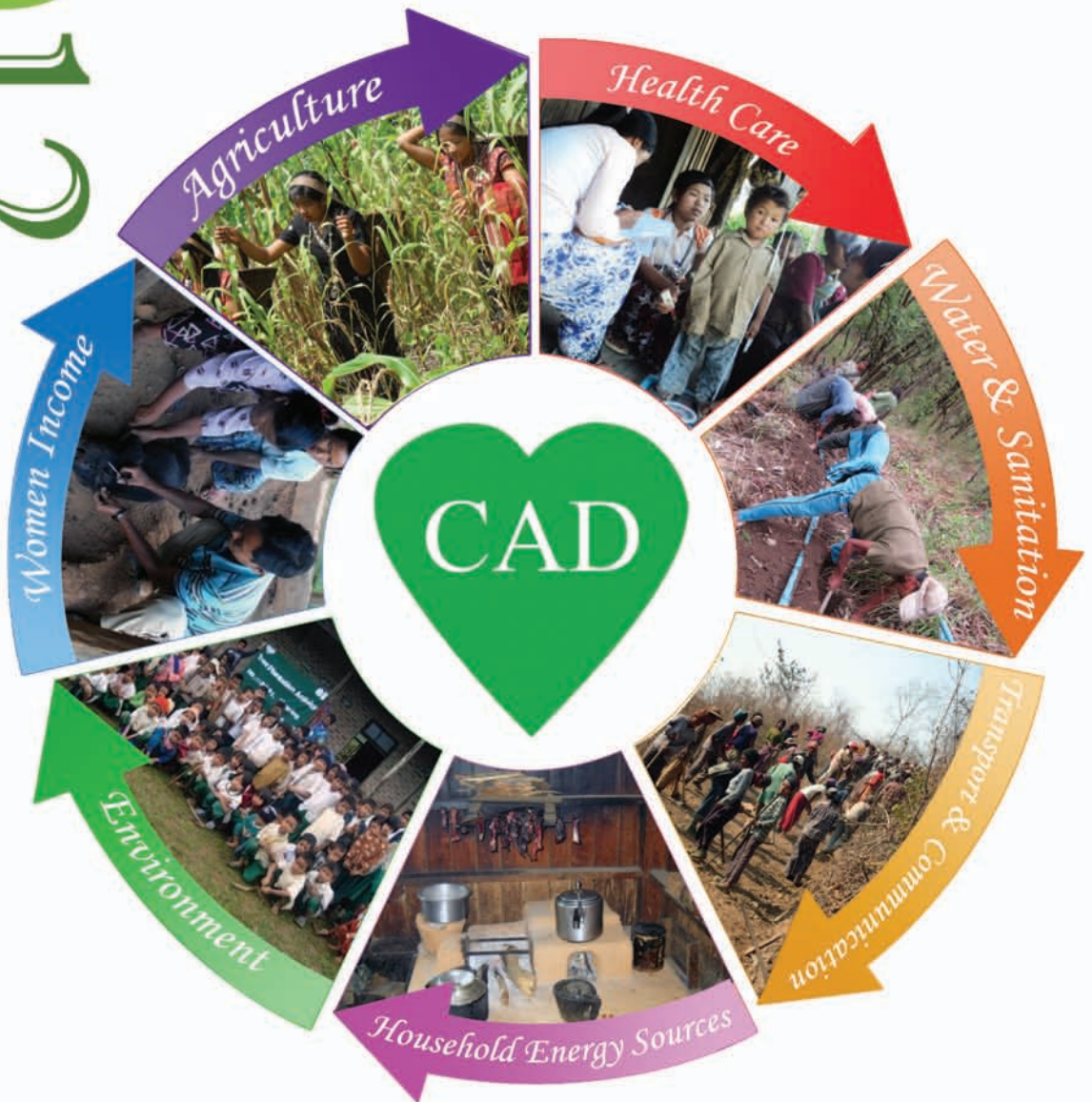


# Annual Report

2012



Country Agency for Rural Development

ကျေးလက်ဖွံ့ဖြိုးရေးအဖွဲ့

## Acknowledgement

We would like to thank One Body One Spirit, Oxfam Novib, MIVA, Archbishop Charles Bo and Holy Childhood for their kind financial contributions to improving the livelihoods and food security of the poorest and most vulnerable people in Myanmar. We are deeply indebted to them for their financial support which is gratefully acknowledged.

## Disclaimer

This document has been produced with financial assistance from **One Body One Spirit**. The views expressed herein can in no way be taken to reflect the official opinion of our donors.





## Prologue

Dear Our Reader, Mingalarba!

It is an auspicious for me to present you our rural development programs that we spearheaded amid limitations of finance, weather, human and other resources in 2012.

In this booklet, you will surely know how much CAD staffs were committed to sustainable



development of the poor in remote Myanmar with undaunted spirit. Our dedication to rural development is timely and strongly synergized by one (on rural development and poverty reduction) of peculiar policies that our President Thein Sein, the Republic of Union of Myanmar, laid down in democratization of our country on 25th June 2012. Year 2012 was very historical trend for CAD. The reason was that some of our donors stopped their financial support to us as they could not have access to our project rural areas and a staff defamed our organization. We underwent an inevitable reduction of our staff and programs and our image was impinged alike.

Actually, rural development work is very dynamic and needs synergetic collaboration and coordination among families, NGOs, donors, government and private business. In some areas, civil war or conflicts occurs because of lack of development in rural areas.

Rural development program needs a holistic approach strategy. Without this strategy, it is in our experience, very difficult for us to kick-start rural development. Therefore CAD has spearheaded the program with an integrated program design. One of our innovative activities is research which is very crucial for professionalism of an organization and is a sign of organization's far-sightedness vision for its long time intervention strategy.

Our rural development program is making positive contributions to Millennium Development Goals; eradicating extreme poverty and hunger, achieving universal primary education, promoting gender equality and empowerment of women, reducing child mortality, improving maternal health, combating diseases, ensuring environmental sustainability and developing a global partnership for development.

In our past experience, we felt that ministries in our country are lack of team spirit. Registration application of CAD to Union Ministry of Home Affairs has still under the process since 2012. Due to lack of registration, it is very difficult for us to raise our necessary fund for rural development to funding agencies making inspirations that we have and program strategy we developed seem at times beyond our capacity, capability and effort. However, there are still many funding agencies inside and outside the country which prioritize human development to our registration. CAD is also getting funding from Catholic funding agencies outside the country and some donors inside Myanmar. We encourage our government and donors with this short sentence: if you want to go fast, go alone but if you want to go far, go with us!

Finally, our heart-felt gratitude goes to our donors who gave us their generous financial support and to our government which gives us collaboration, coordination and larger vision/mission on rural development and poverty reduction and to local communities who worked with and prayed for us for their self-development and finally to our staffs who tirelessly implemented our programs out of the season for poor people.

With our renewed thanks and affections,

A handwritten signature in black ink, appearing to read 'Hlaing' or similar, with a horizontal line extending from the end.

Joseph Kung Za Hmung @ Win Hlaing Oo  
Founding Director of (CAD)



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<sup>1</sup> Lautu Area Development Program





## Description of Organization

**CAD** (Country Agency for Rural Development) is a local non-governmental organization set up in 2004. Its inception is propelled by occurrences of catastrophes from 1987 to 2002 in Lautu region (one of 5 big ethnics in Thang Tlang Township) where no UN agency or non-governmental organization has any development programs. Severe dysentery and food shortages were happened in our region. 75 people died of dysentery in Hnaring village in 1987. A young girl, who was a younger sister of Joseph Kung Za Hmung, died of excessive nose bleeding in 1994. In 2002, more than 8 villages (about 4000 people) faced severe food shortages and drought. Many parents stopped their children's education. Such catastrophes hereby forced us to find humanitarian aids from different agencies and authority which however refused to intervene the suffering of our local people due to lack of accessibility.

Therefore Joseph Kung Za Hmung @ Win Hlaing, courageously founded this organization on 4<sup>th</sup> May 2004 by leaving from a Catholic Seminary, where he studied to be a Catholic priest, to harness all his knowledge, skills and capacities in addressing acute food crisis and severe poverty of rural communities in remote Myanmar. CAD has been spearheading community development programs at about 75 villages in Chin state and 7 villages in Sagaing division.

## Our Strategic Vision

CAD realizes the integrated development of rural communities in Myanmar through perfect capacity.

## Our Mission Statements

CAD firmly stands as an agency with countrywide recognition materializing integrated development of rural communities in Myanmar through:

- Enhancing the capacity of human resources
- Supporting farmers their food security and income opportunities
- Improving access to health
- Improving access to education
- Promoting rural transport and
- Supporting for the emergence of CBOs
- Building self-financing activities for our sustainability

## Core Values of CAD

- Transparency
- Accountability
- Family-type relationship
- Sacrifice
- Respect on woman capacity
- Honesty
- Mutual recognition



## Our Humanitarian Principles

1. All our humanitarian programs must focus on humanity
2. All our humanitarian programs have no impartiality.
3. All our humanitarian programs have no neutrality.
4. All our humanitarian activities are independent programs.

## Our Field of Interest

1. Agriculture
2. Water and Sanitation
3. Education
4. Community based Micro credit and saving program
5. Road and Bridge Construction
6. Human Resources Development
7. Good Governance and Accountability
8. Livelihood
9. Primary Health Care and Nutrition
10. Traditional Knowledge Development
11. Women Empowerment and Development Program
12. Infrastructure

## Our Strategy and Methodology Policy

As local non-governmental organization of poor country, it is not possible for us to have our fund only by contribution of our people. What we do mean is that CAD is absolutely dependent on grants of foreign funding agencies. Hearing of some better and feasible efforts through our CAD assistance, many villagers from nationwide have approached us to assist them their peculiar works in all confidence. Still, our CAD, too, is as yet unable to offer proper and effective assistance to them, as we ourselves need the backing of some major Foreign Agencies. When we discover donors for a project, we manage such project with the following policies;

### 1. Asset Based Community Development (ABCD)

- Firstly, we make **PRA (Participatory Rapid Assessment)** with would-be beneficiaries what they have, what they contribute to proposed program. After knowing their existing resources, agency and beneficiaries work together in planning, acting, doing the project and finally they become owner of the project.





## **2. Deficiency Community Based Asset (DCBA)**

- Secondly, we try to learn what hindrances for their progress are or what they are lack of for their development. Lastly, we design programs in the sense that development of rural people are implemented on what they have and do not have in their limitations.

## **3. Village Community Proposal Delivery (VCPD)**

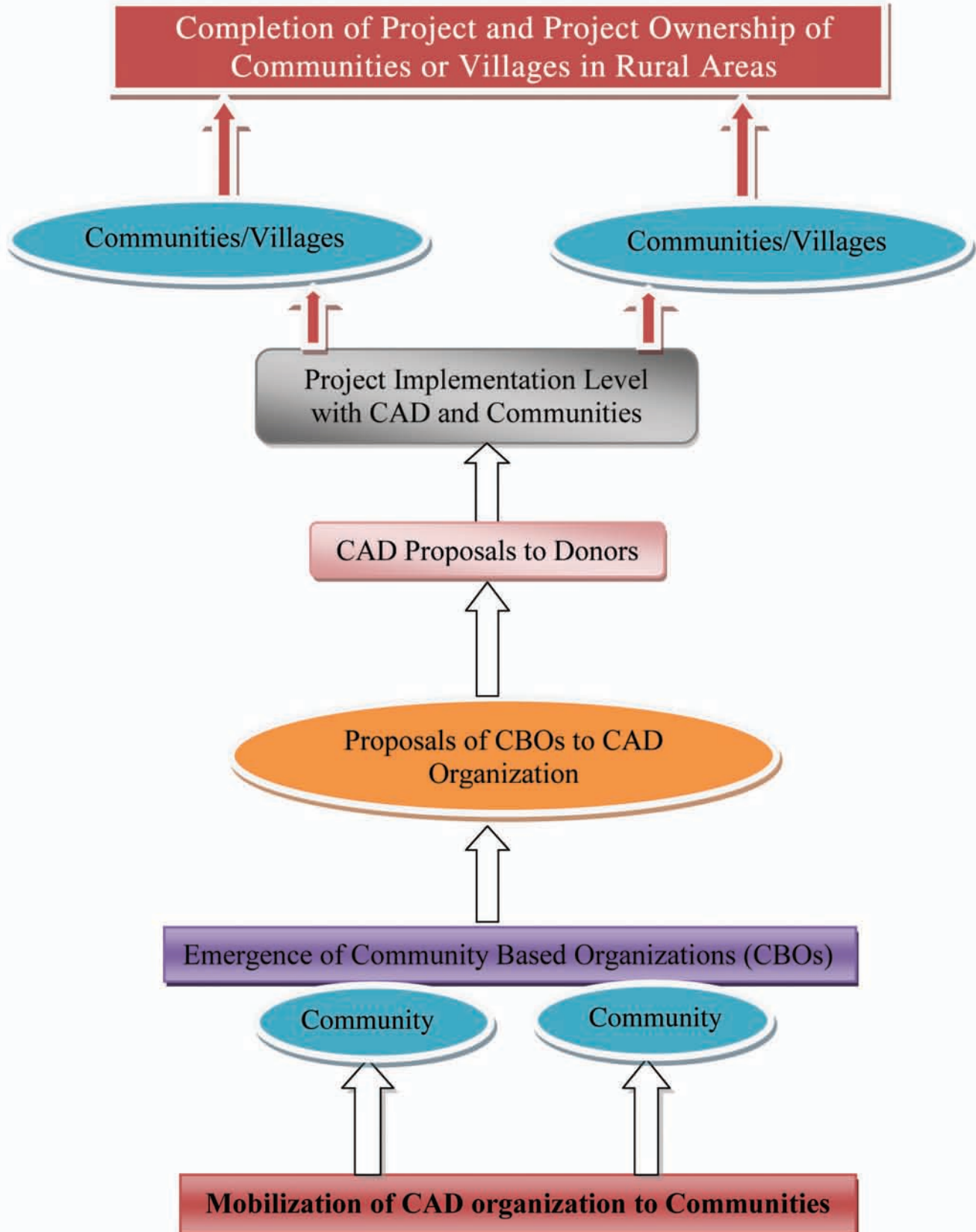
- At times, we face the complaints of village authority and some villagers that they do not agree with the programs proposed to CAD for the good of the proposed villagers. Therefore whenever villagers like to propose us programs, CAD requested them to write Village Community Delivery Proposal, signed for by ruling village authority, in order to avoid complaints from villagers. After only receiving VCDP, CAD rewrites comprehensive program which is finally sent to funding agencies for financial assistance.

## **CAD Policy**

1. Any proposal from communities to CAD must match our Mission Statements.
2. Any proposal from communities to CAD must be free from government's funding or assistance.
3. Any proposal from communities must not have connection with government's project.
4. Any proposal from communities must be free from political, war, tribal crisis, terrorist and insurgents.
5. Any proposal from communities must be approved by village authority.
6. Any proposal from communities must demonstrate the role of women in its program.
7. CAD organization is ever ready to have partnership and cooperation with UN agencies and NGOs.
8. Any proposal from communities must respect state law.
9. Any proposal from communities must support national interests.
10. CAD implements its programs only after consulting and in coordination with local authority.
11. CAD has transparency and accountability for its programs.
12. Any proposal from communities must match our humanitarian principles (Humanity, Impartiality, Neutrality and Independence).

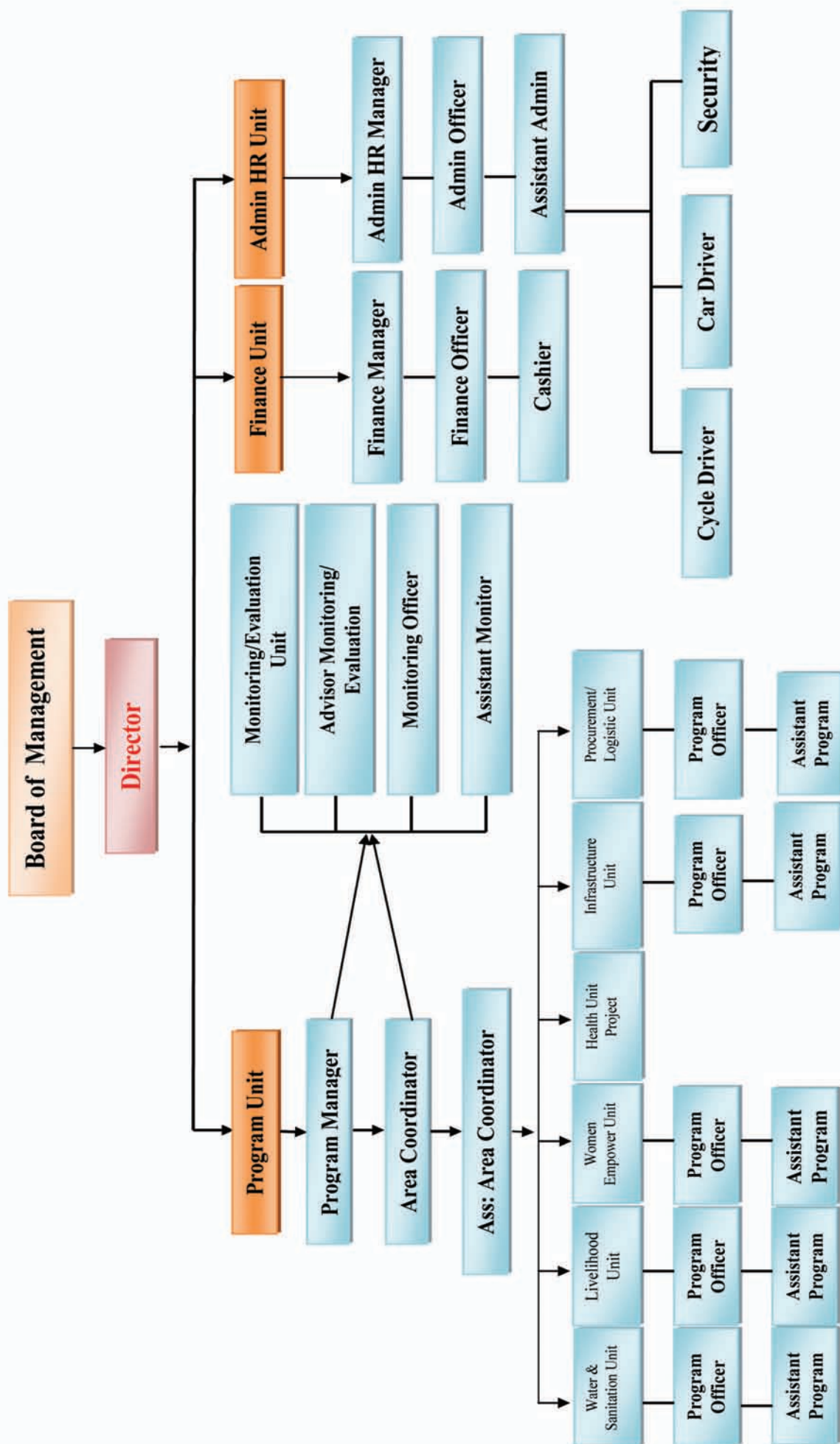
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## Project Management and Implementation Procedures





# Project Management and Implementation Procedures CAD Organizational Structure



## Introduction

## Myanmar Context

Myanmar is one of the largest and poorest countries in South-East Asia. It is ranked 149 out of 186 countries in the 2012 Human Development Index<sup>2</sup>. It has 130 ethnic groups with an estimated population between 55 and 60 million. Myanmar is lagging behind its neighbors in most socio-economic indicators. It is the poorest country in South-East Asia after East Timor in terms of gross domestic product (GDP) per capita.



According to a recent country-wide survey, 26 percent of Myanmar population lives below the poverty line<sup>3</sup>. The number of poor is much higher in Chin (73%), Rakhine (44%), Tanintary (33%), Shan (33%) and Ayeyewady (32%). The proportion of total household budget expanded on food is 68 percent.

Agriculture remains the mainstay of the economy with almost 50% of GDP being derived from agriculture, livestock, fisheries and forestry. Rice is the staple crop and a significant export commodity. It accounts for 43% of total area under cultivation (19,768,431 acres or 8 million hectares in 2006/07). Other important crops include sugar cane, groundnuts, sesame, wheat, maize, millet, jute, cotton, beans, pulses and oilseeds, vegetables, rubber, toddy palm, tobacco and spices. Yields of most crops are low compared to neighbouring countries.

63 % of the labour force is engaged in the agricultural sector, indicating that agriculture will be a key sector in the economy for some time to come. Interestingly, landlessness is a significant phenomenon for 24% of the people whose primary economic activity is agriculture.

<sup>2</sup> <http://hdr.undp.org/en/statistics/>

<sup>3</sup> Integrated Household Living Conditions Assessment II, United Nations Development Programme (UNDP), 2011.





## Chin State Context

Chin state is located in the north-west part of Myanmar, bordering India and Bangladesh. Most of the state is hilly and mountainous having an average height of 4,000 ft. The main livelihood activity is agriculture and shifting cultivation or slash and burn farming, is widely practiced.

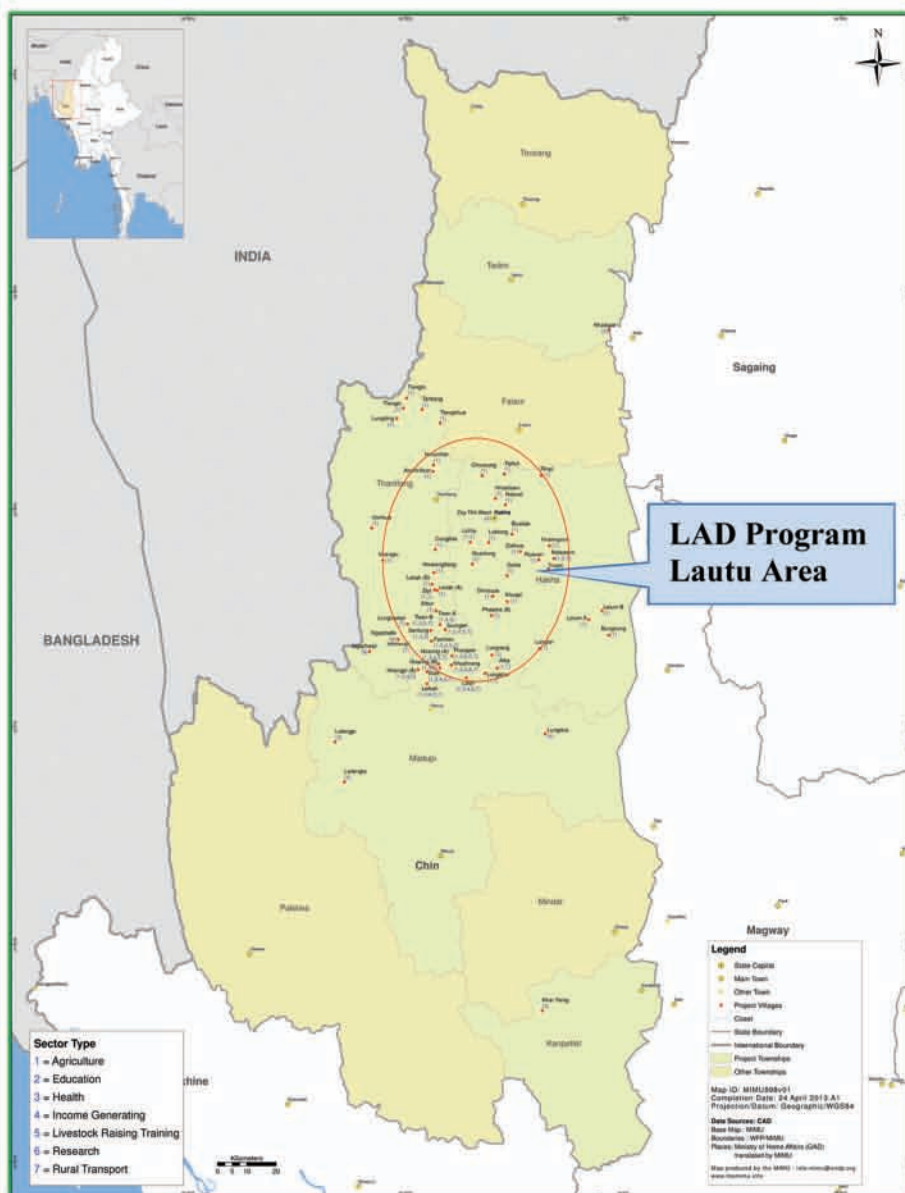
In Northern Chin State, the economic activities are mostly agriculture activities (vegetable and fruit production), livestock, weaving, small trade and seasonal labor work. Regarding food security, the Northern Chin State is representative of upland agriculture systems and the farming systems are based on rotational fallow method to allow time for the regeneration of soil fertility. Over the last twenty years, most of the villages have faced a marked reduction of the fallow period (from 15 years to 6-9 years) due to the increased pressure on agricultural lands. Consequently both natural resources management and agricultural production have been significantly affected.

Approximately 15% of the households (HH) in the sample were female headed and a similar pattern was seen across townships.

The average number of members in a sampled household was 6. However variation in HH size is seen across townships with Falam and Tiddim having an average of 5 and 7 members respectively. Upon comparing data on HH sizes with average number of income earners per family, it can be hypothesized that HHs typically consist of 2 members who generate income and four economically dependent members – in other words children and /or the elderly who are unable to contribute to household incomes.

The State is mainly mountainous with an average altitude above 1,000 meters above sea level. This characterizes by steep slopes and narrow valleys. The total population is slightly about 500,000 individuals, the second lowest at State and Division level in the country after

Myanmar Information Management Unit  
**CAD Projects Village Per Sector**  
Chin State





Kayah State. The population density was 14 inhabitants per square kilometer in 2008, the lowest of the country.

Even in fine weather, transportation is severely constrained by the topography and the very scarce practicable roads. Except one main road or river in each township, access between villages is generally done through foot paths, with entire days spent on walking. The rainy season frequently provokes landslides and cuts the main cities from the (already) limited supplies received from the outside of the State.

While being administered by the same office (Hakha, northern part), Chin State is generally divided into northern and southern parts, based on access options. Routes to enter the 2 parts are different and physical barriers make the connections between the north and the south almost impossible. Paletwa Township, located at the extreme South-West of the State and bordering Rakhine State, is only accessible by boat from Rakhine State (Sittway). While being part of Chin State, this makes it specific since the Township was long administrated by Sittway's authorities and under the supervision of the western commander.

Finally, Chin State has known important waves of migration, mainly concerning its active young population. The Chin Diaspora is said to be one of the most importance of the country and maintaining strong links with the population still living in Chin State. Remittances received are therefore of a substantial account in the rural households. However, it seems that this migratory phenomenon particularly concerns the Northern Part of the State, for which networks are more developed. Migration is one of the last coping mechanisms families settle in regards to the vulnerabilities they face but is generally impacting the sustainability of the agrarian production system (loss of productive labor forces).<sup>4</sup>

## CAD Programs in Chin State

CAD has spearheaded rural community development programs in Chin state since 2004. Additionally, CAD is the first Chin pioneer local NGO in Chin state and one of ten pioneer local NGOs in Myanmar as well. It implemented small project based development from 2005 to 2008 but from 2009, CAD has entered engagement and partnership with OBOS from Republic of Korea and OBOS has started macro-financial support to CAD till today.

With the generous financial support of **OBOS**<sup>5</sup> for 3 years' program (2012-2015) of **Country Agency and Rural Development** (CAD), **LADP**<sup>6</sup> for half year of 2012 (First year's program) was satisfactorily implemented with our implementation plan.

## Our Programs

**Our target villages are (14) such as Hnaring A and B, Fantheng, Sentung, Tisen (A), Tisen (B), Surngen, Thangaw, Khuahrang (9 villages) in Thantlang Township, Leipi village in Hakha township and Leikang, Sate, Hriangpi A and B in Matupi township** in 2012 which are located in the central part of the Chin State. Our target area locates at hilly area and our farmers produce food and income by growing food and cash crops on their slopping lands applying traditional shifting, slash-and-burn cultivation system.

<sup>4</sup> ACF, Assessment Report on Food Security, Palewa Township, Southern Chin state, p.5.

<sup>5</sup> One Body One Spirit Movement, Caritas Seoul, Korea.

<sup>6</sup> Lautu Area Development Program





## Organizational Strategic Vision

CAD realizes the integrated development of rural communities  
In Myanmar through perfect capacity.

### Organizational Mission Statements

CAD will firmly stand as an agency with countrywide recognition materializing integrated development of rural communities in Myanmar through:

- Enhancing the capacity of human resources
- Generating opportunities for food and income
- Improving access to health
- Improving access to education
- Promoting rural transport and
- Supporting for the emergence of CBOs
- Building self-financing activities for our sustainability

### Objectives of LADP

1. To study the real socio-economic conditions of the local communities
2. To increase agricultural products for farmers' food security and higher incomes
3. To enhance greater movement of the local people, economic interactions and protect lives through safer transport
4. To provide general health care to communities and improve health status of local people
5. To introduce modern technology of soil conservation to farmers
6. To improve life-skills of women for their self-employment and contribution to their household's food security
7. To create livelihood opportunities for women headed households for women's empowerment and development in regional socio-economy
8. To enhance the capacity of staff and of CAD organization for more efficient dedication to rural development

### Implementation Process

#### Project village selection

Criteria and methodology for village selection have been carefully done by the CAD project staffs during Program Orientation in our head-office. Selected village tracts/villages were reviewed on the basis of preliminary data obtained through previous assessment findings and collected from the target areas. CAD

project committee had prepared the community action plan for the implementation of LADP activities with community's participation through PRA (Participatory Rural Appraisal) methods.

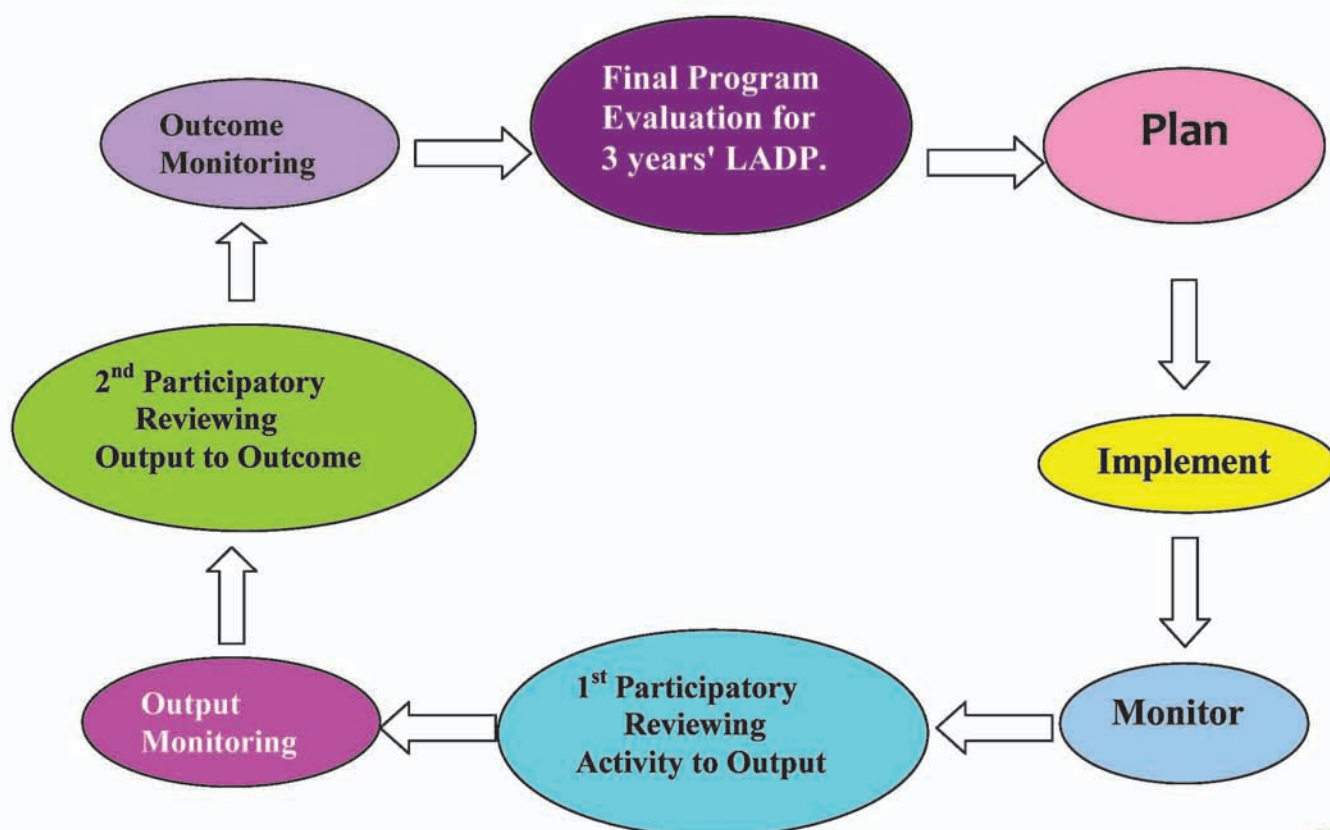
## Community mobilization

CAD's focus is very much based on technical innovation and experimentation as well as more on addressing basic needs through transparent, equitable and accountable community driven process. Thus, community mobilization and facilitation were used as a major motivation strategy to strengthen the community to be able to identify their basic needs in participatory manner. In addition, community mobilization is essential for each and every project's intervention, and need to ensure that community has strong social cohesion and every community member actively participates in community development with their own aspiration. One of the most innovative approaches that we employed in our intervention is that women are empowered to play a catalytic role in fostering sustainable development for the target communities.

## Implementation, Monitoring, Reviewing and Evaluation

At community level, CAD implemented each activity of LADP first by calling for Proposals from communities/villages. Proposals submitted by the communities were screened and only selected proposals are supported by LADP. Technical advisor trains on community workers in line with implementation guideline. Monitoring and program staffs monitor project activities and help us to smoothly complete the implementation. Program team uses monitoring and reviewing system to ensure target outcomes are achieved and objectives are met. It also learns from monitoring and reviewing and feedback learnings into the project design. Participatory Review and evaluation meetings with various stakeholders will be conducted two times per year at the stages of **ACTIVITY TO OUTPUT** and **OUTPUT TO OUCTOME ACHIEVEMENT**.

### Way of LADP







## LADP Activities in 2012

| Activities Details: |   | Indicator for implementation / Results:  |
|---------------------|---|--|
| 1                   | Survey  | Survey Report of Lau Tu Ethnic community development   |
| 2                   | Irrigation for Terraces                           | Terraces will be occupied with crops the whole year for higher agricultural products and for higher family's income.   |
| 3                   | Construction of Clinic                            | Local people will have easier access to health care and medical treatment for their well-being.  |
| 4                   | Sale of Medicines                                 | Local people will have access to affordable prices of medicines  |
| 5                   | Car Road Construction                             | Local people will have greater movement, economic interaction and protect lives through safer transport.   |
| 6                   | Piglet Distribution to 25 women headed households | Women will have more empowerment in economy and more income opportunities.   |
| 7                   | Hybrid Paddy Variety Demonstration                | CAD will try to introduce the hybrid paddy variety to Chin area so that local farmers will have higher yield and substitute their local seeds with new one for their future household food security. |
| 8                   | CAD Strategic Workshop                            | CAD will produce our 5 years' strategic development program.   |

# Survey on socio-economic situation of Lau Tu ethnic community development

## 1). Background and Rationale

With a total population of about half a million, Chin State is one of the poorest regions in Myanmar according to a report of UNDP. The region as a whole is not vested with valuable natural resources and favorable agro-climatic conditions. Nevertheless, most of the inhabitants grow maize and rice as their staple food crops usually by practicing traditional shifting cultivation system under rain-fed conditions. Their year-round efforts in shifting cultivation hardly suffice the consumption of subsistence farmers the region for even half a year. While most households in the region were originally food-insufficient, situations of food security became ultimately worse due to a rodent outbreak in 2008 which left most households in short supply of food.

Various development agencies immediately responded the crisis and launched emergency relief programs by providing food aid and other financial and material supports. And a number of assessments have been done individually or jointly by the participating agencies studying gaps and impacts of their interventions. However, most previous assessments focused on changes in food security situations and rarely on the overall socio-economic situations of the region. This survey is dedicated to investigate the overall socio-economic situations and explore potential solutions for future development projects. The survey is also expected to yield new areas of concern for the existing and potential development actors of the region.

## 2). Objectives of Survey

The overall objective of this survey is to investigate the socio-economic situations of the survey area in a holistic manner and explore potential solutions for future development projects while revealing new areas of concern for the existing and potential development actors of the region. Specific objectives of the survey are as follows:

- To understand the overall socio-economic situations of the survey area
- To identify the gaps of previous development activities in the survey area
- To find out new areas of concerns for future development interventions

## 3). Survey Procedures

This integrated socio-economic assessment was conducted in a total of 21 villages of CAD intervention area in Hakha, Thantlang, and Matupi Townships during March 4-23, 2012. The assessment covers 10 villages from Hakha Township, 8 villages from Thantlang Township and 3 villages from Matupi Township. The assessment team was composed of 8 CAD staffs including 6 field staff from CAD field offices led by a Program Manager and Program Consultant. Sampling of the survey was made possible by purposively selecting the survey villages and every tenth household from each village was selected to form the final sample by means of systematic sampling. And two separate questionnaires, one for village level data and another for household level data, were employed.





#### 4). Scope and Limitations

Though this survey was conducted a small number of villages covered by CAD intervention, it was designed to cover the overall aspects of socio-economic conditions in the entire region as much as possible. The survey was prepared also to find out new variables that might be of interest for development actors and that have never been explored before. However, it is worth admitting that the survey was not able to yield proper information about certain variables as expected due to a number of difficult circumstances.

#### 5). Demographic Data

The sample is composed of a total of 208 households from 21 villages in Hakha, Thantlang and Matupi Townships, and the respondents consist of 59.6% male and 40.6% female. Education levels of the respondents vary as illiterate (16.3%), primary school (40.9%), middle school (30.9%), high school (9.1%), and graduate (2.9%). It was observed that respondents in Matupi Township have the lowest levels of education whereas the highest levels of education are found among respondents from Thantlang Township. The proportion of respondents with high school education is the highest in Hakha Township which is outscored by Thantlang Township for graduate level education.

The occupation of respondents was also assessed and it is found that farmers constitute 91% of the sample. The rest of the sample is distributed as government employees (2.4%), pastors (1.0%), retired persons (0.5%), and others (4.3%). However, the proportions of respondents by occupation within the sample are not evenly distributed since the proportion of government employees in Hakha (7.5%) is significantly high compared with other Townships and all the respondents in Matupi Townships are farmers. The category named 'others' is found to have probable relationship with those households having remittance as their major income source though reliable information about it is difficult to find. As such, the proportion of the occupation of respondents categorized as others is the highest (6.2%) in Thantlang Township.

Of all the respondents, 89.9% are household heads and the remaining are dependents. And 15.9% of the respondents are members of Agape Women Groups formed by CAD in fulfilling its mission to empower women. The average household size for all sample households is 6.2 persons with the highest size in Matupi Township (7.0). Households with 1-3 family members account for 13.5%, with 4-6 family members (41.8%), with 7-9 family members (34.6%) and with 10-12 family members (10.1%). It is found that the proportion of working family members (49%) is lower than that of dependents (51%) and dependency rate is the highest in Matupi Township (70%). In addition to common demographic data, the assessment also investigated the majority groups of respondents in terms of ethnic sub-group and religious denomination. These variables were taken into account with the belief that any ethnic sub-group or religious group being majority in a community might have significant impacts (influence or domination) in the decision making process of development issues. And it has been found that the ethnic sub-group called 'Lautu' forms majority of the total sample. The proportions of Lautu ethnic sub-groups are 100% for Matupi Township and 83.1% for Thantlang Township. In Hakha Township, an ethnic sub-group called 'Senthang' constitutes majority (53.7%) of the sample. Other ethnic sub-groups include Zotung and Zophei.

#### 6). Productive Assets

Productive assets can be decisive in making livelihoods for a family. For the study area, 77.9% of the sample reported that they do not own land.



## 7). Agriculture

Agriculture, especially farming, is the major means of making livelihoods for most households in Chin State. In the case of maize, the proportions of households according to their farm areas cultivated under maize are indicated as 2% for less than 1 acre, 57.1% for one acre, 32.7% for two acres, 6.1% for three acres, and 2.0% for four acres and above. It has been found that the highest proportions of farmers (54% in Hakha, 100% in Matupi, and 56.9% in Thantlang) are concentrated in the categories of farmers with one and two acres of farm cultivated under maize. Since the proportion of farmers with more than 4 acres of farm cultivated with maize is only 2%, it is worth noting that almost all farmers in the survey area are smallholders compared with the criteria of categorizing in other parts of the country.

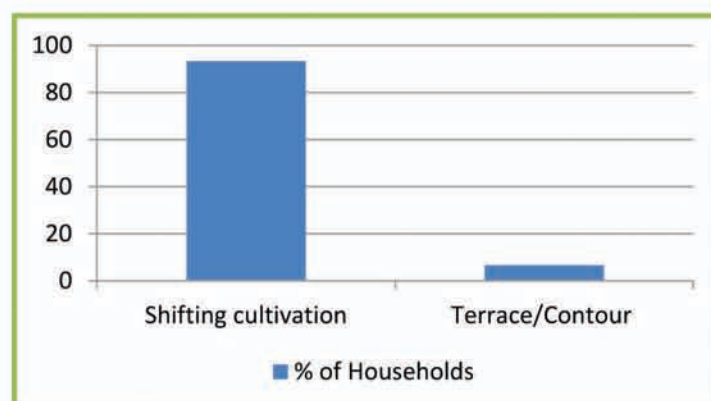
### 7.1 Farming systems

Most of maize farmers (93.3%) practice traditional shifting cultivation system and the rest (6.7%) utilize terrace system in growing maize. Upland rice also is grown under shifting cultivation by 90% of farmers and only 10% of farmers practice terrace system in growing upland rice. But the system of growing upland rice on terrace is practiced only in Thantlang Township at the proportion of 12.5%. And no practice of growing upland rice is found in Matupi Township either in the form of shifting cultivation or terrace.

#### Paddies Terracing farm



**Figure 1 Proportions of farmers by types of farming system**





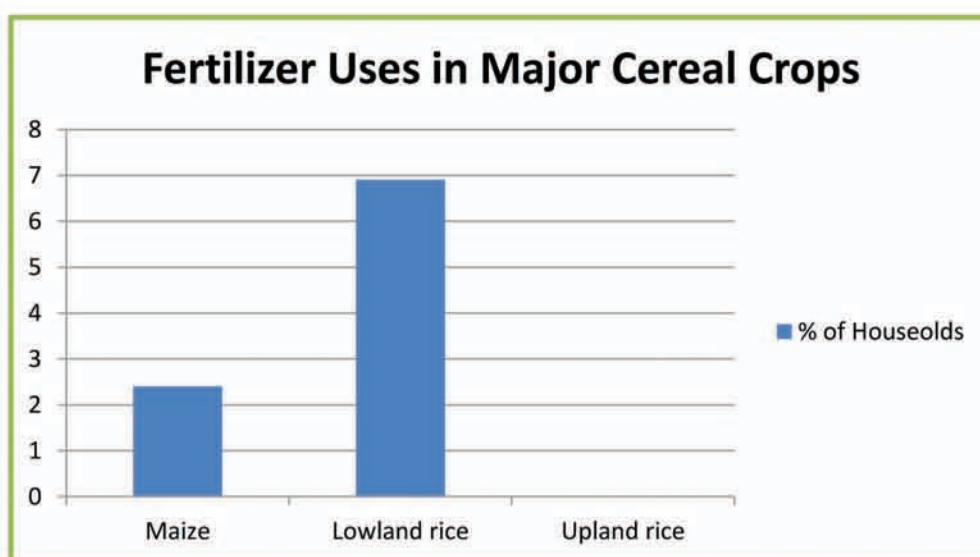
## 7.2 Crop varieties

Of the three major cereal crops grown, most belong to local varieties. In the case of maize, 97.6% of growers use local varieties and this proportion is shared by Hakha and Thantlang whereas all maize varieties grown in Matupi are local. Similar regards apply to the varieties of upland rice and lowland rice. The proportion for upland rice growers who use local varieties is 88.9% for the total sample. However, the varieties of upland rice grown in Matupi and Thantlang are purely local. Among all lowland rice growers in the three Townships, 83.3% of farmers grow local varieties and no lowland rice farmer in Matupi grows improved variety of lowland rice.

## 7.3 Fertilizer use

Proper and sufficient use of fertilizer will be a good determinant for the yield rate of any crop grown under any condition. In the survey area, however, it is found that fertilizer is applied only in maize and lowland rice. The proportions of farmers who apply fertilizer are 2.4% for maize and 6.9% for lowland rice, and no farmer uses fertilizer in upland rice. And the proportions of fertilizer application in maize and lowland rice are distributed in Hakha and Thantlang Townships and no farmer in Matupi applies fertilizer in any major cereal crop.

**Figure 2 Proportions of fertilizer use by types of major cereal crops.**



## 7.4 Pesticide use

Worse situations are found regarding the use of pesticides. The assessment indicates that the application of pesticide is found only in Hakha and Thantlang Townships. The proportions of pesticide application are 1.2% for maize and 12.7% for lowland rice, respectively. And no pesticide is used at all by any farmer across the three Townships. Yet, the level of pesticide application in Hakha is higher than that in Thantlang especially in maize. In Thantlang also, farmers apply pesticides in lowland rice, but not in maize, which stands being the major cereal crop for majority.



## 7.5 Irrigation facilities

Irrigation facilities are essential for boosting the yield rates of agricultural crops. But this is a common understanding and some crops like upland rice that are usually grown rain-fed do not need irrigation. In the study area, farmers who use irrigation in maize account only for 1.8% and the proportion of farmers who use irrigation in lowland rice is 80.8%. In fact, the proportion for irrigation in lowland rice is low since the nature of lowland rice requires the use of irrigation. But poor farmers do not always afford to establish irrigation facilities or to renovate the existing ones.



**Pilot Irrigation for Terraces**

## 7.6 Crop yields

The averaged yield rates of the three major cereal crops are still very low compared with those in other parts of the country or with the national average. In the case of maize, the overall means of yield rate range from 6.94 to 34.18 baskets/acre (min=1, max=75, median=20) and the highest yield rate is found in Matupi Township with a range of 9.0 to 49.12 baskets/acre (min=1, max=50, and median=25). It is found that the difference between maximum and minimum is quite high for Thantlang Township compared with those for Hakha and Matupi Townships. And this could result certain hunger gaps for some communities to whom this data belong.

Yield rates of rice show no significant difference in terms of upland and lowland. The mean yield for upland rice throughout the three Townships ranges from 9.60 to 50.83 baskets/acre (min=2, max=100, median=30) while that for lowland rice ranges from 17.60 to 56.47 baskets/acre (min=2, max=80, median=39). In this case, the least differences between the mean, median, minimum, and maximum are found in Matupi Township whereas the highest variations are found in Thantlang Township where the mean yield ranges between 15.49 to 55.09 baskets/acre (min=7, max=100, and median=30).



**Ladies yielding millets at terraces**



**Vegetables at Terraces**

Lowland rice also shows significant yield variations across the study Townships for the year 2011. The mean yield for lowland rice for all the three Townships ranges from 16.60 to 56.48 baskets/acre (min=2, max=80, median=39). The highest variation between the mean, median, minimum, and maximum of lowland rice yield is found in Hakha and ranges from 11.06 to 46.09 baskets/acre (min=2, max=65, and median=25). Compared with the mean yield rates of other cereal crops, lowland rice keeps considerably low yield variations.

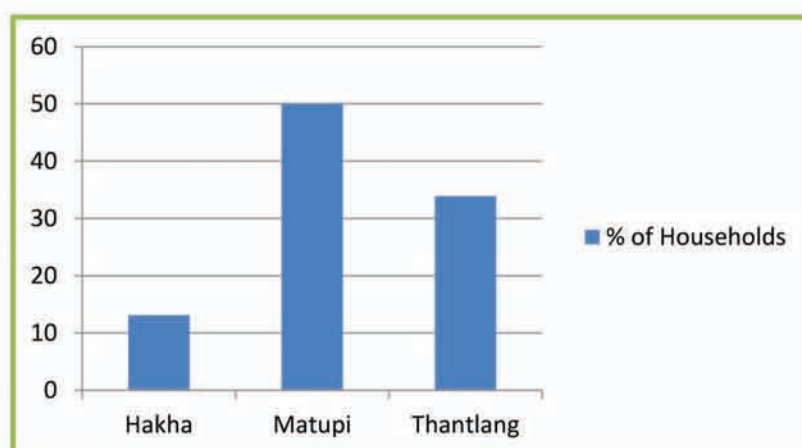


## 7.7 Use and sufficiency level

When the level of food sufficiency (by months) through their own production was asked, 27.7% of farmers on the sample said that they are sufficient through their own production. And the level of food sufficiency through own production is the highest in Matupi Township (50%) followed by Thantlang Township (33.9%) while Hakha Township ranks the lowest (13.1%) in terms of food sufficiency through own production. It is worth noting that food sufficiency through own production here does not take into account other forms of access to food such as those purchased, borrowed, or obtained through social safety nets.

What was investigated also by the survey is how people utilize their cereal grains of their own production. Regarding maize, 95% reported that they consume their maize grains whereas another 2.5% said they sell the grains. And all the respondents who sell their maize grain live in Thantlang Township. This means that maize is consumed as major food crop in Hakha and Matupi Townships. Also in the cases of upland rice, 87.8% of the respondents said that they consume their products whereas households who sell account only for 4.9% and this proportion are concentrated in Hakha and Thantlang Townships. Similar regards apply to the proportions for selling. The overall proportion of lowland rice farmers who consume their grains are 94.4%.

**Figure 3 Proportions of households food-sufficient through own production**



## 7.8 Storage methods

In order to explore the quality of food consumed and the level of food sufficiency, the respondents were asked about how they used to store their cereal grains. And the assessment found that most proportions of respondents use traditional method in storing their grains (83.2% for maize, 79.5% for upland rice, and 95.9% for lowland rice. Improved storage methods here do not mean the use of advanced treatment necessitating expensive inputs. But it just stands for the use of any protection measure in order



**Storage Systems in Chin State**



to conserve their grains. Various local means of protection measures are practiced in maize and rice by respondents from Hakha and Thantlang Townships, but no farmer in Matupi uses any form of improved storage method.

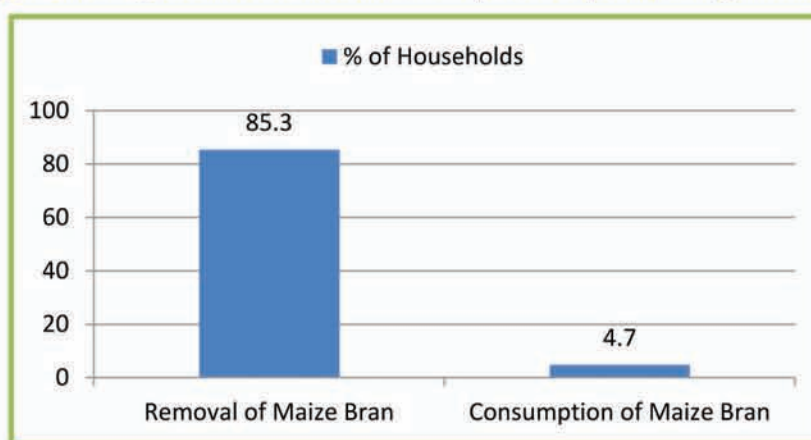
## 7.9 Processing methods

The purpose of investigating food processing methods is to learn the efficiency of food utilization and the potential impacts on the nutritional status of households in the survey area. And the survey found that only 13.5% of maize growers consume whole grains of maize while 85.3% practice pounding<sup>7</sup> before they consume the maize grains. The practice of maize pounding is associated with removal of maize bran which is believed to reduce nutritional uptake of the people who practice. Maize pounding is practiced by all study households in Matupi Township. The two types of rice (upland and lowland) are supposed to be pounded or milled since it cannot be consumed together with the bran. But only 10.3% of upland rice growers and about 39% of lowland rice growers only mill their rice. In this regard, Matupi Township has the highest proportion of milling rice.



Food Processing in Chin

**Figure 4 Proportions of households by maize processing method**



## 7.10. Consumption Patterns

Traditionally, pounded maize grains are consumed as porridge together with any form of vegetable. In the survey area, the proportion of households who consume maize as porridge account 76.4% and another 22.4% steamed the grains for consumption. And Matupi Township has the highest and Thantlang has the lowest proportion of porridge consumption. Consumption of rice, both upland and low land, as porridge is as relatively low as 34.2% for upland rice and 11.8% for lowland rice. Again, the highest level of porridge consumption is found in Matupi Township whereas the proportions for Hakha and Thantlang are not that significant in both upland and lowland rice. Traditionally, consuming rice in the form of porridge is an

<sup>7</sup> The practice of pounding maize grains in a wooden mortar with wooden pestles especially by women in order to remove the bran which is usually used as animal feed.



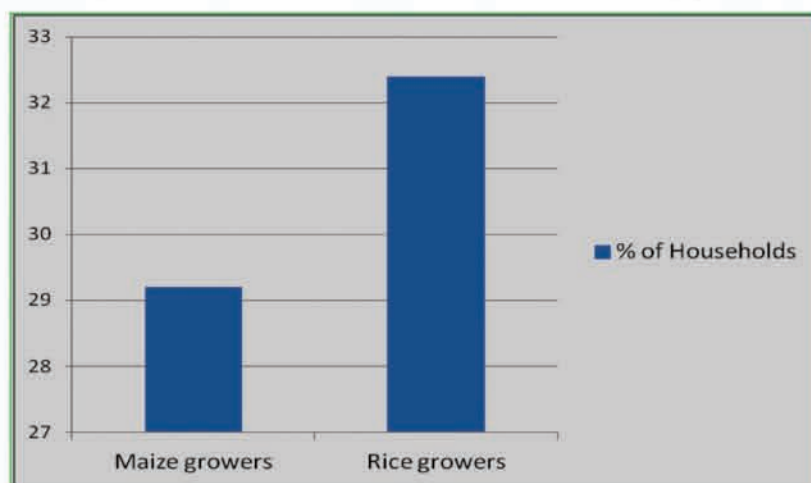
indicator of food shortage for the households concerned and is not the pattern practiced in times households are food-sufficient.

Among the survey households, most consume only the endospermic part of major cereal grains. Maize growers who consume only the endospermic part of maize grains are 78.4% and the proportions for rice are 77.8% (upland rice) and 94.7% (lowland rice). Of the households who consume the endospermic part of cereal grains, most use the bran as animal feed and the proportions for using bran as feed are 96.9% for maize, 92.9% for upland rice, and 84.5% for lowland rice. The proportions of households who sell the bran are 0.8% for maize, 7.1% for upland rice and 8.5% for lowland rice. And the level of use of bran as animal feed is the highest in Matupi Township.

### 7.11 Level of food sufficiency

Food sufficiency level is measured by months irrespective of the quality of food consumed. It has been found that, overall, 29.2% of maize growers and 32.4% of rice growers (both upland and lowland) are food-sufficient for less than 6 months. However, all respondents of rice growers and 66.7% of maize growers in Matupi fall under this category. The proportions of households who are food-sufficient for the whole year are 37.7% for maize, 35.3% for upland rice and 30.9% for lowland rice. Most households in Hakha and Thantlang are food-sufficient for 6 to 9 months.

**Figure 5 Proportions of food-sufficient households by types of crop grown**



### 7.12 Major constraints

The major constraints for ensuring food sufficiency, according to their levels of severity, include crop damage due to pest infestation and uncontrolled animal-raising, low soil fertility, limitation of cultivated area, and lack of fertilizer. Among the households surveyed, 48.5% reported that their crops were destroyed by pests and another 36.4% reported damage by animals. The proportions of households reporting damage by pests and animals are the highest in Matupi and Hakha Townships. Significantly, up to 66.7% of respondents in Thantlang Township reported losses of their cereal crops due to pest infestation. Low grain yield due to poor soil fertility was reported by 9.1% and each 3% of respondents said that limited farm area and lack of fertilizer also constrain their production.

## Income Earning Activites

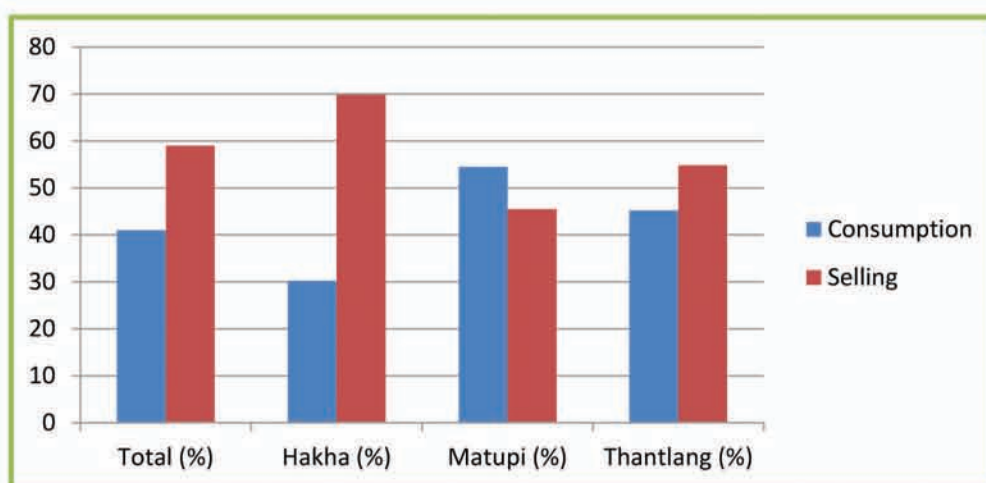
### 1). Livestock and Fishery

In rural areas, raising livestock can be a coping strategy for food insufficiency and for meeting other household needs albeit not worth considering as a valuable livelihood asset or income source. It can also contribute to the nutritional improvement of household members. In the survey area, 96.2% of households raise any kind of livestock and the proportion is 100% in Matupi Township. The commonly raised livestock are pig (87.5%) and chicken (91.5%), but some households also raise goat, buffalo, mythun, cow, and horse. Most of these livestock are raised through landrace and are rarely fed. The proportions of households raising large animals like buffalo, mythun, cow, and horse are relatively low compared with those of small animals. Nevertheless, the highest proportion of households raising buffalo and cow is found in Hakha Township and of mythun in Thantlang Township. In Hakha and Thantlang Townships, the purpose of raising livestock is mainly for sales (69.8% for Hakha and 54.8% for Thantlang) whereas most survey households (54.5%) in Matupi Township do livestock-raising for consumption. The proportions of households by purpose of raising livestock thus vary across the three survey Townships.



A mother is getting a goat from CAD

Figure 5 Proportions of households by purpose of raising animals



Though the purpose of raising animals is not necessarily for income generation, the amounts of income earned through selling livestock are not negligible. The average income from selling pig is 106,935 kyats (min=20,000, max=400,000, median=95,000). But it has been found that households who gained these amounts of income from pig-raising are concentrated only in Hakha and Thantlang Townships. With similar regards, the amounts of income through chicken-raising is 20,000 kyats (min=10,000, max=60,000,





median=20,000). And the lowest income from livestock is gained through goat-raising with a mean income of 30,000 kyats and such income earning though goat is found only in Thantlang Township.

A very few households in the survey area gain income from selling large animals. When they do, the average incomes can amount 380,000 kyats for buffalo, approximately 280,000 kyats for mythun, and about 160,000 kyats for cow. However, evidences of gaining income from selling large livestock have been found only in Hakha and Thantlang Townships. The major constraints encountered in raising livestock include the lack of food (55.9%) and capital money (44.1%) especially for those households in Hakha and Thantlang Township whereas such difficulties have not been reported by households in Matupi Township.

The situation of fishery was also investigated by this survey not in the sense that it has business potentials, but rather from the aspect of nutritional improvement. It is expected that consumption of a small amount of fish could make a significant contribution to household nutritional status. In this survey area, only 6.2% of respondents engage in fishery and most of those households live in Hakha Township. A lower proportion (4.6%) of households in Thantlang Township also do fishery, but no household from Matupi Township engages in fishery. All households who engage in fishery do small-scale fresh water fish culture than fishing in rivers and streams.

## 2). Sources of income

Most livelihood assessments, if not all, find it difficult to find out the actual income of their respondents. However, it is believed that the findings of most assessments are more or less identical to the realities of the households being assessed. In fact, to obtain accurate amounts of incomes for households under study largely depends on the performance level of enumerators as well as knowledge level of the respondents. This survey also investigated the incomes of households under study and it is worth simply admitting that the information obtained may or may not be identical with the actual incomes. However, we firmly believe that information obtained through this survey will represent the most approximate amounts of income for its respondents.

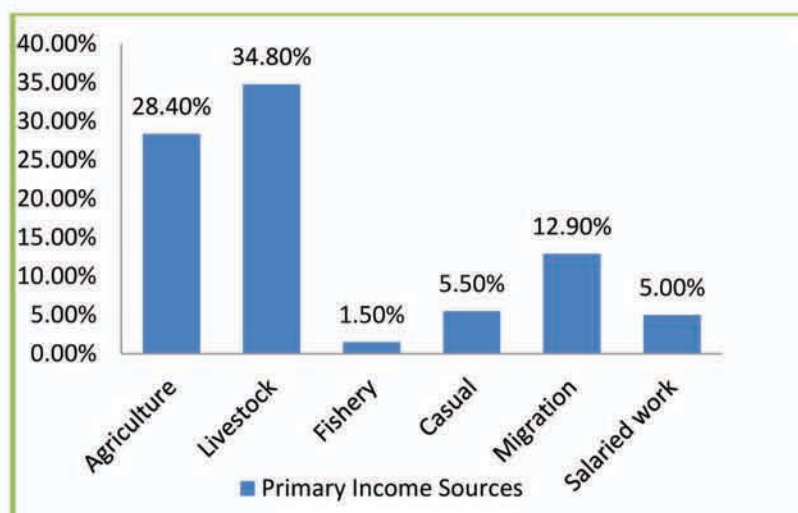
As such, the assessment found that the mean income of the study area for the year 2011 is **250190 Kyats** (min=3,000, max=9,000,000, median=200,000). And it has been found that income distribution is not even in the other three Townships. The three major income sources of the respondents are agriculture for 28.4% of households, livestock for 34.8% of households, migration for 12.9% of households. Other sources of incomes include casual work, salaried work, artisan, forest products, small trade/grocery shop, and fishery. The highest dependence on agriculture and livestock is found in Thantlang Township followed by Hakha Township while the highest proportion of migration as major income source is found in Matupi Township.



A Lady with a traditional weaving



**Figure 7 Proportions of households by major sources of income**

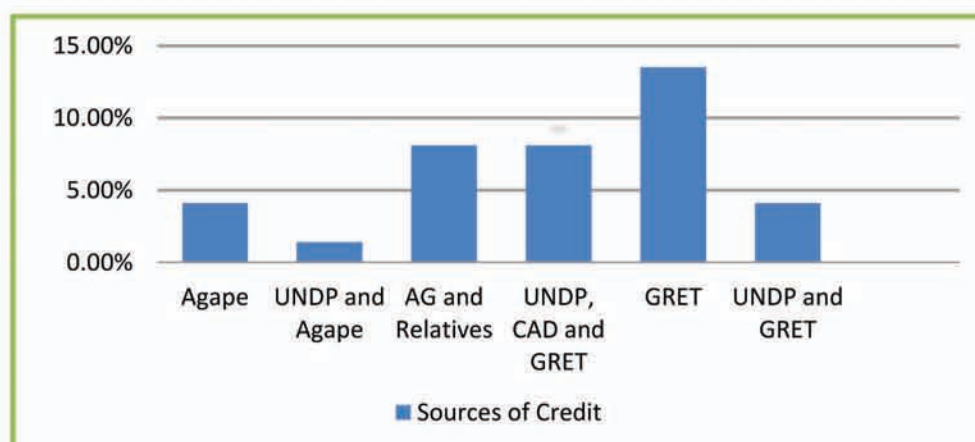


### 3). Credits and Debts

While availability of credit can be very important for livelihood improvement, it can also be the cause of indebtedness unless the credits are properly utilized for productive purpose. According to this survey, 35.6% of households reported that they have access to credits and Hakha Township has the highest proportion (55.2%) and Matupi Township has the lowest proportion (9.1%) of access to credit. The proportion for Thantlang Township remains at the middle (27.7%).

Of the households who have access to credit, the proportion of households taking loans from only UNDP<sup>8</sup>, the largest credit provider in Chin State, is 51.4%. Ranked second to UNDP is GRET<sup>9</sup> which remains the sole source of credit for 13.5% of the total survey households. About 17.6% of the total received loans from two or three sources of credit. Other minor sources of credit include Agape (CAD), AG and relatives, and private money lenders.

**Figure 8 Proportions of households by credit sources**



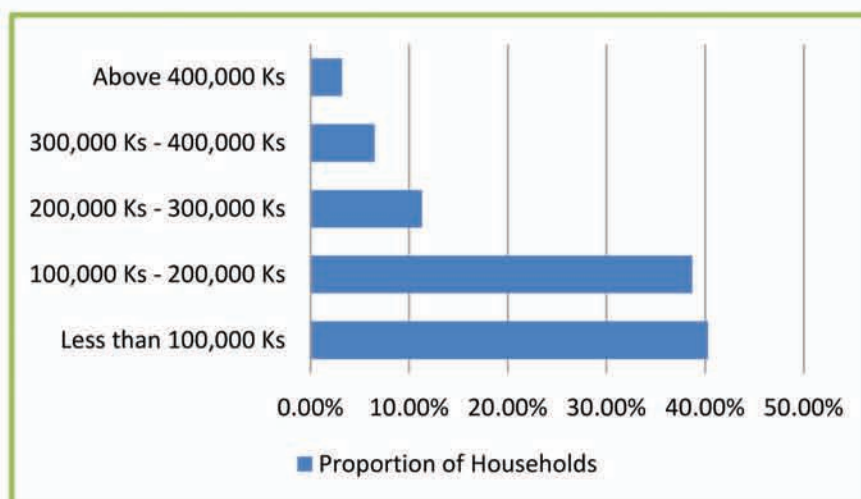
<sup>8</sup> United Nations Development Programme.

<sup>9</sup> Groupe de Recherche et d'Echanges Technologiques.



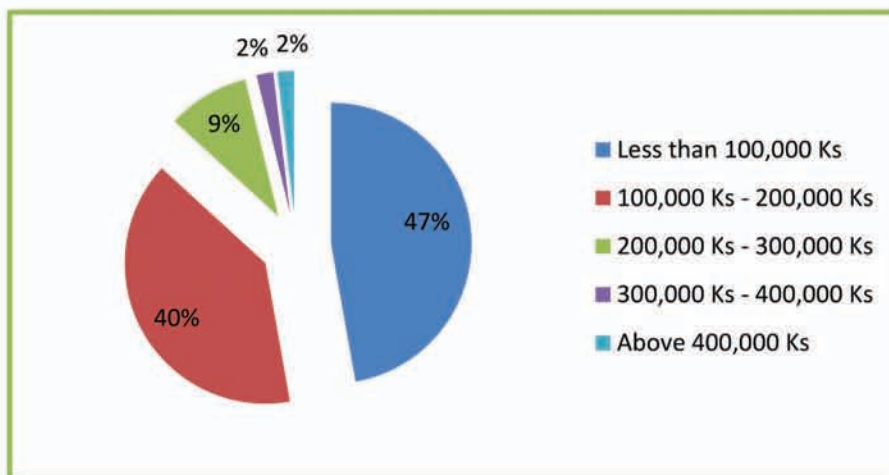
Findings indicate that credit providers are present in Hakha Township followed by Thantlang Township. The mean amount of loans taken is about 112,000 Kyats (min=10,000, max=1,000,000, median=100,000). Of the households who received loans, 40.3% received loans of the amounts less than 100,000 Kyats, 38.7% received loans of 100,000 to 200,000 Kyats, 11.3% received more than 200,000 and up to 300,000 Kyats, 6.5% received more than 300,000 and up to 400,000 Kyats, and only 3.2% received more than 400,000 Kyats. And Hakha and Thantlang have the highest proportions of households with access to credit.

**Figure 8 Proportions of households by loan sizes**



While credit is seen as an important input for poverty reduction, information is limited as to the purpose of taking loans and how the loans taken are repaid. For 47.6% of households, loans are taken for livestock whereas 25.4% took loans for education. The other purpose of taking loans for 17.5% of households is for buying food and for another 9.5% is for health expenses. The highest proportion of households taking loans for food is the highest in Thantlang Township. On average, only half of the amount of each loan taken has been repaid. Repayment rate is proportionally related to the amount of loan that it gets higher as amounts of loan are smaller. As such, the repayment rate for borrower with less than 100,000 kyats of loan size is 47.2% whereas that for borrowers with more than 400,000 kyats is only 1.9%.

**Figure 9 Proportions of repayment by amounts of loans taken**





Our common understanding is that loans are taken for any specific purpose that could be economic or social. When the respondents were asked if loans were utilized as it was proposed, 62.1% of respondents reported that they could utilize their loans as they proposed. The reasons for why they failed to utilize the loans as proposed are health expenses for 62.5%, market access for 25%, and education for 12.5%, respectively. The proportion of households who spent the loans for health expenses is the highest in Hakha Township. No borrower from Matupi utilized their loans as they proposed by the time of loan proposition.

#### 4). Level of indebtedness

When asked about if they are indebted, 25% of households said that they are indebted and the proportion is shared by Hakha and Thantlang Township. The average amount of debt is about 120,000 kyats per household (min=10,000, max=500,000, median=100,000). And the levels of indebtedness are the highest in Hakha and Thantlang Townships. And the reasons for being indebted include education and health together (36%), health alone (15.4%), and education alone (1.9%). The remaining 48.1% provided no answer.

#### 5). Labour migration

Labour migration is regarded as a major coping strategy for escaping poverty through remittances. At the same time, it is obviously major cause of losing brain and labour forces and local productivity can be affected in the long run. Labour migration is categorized in this survey as domestic migration, cross-border migration, and international migration, and international migration is the common form of migration found in this area. Despite the perceived contribution of remittance to household economy, only 25.9% of respondents recognize the contribution of labour migration to household economy and as high as 50% of the respondents provided no response. In Thantlang Township, only 15.2% have the opinion supporting the fact that migration contributes to household economy.

## Home Entertainment

Entertainment facilities at household level can be regarded as a good indicator for the economic well-being of the household and as a means of recreation. In the survey area, about 14.9% of households own television, 8.7% have video, 16.3% have cassette, and 21.6% own radio. Supposed these facilities indicate the wealth of the households concerned, the highest proportions are found in Hakha and Matupi Townships. Again, while higher proportions of households in Matupi Township own such less valuable recreation items like cassette and radio, Hakha Township holds higher proportion of households owning video which is considered more expensive.

#### 1). Social Safety Nets

For most communities, social safety nets can serve as a coping strategy in times of conflicts, disasters, and famines, etc. It can also strengthen cohesiveness and collective capacities of the communities concerned in initiating development activities. In this survey area, 82.5% of households belong to the social safety nets of religious groups. Another proportion of households (47.6%) benefits from groups of relatives and the proportion benefiting from other communal groups accounts for 36.8%. While the proportions of involvement in communal groups are not much different across the three Townships, it has been found that households in Hakha Township have strongest linkage with religious groups and Matupi Township has the highest proportion of households involved in groups of relatives.





## Working Patterns

Working pattern of a household can be a determinant for estimating the labor inputs of that household for livelihood and associated outputs. Therefore, the timelines of every activity of a day was asked in order to know the net working times of the households. According to their response, most households get up at 6 a.m and start work at 8 or 9 a.m except for Thantlang where a considerable proportion of households start working at 7 a.m. They take a rest for lunch for about one hour beginning at 12 a.m and start work again at 1 p.m. This means that most households ensure a net working time of 3-4 hours in the morning. They keep on working until 4 p.m (Matupi and Thantlang Townships) though majority in Hakha stop working at 5 p.m, putting their net working time in the afternoon at about 3-4 hours. Thus, it can be said that the total working time for a normal household in the survey area is about 6-7 hours per day. Again, the total times spent on the way to their workplace are 1 hour for 64.9% of households in the survey area. But this proportion is mainly shared by Hakha and Thantlang Townships. The proportion of households who spend 2 hours on the way accounts for only 35.1%.

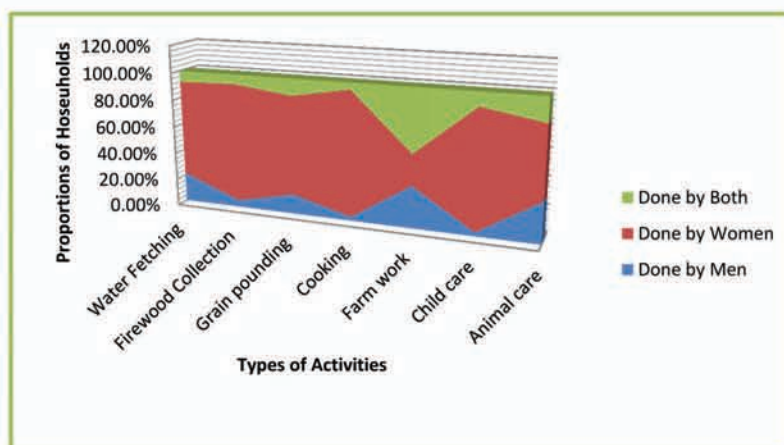
### 1). Time allocation by major activities

The concept behind investigating time allocation by major activities is about to identify the types of activities which consume most working times relatively in comparison to the outputs gained. According to this survey, the averaged time spent in water fetching by most households is about 1 hour (2 hours for a few households) per day and there is no significant variation across the three survey Townships. Times spent daily for collecting firewood is about  $2 \pm 0.5$  hours per day on average (min=1, max=5, median=2). It has been learned that some households in Thantlang Township spend up to 5 hours a day in collecting firewood (see Table 1).

### 2). Activities by gender

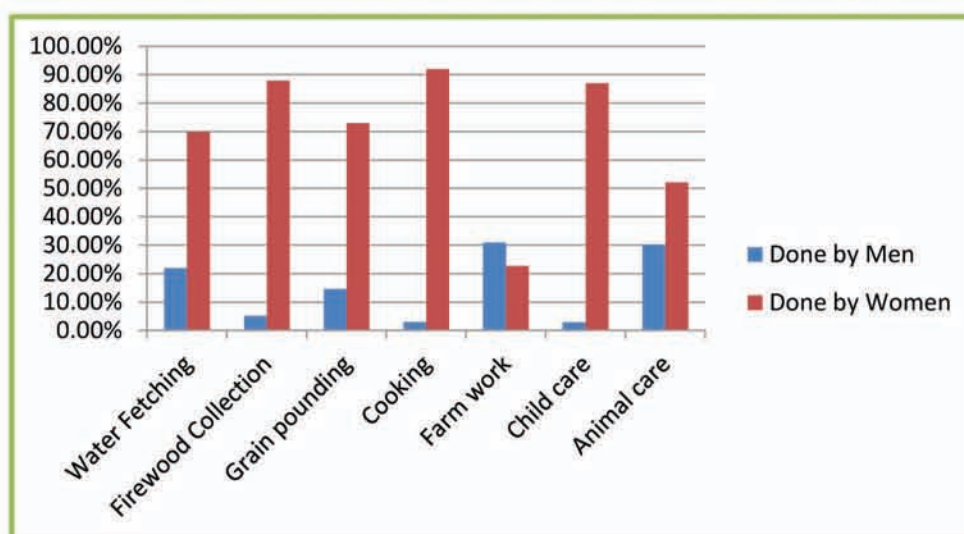
It is always thought that women are discriminated in all aspects including division of labor by gender, distribution of food within household, the process of decision making, etc. In this survey area also, it has been found that most activities of the household are performed by women. Of the survey households, 69.9% said that water fetching is done by women and 8.2% said that men and women do the work together. Only 21.9% reported that water fetching is solely done by men. The proportions of households reporting the work of water fetching being done by women only are 60% in Hakha Township and 81.8% in Matupi and Thantlang Townships. And Thantlang has the highest proportion of households in which water fetching is done by men and women together.

Figure 10 Division of labor by gender for major activities





**Figure 11 Comparative description of division of labor by gender**



With similar regards, households who reported that the work of collecting firewood is only done by women are 87.9%. The remaining 5.1% said that firewood collecting is done by men only and another 7.1% said that the work is done together by men and women. Men's share of the work of firewood collecting is the least in Matupi Township. Again, 72.9% of the survey households said that the work of grain pounding is done by women only while the proportion for men only is 14.6%. And 12.5% of households reported that the work is done by men and women together. It has been also learned that no household in Matupi reported the involvement of men in grain pounding and no household in Hakha said that grain pounding is done together by men and women.

In the survey area, the work of cooking also is mainly done by women. As such, 92% of households reported that cooking is done only by women whereas 3% said that the work is done by men only. The proportion of households reporting the work of cooking being done by men and women together is only 5%. In Matupi Township, the work of cooking is totally seen as the responsibility of women in Matupi and Thantlang Townships and there is no evidence about cooking being done by men or both men and women in Matupi Township.

Findings about farm works based on gender division of labor within household are seen less unfair because 46.4% of households reported that the work is done by both men and women. The proportion of households reporting farm work being done by men is 30.9% and women is 22.7%. And there is no significant variation across the three survey Townships in terms of farm works done by men or both men and women. However, men in Matupi Township do less farm works compared with those in Hakha and Thantlang Townships. Nevertheless, the division of labour by gender is less unfair as to farm works compared with other activities in the three survey Townships.

Another area of work done only by women (87%) is child care. Only 2.9% of households reported that men do child care and another 10.1% said that the work is performed together by both men and women. Analyzing by Township, no household in Hakha Township reported child care as a work shared between men and women. Again, the proportion of households who said men do child care are concentrated in Hakha Township and no household in Matupi and Thantlang Townships reported child care being done by men.

The work of caring animals is not less important than other livelihood activities since it significantly contributes to household economy at least as a coping strategy. For this study area, the proportion of households saying animal care is done by women is 52.1% and that for men is 30.2%. About 17.7% of





households reported animal care as the work done together by men and women. At the same time, no respondents from Matupi Township reported the involvement of men in caring animals. Variations for the proportions of households are high across the three Townships regarding the division of labour by gender for animal care. In Hakha Township, the proportion of households who reported that animal care is done by men is 63.4%. However, similar proportion for animal care being done by women is 63.4% in Thantlang Township and by both men and women is 63% in Matupi Township.

## Health Care

Unless proper attention is paid, health care can be a contributing factor for livelihood situations of the households concerned. In the survey area, 32.6% of households have children younger than one year and the proportion for households having under-five children is 52.4%. And it has been found that about 32.8% of households have more than two under-five children and the proportion of households having children, less than both one and five years of age, is the highest in Matupi Township.

Regarding child mortality, 5.3% of households reported child death and most cases of child have been found in Thantlang Township. Respondents were asked if they received post-natal care, 95.6% of them said that they did not received post-natal care and the proportion was as high as 100% in Matupi Township. The proportion of households encountering maternal death in 2011 accounts 1.5%, and the entire proportion of maternal death belonged to Thantlang Township.



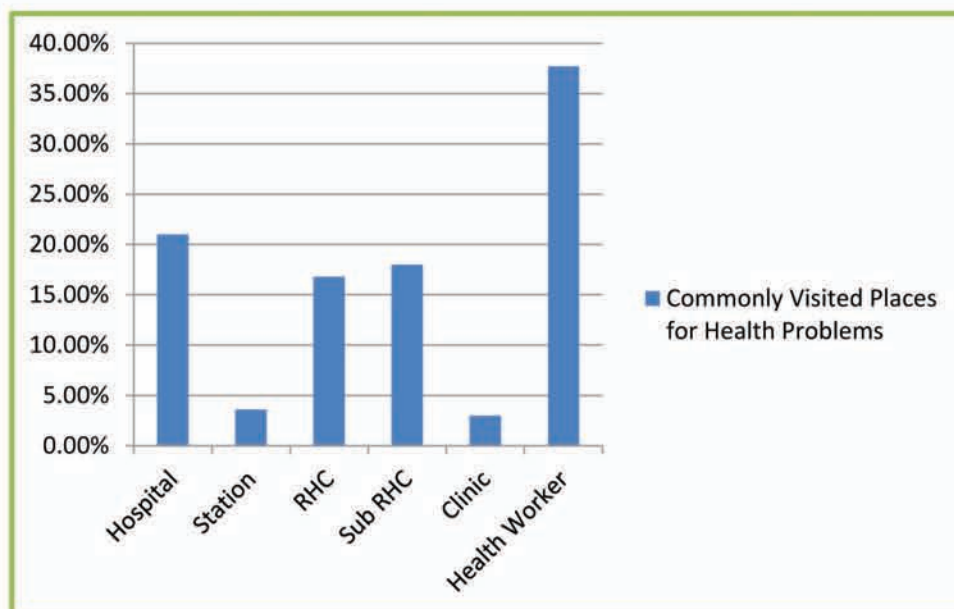
CAD physician gives health care to an old woman

In the study area, 62.3% of households reported that they did not receive hygiene education and the proportion is 50.5% for education on HIV/AIDS. Matupi Township received the lowest level of health education and Hakha Township received the highest. At the same time, only 9.9% of the households surveyed reported that they received education on reproductive health. No respondent in Matupi said that they received reproductive health education. Again, about 70.1% of households received education on malaria and the proportions are 100% for Hakha and 59.5% for Thantlang.

A high proportion of vaccination has been found. The proportions households by type of vaccination received include BCG (67.2%) and Measles (49%). It has been found that the proportion of households reporting measles vaccination is very limited in Matupi Township compared with Hakha and Thantlang.

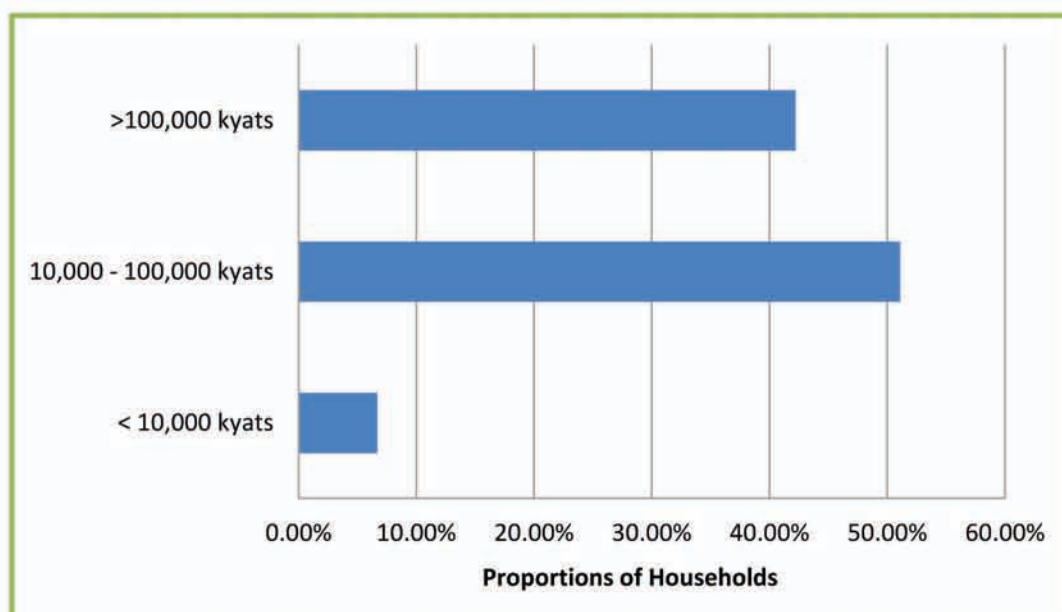
Another low level of health intervention is supplementary feeding for which the proportion is only 9.9% across the three Townships and Thantlang Township ranks the lowest.

**Figure 12 Common visited places in times of health problems**



The expenses for health care by households also was investigated and the mean amount of money spent on health is approximately 79,000 kyats (min=1,200, max=900,000, median=50,000) for the year 2011. For 6.7% of the survey households, health expenditures amounts less than 10,000 kyats whereas the proportion for households with health expenses amounting between 10,000 to 100,000 kyats is 51.1%. And about 42.2% of households spent more than 100,000 kyats health.

**Figure 12 Proportions of households by amounts of health expenses**





## 1). Water and Sanitation

Access to clean drinking water can contribute to the health and well-being of households in rural areas. In this study area, up to 98.6% of households have pipe water as their major water source and households who receive water from dug well accounts for only 1.4%. The use of dug well water is found only in Thantlang

Township. Through the existing water sources, water is available all year round for about 75.7% of households. Hakha Township has the lowest level of water availability and only 47.7% of households have water available for 12 months. And the lowest level of water scarcity is found in Matupi and Thantlang Townships, the former even lower than the latter.

Regarding the drinking patterns of water, 98.1% of households said that they usually drink boiled water and there is no much variation of proportions across the three Townships. Again, 69.2% of households in the survey area said that they received hygiene education while similar education was received only by 9.1% of households in Matupi Township. Moreover, 89.4% of households said that they use fly-proof latrines and 91.3% said that they wash their hands before meals.



Drinking Water Project



Traditional make-shift bamboo drinking water



## Food Sources and Sufficiency

Major sources of food are classified partly in the sense that they can also highlight the resilience and established capacity of the households after rodent outbreak in 2008. Findings indicate that 67% of households were able to rely on their own production while some 30.1% still need to purchase the major portion of their consumption. However, proportions vary widely across the three Townships and situations remain the worst in Matupi Township where only 9.1% of households can rely on their own production and 81.8% still need to purchase compared with the proportions in Hakha (40.9%) and Thantlang (20.2%). Other sources of food include food aid from development agencies, gifts from relatives, and those



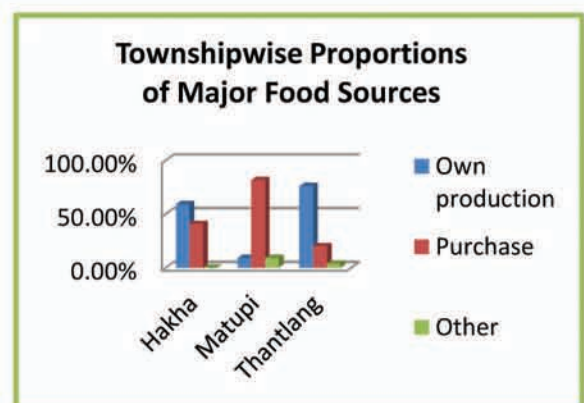
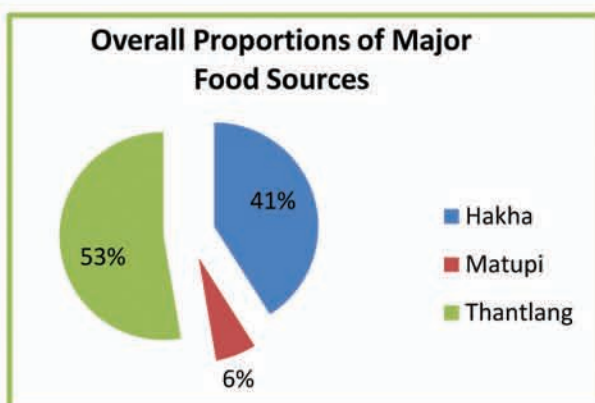
Traditional shifting farm



Terracing farm

obtained through religious groups and social safety nets. The various levels of food sufficiency also presents the approximate lengths of hunger gaps normally encountered in the survey villages. For 45.3% of households in the survey area, hunger gaps last for less than 6 months though a higher proportion (54.7%) of households have hunger gaps of more than 6 months. The average length of hunger gaps across the three Townships is  $5.26 \pm 2.65$  months (min=1, max=12, and median=6). Though much variation in the different lengths of hunger gaps has not been found, it is worth noting that the proportions of households with longer hunger gaps are higher in Matupi and Thantlang Townships than in Hakha Township.

Figure 13 Proportions of households by major food sources





## Education

The average number of school age children (under 16 years of age) per household is 2.27 for the three Townships. Of that average, different means for students of various classes are high school ( $1.06 \pm 0.246$ ), middle school ( $1.49 \pm 1.102$ ), post-primary school ( $1.69 \pm 0.951$ ), primary school ( $1.69 \pm 0.781$ ), and pre-school ( $1.00 \pm 0.000$ ). There is no significant variation between the enrolment rates of boys and girls though the latter have a bit lower mean. Among the three townships, however, Hakha has the highest rate of enrolment followed by Thantlang, and Matupi has the lowest rate of enrolment.



A school in Tisen



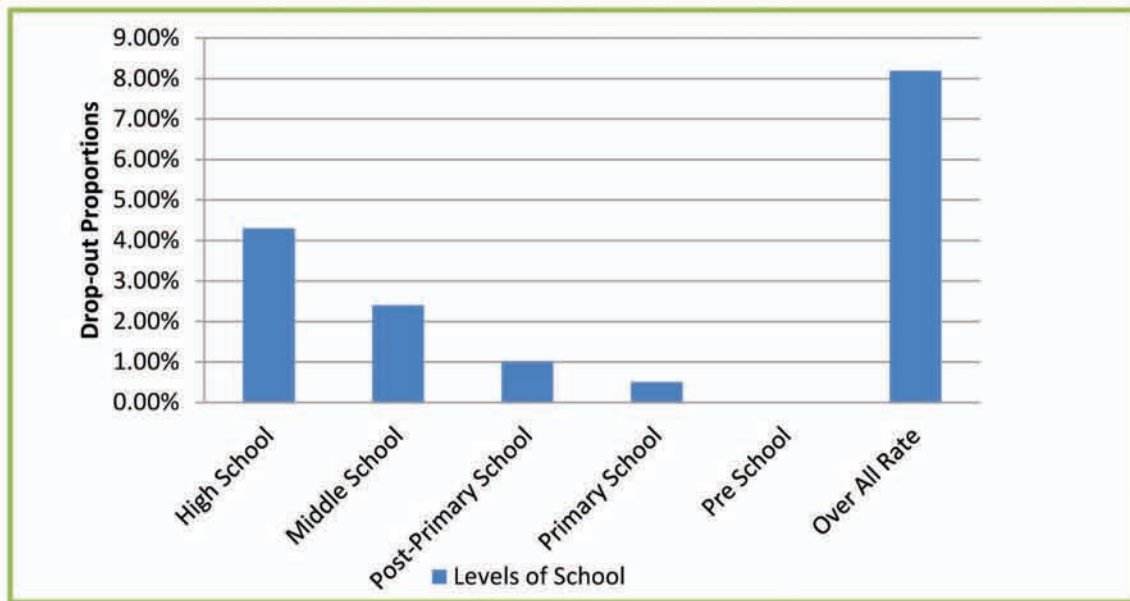
CAD School in Monhla Village

**Table 2. Means of student enrolment rates at various school levels**

| All Enrolled          | Mean            | Girls Enrolled | Mean            |
|-----------------------|-----------------|----------------|-----------------|
| <b>High School</b>    | $1.06 \pm 0.25$ | High School    | $1.00 \pm 0.00$ |
| <b>Middle School</b>  | $1.49 \pm 1.10$ | Middle School  | $1.20 \pm 0.41$ |
| <b>Post-Primary</b>   | $1.69 \pm 0.95$ | Post-Primary   | $1.16 \pm 0.37$ |
| <b>Primary School</b> | $1.69 \pm 0.78$ | Primary School | $1.33 \pm 0.81$ |
| <b>Pre-School</b>     | $1.00 \pm 0.00$ | Pre-School     | $0.00 \pm 0.00$ |

Against the enrolment rates of school age children, drop-out rates are relatively high across the three Townships. According to findings of the survey, the average drop-out rate for households throughout the entire area is about 8.1%. Compared across the various levels of class, drop-out rates for the year 2011 are high school (4.3%), middle school (2.4%), post-primary school (1%), primary school (0.5%) and there is no observed drop-out rate at pre-school level. And the overall drop-out rate for the entire area is 8.2% with drop-out rate in Hakha (19.4%) being the highest followed that in Thantlang Township.

**Figure 14 Student drop-out rates by different school levels**



### 1). Matric and University Level

Matric level education can be useful in one way or another in development activities of the communities concerned. In this survey area, only 3.8% has matriculated persons and 1.9% has university students in their households. The proportions of households having both matriculated persons are higher in Hakha (4.5%) and Thantlang (3.8%) compared with that in Matupi (0%). With the same regards, the proportions of households having both university students are higher in Hakha (3.0%) and Thantlang (1.5%) compared with that in Matupi (0.0%). Considered from economic perspective, the investments for pass and fail at matric level might not be that different if all students have equal change to quality education.





## Transport and Communication

The modes of transport and communication and the level of access to transport and communication facilities can be quite decisive to the development of a community. In the survey area, the most common mode of transportation is 'on foot' for 92.8% of households while 25.1% reported that they usually travel by car. The proportions of households travelling on foot across the three Townships are 81.8% in Hakha, 72.7% in Matupi, and 100% in Thantlang Township. Similarly, the proportions of households travelling by car are 31.8% in Hakha, 27.3% in Matupi, and 21.5% in Thantlang Township. Despite this information, it is also worth keeping in mind that the survey villages are located in the most remote areas of each Township.



CAD use modern machines in road building



Cash for work program

proportion of access to communication facilities, Matupi Township has the lowest level, and Thantlang Township at the middle. Unfortunately, almost all households use those communication facilities for social purpose rather than productive ones.

In addition, most students in the study area (99.5%) usually go to school on foot. Moreover, most households (76.2%) in the study area usually go to health services on foot when they have health problems. However, most people (51.5%) go to Town by car while the proportion of households going to Town on foot is only 47.1%. Similarly, 99.5% of households in the survey area usually go to market on foot. Across the three Townships, travelling on foot for different purpose of travel is most common in Matupi Township followed by Thantlang Township, and Hakha Township remains with the lowest proportion of households travelling on foot. Access to proper communication facilities is increasingly considered as a development indicator for rural communities. However, more important than access is how people utilize those facilities. In the survey area, 59.6% of households have access to communication facilities like telephone, internet, and postal services, etc. Hakha Township has the highest



CAD builds Suspension Bridge



## Shelter

For many regions, roof type can be a good indicator for estimating the economic status of a household. This is not always true in Chin State since the people value most on shelter that they accumulate their wealth in houses. According to this survey, up to 69.9% own houses roofed with corrugated iron sheets where as the proportion for slate-roofed houses is 17%. Another 10.2% of houses in the survey area are roofed with thatch and as few as 0.5% of households live under plastics/tarpaulin. Most houses roofed with corrugated iron sheets and slates are found in Hakha and Thantlang Townships whereas most thatch-roofed houses can be found in Matupi Township. In the three Townships, most houses are walled and floored with wooden planks and are in strong enough conditions.



A thatch roofing house in Chin state



Some zinc roofing houses in Hnaring village



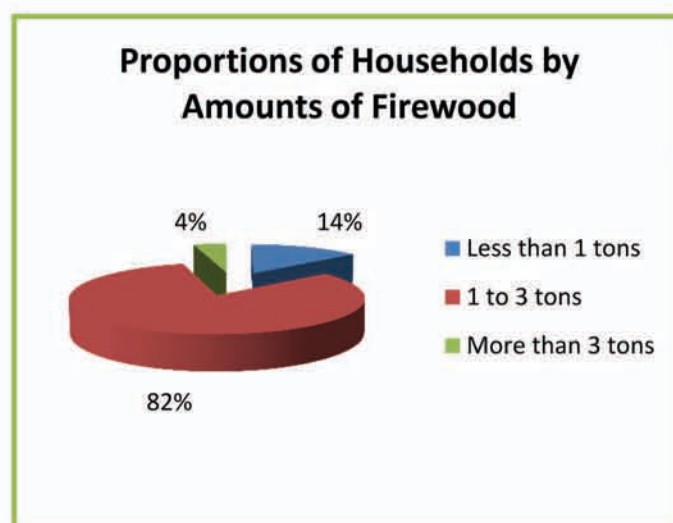
## Household Energy Sources

The basic idea of assessing household energy sources is more related to gender and environment issues than energy itself. In the survey area, as high as 98.5% of households use firewood as their major energy source. Of this proportion, 81.9% of households collect each 1-3 tons of firewood every year and the highest proportions are found in Matupi (87.5%) and Thantlang (87.1%). This proportions can somewhat highlight the potential rate of deforestation in the survey area. From the perspective of environment, Hakha Township appears to have the lowest rate of deforestation due to collecting firewood. A very limited uses of electricity and biogas are also found in some villages of Thantlang Township. At the same time, it is found that most of the energy sources are the initiations of respective individuals or communities concerned.



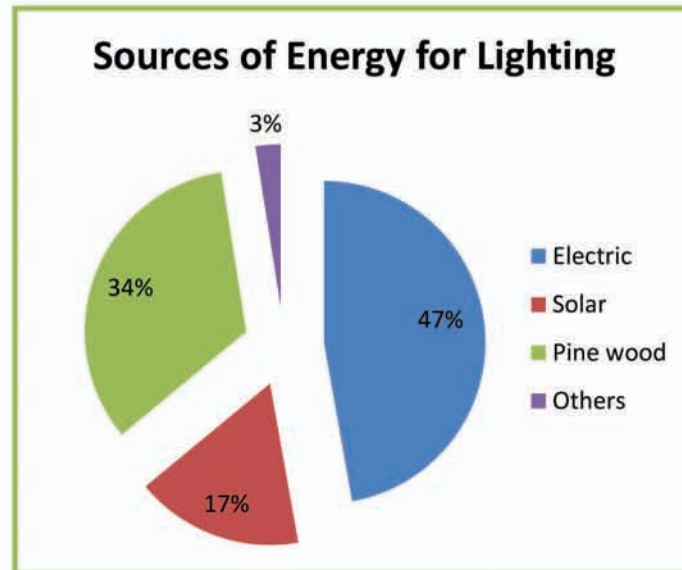
A kitchen in Chin state

**Figure 15 Proportions of households by amounts of firewood**



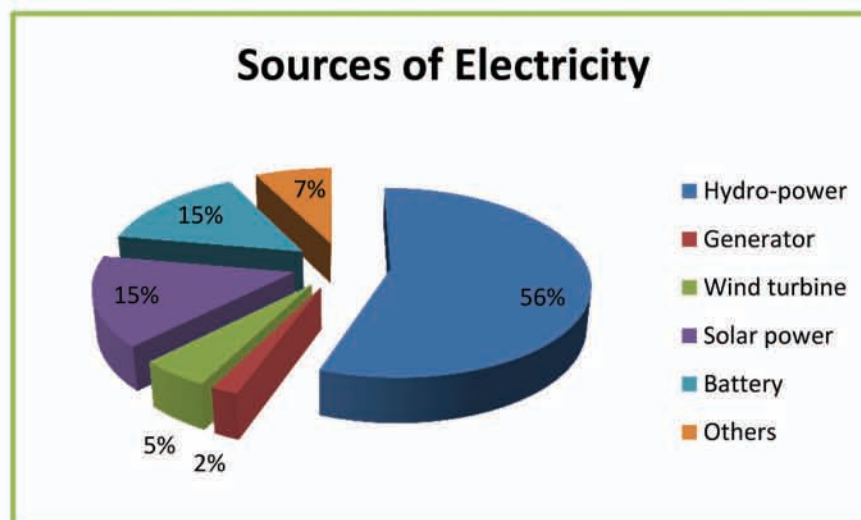
The three common sources of household lighting at night include electricity, pine wood, and solar power. Households who have electricity as their major source of lighting constitute 47.2% of the total households while 33.5% of households still depend on pine wood for lighting at night. Less common than these two sources of lighting is solar power for which the proportion of households is 16.8%. The proportions of households having access to electricity are 65.1% in Hakha Township and 41.3% in Thantlang Township while no evidence of access to electricity has been found in Matupi Township. It has been also found that there is a correlation between the proportions of electric users and pine wood users. The higher the level of access to electricity, the lower the level of using pine wood across the three survey Townships.

**Figure 15 Proportions of households by sources of energy for lighting**



The use of electricity for lighting is considerably high in comparison to other sources of lighting at night. And the major source of electricity for 55.5% households of the survey area is hydropower. Households using solar as major source of electric energy constitute 15.4% of households in the survey area and the proportion of households using batteries is 14.8%. Other minor sources of electricity include wind mill, generators, etc. The uses of hydropower is most common in Hakha Township (76.3%) followed by Thantlang Township (47.9%). The uses of solar power and batteries as major sources of electricity are most common in Matupi Township (33.3% for solar and 22.2% for batteries). No use of hydropower, generator and wind mill has been found in Matupi Township.

**Figure 16 Proportions of households by sources of electricity**







## Environment

The environment covers a very broad subject. However, this study mainly focuses on deforestation and the associated loss of trees and the species. Respondents find it difficult to provide the approximate measures of the losses as they rarely do specific measurements and have little knowledge about those measures. This is because no specific measurement has been done in the past either by the respondents themselves or external



Tree plantation at school

actors like governmental bodies and development agencies. According to the survey, the average area of trees fell for shifting cultivation by 90.7% is about 1 to 2 acres. Those households felling less than 6.9% of trees account 6.9% and another 2.5% fells trees of 4 or more acres. The highest proportions of households with medium rates of tree felling for shifting cultivation (2 acres) are found in Matupi and Thantlang Townships. However, the highest rates of tree felling (more than 4 acres) are found among some households in Hakha Township. And the average area of tree felling for shifting cultivation across the entire survey area is  $1.05 \pm 0.22$  acre.

The practice of felling trees for firewood is considered a major cause of deforestation throughout the survey area. On average, households in the survey area fell trees for about  $1.78 \pm 1.2$  tons of firewood. And about 50% of households reported that they cut down trees for two tons of firewood, and the proportion in Matupi Township is as high as 80%. The proportion of households felling trees for less than one ton is about 12.2% and that of households felling trees for even more than four tons. Most of those households felling trees for more than 4 tons of firewood are usually found in Thantlang Township. It has been found that the practices of felling trees for firewood is less systematic than that for shifting cultivation, thereby proportionally more destructive to the natural environment.

There are other practices that are supposed to have destructive impacts on the natural forests in a lesser extent. However, these practices can pose major threats to natural forests since they requires a huge quantity of young trees for use as fencing materials and stakes, etc. in home gardening. In this survey area, about 95% of households fell about one ton of young trees for use in home gardening. Regarding the practice of felling trees for shelter materials, about 81.1% of households fell about one ton of trees per year and the average amount is  $1.35 \pm 0.89$  ton per year for the entire survey area. In addition to these, about 25.1% of households reported that they engage in collecting wild species (herbs and insects) for selling which also is subject to selective felling of trees, and the practice is most common in Hakha Township (51.5%). With these deteriorating environmental phenomena, 50.5% of households in the study area believe that there are negative impacts on agricultural crops.





## Nutrition Assessment Report

CAD team led by our program manager, consultant and 6 staffs from our Hnaring and Hakha sub-office conducted this survey during February 19 to March 25, 2012. The survey consists of two parts; one is nutrition and the other is socio-economic situation.

In our nutritional survey in 3 townships, we had 770 samples of children under 5 and we detected that prevalence of acute malnutrition via MUAC (14.3%), stunting (52.3%) and wasting (10.3%) and underweight (37.1%)<sup>10</sup> in these townships. This information has been already shared to respective regional and union government. With partnership between Ministry of health (MOH) and UNICEF, Chin state local representative from UNICEF and township medical officers arrived to our Hnaring CAD Sub-office to check this report and finally the MOH sent NAG5 and micronutrients to the malnourished children through Hnaring Rural Health Center. According to regulation of MOH, only the MOH and international NGOs can give treatment to malnourished children. Therefore CAD could do only referral system to the MOH.



CAD makes MUAC

Regarding nutrition issue, there is only one nutrition unit in Chin state based in Hakha City which is responsible for Hakha and Than Tlang townships. Due to such circumstance, CAD could not make referral system for 5 malnourished children identified at 4 villages in Matupi township which is covered by our LADP.

### Here is the nutritional status of children in 3 townships in Chin State

| Forms of Malnutrition | Level/Mode of Presentation     | Prevalence by Township |           |           | Total Malnourished | Total Studied |
|-----------------------|--------------------------------|------------------------|-----------|-----------|--------------------|---------------|
|                       |                                | Than Tlang             | Matupi    | Hakha     |                    |               |
| Stunting              | Freq. (%) within Township      | 307 (50.7)             | 70 (56.0) | 26 (66.7) | 403 (52.3)         | 770 (100)     |
|                       | Freq. (%) within total studied | 307 (39.9)             | 70 (9.1)  | 26 (3.4)  | 403 (52.3)         | 770 (100)     |
| Wasting               | Freq. (%) within Township      | 66 (11.1)              | 6 (4.7)   | 6 (14.6)  | 78 (10.3)          | 760 (100)     |
|                       | Freq. (%) within total studied | 66 (8.7)               | 6 (0.8)   | 6 (0.8)   | 78 (10.3)          | 760 (100)     |
| Underweight           | Freq. (%) within Township      | 237 (36.8)             | 45 (34.4) | 22 (50.0) | 304 (37.1)         | 819 (100)     |
|                       | Freq. (%) within total studied | 237 (28.9)             | 45 (5.5)  | 22 (2.7)  | 304 (37.1)         | 819 (100)     |

<sup>10</sup> CAD (May 2011). Under Five Nutritional Survey in Central Chin State.



## CAD Programs in 2012

### Irrigation for Terraces

Having made a thorough assessment of irrigation needs reported by communities, therefore, CAD project committee in our Hnaring Sub-office decided to give irrigation pipes to terracing farmers in Thang Aw village. There are 147 households with 963 people in this village. The support makes irrigation water available for 15 acres of terraces where both food crops and cash crops can be grown. The water is conveyed from the source that is about 1.7 km away from the terraced areas. In this village, there are 17 acres of terraces established by CAD in partnership with WFP, and the 15 acres of terraces supported with irrigation facilities were selected by means of their concentrated location.



New agricultural water pond built by CAD



A girl, pumping water to onions

The direct beneficiaries are 15 households representing 105 people (48 males and 57 females). These families are expected to diversify their crops and reduce their land area under shifting cultivation in addition to the primarily expected land ownership. According to the Chin customary law, every household has access to land utilization only and this access to land utilization does not ensure the right to land ownership for the poor or farmers. However, the significance of our activity in this farm irrigation is that OBOS and CAD have created the right of land ownership for 15 households who were traditionally deprived of land ownership. As a long term impact, the intervention will ensure a protection for small farmers against potential exploitation by commercial businesses in future since the upcoming open and

competitive economy will definitely pose a threat to access to land of small farmers. Here are the lists of farmer beneficiaries for irrigation support.

According to WFP<sup>11</sup>, only 24% of all sampled HHs (with access to land) reported having access to irrigation. This is a worrying statistic as it indicates that:

- (a) Over 76% of agricultural HHs have no regular access to irrigation and instead depend on natural sources. Thus any delay in rains, change in weather conditions would have direct and far-reaching effects on livelihoods. This relates to the second most commonly reported constraint.
- (b) HH members would have to spend significant time and effort to source water for agriculture (esp. during the planting season).
- (c) Lack of access to sufficient irrigation could result in HHs being forced to cultivate only a portion of their land, thus being unable to maximize their food and income generating potential.

<sup>11</sup> Chin Food Security Monitoring Report, WFP, 2009.



| No | Beneficiary Names | Acre | Household | Population | Male | Female |
|----|-------------------|------|-----------|------------|------|--------|
| 1  | Cho Liang         | 1    | 1         | 7          | 3    | 4      |
| 2  | Thang Hre         | 1    | 1         | 4          | 3    | 1      |
| 3  | Thla Kung         | 1    | 1         | 7          | 5    | 2      |
| 4  | Boi Rung          | 1    | 1         | 9          | 4    | 5      |
| 5  | Pu Khia           | 1    | 1         | 3          | 2    | 1      |
| 6  | Za Liang          | 1    | 1         | 9          | 2    | 7      |
| 7  | Bil Liang         | 1    | 1         | 5          | 2    | 3      |
| 8  | Ku Tial           | 1    | 1         | 8          | 3    | 5      |
| 9  | Hre Ling          | 1    | 1         | 10         | 4    | 6      |
| 10 | Le Cha            | 1    | 1         | 4          | 3    | 1      |
| 11 | Mang Hlo          | 1    | 1         | 7          | 2    | 5      |
| 12 | Hia Kung          | 1    | 1         | 6          | 2    | 4      |
| 13 | Ngun Uk           | 1    | 1         | 11         | 6    | 5      |
| 14 | Le Thar           | 1    | 1         | 8          | 5    | 3      |
| 15 | Le Hli            | 1    | 1         | 7          | 2    | 5      |
|    | Total             | 15   | 15        | 105        | 48   | 57     |

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Villagers build water tank



## Land Resource and Soil Type

Land resource and management is linked to sustainable food and agricultural production as well as sustainable natural resource management and resource extraction. Particularly as land is the main resource for food and agriculture production it is important to understand the historical background and current situation of land policy in order to formulate and enact Land Law of Myanmar. In Myanmar, the State is the ultimate owner of all land. Farmers have right to cultivate only and the land is not transferable. Land occupied for the purpose of agriculture such as Paddy Land, Ya (dry land), Kaing (alluvial land), Garden, Dhani and Taungya (upland) is managed by the Village Tract Administrative Council (VTAC).

However, in Chin State, traditional land administration systems are still adopted. Village Chairman and village committee allocate land to applicants in most of the village. Only village chief assigned lands and landless draw lots. The chief assigned lands to all except hereditary title holders. Average about 2-3 luyi are assigned by village chief to applicants by drawing lots and generally the communal lands were assigned to all villagers.

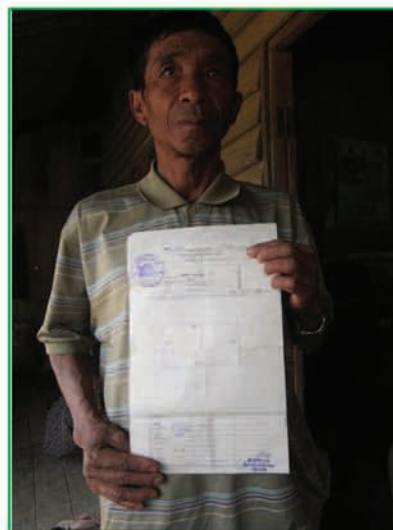
Lands are hereditary to their offsprings and if there is no heritable private land, all lands are assigned by letting villagers draw lots. There is no land market but those who clear the land can cultivate the crops. Pro-mulgate comprehensive agricultural and land policy in transforming the country into modern and developed democratic state under the new 2008 constitution. Agricultural land law and vacant land law were prescribed in 2012. According to these laws, land registration, for permanent lands, developed with financial assistance of CAD during 8 years (2004-2012), were done by the facilitation of Settlement and Land Records (SLRD). At the time of the study, SLRD take records for the land ownership and areas. This is a very admirable achievement of CAD on creation of land ownership rights for farmers in line with new land bill from customary land tenure because no NGO could create such kind of land ownership in Myanmar till 2012.

According to the modern classification, there are 24 main soil types being recognized in the Union of Republic of Myanmar. The characteristics of these soils are determined upon (1) the physical and mineral composition of the parent material, (2) the relief (physical features), (3) the climate under which the soil material has been developed and, (4) the vegetation. Soil classification has generally been made on the basis of the distribution of the important land resources for agriculture.

In Chin Hills, Complex soil (Ferralic Cambisol) are found on the high mountainous belt of the Chin Hills at the elevation of 4000 to 6000 feet above sea level. These soils are less structured having bedrock in the lower horizons so in the rainy season, there happens to be any danger of landslide. Generally, these soils are only suitable for forest conservation and plantation crops.



Land Register form for terrace land in Hnaring village on CAD terraces



An applicant who apply for land registration to SLRD on CAD beneficiary



## Construction of Clinic

As this activity was requested to OBOS with 3 years' plan, in the first year (2012), we bought and collected necessary hard woods and molded and baked 50,000 pieces of bricks for building CAD Health Care Center in Hnaring village which is surrounded by 12 villages of Lautu tribe. We overspent the budget because we ought to buy and collect necessary hardwoods and bricks in time while weather is good and transport facilities are available.

*We baked bricks for clinic construction*



As soon as Year 2013 begins, construction of the Center building will be commenced no later than the end of February. Due to a good work-plan and provided that most of the core materials such as bricks, woods, land are already in place, we expect to accomplish the entire construction activities before the end of June 2013.



*We moulded bricks*

Hnaring is the capital village of Lautu region and consists of more than 351 representing 2042 people. In Hnaring village, there are two primary schools, a high school, a rural health center, and a post-office. The village also hosts Catholic vicar zone and a Baptist Association office. CAD has started registration of this center to **TMO (Township Medical Office)** in Than Tlang township of Chin state.



## Public Health Care & Sales of Medicines

According to WFP report<sup>12</sup>, the main source of expenditure for 80% households in Chin State including CAD intervention areas is purchase of food. Expenditure on health was reported to be the second most common source of expense with 72% of the households reporting it to be one of their three main expenses.



A man shows his medicines, purchased in CAD shop from 20 kilometers with bike.

In Hnaring where our Sub-Office has been being run by OBOS funding since 2009, reliable public health care system and health care center are non-existent. Health staffs assigned for the rural health center are not available for most of the times as they find it difficult to stay in the village. Those who get sick are totally dependent on untrained rural physician and on medicine sellers. Those who are in serious, conditions are carried in stretcher on foot to State Hospital which is located at 78 kilometers from our sub-office. In Myanmar, one doctor covers more than 20,000 people and this doctor is mostly not available in rural State hospital which means

they are assigned to rural areas but they did not want to work there due to lack of incentives from the government.

In our socio-economy survey, it is found that the second highest expenditure of households is in health which represents about 40% of their total income and the proportions get higher as household incomes get lower. That is why our Health Care Center sells essential drugs at the prices affordable for poor families. By selling pharmacy in rural areas with affordable and cheaper prices than local merchant dealers, we won the heart of the local people who even think and say to one another that all medicines in CAD HCC are brought from Korea and medicines at merchant's shops are locally produced. This needs not to be construed as an exact truth, but it reflects how the communities trust CAD and its intervention.

Our values for customers are:

1. 24 hours service
2. Affordable, cheaper prices than local market
3. Kind and warm reception
4. Unexpired and registered medicines

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<sup>12</sup> Ibidem

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CAD Physician gives medical care to a child



Pharmacists and Nurse in CAD Health Care Center, funded by OBOS





## Car Road Construction

Our belief is that rural development cannot be boasted without occurrence of car road and good transport system. Additionally, agricultural transformation from traditional farming to modern farming system cannot be sustained without establishment of car road link between rural and urban regions. Therefore car road is necessary foundation for crucial incentive for farmers that they could transport their agricultural products to market and urban areas or either merchants or market will come to them.

At times, whenever we met funding agencies or we submitted our proposals to funding agencies, one of questions that they raised is “road construction is the work of government”. However in Myanmar, this understanding is extremely opposite because our Myanmar government did not implement rural development programs in remote ethnic areas. You will hear about 90% of rural car roads in Chin state were built by villagers themselves or by Churches or by NGOs.

Development cannot be kick started in rural areas without at least ordinary car road occurrence. CAD has spent about 40% of its budget in car road construction because we have seen the fruits that it is a worthwhile investment for poor people for higher and better accessibility to market, to movement and to economic interactions.

In 2012, construction of seven miles (10.5 km) of car road between Hnaring and Khua Hrang villages was begun on 10<sup>th</sup> March and completed on 31<sup>st</sup> May 2012. We hired bulldozer with 36,000 kyat (US\$ 45) per hour. It took 138 hours to dig 3 miles of car road. We will continue the remaining 4 miles in 2013. We overspent Kyat 5,000,000 for distance of 3 miles because of choosing good weather and availability of bulldozer.



As the rainy season begins, lots of landslides happened on this newly built car road but these landslides are positive for road expansion in future and road maintenance is normally made by communities.

**Our objectives for this activity are as follows;**

1. To enhance greater movement of communities
2. To enhance greater economic interactions
3. To save human lives through safer transport system



## Suspension Bridge Construction

It is an inevitable for us to find small and big rivers in building rural car road system. Road construction and bridge construction go hand in hand because car road needs bridges so that transportation can flow the whole year without any disturbance by flood. Bridges are one of the most important structures built by man. They are very important because they make spanning of physical obstacles like body water, road or a valley possible.



A bridge across Boinu River supported by CEI removes remoteness of Lautu and Mara ranges.

Our belief is that rural development cannot be boosted without occurrence of car road and good transport system. Additionally, agricultural transformation from traditional farming to modern farming system cannot be sustained without establishment of car road and bridges link between rural and urban regions. Therefore car road and bridges are necessary foundation for crucial incentive for farmers that they could transport their agricultural products to market and urban areas or either merchants or market will come to them. To add, sick people can reach to clinics in time and flow of goods are not stopped and prices of goods are stable in rural areas.

At times, whenever we met funding agencies or we submitted our proposals to them, one of questions that they raised is “road and bridge construction is the work of government”. However in Myanmar, this understanding is extremely opposite because our Myanmar government did not implement rural development programs in remote ethnic areas. You will hear about 90% of rural car roads in Chin state were built by villagers themselves or by Churches or by NGOs.

Development cannot be kick started in rural areas without at least ordinary car road and bridge occurrence. CAD has spent about 20% of its budget in car road construction because we have seen the fruits that it is a worthwhile investment for poor people for higher and better accessibility to market, to movement and to economic interactions.

In Chin state, majority of suspension bridges were built by Churches or villagers or NGO. Most of bridges last about 40 years and we with joy and pride, claimed that bridges are maintained and renovated with available local hardwoods by villagers themselves.

Our objectives for this activity are as follows;

- a. To enhance greater movement of communities
- b. To enhance greater economic interactions
- c. To save human lives through safer transport system





## Women Income Development

CAD believes that micro-finance and micro-credit and saving are only excellent for grant givers (UN agencies and NGOs and Private businessmen) but may be good for a few poor families and deleterious to majority of the poor.

CAD does oppose any micro-finance, micro-credit and saving program (MMSP) in addressing poverty and food insecurity. In Myanmar, there are UN agencies and many NGOs which are having MMSP since 1985 but we learnt that these agencies and NGOs are becoming stronger year by year in fund and poor beneficiaries poorer day by day. Myanmar government has started this loan program under ministry of cooperative to farmers since 2012 too. There is no history that MMSP destroys poverty and food insecurity in any corner of the world. About 80% or majority of the poor becomes victims of micro-finance or micro-credit and saving program. The assets of the poor are taken away by the agencies or the poor are put in jail.

Therefore, if UN agencies and NGOs and government based ministries are committed enough to tackle poverty and food insecurity of the poor, **capital seed money (CSM) without interest** must be implemented. CSM is the best and most efficient strategy in uplifting the living standard of the poor because CAD has experienced and seen this fruit from its own program.

Our annual general meeting, held on 11-18 January 2012, decided to provide small livestock to individuals on women groups for income generation. Participants of the meeting agreed on the following criteria as to small livestock provision;

1. **Small livestock (pigs and goats) will be distributed to Women group which will decide who should get the animal.**
2. **The recipient of the livestock will own the mother and one offspring.**
3. **The other offspring will be distributed to other members of the group.**
4. **CAD will give them training on pig breeding and vaccination.**

The prices of pigs and goats vary depending on the age and body mass of those animals. Nevertheless women proposed CAD to buy for them animals with age more than 6 months for pigs and 12 months for goats because pigs beyond 6 months age and goat beyond 12 months are sure for survival and are resistant to adverse changes and extreme conditions.



CAD is giving a goat to a lady

The normal feed for pigs in our area is banana tree which is sliced and chopped into pieces and fed to pigs by mixing it with water and broken rice or maize bran. But goat has different way of life. It eats only grass and it needs a special care of owner in the sense that insects are not included in the grass it feeds on. Otherwise, it dies.

In our budget, we plan to provide 25 numbers of livestock to 25 women headed households but due to overspending on car road and clinic construction, 8 pigs and 3 goats are only provided to 11 women groups and the remaining will be continued as soon as the second installment is received from OBOS. Our annual



general meeting, held on 11-18 January 2012, decided to provide small livestock to individuals on women groups for income generation. Participants of the meeting agreed on the following criteria as to small livestock provision;

1. Small livestock (pigs, chicken and goats) will be distributed to Women group which will decide who should get them.
2. The recipient of the livestock will own the mother and one offspring.
3. The other offspring will be distributed to other members of the group.
4. CAD will give them training on pig breeding and vaccination.

The prices of pigs and goats vary depending on the age and body mass of those animals. Nevertheless women proposed CAD to buy for them animals with age more than 6 months for pigs and 12 months for goats because pigs beyond 6 months age and goat beyond 12 months are sure for survival and are resistant to adverse changes and extreme conditions.



Agape Women Group receives a pig from CAD



CAD staff cuts pig's ear a V symbol with pig recipients of women groups.

### Distribution of livestock to women groups per village

| No | Names of Villages | Livestock | Female | Quantity | Direct Women Beneficiaries | Indirect | Remark              |
|----|-------------------|-----------|--------|----------|----------------------------|----------|---------------------|
| 1  | Hnaring A         | Pig       | Female | 1        | 9                          | 45       |                     |
| 2  | Hnaring B         | Pig       | Female | 2        | 15                         | 68       |                     |
| 3  | Leipi             | Goat      | Female | 4        | 34                         | 178      |                     |
| 4  | Khuahrang         | Pig       | Female | 4        | 29                         | 114      |                     |
| 5  | Thang Aw          | Goat      | Female | 2        | 39                         | 192      |                     |
| 6  | Thang Aw          | Chicken   | Female | 16       | 39                         | 192      |                     |
| 7  | Hriangpi B        | Pig       | Female | 4        | 39                         | 183      | Already given birth |
| 8  | Sate              | Pig       | Female | 4        | 39                         | 179      |                     |
|    | Total Numbers     |           |        | 37       | 243                        | 1151     |                     |



## Pig Food Preparation Training for Women

The study<sup>14</sup> sample is composed of households with various livelihoods groups and different levels of education. Composition of the sample according to livelihoods groups thus is: 743 (89%) engage in farm works, 31 (3.7%) in casual works, 32 (3.8%) in government services, 20 (2.4%) in religion, 2 (0.2%) retired, another 2 (0.2%) engage in traditional healing and only 5 (0.6%) engages in other miscellaneous activities. Of the entire sample, 131 (15.7%) are illiterate, 401 (48%) have primary education, 191 (22.9%) have middle school level, 90 (10.8%) have high school level, and only 22 (2.6%) studied up to graduate level.



A trainer instructs women pig food production & preparation.

Regarding the above no. 5, pre-assessment among training participants was conducted and it was reported that 100 % of trainees has no access to such training on pig food preparation. Majority women are not interesting in this training because they thought it is not new for them as they usually feed pigs banana tree mixing with broken rice or maize. However, when they finished the training, what they know before, they practice before is extremely different from what they learnt from CAD. The main key of the training is “Pigs grow faster and we earn income more”.

### Training Subjects:

1. How to make pig food from nature?
2. How to prepare food for pigs?
3. How to feed pig food?
4. How to build pig style?

Training Duration: 6 days

Training Venue: - CAD Sub-Office, Hna Ring village

Resource Person: - Mr. Tin Hri, Well-trained volunteer staff of Caritas Hakha



Head of CAD Hnaring Sub-Office gives a present to a trainer on pig rising.

<sup>14</sup> CAD Nutrition Report, 2012



## CAD Strategy Workshop

Five-year strategy of CAD was drawn in our head-office from 19 – 23 January 2012 by hiring an external agency called 'Capacity Building Initiative (CBI)', which is a local NGO specializing in capacity building. From this workshop, we came up with the following Five-year strategies for CAD.



### A. Strategic Vision, Mission, and Core Values

#### 1. Strategic vision of the Program

CAD realizes the integrated development of rural communities in Myanmar through perfect capacity.

#### 2. Mission Statements

CAD will firmly stand as an agency with countrywide recognition materializing integrated development of rural communities in Myanmar through:

- Enhancing the capacity of human resources
- Generating opportunities for food and income
- Improving access to health
- Improving access to education
- Promoting rural transport and
- Supporting for the emergence of CBOs

#### 3. Core Values of CAD

- Transparency
- Accountability
- Family-type relationship
- Sacrifice
- Respect on woman capacity
- Honesty
- Mutual recognition



We are drawing our vision together





## **B. Target Groups, Areas and Sectors, and Exit Criteria**

### **1. Target Groups of the program**

This strategic plan belongs to an integrated development program consisting of different sectors for diverse livelihood groups in different geographical areas. As a result, our targeted group can be briefly described only as “socio-economically the most disadvantaged populations”. These populations may include but will not be limited to farmers, waged/casual labors, small fisher folks (if any), small traders, and women, etc. as defined and agreed by the communities. Wherever possible, priority will be given to households headed by women and with such vulnerable people as the elderly, persons with disabilities, widows without asset or personal background, and unaccompanied children, etc.

### **2. Areas and Sectors of the Program**

For this five year program, CAD intends to cover selected Townships with the worst socio-economic situations in **Chin State, Sagaing Region, Magway Region, and perhaps Bago Region** though activities may vary from region to region. In selecting its targeted Townships, CAD will take into account the presence of other agencies in the targeted areas in order to avoid duplication of assistance. This would be made possible by coordinating and sharing information with other agencies that are already present in the proposed CAD targeted areas. Based on careful review and critical analysis of findings from previous assessments of other agencies and CAD itself, the activities for this five-year plan fall under nine broad sectors which are further grouped into six broader components by having adhered to our missions. The six components of this strategic plan (and related sectors for food and income) are provided below with gender, environment and DRR being cross-cuttings:

- Human resources development
- Food and income (Agriculture, Livestock and fishery, and Income generation)
- Education
- Health
- Evidence Based Research
- Rural transport
- Community based organization

## **C. Overarching Strategies**

In order to ensure that our actions are implemented in line with our missions, the followings are formulated to have served as guiding principles or frameworks of our interventions throughout the next five years.

- Enhancing the capacity of staff and communities by linking and partnering with external organizations engaging in capacity building services
- Providing essential inputs and modern techniques for agriculture and income generation
- Supporting children who could not afford to pay for school and staff and young people who are interested in higher education
- Constructing and renovating rural transport facilities by providing the required resources and in partnership with rural communities



- Supporting rural communities to ensure improved access to primary health care services and to gain and practice health knowledge for their personal prevention and care
- Supporting for the emergence and sustainability of community-based organizations (CBOs) in the project areas

## D. Accountability, Monitoring and Evaluation

CAD is committed to be accountable to the communities for whom we work, the donors from whom we receive our project inputs, and the government who gives us policy and administrative support. As part of our accountability, we will establish a feedback mechanism in a way that it is accessible by all stakeholders. Our accountability principles will be applied in such critical stages of our projects as targeting, beneficiary selection, delivery of our assistance, monitoring and review, etc. Last but not the least, we will ensure equal visibility of CAD and our donors in our project areas.



*We are writing our strategy*



*We are putting our interest together*

To have our projects completed successfully and accountably, we will form a monitoring and evaluation unit and develop a monitoring and evaluation system that contains a flexible monitoring and evaluation framework. Then the M&E system and M&E framework as well as the concepts and tools of M&E will be introduced to all staff members. All program staff will be responsible to monitor the progress of their own activities while staff of M&E unit will perform regular monitoring of the project. M&E unit will also be responsible for the establishment of complaint/feedback mechanism and the handling of complaints and feedbacks received as much in compliance with HAP principles and CAD core values.

## E. Exit Criteria

CAD firmly believes that our projects will bring the desired results to our targeted communities. At the same time, experience and lessons learned from previous projects show that those results brought about by development projects are usually not lasting unless the communities have their capacity improved enough to keep up and multiply those results. Therefore, CAD will exit only when the original problem has been solved and the targeted communities have sufficient capacity for maintaining project results and initiate better and more projects by themselves. This will be mainly realized through providing support for the emergence, growth, and development of community based organizations in each targeted village and ensuring the communities has acquired proper productive assets and improved technologies.



## OBOS Monitoring Matrix

| Anticipated Outcomes  | Indicators  | Progress/Results   |
|---|---|--|
| Actual socio-economic situations of Chin State were known.  | A socio-economic survey conducted and report produced                     | We have conducted a socio-economic survey in last March and report writing is in progress. A nutrition report is separately submitted to OBOS.   |
| Farmers can grow diverse crops regardless of seasonal influence                                     | Irrigation pipes fitted and farmers grow diverse crops on their terraces. | Many beneficiaries of terraces have started using water in crop cultivation and department of agriculture already issue land ownership paper to terracing farmers as “permanent land owners”.  |
| Local people have improved access to health care services at affordable costs                       | A health care center building constructed in Hnaring village.             | Procurement of hardwood and baking of bricks have been finished. Construction activities will be begun by early 2013.  |
| Local people have improved access to health care services for their well-being                      | Essential medicines/health care services provided at affordable costs     | Essentials medicines have been sold at affordable prices and clinical diagnosis provided free of charge for six months. People from 100 km come to buy medicines to CAD center.  |
| Local people have greater movement, economic interaction and protect lives through safer transport. | Target villages are accessible by jeep car and truck.                     | The road is functional for 11 months of the whole year and flow of goods or commodities are not disturbed because of good road condition. In January 9, 2013, a truck entered Hnaring village transporting CAD clinic materials and such entry of truck is a big achievement of the road construction because truck cannot come to Hnaring before 2013.        |
| Target women-headed households have improved livelihood assets for better income                    | Target women-headed households have raised their own small animals        | 25 pigs, 4 goats and 16 chickens were distributed to women groups as livestock distribution program. The result is that some women express their feeling that before they don’t believe they will get pigs from CAD without money but now they really witness that they can own livestock without any capital. The tangible results will be available in 2013. |
| CAD produced a Five-year strategic document.  | CAD held a workshop for strategic plan development.                       | The strategic workshop has been completed and documentation is in progress. We completed documentation of CAD’s strategies before the end of 2012.   |
|   |   |  |



## Case Studies

### a. U Rung Hmung (35 aged old), Khuahrang Village

I come from Khua Hrang village which locates at 4 kilometers from Hnaring village where CAD has Health Care center.

My daughter is seriously sick with dysentery for 7 days and I tried to cure her illness in a traditional way and later with medicines with a traditional practitioner. After 7 days, she does not become better and a practitioner also has no medicine what he wants to give my daughter. Finally a person who came to visit my daughter told us that varieties of medicines with cheap prices are available at CAD Health Care center in Hnaring village. Sooner I heard of this information from him, I rush to this center with my motorbike to save the life of my daughter.



A man showing medicines,  
purchased in CAD health care center  
with My motorbike

**When I reached to your center, I come to know more about the center as follows;**

1. CAD has alternative varieties of medicines with cheaper prices.
2. Expired medicines are not sold in CAD.
3. Because of car road construction with OBOS, I come to Hnaring with his motorbike.
4. Pharmacists are ready for 24 hours.
5. I am grateful to CAD and to CAD's donors.

I wish God bless CAD and its works for our people in this region.



## b. Agricultural Irrigation Facilities Development

We are surprised to see the vision of agri-infrastructure aid of CAD in our region. We heard of such promise from your staff but we did not believe. However you did what you promised us. We never hear of such agri-infrastructure aid in our lives from governments till 2011. Now in our village, there are 3 NGOs (CAD, Caritas Hakha, CARD, WFP) but it is only CAD which seems the strongest NGOs in methodology, strategy, finance and deepest regional knowledge that has for improving local food security with a holistic approach program. Other NGOs have no such holistic approach strategy in our village.



Sooner water is irrigated to our terraces, we start growing onion, garlic flowers, gingers and now department of agriculture also gives us "land lease" for good. Now without having any capital, I have come to own a farm of 2 acres for good. I thank you CAD and OBOS.

### 8.3 Livestock

This woman expressed her feeling to CAD as follows:

"In my village, people who have no capital, could not raise livestock before. People who want to raise livestock, take loans with high interest before. I could not believe myself that I own a goat with CAD's generosity. Now we, members of Agape women, could raise livestock without having capital and without taking loans with high interest from others from CAD. I am grateful to CAD and to your donors".

She said she is delighted with joy because she gets not only capital but also get access to knowledge expansion from CAD. She said she will feed her daughter the goat milk so that she could become intelligent in education and one day she hopes her daughter will become a teacher. She hopes she will have some income from selling goats and she will spend the money for her daughter's health and education.





## 11. Case Studies

### 1. U Dua Chum (47), Sentung Village

Sentung village in Thantlang Township is about 6 miles from Hnaring and at the outskirts of Thantlang Township. It is one of CAD project villages. Most of the villagers make traditional shifting cultivation as their major livelihood activity. Since the village is remote in terms of location and access, no farming households in the village engage in growing cash crops despite the very limited incomes for most households.



U Dua Chum, a poor smallholding farmer is very keen to engage in intensive growing of cash crops other than conventional food crops. He has a family of seven people. His wife has a certain form of disability and his children are still young and not productive yet. So, they have been one of the worse-off families in their village. He used to work on a small land and inevitably grew conventional food crops as other villagers do. But he could not grow any cash crop in the past due to the lack of water even though he is business-minded and was willing to do so. He dug a small fish pond and grew some banana trees before CAD intervention. However, the productivity and associated income were very limited due to the lack of irrigation water and his family had been food secured for years. When CAD entered their village, he was proposed as a terrace beneficiary and he established the terrace on his own land.

After one year from terrace establishment, the difficult livelihood conditions of his family have been totally reversed. The conversion of his normal land into terrace allows him to grow various crops regardless of seasonal changes. He noticed that his family has become more food-sufficient after growing crops on terrace compared with his situations while he engaged in traditional shifting cultivation. Therefore, he said "I know now that terrace establishment has opened up new ground livelihood opportunities for my family. I feel as if I own a modern farm in plain land".



## 2. Small Business (Soap making) – Agape Women Group(s), Sate

Sate village is located in the edge of Matupi Township and is covered by LADP. It has a population of **645 people in 104 households**. The village is remote from Thantlang or Matupi Towns especially in terms of market access. In the past, shifting cultivation is the major source of both food and income for almost all households in the village. CAD entered this village in 2009 and formed Agape women groups as part of its women empowerment and development activities. And there are 4 women groups in Sate village.



By the year 20010, CAD provided vocational and micro enterprise development training for members of Agape women groups. While micro enterprise development focused on basic business management and accounting, the vocational training included such hands-on skills as soap making and jam and juice production. Three out of the four Agape women groups were very active that they immediately started up their own businesses by applying the skills acquired from and investing the small loans provided by CAD. Though they engaged in making soap and fruit juice, they have been successful only in soap making.

After one year, it has been observed that the three women groups have become successful in soap making that they could not meet the increasing demand of their products. For every 6000 kyats they invest for raw materials, the groups can earn a gross income of at least 12,000 kyats. This means that there is a potential for maximizing the products as long as they have the required capital. The business of fruit juice failed mainly due to the limited purchasing capacity of local people. What we have learned from this case thus is the need of market intelligence and marketing ideas if one is to start micro enterprises.

## Financial Report

Financial report for 2012 is available upon request.





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