	5.0 percent
Cow	25.0 percent
Carabao	35.0 percent
Horse	2.5 percent
Mean number of animal per household	
Chicken	13.0 heads
Pig	2.4 head
Goat	2.0 heads
Cow	1.4 heads
Carabao	1.6 head
Horse	1.0 heads

The households had 13 chickens and two to three pigs on average. The cow and carabao raisers had on average one or two heads each. Carabaos and horses were raised mainly as beasts of burden. But only 2.5 percent had a horse. The horse owners had only one each. .

Raising animals brought in cash to the households. A good number of animals raised ended up in the market. Among the chickens, 40.4 percent were sold in 2008 (Table 18). The percentage of animals sold was even much higher for pigs at 65.3 percent. The high mortality rate among poultry and livestock may partly explain the low percentage of households raising them and the limited number of heads raised. Around 15.8 percent of the chickens and 30.4 percent of the pigs died making animal raising a risky enterprise.

Table 18 Yield Distribution of Poultry and Livestock of the Indigenous People in CADT 092: 2009

Crop	Consumed	Sold	Died	Total
Chicken	43.8 percent	40.4 percent	15.8 percent	100.0 percent
Pig	4.3 percent	65.3 percent	30.4 percent	100.0 percent
Carabao	0.0	100.0	0.0	100.0 percent
Cow	0.0	100.0	0.0	100.0
Average	12.0 percent	76.4 percent	11.6 percent	100.0 percent

Animal diseases and absence of veterinary services resulting to high animal mortality was identified as a problem by 28.6 percent of the respondents (Table 19). Beating this problem means that chicken and pig production would automatically increase. Thief was another disincentive to raise animals. To 5.7 percent of the respondents, thief was a

serious problem together with animal disease. But the concern of 25.7 percent was not having enough feeds to support the animals. Some 20.0 percent mentioned lack of capital to buy feeds and afford animal medicine. Raising animals was not part of the traditional household economy of the indigenous people in CADT 092 area. The skills to produce feeds and fodder and taking care of the animals had yet to be learned more systematically.

Table 19 Problems in Raising Animal of the Indigenous People in CADT 092: 2009

Problem	Percent
No problem mentioned	8.6 percent
Diseases and absence of veterinary services	28.6
Insufficient feeds and disease	11.4
Thief and disease	5.7
Insufficient feeds	25.7
Lack of capital	20.0
Total	100.0 percent

Lot Tenure

In spite of an approved CADT, most respondents did not consider the land where their house stood as their own. Only 57.4 percent said that they own their home lot (Table 20). About 39.4 percent of the households were occupying a lot for free although they did not own it. The rest were either renters or were amortizing.

Those who owned the home lot considered a title as proof ownership. Around 88.9 percent of this title was in the name of a man. Only 8.3 percent of the households had home lot title under the name of a woman. Another 2.8 percent had title under the name of both a man and a woman. Although limited, the percentage of titles in the name of a woman or both a man and a woman indicated that the system of land ownership did not discriminate against women.

Table 20 Selected Data on Lot tenure of the Indigenous Peoples' Households in CADT 092: 2009

Item	Data
Lot Tenure	
Owned	57.4 percent
Renters	2.1
Amortizing	1.1
Free occupancy	39.4
Total	100.0 percent
Gender of the name in the lot title	
Male	88.9 percent
Female	8.3
Both	2.8
Total	100.0 percent

Household Utilities

Based on the percentage of households who had access to sanitary water sources, it seemed that much had been achieved for the indigenous peoples. Around 60.2 percent of the households in CADT 092 area had access to a communal faucet (Table 21). Another 31.2 percent had even a house connection. Some 1.1 percent drew their drinking water from a pump well. Only a small percentage still drew their water from sources considered unsanitary such as a dug well or an open spring.

Table 21 Selected Data on Housing Utilities of the Indigenous Peoples' Households in CADT 092: 2009

Item	Data
Source of drinking water	
Faucet with house connection	31.2 percent
Communal faucet	60.2
Pump well	1.1
Dug well	1.1
Spring	6.4
Total	100.0 percent
Toilet ownership and type of toilet	
None	17.6 percent
Flash or water sealed	72.9
Open pit	8.2
Close pit	1.3
Total	100.0 percent
Cooking fuel used	
Electricity	6.5 percent
Wood or charcoal	93.5
Total	100.0 percent
Lighting fuel used	
Electricity	62.9 percent
Kerosene	34.8
Electricity and Kerosene	2.3
Total	100.0 percent

But more needs to be done in sanitation. Around 17.6 percent of the households did not have a toilet. Only 72.9 percent had flash or water-sealed toilet. The rest had toilets considered unsanitary.

In terms of energy use, 34.8 percent still used the highly polluting kerosene lamps. The reached of electricity had been substantial though at 65.2 percent. Wood and charcoal were still the main cooking fuel used. Around 93.5 percent still used these materials for cooking.

Access to Services

The households were relatively close to a health center and an elementary school. They live around 0.4 kilometers from a health center and 0.5 kilometers from an elementary school on average (Table 22). The farthest house from the health center and an elementary school was only one kilometer away.

But a hospital was on average 16.9 kilometers away while a high school was 10.1 kilometer away. The farthest house from a hospital and a high school was 35 kilometers away.

All health centers were located outside the CADT area. Neither were there any health personnel within the CADT area. There were however two primary school with 9 teachers. With around 1,169 school-age indigenous peoples' children in the CADT area and assuming that they were all in school, the ratio would be around 130 students per teacher. This ratio was way above the standard of 30 students per teacher. Further, indigenous culture was not part of the curriculum in the schools within the CADT area.

There were micro enterprises within the CADT area, mostly general merchandise (sari-sari) stores. Although some were profitable they never expanded. Their operation was also intermittent due to seasonal bankruptcy. There was no cooperative in the CADT area.

Table 22 Average Distance of Selected Services from Indigenous Peoples' Houses and Services Located in CADT 092 area: 2009

Item	Data
Average Distance of Social Services from the Houses of Indigenous People	
Health Center	0.4 km
Hospital	16.9 km
Elementary School	0.5 km
High School	10.1 km
Average	7.0 km
Social Services Located in the CADT Area	
Health Center	0
Midwife	0
Nurse	0
Doctor	0
Primary School	2
Classroom	9
Teacher	9
Curriculum on indigenous culture	0
Micro-enterprises	Many
Status of micro-enterprises	Intermittent operation
Cooperatives	0

Loan Facility and Availability

The lack of capital had been expressed as problem by the respondents in the conduct of economic activities. But 40.5 percent of the respondents reported knowledge of a loan facility (Table 23). Among those who had knowledge, 90.0 percent took out a loan. In the past two years, they took out a loan two to three times. The average amount of the loan taken was 8,917 pesos. Among those who refused to take out a loan, the reasons revolved around the inability of the household to meet the payment requirement.

Table 23 Selected Data on Housing Utilities of the Indigenous Peoples' Households in CADT 092: 2009

Item	Data
Percentage of respondents who know a loan facility	40.5 percent
Percentage of respondents who know a loan facility and availed a loan	90.0 percent
Average frequency of availing a loan in past 2 years	2.6 percent
Average amount of loan obtained	8,917 pesos
Reasons for not availing a loan	
Lack of funds for repayment	100.0 percent

Observed Environmental Changes

To measure the environmental changes that occurred in CADT 092 area, the respondents reviewed six aspects and rated its state compared to 20 years ago. These aspects were as follows: ease in getting drinking water, quality of drinking water, clarity of the water in the river, expanse of the forest, faunal diversity and freshwater fish stock. On the average, 58.7 percent noted that the environment had gone worse (Table 24). But the rating varied by aspect. The environmental aspects which were rated highly to have gone worse were the expanse of the forest (93.0 percent), faunal diversity (97.8 percent) and freshwater fish stock (97.8 percent).

Table 24 Change in Selected Environmental Indicators Observed by the Indigenous Peoples' Households in CADT 092: 2009

Item	Better	Same	Worse	Total
Ease in getting drinking water	93.6 percent	3.2 percent	3.2 percent	100.0 percent
Quality of drinking water	75.3 percent	15.1 percent	9.6 percent	100.0 percent
Clarity of the water in the river	21.3 percent	29.2 percent	49.5 percent	100.0 percent
Expanse of the forest	1.1 percent	3.2 percent	93.0 percent	100.0 percent
Animal diversity	0.0 percent	2.2 percent	97.8 percent	100.0 percent
Freshwater fish stock	0.0 percent	2.2 percent	97.8 percent	100.0 percent
Average	32.0 percent	9.3 percent	58.7 percent	100.0 percent

Around 84.5 percent identified logging as the factor behind the reduction of the forest (Table 25). It was also the culprit pointed out by 9.2 for the reduction of faunal diversity. Settlement expansion as a result of population growth was also a factor for the reduction of the forest and faunal diversity. Around 4.9 percent blamed it for the reduction of the forest and 6.9 did the same for the loss of faunal diversity.

The gold rush giving rise to small scale mining also took the blame. Around 2.3 percent blamed it for forest reduction and 3.5 percent did the same for the reduction of animal diversity. But most household considered unregulated hunting and habitat loss as the main culprit in the depletion of the animals in the forest. Around 44.8 and 35.6 percent respectively, mentioned these factors.

Table 25 Reasons for Deterioration of Selected Environmental Indicators Observed by the Indigenous Peoples' Households in CADT 092: 2009

Reasons	Percentage
Ease in getting drinking water	
Increased distance of water sources	100.0 percent
Total	100.0 percent
Quality of drinking water	
Degradation due to small-scale mining	84.6 percent
Siltation	15.4 percent
Total	100.0 percent
Clarity of the river	
Siltation due to small-scale mining	92.1 percent
Deforestation	7.9
Total	100.0 percent
Expanse of the forest	
Extensive small –scale mining	2.3 percent
Logging	84.5
Settlement expansion	4.9 percent
Farm expansion and swidden cultivation	8.3
Total	100.0 percent
Animal diversity	
Intense hunting pressure	44.8 percent
Habitat loss	35.6
Logging	9.2
Settlement expansion	6.9
Mining operation	3.5
Total	100.0 percent
Freshwater fish stock	
Water pollution	11.2 percent
Use of poison, dynamite and electricity	86.4
Use of net	1.2
Too many fishers	1.2
Total	100.0 percent

For the reduction of fish stocks, the use of destructive methods (dynamite, poison and electricity), was pointed out as the factor by 86.4 percent. The use of these illegal methods was apparently rampant. Around 11.2 percent identified water pollution as a problem. The other factors cited were the increase of the number of fishers and use of nets.

The aspects that were highly rated to have gone better were the ease in getting drinking water and its quality. Around 93.6 percent reported greater ease and 75.3 percent reported better quality. The installation of water systems was practically the only reason cited for the improvement in both aspects (Table 26). The cleanliness and safety of the source and the use of chlorine were all part of the water system operation.

Those who were not beneficiaries of a water system noted greater difficulty in getting their drinking water due to the increasing distance of the source. They constitute 3.2 percent. The ones who noted deteriorating quality of drinking water composed 9.6 percent. The degradation of water sources due to small-scale mining was considered the main culprit.

There was no clear plurality on the clarity of rivers. Around 49.5 percent said the rivers were in worse shape compared to 20 years ago. Around 92.1 percent of them attributed this to the impacts of small-scale mining. But 29.2 percent said the rivers were the same. The rest said the rivers were in better shape although they could not cite any reason for this.

Table 26 Reasons for Improvement of Selected Environmental Indicators Observed by the Indigenous Peoples' Households in CADT 092: 2009

Reasons	Percentage
Ease in getting drinking water	
Installation of water systems	100.0 percent
Total	100.0 percent
Quality of drinking water	
Installation of water systems	55.2 percent
Clean and safe source	20.7
Use of chlorinated water	24.1
Total	100.0 percent
Clarity of the river	
None given	100.0 percent
Total	100.0 percent

Gender

It was seen in the literacy and educational attainment of the household members in CADT 092 area that women were better off than men. It was also seen in lot ownership that women could own land and put the title to their name either singly or side-by-side with a man's name. These indicators revealed that women were never discriminated at the household and societal level. The role of women in managing the households further showed their preeminent position vis-à-vis the men. This role was demonstrated in the

conduct of economic activities (fishing, farming, animal husbandry and business operation) and in their participation in decision making at the household and community level.

Fishing

Fishing was mainly a male activity. On the average, the male performed the five fishing activities in 73.4 percent of the households (Table 27). Among these activities, the catching of fish or fishing itself was the most male dominated. The men did this task in 95.3 percent of the households. The men also did gear preparation in 93.3 percent of the households. Both men and women gleaned in 25.0 of the households. Both also did the cleaning of the gears in 42.9 percent of the households. However, women had the biggest role in selling of the catch. In 40.1 percent of the households, the women did this. In the rest of the households, men sold the catch.

Table 27 Doer of Fishing Activities in Indigenous Peoples' Households in CADT 092: 2009

Activity	Male	Female	Both	Total
Gear preparation	93.3 percent	6.7 percent	0.0 percent	100.0 percent
Fishing	95.3 percent	0.0 percent	6.7 percent	100.0 percent
Gleaning	75.4 percent	0.0 percent	25.0 percent	100.0 percent
Cleaning of gear	42.9 percent	14.2 percent	42.9 percent	100.0 percent
Selling	60.0 percent	40.1 percent	0.0 percent	100.0 percent
Average	73.4 percent	12.2 percent	14.4 percent	100.0 percent

Farming

While fishing could be considered a male-dominated activity, farming mainly involved both men and women. On the average, both performed the six farming activities in 47.7 percent of the households (Table 28). But more households relied on men in land preparation and plowing at 63.5 and 83.3 percent, respectively. These activities were considered physically demanding. But men and women generally worked together in planting, cleaning and weeding and harvesting. Both planted the fields in 64.6 percent of the households, cleaned and weeded in 67.1 percent and harvested the crops in 74.3 percent. The selling of farm produce involved women more than in selling of fish catch. Women sold the produce in 54.7 percent of the households. In 28.3 percent of the households, men and women shared the task of selling.

Livestock and Poultry

The size of the animal largely determined the gender division of work in managing livestock and poultry. The women looked after the smaller animals while the men did it for the bigger ones (Table 29). Chickens and pigs were under the care of the women in 20.0 and 53.0 percent of the households, respectively. Both women and men also took care of the chickens in 40 percent of the households. In all the households, the women took care of the goats.

Table 28 Doer of Farming Activities in Indigenous Peoples' Households in CADT 092: 2009

Activity	Male	Female	Both	Total
Land preparation	63.5 percent	1.2 percent	35.3 percent	100.0 percent
Plowing	83.3 percent	0.0 percent	16.7 percent	100.0 percent
Planting	32.9 percent	2.5 percent	64.6 percent	100.0 percent
Cleaning and Weeding	30.5 percent	2.4 percent	67.1 percent	100.0 percent
Harvesting	23.1 percent	2.6 percent	74.3 percent	100.0 percent
Selling	17.0 percent	54.7 percent	28.3 percent	100.0 percent
Average	41.7 percent	10.6 percent	47.7 percent	100.0 percent

Table 29 Household Member Taking Care of Animals Raised by Indigenous Peoples' Households in CADT 092: 2009

Animal	Male	Female	Both	Total
Chicken	40.0 percent	20.0 percent	40.0 percent	100.0 percent
Pig	11.8 percent	53.0 percent	35.2 percent	100.0 percent
Goat	0.0 percent	100.0 percent	0.0 percent	100.0 percent
Cow	50.0 percent	33.3 percent	16.7 percent	100.0 percent
Carabao	50.0 percent	25.0 percent	25.0 percent	100.0 percent
Average	30.4 percent	46.3 percent	23.4 percent	100.0 percent

But the men were in-charge of the cows and carabao in 50 percent of the households. They share the tasks with women in 16.7 percent of the households for cows and 25.0 percent for carabao. The nurturance of the women seemed to work well with the smaller animals which were more susceptible to diseases and thief and required more attention in feeding

Business, Household and Community Tasks

Women run the business enterprise in 25.0 percent of the households and share this task with men in 37.5 percent (Table 30). They serve as the purser in 87.8 percent. In 53.8 percent of the households, the women participated in community organization. In 45.6 percent, they also attended the barangay meetings.

This is consistent with the pattern noted earlier that marketing, finance and social relations were women's domain. But the men and women both decided on major household concerns. In 77.8 percent of the households both were involved in selecting the school for children. Both also decided on a major buy in 86.8 percent.

Table 30 Gender of Household Member Doing Selected Tasks in Indigenous Peoples' Households in CADT 092: 2009

Tasks	Male	Female	Both	Total
Run business	37.5 percent	25.0 percent	37.5 percent	100.0 percent
Select the school for children	4.4 percent	17.8 percent	77.8 percent	100.0 percent
Decide to buy a costly item	3.3 percent	9.9 percent	86.8 percent	100.0 percent
Keep the money for the family	0.0 percent	87.8 percent	12.2 percent	100.0 percent
Attend barangay meeting	17.8 percent	45.6 percent	36.6 percent	100.0 percent
Participate in community organization	16.7 percent	53.8 percent	29.5 percent	100.0 percent
Average	13.3 percent	40.0 percent	46.7 percent	100.0 percent

Gender Preference in the Household

The gender preference of the household was seen in the gender of the child that they preferred to send to school if funds would only allow them to send only one. Around half (48.6 percent) of the respondents did not have any preference (Table 31). Some 33.8 percent chose a boy while 17.6 percent preferred a girl.

Table 31 Gender Discrimination and Indigenous Peoples' Households in CADT 092: 2009

Item	Data
Preferred gender of a child who is went to school in case of fund scarcity	
Male child	33.8 percent
Female child	17.6
Any	48.6
Total	100.0 percent
Reason for preference for sending a male child to school	
Prepare him for the responsibility to support a family	100.0 percent
Total	100.0 percent
Reason for preference for sending a female child o school	
Greater chance to take school seriously	83.3 percent
Lower earning power if employed at a young age	16.7
Total	100.0 percent
Percentage of households with experience in gender discrimination in applying for work	1.1 percent
Percentage of households with experience in gender discrimination in obtaining social services	0.0 percent

The only reason for male preference was the need to prepare him for the responsibility of supporting the family. Those who picked up the girl mainly considered the greater chance that she would be serious in school compared to a boy. The girls had also less employment opportunities in a rural economy and if employed they were likely to earn less than a boy. Around 16.7 percent of the respondents cited this as a reason.

Instead of relying on the girls to contribute to the household income, many parents considered sending them to school as a better investment option. The reasons given for the preference for a girl seemed to be supported by the higher literacy, educational attainment and out-migration among women. This preference discriminated against men and may require reverse gender equity strategy.

Human Rights

Although 94.4 percent of the respondents claimed to know about human and indigenous peoples' rights, 27.9 percent could not mention any specific human rights (Table 32). Further, only a small percentage was able to mention correct specific human rights. Around 31.4 percent mentioned the right of ancestral domain which is actually an indigenous peoples' right and already mentioned in the questionnaire as an example.

The answer of 4.6 percent could be interpreted to mean the right to be treated with respect and dignity. Around 7.0 percent may mean the right to life when they said they need to protect themselves. The rights to earn a living and to organize were mentioned by 2.3 and 1.2 percent.

The right to ancestral domain was again the answer of 52.4 percent when asked of any specific indigenous peoples' right that they know. Around 20.2 percent mentioned the right to natural resources. Only 1.3 percent correctly mentioned the indigenous peoples' right provided for in the IPRA: right to self-governance.

Around 63.6 percent of the respondents obtained their knowledge from National Commission on Indigenous Peoples (NCIP). Some 23.4 percent credited the tribal elders and leaders as the provider of such knowledge. The other sources cited were their parents and the Indigenous Peoples' Rights Act (IPRA) itself.

Support Institutions of the Indigenous Peoples

The conditions of the households in CADT 092 area showed four main trends relevant to the Indigenous Peoples Development Project (IPDP): deep-seated poverty in an operating environment highly deterrent to income-generation, continuously degraded natural resources, low understanding of human and indigenous peoples' rights and gender equity slightly skewed in favor of women.

These trends served as the main challenges in working for the development of the indigenous peoples in CADT 092 area. The burden in overcoming these challenges rest mainly on the indigenous peoples as represented by the ancestral domain organization (ADO). The IPRA mandated the ADO to pursue and protect their legitimate and collective interests and aspiration through lawful and peaceful means (Section 19).

Under this mandate, the ADO is the main institutional support in working for indigenous peoples' development.

Table 32 Selected Data on the Knowledge of the Indigenous Peoples' Households on Human and Indigenous People's Rights in CADT 092: 2009

Item	Date
Percentage of respondents who claimed knowledge on human and indigenous peoples' rights	94.4 percent
Source of information on human and indigenous people's rights as identified by the respondents	
NCIP	63.6 percent
Parents	10.4
Tribal elders and leaders	23.4
Reading the IPRA	2.6
Total	100.0 percent
Human rights mentioned by respondents	
None mentioned	27.9 percent
Protect one's family	7.0
Respect each other	4.6
Prevent illegal activities	4.6
Establish harmonious relationship	3.4
Make one's own decision	3.5
Protect the ancestral domain	31.4
Protect one self	7.0
Earn a living	2.3
Organize into a group	1.2
Use of customary laws	2.3
Others (Right to be brave and to be careful)	4.8
Total	100.0 percent
Indigenous Peoples' right mentioned by respondents	
None mentioned	11.9 percent
Ancestral domain	52.4 percent
Protect natural resources	20.2
Obtain development assistance	8.3
Earn a living	2.3
Struggle for a cause	2.3
Self-governance	1.3
IPRA	1.3
Total	100.0 percent

The government agency mandated by IPRA (Section 38 and 39) to protect and promote the interest of the indigenous peoples through the formulation and implementation of policies and programs is the NCIP. The local government units (LGU) has the responsibility to support the indigenous peoples arising from their mandate to look after the general welfare, accelerate economic development and upgrade the quality of life. Because of their mandate, the capability of the ADO, NCIP regional, provincial offices and

service centers and the municipal and provincial government in supporting the indigenous peoples are looked into.

Ancestral Domain Organization

The indigenous peoples in CADT 092 area were organized into a formal group called "Manobo Mamanwa Ancestral Domain Association" in 1994 (Appendix 1). The Office of Southern Cultural Communities (OSCC), the immediate predecessor of NCIP led its organization for the purpose of obtaining a Certificate of Ancestral Domain Claim (CADC). The OSCC worked with the existing sector leaders to form the council of elders. The council later evolved an organization.

The management structure of the ADO included positions for a chair, vice-chair, treasurer and a secretary. The sector leaders composed the council of elders. The position of sector leaders was filled up by succession. A sector was a largely a clan usually composing a neighborhood or a housing cluster. The occupants of the other positions were chosen among the sector leaders except for the chair which is held by succession.

The chair of the ADO reported that it had a constitution and by-laws but a copy of this cannot be obtained. The ADO was also reportedly registered in the Securities and Exchange Commission (SEC) but the location of registration paper could not be identified. It was not accredited in the any LGU although it may be accredited in NCIP. The ADO's vision for the CADT was reportedly to formalize the indigenous peoples' ownership of the ancestral domain and develop it. This vision was reportedly unwritten according to the leaders although the ADO had a constitution and by-laws that should contain it.

Nonetheless, the ADO did not have any management systems, funds equipment, office space or personnel. Neither did it have any program although it reportedly uses the Provincial Consultative Body composed of Council of Elders throughout the province to settle human rights complaints. But this body was largely non-functional. For complaints on gender equity, the sector leaders reportedly settled these.

It reported a number of policies. These policies were on territorial boundaries, entry of migrants, violence against indigenous peoples, behavior of women in public places and natural resource extraction (mining, fishing, logging and non-timber forest products). These were said to be unwritten. The leaders cited the burning of the houses used in mining and the expulsion of outside miners as the actions they have taken to implement their policies. But the baseline data showed that the in-migration and the adverse impacts of mining were on-going.

NCIP trained three of its leaders on leadership but none could recall anything that they learned from it. Apart from the problems seen in the household profile, the ADO suffered from ethnic cleavage between the Mamanwa and Manobo. The Mamanwa wanted to have their own organization to avoid the domination and system of management of the Manobo. The deficiency of funds and capability were their main problems. They could not even hold meetings for financial reasons.

The immediate challenge was to confirm the documentation and accreditation of the organization so that these can be provided if lacking. In this way, the ADO could make use of the opportunities provided for in the IPRA, Local Government Code and other legal

instruments. Acquiring enough capability to even just set up and run management systems will take a long term investment.

NCIP Provincial Office

The NCIP had a three-tiered operation to serve the indigenous peoples: service center, provincial office and regional office. But the provincial office in Cabadbaran was also functioning as a service center to the indigenous population of CADT 092 area. The provincial office had only five staff members four of whom were women (Appendix 2). Based on the size the indigenous population in CADT 092 area, the ratio was 1,300 clients per staff. This ratio compared favorably with the standard ratio in the provision of health services: 20,000 clients per doctor and 5,000 clients per midwife or sanitary inspector.

The NCIP provincial office had two desk top computers, one laptop, two printers, one hand-held camera, two air-conditioners and a landline. The IFAD-supported project also provided the office with a vehicle. But its staff had insufficient skills in both computer and field operation. It nonetheless had barely enough funds for field operation much more support the service center, which is its task. Around 35 percent of its 10,000 pesos monthly maintenance and operating expenses (MOE) went to office rental. The rest was barely enough to meet the monthly expenses on utilities, transportation and supplies.

NCIP Regional Office

The regional office had a staff of 26, 60 percent were women. Its function was mainly to carry out the national policies and programs at the regional level, coordinate with other national agencies and support its provincial offices. But much of the resources of the regional office were spent on coordination with other agencies and stakeholders and settlement of disputes among indigenous peoples and between indigenous peoples and outsiders.

Coordination occurred through its membership in the Regional Development Council (RDC), Regional Peace and Development Council (RPDC) and Protected Area Management Board (PAMB). Further it had number of Memorandum of Agreements (MOA) with at least five national agencies but many of these were not acted upon. The agencies were the DENR, Department of Agrarian Reform (DAR), Department of National Defense (DND), Department of Interior and Local Government (DILG) and the Department of Education (DEPED). It has an arrangement to conduct forum with DENR and the Department of Trade and Industry (DTI) but this had not been regularly conducted due to the secretariat work and funds needed. It also had not participated in the preparation of any local ordinance, Physical Framework Plan, Municipal or City Land Use Plan and Protected Area Plan.

In the course of the conduct of their tasks, the regional staff considered the insufficiency of their skills in the following aspects: English and technical writing, project development, plan implementation, computer operation, information system and data management, conflict management, negotiation and mediation, facilitation and meeting management and resource accessing.

Table 33 Selected Baseline and Suggested Target Values for IPDP to Meet in CADT 092: 2009

Indicator	Baseline Value	Suggested Target Value
Poverty Reduction		
Annual household income	32,066 pesos	47,458 pesos at current value
Percentage of households cultivating abaca	19.9 percent	50.0 percent
Percentage of households cultivating coconut	32.6 percent	50.0 percent
Average area planted to abaca per household	0.60 hectare	1.0 hectare
Average area planted to coconut per household	0.78 hectare	1.0 hectare
Average yield per hectare of coconut (copra)	577 kilogram	800 kilogram
Percentage of households raising animals	42.5 percent	60.0 percent
Average number of chickens per households	13.0 heads	18.0 heads
Average number of pigs per households	2.4 heads	3.0 heads
Percentage of households with electricity	65.2 percent	75.0 percent
Environmental Conservation		
Average amount of fish catch per engagement	2.7 kilograms	3.7 kilograms
Toilet ownership	82.4 percent	95.0 percent
Percentage of persons who said the forest is reducing	93.0 percent	70.0 percent
Gender Equity		
Percentage of persons without education		
Male	15.0 percent	10.0 percent
Female	12.9 percent	10.0 percent
General	14.1 percent	10.0 percent
Human Rights		
Percentage of respondents who can correctly mention a specific human right	15.0 percent	50.0 percent
Percentage of respondents who can correctly mention an indigenous peoples' right other than right to ancestral domain	1.3 percent	50.0 percent
Institutional Support		
A DO Confirmed Constitution and by-laws	0	1 document adapted by ADO
Accreditation of ADO in the municipalities	0	3 municipalities
ADO sustainable income generation mechanism	0	1 mechanism
ADO written policies	0	6 policies
Computer literacy training for NCIP	0	1 training
Hands-on facilitation courses for NCIP	0	1 training
Practical English and technical writing course for NCIP	0	1 training
Scanner for NCIP regional office	0	1 unit
Indigenous peoples' legislative agenda at the provincial level	0	1 legislative agenda
Orientation seminar of indigenous people for concerned provincial and municipal personnel and officials	0	1 seminar
Indigenous peoples trained municipal focal person	0 municipality	3 municipalities
Indigenous peoples trained provincial focal person	0	1 focal person

Appendix 1

Selected Data on Ancestral Domain Organization of CADT 092: 2009

Item	Data
Organization's name	Manobo Mamanwa Ancestral Domain Association
Year of organization	1994
Year of SEC registration	1997
Reason for the organization	To concretize the group managing the Ancestral Domain
No of persons forming the organization	8
Positions of organizers	Council of Elders
Agency helping in the organization	Office of Southern Cultural Communities
Type of help provided	Ancestral domain documentation
Documents	Constitution and By-laws
Management before ADO	Sector leaders representing clans using agreements and customs
Problem in management before ADO	None
Current Positions	Chair, Vice-chair, Council of Elders Secretary, Treasurer
ADO source of advice other than officers	None
Management Systems	
Vision	Formal ownership of land thru titling and development
Form	Unwritten
Policies	Territorial boundaries
Funds	None
Fund utilization procedures	None
Equipment	None
External Support	NCIP
Type of support	Census, Leadership training, IPRA Seminar
Training	
Number trainees	3
Training provider	NCIP
Type of training	Leadership
Most helpful training	Not identified
Added training needed	Not identified
Human Rights	
Policies	Ban of entry of migrants; Ban of violence against IP
Program on human rights	0
Mechanism to receive human rights complaints	Provincial Consultative Body Composed of Council of Elders
Gender Equity	
Policy	Ban on women in place considered indecent
Mechanism to settle gender-related complaints	Sector leaders
Environmental Protection	
Policies	Ban on use of hose in mining; Ban on illegal mining, logging, fishing and NTFP collection
Actions done so far	Confiscate and burn hoses; Expelled migrant miners
Problems and Suggestion	
Problems	No management funds; Degradation of the environment; Lack of management knowledge and capability
Suggestion	Capital for mining; Separate organization for Mamanwa Support for ADSDP preparation and processing; Animal dispersal

Its 26 staff members shared the use of three computers and printers, one landline and three vehicles. The IFAD-supported project provided the vehicles. Although the regional office usually led in ancestral domain delineation, it had only one Geographic Positioning System (GPS) instrument. It had no Management Information System (MIS) or a database-dedicated computer in spite of the heavy flow of information in and out of the office. Around 33.3 percent of its 180,000 monthly MOE budget went to office rental. The rest paid for the utilities supplies and transport with very little left for field operation. For this reason, it was highly dependent on external support to carry out such basic field activities as CADT area delineation and ADSDPP preparation. The regional office like the provincial office had no technical and financial means to adequately support its service center or carry out long term programmatic interventions.

Municipal Government

CADT 092 area was within the jurisdiction of three municipalities: Cabadbaran, Santiago and Tubay. The municipal council in Cabadbaran had a Committee on Indigenous Peoples but had not promulgated any ordinance for their support (Appendix 3). Indigenous peoples' concerns were covered by the Committee on Human Settlement in Santiago and its municipal council passed two resolutions supporting their activities. One required the municipal government to support the preparation of ADSDPP and another proposed the creation of a tribal barangay. There were no data for Tubay

Although the two municipalities had no indigenous peoples' program, they had some activities for them. Cabadbaran had housing project, school building and teachers' subsidy while Santiago supported the Municipal Tribal Council. Cabadbaran worked with an NGO called Bahay Kalinga while Santiago worked with NCIP.

Santiago had an indigenous peoples sitting in the Municipal Development Council (MDC) but none on the Municipal School and Health Boards. There was no elected a municipal official from the indigenous peoples but there were two barangay captains who members of the Association of Barangay Captains (ABC). Cabanbaran has no indigenous peoples in any board or elected positions. Both of them had not accredited any indigenous peoples' organization including the ADO and have not cited any problem in working with them.

Provincial Government

The provincial council of Agusan del Norte has a Committee on Indigenous Peoples (Appendix 4). It had so far promulgated three ordinances on the creation of tribal barangays and one on the co-management of a timber area. The Provincial Environmental Code had also provisions on indigenous peoples' concerns. But the provincial government had no program or dedicated staff to deal with indigenous peoples' concerns. They were not also represented among the elected provincial officials and none sat on the Provincial Development Council (PDC), Provincial Health Board and Provincial School Boards. No indigenous peoples' organization was accredited in the provincial government.

The provincial government had a number of problems in promoting the development of the indigenous peoples. These included the following: (1) absence of comprehensive indigenous peoples' legislative agenda, (2) absence of provincial-level organized group to represent their concerns, (3) NCIP constraints in managing IP development, (4) non-

inclusion of line item for indigenous peoples' development in the provincial budget, (5) most provincial council staff were contractual and technical knowledge was not retained in the institution, and (6) interventions were not sustainable and had bred dependency. The orientation of the provincial officials and concerned personnel on indigenous peoples was seen as necessary.

Key Baseline Values and Suggested Targets

One of the functions of the baseline data is to enable the project management come up with more realistic targets given its financial resources, time-frame and constraints in the administrative and implementation settings. The baseline data showed the current status of the various aspects of the lives of the indigenous peoples without which there is no basis in projecting the degree of change that can be attained by an intervention. By comparing the baseline with post-term data, the extent these targets would be achieved could be measured.

From the baseline data on CADT 092 30 targets were set (Table 33). These targets require the agreement of the project management, project beneficiaries and other stakeholders who would be involved in the planning and implementation of the project. Once they agree on the targets, they can proceed to laying down the strategies and activities to be done to achieve the targets as well as the resource requirements and arrangement for implementation.

The IPDP has four main components: poverty reduction, environmental protection, gender equity, human rights protection and institutional support. Based on the baseline data, 10 targets are set for poverty reduction, three each for gender equity and environmental conservation and two for human rights. There are 12 targets for institutional support. These targets are interrelated in a way that the attainment of one should contribute to the attainment of the others. For instance, the attainment of fish catch increase in environmental protection should contribute to the increase in income under poverty reduction. This means that the strategies and activities must be designed and put together in a coherent manner so that each will support the accomplishment of the other.

Appendix 2

Selected Data on the Capability of the NCIP Agusan del Norte Provincial Office and Caraga Regional Office: 2009

Item	Regional Office	Agusan del Norte
Date of Data Collection	24 October 2009	2 October 2009
No of staff	26	5
Number of Women Staff	15	4
Percent of Women Staff	60%	80%
Training in last 12 months	3-4 trainings for technical staff	1 training
Desk Computer	3	2
Laptop Computer	0	1
Printer	3	2
Scanner	0	0
GPS	1	0
Cellular Phone	0	0
Land line	1	1
LCD projector	0	0
Plotter	0	0
Hand held Camera	0	1
Video Camera	0	0
Service Vehicle	3 (IFAD)	0
Air conditioner	5	2
Internet Connection	1	0
Fax machine	0	0
Office space rental per month	PHP 60,000.00	PHP 3,500.00
MOE Budget per month	PHP180,000	PHP 10,000.00
Foreign Fund Support	IFAD	IFAD
National Agencies with MOA	DENR, DAR, DILG, DEPED, DND	None
Membership in Regional/ Provincial Development Council	Yes	Yes
Regional/Provincial Peace and Development Council	Yes	Yes
PAMB	Yes	No
Participation in Formulation of Local Ordinance	None	None
Participation in formulation of Physical Framework Plan	NA	None
Participation in Formulation of Land Use Plan	NA	NA
Participation in Formulation of Protected Area Plan	NA	NA
Problems	Insufficient technical staff Need for a computerized data base Need to acquire necessary equipment	Lack of skills NO fax machine

Item	Regional Office	Agusan del Norte
	<p>Need staff development training Need to review and operationalize fully MOA with other agencies Need to an improved internet connection</p>	
<p>Recommendations</p>	<p>Recruitment of statistician, encoder, social worker, NRM specialist, Institutional specialist, driver and utility; Provide a dedicated computer for data base Provide scanner, video-camera, fax machine, laptop and GPS Dual Frequency Ensure the conduct of regular DENR-NCIP and DTI-NCIP Forum and provide Secretariat Training on English and technical writing; project development; plan implementation, computer literacy, information system and data management; conflict management, negotiation and mediation; facilitation and meeting management and resource accessing</p>	<p>Training on Computer literacy, Facilitation, Documentation Provide fax machine and internet connection</p>

Appendix 3

Selected Data on the Capability of the Municipality of Cabadbaran and Santiago, Agusan del Norte on Supporting the Indigenous Peoples: 2009

Item	Cabadbaran	Santiago
Date of Data Collection	28 September 2009	28 September 2009
Respondents	Harry Sumbilan (SB Records Officer)	Felipe Mar (SB Secretary)
Municipal Council Committee in-charge of IP concerns	Committee on Indigenous People	Committee on Human Settlement
Municipal Laws on IP concerns	None	Resolution supporting the formulation of ADSDPP Resolution for the creation of tribal barangay
Municipal Program on IP	School Building; Teacher subsidy;	Monthly Food for Work P500 a month assistance to Municipal Tribal Council of 8 members; Job order to clean and maintain municipal water supply source;
Externally supported IP Projects	Housing (Bahay Kalinga) with land provided by the municipal government	CBRMP: Loan from World Bank; Livelihood and Reforestation; ADSDPP Preparation IFAD Farm to Market Roads (Provincial Government with Municipality providing Fuel, oil labor and Food)
Entity looking after IP Concern	None	None
Agencies supporting the municipality on IP concerns	Bahay Kalinga	NCIP
IP municipal officials	None	None
IP member in Municipal Development Council	None	1
IP member in Municipal Health Board	None	None
IP member in Municipal School Board	None	None
IP member in Association of Barangay Captains	None	2
Number of accredited IP Organization	None	None
Problems In IP development	None	None
Recommendations in IP development	None	None
Lessons from past IP projects	None	None

Appendix 4

Selected Data on the Capability of the Agusan del Norte Provincial Government in Supporting the Indigenous Peoples: 2009

Item	Agusan Del Norte
Date of Data Collection	2 October 2009
Respondents	Tomas Tener Jr (Provincial Development Officer) Lydia Manulat (Officer in Charge Legislative and Plenary Affairs) Mary Cheryl Manoy (SB Public Relations Officers) Leah Suyao (Legal Service Officer)
Provincial Council Committee in-charge of IP concerns	Committee on Indigenous People
Provincial Laws on IP concerns	3 Ordinances on Tribal Barangays; Part of the Provincial Environmental Code Ordinance ordering co-management of the land covered by Timber License Agreement (TLA) of the Nasipit Lumber Corporation recognizing the rights and share to proceeds of indigenous people
Provincial Program on IP	None
Externally supported IP Projects	IFAD but these are implemented at the municipal level
Entity looking after IP Concern	None
Agencies supporting the municipality on IP concerns	NCIP
IP provincial officials	None
IP member in Provincial Development Council	None
IP member in Provincial Health Board	None
IP member in Provincial School Board	None
Number of accredited IP Organization	None
Problems In IP development	Inability of IP to articulate and push a legislative agenda; No organized group or single entity to talk and engaged on IP concerns NCIP constraints in managing IP development No line item for IP in the provincial budget 70% of SP staff are co-terminous with the council members and technical knowledge from training are barely retained in the institution
Recommendations in IP development	Education for IP through affirmative actions Culture sensitive employment opportunities Orientation of legislative staff on IP
Lessons from past IP projects	Current activities of council members giving them rice as requested is not sustainable and breeds dependence