Profiling 'community of practices' in Southern Province, Zambia.

By

Mr. Gabriel B. Chipeta, Dr. David M. Sibalwa and Dr. Daniel L. Mpolomoka

December, 2014
# Table of Contents

ABSTRACT................................................................................................................................. ii
GENERAL INTRODUCTION........................................................................................................... 1
BACKGROUND............................................................................................................................... 1
OBJECTIVES .................................................................................................................................. 2
METHODOLOGY ............................................................................................................................ 2
Research Design ......................................................................................................................... 2
Choice of Site ............................................................................................................................... 3
Data Collection Methods ........................................................................................................... 3
Sources of Information ................................................................................................................ 3
CASE STUDIES OF CoPS ............................................................................................................. 3
CHOMA (MBABALA) .................................................................................................................. 3
Demographic Characteristics ...................................................................................................... 3
Mbabala Community .................................................................................................................... 4
Discussion ..................................................................................................................................... 5
MONZE (NTEEME) ..................................................................................................................... 6
Demographic Characteristics ...................................................................................................... 6
Challenges ..................................................................................................................................... 7
Discussion ..................................................................................................................................... 7
Cooperating Partners ................................................................................................................... 8
Conclusion ................................................................................................................................... 10
Recommendations ...................................................................................................................... 10
NAMWALA (BAAMBWE) ........................................................................................................... 11
Demographic Characteristics ...................................................................................................... 11
Discussion ..................................................................................................................................... 12
Socio-Economic Status .............................................................................................................. 12
Agriculture ................................................................................................................................. 12
Recommendations ...................................................................................................................... 15
GENERAL CONCLUSION ........................................................................................................... 16
ABSTRACT

This report details students’ experiences in three community of practice areas all located in the Southern Province of Zambia, namely Nteeme in Monze District; Mbabala in Choma District; and Baambwe in Namwala District. The three hereby represent the community of practice (CoP) for the Transformative Engagement Network (TEN) Project at Zambian Open University (ZAOU). The objective of going to the CoP was to collect baseline information, which would in turn will be used to form linkages with communities and help build future developmental projects in line with the TEN vision.
GENERAL INTRODUCTION
This report details findings from community of practice areas in Southern Province. Profiling of CoPs being discussed herein was undertaken by both students following the Masters' Degree in Transformative Community Development (MTCD) and a team of ZAOU staff spearheading the TEN Project. The TEN team generated the socio-economic baseline study which has now given birth to this CoP information being presented. Before embarking on collecting information, the TEN team oriented students so as to equip them with information and knowledge regarding their role in the CoPs. By and large, the team ensured that students adhered to the norms and guidelines stipulated in the module (study guide).

There were three Communities of Practice (CoPs) targeted in Southern Province, covering three districts: Choma (Mbabala), Monze (Nteeme) and Namwala (Baambwe). All the three were chosen because they are agricultural oriented areas.

The Southern Province was chosen because of the seemingly steady decline in agriculture as a result of climate change and variability. Choma and Monze are predominantly agriculture producing areas, while Namwala is predominately livestock with minimal involvement in crop production.

This survey was undertaken to gather preliminary information on the Communities of Practice, to help students familiarize themselves with CoPs, and to help them prepare for their research in the Masters of Transformative Community Development programme.

BACKGROUND
The provincial capital for Southern Province is Choma. This was made capital in 2011 by Patriotic Front Government, shortly after being ushered into power. The Batonga forms the largest ethnic group in the Province. The rail line and the Lusaka-Livingstone road are the two key transport axis of the province, running through its centre and its farming towns: Kalomo, Choma, Pemba, Monze, and Mazabuka. Even though maize is the commonly grown crop, there are other commercially important activities in the Province like sugarcane plantations, which are at the edge of the Kafue Flats, and cattle ranching.

Southern Province is one of Zambia's ten provinces, and home to Zambia's premier tourist attraction, Mosi-oa-Tunya commonly known as Victoria Falls, which is shared with neighbouring Zimbabwe. The province houses the Southern Plateau, which is the largest area of commercial production in the country.
farmland in Zambia. The region receives less than 800mm annual rainfall (ECZ, 2008:32). Decades ago, it had an unbeaten record in producing most of the maize crop. Alas, today, many other parts of the country challenge it (the province). For example, Central (Mkushi Farming Block) and Western (Kalumwange Farming Block) Provinces command huge chunks of farming respect.

Within Southern Province are the Zambezi River, which forms the province’s border on the southern side; and Lake Kariba, which is along the province’s south-eastern edge. Meanwhile, on the eastern border lies the Kariba George and Zambezi; and the Kafue River forms the north-east border, with the gorge, dividing it from Lusaka Province.

Additionally, the Kafue Flats lie mostly within the province's northern border with Central Province. The Kafue National Park, which is the largest in Zambia, lies in the north-west, and borders with the lake formed by the Itzhi-Tezhi Dam. On the south-western border, the Province shares a boundary with Western Province and runs through the teak forests around Mulobezi which once supported a commercial timber industry and for which the Mulobezi Railway was constructed.

Another important feature of Southern Province is the large source of fossil fuel in Zambia, the Maamba Coal Mine situated in the Zambezi valley, which is also served by a branch line of the railway.

OBJECTIVES
To enable students to:
1. Familiarise with CoPs,
2. Interact with the community, government institutions/departments, and NGOs,
3. Ascertain study areas for the research.

METHODOLOGY
Research Design
Information in the three community of practice (CoPs) was gathered following the participatory research method. Participatory research methods can be used not only to enable local people to seek their own solutions according to their priorities, but also to secure funding, to co-opt local people into the agendas of others or to justify short-cut research within a top-down process (Andrea Cornwall and Rachel Jewkes, 1995). By and large, participatory research recognizes average people as researchers themselves and in search for solutions to problems of their daily struggle and survival.

This research design was used based on the following reasons:
- it offered opportunities to engage people as active contributors;
- exploring local knowledge and perceptions;
- being reflexive, flexible and iterative;
Choice of Site
All the three community of practice areas visited were predominantly agricultural sites. They are hereby bounded (as CoPs) for administrative purposes. They were selected based, among other factors, on their vulnerability to food insecurity, malnutrition, climate change, gender inequality, unsustainable environment management, drought and dry spells. For example vulnerability to the impacts of climate change may reduce the capacity of women to produce, harvest and store food.

Data Collection Methods
Field observations, focused group discussions, one on one interviews, discussions with community leaders (the chief, area councilor, CEO).

Sources of Information
- Government Departments: District Agriculture Office (DACO), Central Statistical Office (CSO), Ministry of Health (MOH), Community Development and Social Welfare, Zambia Agriculture Research Institute
- Group discussions
- Traditional Leaders
- Private institutions: Seed companies, NGO’s, Religious Groups
- Volunteer Groups
- Political Groups

CASE STUDIES OF CoPS
This section gives a detailed information about each one of the CoPs visited. The three CoPs are in three districts: Choma (Mbabala), Monze (Nteeme) and Namwala (Baambwe).

CHOMA (MBABALA)
This CoP was covered by four students, namely: Kabenuka Munthali\(^1\), Rita Mhone\(^2\), Kawana Lipalile\(^3\) and Christine Ndopu\(^4\). These looked at power differentials within and between different sections within Mbabala community. Besides this focal point area, these students had additional areas to consider with regard to the CoP allocated them.

Demographic Characteristics
Mbabala is located in Choma District, Southern Province. Choma is the provincial capital of the Southern Province. Covering 7300km\(^2\) of which only 45km\(^2\) is the central urban area and accommodates 35% of the population while 65% is spread out over the 446 villages (CSO, 2012).

---
\(^1\) Works for the Government of the Republic of Zambia in the Ministry of Agriculture and Livestock.
\(^2\) Works for the Government of the Republic of Zambia in the Ministry of Community Development, Mother, Child and Health.
\(^3\) Works for the Government of the Republic of Zambia in the Ministry of Health.
\(^4\) Works for a Non-Governmental Organisation in Western Province, Mongu.
Choma’s population as at 13 October 2013 was at 220,000, 60,000 are registered farmers. It serves as the commercial hub for the central region of the province. The annual growth rate is 6.8% (CSO, 2010) and is the highest growth rate in the Province. It has the typical climate of southern Zambia with temperatures between 14°C and 28°C and sunshine ranging between 9 and 12 hours per day. Choma is predominantly a Tonga speaking area.

**Mbabala Community**

Located 30km west of Choma town centre. Today, its population stands at 1,468, 300 households. There are 5,000 registered farmers (3,849 males and 1,151 females). What is more is that differentials in power are very distinct and often conflict.

There are three types of authority that Mbabala community derives its authority from. These are discussed in detail below.

**Central or Integral Authority**

It is common knowledge to note that all public institutions have inherited a colonial planning system and accordingly their administration and governance. The current planning tools are based on both colonial and traditional chief culture. Often times, the grassroot is usually ignored because the linkage is usually undermined or left unchecked. Suffice to say, the transition is very slow and depends on political will in most cases.

**Traditional Authority**

In any village, traditional authority is as supreme as the local authority (police) is in towns. This explains why *traditional leadership* is very prominent and tends to be superior in most decision making processes in Mbabala community, such as:

- Presence of strong traditions that make changes go very slowly, power remains within
- certain networks, attitudes of negligence and ignorance, continuation of certain
- stigmas and preservation of corruption
  - Land Tenure
  - Community/Household disputes
  - Spiritual/ Superstitious influence
- Culture

**Local Authority/Municipal Council**

There are clear distinctions between the traditional authority and the local authority. Today, the local authority or municipal council plays the following functions:

- Physical planning and resettlement
- Transport and communication
- Social and Economic development
However, there are challenges the local authority faces in executing its functions. One of them is the high pressure on State land as an income generator for the council the formally available land is mainly allocated to high income groups and is disadvantageous to lower incomes groups.

In addition, the local authority finds itself undermined by political pressure and lack of financial resources and skilled personnel.

Discussion
Instances that depict power differentials in the CoP abound. The influence and usefulness of the power differentials cannot be underestimated too. For instance, by virtue of being in force, power differentials help cushion the impact of the somewhat problematic cultural infiltration of foreign behaviours of children from cities and towns into villages and vice versa.

It is also common to have delinquents in villages, especially after people have been to cosmopolitan places. In such instances, they come with copied dress codes and other associated behavioural traits, which in many cases are inimical to typical village set ups. As such, the influence and enforcement of power differentials through local authorities saves the situations and maintains the purity of traditions.

Besides the power differentials common in Mbabala, members of the community are engaged in agricultural farming and grow crops that range from maize to groundnuts. Figure 2.0 depicts groundnuts and how they are dried in the drying shade.

The three types of authority from which Mbabala derives its authority really help them handle many issues that arise in its communities and help resolve them. One of such issues is the inversion of villages by businessmen and women popularly known as 'briefcase businessmen and women' (figure 3.0). They are commonly known by that name because of their nature, conmen and con-women. They trick farmers and lure them to sell their produce at very low
prices. Power differentials really plays a pivotal role in Mbabala. Armed with the right ways of tackling such cases, traditional leaders successfully deal with them.

Figure 3.0: 'Briefcase businessmen and women'

MONZE (NTEEME)
This CoP was covered by three students, namely: Kabange Masenga⁵, Esther Kalonga⁶ and Clara Chipoya⁷. These looked at the role of agencies/organisations/service providers involved in the community. Besides this focal point area, these students had additional areas to consider with regard to the CoP allocated them.

Demographic Characteristics
Nteeme camp is a big camp serviced by one agricultural camp officer. Other government departments include Community Development, Mother, Child and Health Department. According to the 2010 census, the total population of Monze is 195,921 people (CSO, 2010).

Nteeme camp has a farmer population of 3,833 of which about 40% are women. About 1,386 benefited from Fertilizer Input Support Program (FISP) belonging to 74 cooperatives, clubs and information centres. Most farmers were resisting adopting conservation agriculture, but now with changing climate are now beginning to adopt. Adoption was as low as 5% but has now is increased to about 35%.

---
⁵ Works for the Government of the Republic of Zambia in the Ministry of Agriculture and Livestock.
⁶ Works for the Government of the Republic of Zambia in the Ministry of Community Development, Mother, Child and Health.
⁷ Works for the Government of the Republic of Zambia in the Ministry of Community Development, Mother, Child and Health.
Challenges
The challenges being faced in adopting are training materials are not readily available especially on training tools like the fiterelli planters (only 3 exist for training purposes). Others include complaints by farmers that:

- conservation farming is labor-intensive,
- cattle are too small to do ripping when it is dry,
- alternative is to use tractors but are too expensive for the small holder farmers and
- weed control is a challenge as some farmers are not willing to use herbicides.

Discussion
In Nteeme CoP, the information collected centered on:

- **Household identification**: Containing details such as name of Province, District, Camp, respondent’s name, sex, age and marital status;
- **Farming activities**: Containing details of major crops grown, types of cultivation, effect of the changing climate on agricultural production
- Organizations working in the area that support agriculture, health and community development.

In Nteeme Agricultural Camp, there are a variety of crops grown. These range from maize, sunflower, groundnuts, soya beans, mixed beans, cowpeas to sweet potatoes. Table 1.0 below amplifies.

Table 1.0: Crops grown in Nteeme Agricultural Camp

<table>
<thead>
<tr>
<th></th>
<th>Maize</th>
<th>S/Flower</th>
<th>G/nuts</th>
<th>S/beans</th>
<th>M/beans</th>
<th>C/peas</th>
<th>S/potatoes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expected Production (MT)</strong></td>
<td>5,634</td>
<td>127</td>
<td>142</td>
<td>440</td>
<td>4</td>
<td>10</td>
<td>418</td>
</tr>
<tr>
<td><strong>Yield (MT/ha)</strong></td>
<td>2.33</td>
<td>1.55</td>
<td>0.58</td>
<td>1.75</td>
<td>0.07</td>
<td>0.38</td>
<td>2.48</td>
</tr>
<tr>
<td><strong>Expected sales (MT/ha)</strong></td>
<td>3,735</td>
<td>126</td>
<td>104</td>
<td>18</td>
<td>3</td>
<td>7</td>
<td>338</td>
</tr>
</tbody>
</table>

Source: CSO (2013)

The majority of the farmers interviewed revealed that most of them belong to cooperatives and farmer groups and receive government support through Farmer Input Support Program (FISP). The major crops grown are maize, groundnuts, sweet potatoes, cowpeas sun hemp,
and cowpeas. The photographs below show these kinds of produce which members of the community subsequently use for daily food consumption. At the time of the CoP visitation, the students were privileged to be served with maize meal (commonly known as Nshima), the community's staple food (shown in figures 4.0 and 5.0 below).

Figure 4.0: Women preparing 'nshima'  
Figure 5.0: Ground maize meal

In the past, they mostly used animal drought power using their own animals but now have to borrow or hire due death of animals by diseases. The annual rainfall received has been reducing over the years thus negatively affecting agricultural production.

Cooperating Partners
Many organizations and partners are working with government in implementing conservation agriculture. These include; World Vision, Conservation Agriculture Scaling up CASU project, ZNFU and Harvest Plus project.

In terms of community development, there are 20 existing women clubs with 15 being functional 12 of which are supported by Department of Community Development. Figure 6.0 shows a composition of these clubs with members in attendance drawn from a cross section of Nteeme society. One association is called Nteeme Area Women Association exists.
The role of agencies/organisations/service providers involved in Nteeme community

The NGOs supporting women groups are World Vision, DAPP, Land Alliance and Vision Fund a department of World Vision.

Some of the problems faced by the community among others are teenage pregnancies, early marriages and Gender Based Violence maternal and child health problems low agricultural productivity. These often form the agenda of most meetings and sensitization programs that they roll out in Nteeme community.

It is evident from the foregoing that the organizations mentioned above play a major role in the development of this community. They support the government in its effort to develop the country. Suffice to say, because of the linkages that these agencies make or facilitate between the communities and support agencies, they help Nteeme community strive to come out of poverty, establish seemingly sustainable ways of living. Thus, Nteeme uplifts her standard of living in such ways. Basically the role of agencies/Organizations in Nteeme is to supplement Government’s efforts mainly in the area of Agriculture, and Community development.

In Nteeme Agricultural Camp, there are a number of cooperating partners that work with the community to advance various sectors of the economy: educational, social, political, etc. Some of these include the following:

- World Vision has a sponsorship program for vulnerable school going children. They also support improved livelihoods through trainings and linkages. They are also in water and sanitation and support building of school infrastructure
- DAPP supports programs of HIV/AIDS control-prevention, care and treatment
- Land Alliance is also another organization that supports women’s rights access to land
- Vision Fund is a subsidiary of World Vision. They support Income Generating Activities and give soft loans to clients. In the first round K500 is loaned out where clients decide the mode of payment. For example, a monthly payment of 5% interest rate. Beneficiaries must already be in business and not salaried workers.
- Other organizations like ZNFU, Harvest Plus, CASU project are involved in supporting sustainable agricultural production

These cooperating partners support government in its effort to develop the agriculture sector, among others. One vivid example that depicts how this is achieved is the result of the collaborative effort of the government and these agencies which has resulted into the adoption of conservation agriculture, which has subsequently increased from about 5% to 35%. Another one is the yields for maize for example using conservation agriculture (CA) has increased from 1.9 t/ha to over 3.5 t/ha.
Conclusion

There are challenges in low farmer adoption of conservation agricultural practices. Other problems are teenage pregnancies, early marriages and Gender Based Violence. Problems of health are in relation to maternal, children’s health and under nutrition. The economic mainstay of the community of practice is predominantly agriculture based. The farmers involved in agriculture are mostly small holder farmers. The major agricultural enterprises are crop production, mainly maize, groundnuts, sweet potatoes, cowpeas, beans, sunflower, sun hemp and cotton. The agricultural enterprise is rearing livestock, mostly cattle and a fewer number of small livestock like goats, sheep, chickens and pigs. The community has been hit by 'climate change' which has negatively affected agricultural production. Over the years, government has continued to support some farmers with seed (mostly maize and groundnuts) and fertilizer through the Farmers Input Support Program (FISP). In the recent past, most farmers have had their cattle stock dwindling due to loss by death because of cattle diseases.

Recommendations

- There is need to have increased investment in the agricultural sector because this is the major economic activity for the residents of Nteeme Community.
- Government and NGOs must continue sensitizing farmers about climate change adaptation and survival.
- Government should re-design the farmer input support program so that farmers will be able to benefit from inputs for a one hectare field as opposed to only to limas. And after two seasons farmers must be able to graduate to a level where they will not require this support.
- Government crop and livestock marketing must be broadened so that it includes other commodities and not just maize.
- Government must continue with the program of cattle restocking and disease control.
NAMWALA (BAAMBWE)
This CoP was covered by three students, namely: Jembo Hanyaya\textsuperscript{8}, Amideous Mwango\textsuperscript{9} and Helen Kholoma\textsuperscript{10}. These looked at the range of crops grown by members of the COP and changes in the range of crops grown in recent years. Besides this focal point area, these students had additional areas to consider with regard to the CoP allocated them.

Demographic Characteristics
Baambwe is located in the Northern part of Namwala along the edge of the Kafue plains. Namwala district is in agro-ecological region number IIb. Mainly, Baambwe receives rainfall of about 800mm/year.

Temperatures in June-July were 5.5\degree C to 7\degree C, while in October-January 17\degree C. The soil of the Kafue flats are very heavy-cracking clays, sticky when wet and hard, cloddy when dry areas, are difficult to cultivate except with special skill, care and timing according to their condition.

In Baambwe, there are a total of 5000 people (Village registers, 2014); with 3000 farming households; total population of cattle is 16,000 (Village registers, 2014); and the distribution of animals among people is not even.

The upland/plateau is mainly composed of unconsolidated sandy soils. Primarily, crops are grown both in the plains and on the plateau. Meanwhile, the main vegetation type is generally woodland savannah. This vegetation is characterized by Brachystegia and Combretum species and open grasslands.

Typical riveline trees including some evergreen bush species which occur in places along the river banks. The woodlands are protected as reserves on the plateau. In addition, a wide range of vegetation types consists of many species of natural vegetation. The range reflects the different soil types and the various climatic and flooding conditions, the effects of grazing by cattle and those of burning are also reflected.

Figure 7.0 below shows the location of Bawmbwe in Namwala District.

\textsuperscript{8} Works for the Government of the Republic of Zambia in the Ministry of Education, Science, Vocational and Early Education (MESVEE).
\textsuperscript{9} Works for the Government of the Republic of Zambia in the Ministry of Community Development, Mother, Child and Health.
\textsuperscript{10} Works for the Government of the Republic of Zambia in the Ministry of Community Development, Mother, Child and Health.
Discussion
Various information collected in this CoP has been discussed in themes. These depict views of people in the CoP and triangulated with literature on various aspects under consideration.

Socio-Economic Status
• The ila people are prominent pastoralists and value their animals highly for their social and economic life.
• In periods of drought, cattle in the study area are always exchanged for grain with people who had good harvest but those without cattle are affected more and opt for other alternatives like fishing.

Agriculture
Traditionally, the illa speaking people of Namwala are cattle herders. Crop production was regarded as inferior to cattle production. During the pre-colonial period, there were more
different crops grown than today. These are maize as a staple, millet, sorghum, groundnuts, cassava, sweet potatoes and vegetables.

It was only in late colonial times and after Zambia gained her independence that maize production became an important commercial factor in the Illa area. Portuguese traders originally introduced maize to southern Africa in the sixteenth century. This was 'flinty hard maize' with low yields and a variety of colors.

In Namwala smallholder farmers used to do intercropping, cultivating maize together with a mixture of other crops such as sorghum, millet, pumpkins and groundnuts. By the end of the 1700s flint maize was an important staple food but was not dominant until the arrival of the European colonial powers in 1900. Today maize contributes 70% to the staple crop in Zambia as a whole and Baambwe in particular. Very few farmers (1%) in Baambwe (TEN Project Baseline, 2014) are still growing sorghum and millet and the community attributed this low production to lack of seeds and market for these crops as compared to maize whose market is readily available and subsidized by the Government through the Farmer Input Support Program (FISP) and Maize Marketing Program (MMP) through the Food Reserve Agency (FRA).

Other crops, grown on a small scale include cassava and sweet potatoes, contributing 0.4% and used mainly for household consumption. The Baambwe community attributed the low production of sweet potatoes and cassava to destruction by cattle which are let loose immediately after maize is harvested (around April-May). Meanwhile these two tuber crops would still not be ready for harvesting. Those farmers that manage to grow cassava and sweet potatoes either fence the fields or plant very early so that they harvest at the same time with maize.

Apart from destruction by animals, there is also very limited knowledge on the processing and use of the crops. Community members indicated that cassava is either cooked fresh or dried and milled into flour which is used for cooking the local thick porridge (Nshima) which is eaten with relish. Sweet potatoes are also cooked fresh and excess tubers are dried for later use.

Legumes like groundnuts, cowpeas, beans, Bambara nuts, and pigeon peas are grown on a much smaller scale as compared to maize. The low production is also attributed to limited market and low prices except for groundnuts. Again communities indicated that they have limited knowledge on the use of these crops and hence do not attach much value them.

Cash crops such as Sunflower and cotton are also still being grown but only by a few farmers (25%) as compared to maize. The community members indicated that sunflower has limited
market and farmers have no processing equipment, while cotton has a lot of demand for funds to purchase chemicals which farmers indicated is hard to come by.

Different vegetables are now being grown in gardens established near water bodies and also during the rainy season. Fresh vegetables both indigenous and exotic are sold within the community or taken to Namwala Town. Excess vegetables are sun dried and later used for household consumption. Community members indicated that the drying is done using traditional methods which involves boiling and later drying directly in the sun on roof tops or on mats which are put directly on the ground without any covers and as a result the end product is near to black and full of sand particles. They fell to sell this at a higher price because of poor quality and hence resort to consume it.

Climate change has necessitated the growing of different crops as a coping strategy especially among the women headed households without cattle. Such crops are drought resistant like cassava, sorghum, millet, cowpea, sweet potatoes, beans. Others are early maturing varieties. Cash crops such as sunflower and cotton.

Drought resistant crops and early maturing varieties are being grown because of the reduced rainy days, amount of rain and increased temperatures which has affected plant growth and in extreme cases cause plants to wilt and die and hence reducing crop productivity.

While the Baambwe community has observed that climate change has affected crop production negatively, the use of conservation technologies like Conservation Agriculture (CA) is low as farmers have either not adopted or have adopted and abandoned the technology. CA attempts to achieve ‘resource-efficient’ crop production by utilizing three farming principles: firstly, minimum soil disturbance, secondly, organic soil cover and, thirdly, diversified crop rotations. The reason given was that farmers have little resources to make available for seeds, rippers, Chaka hoes, fertilizers and herbicides.
During the visit to the community of practice, there were no visible signs in the fields observed of any use of any of the CA principles but the Camp Extension Officer (CEO) explained that many farmers were using only one CA technology of crop rotation.

The community members revealed that most families lost their cattle through diseases, lack of improved cattle management and climate change as most of the pastures have deteriorated making animals weak and vulnerable to diseases in the dry season. Most cattle breeds found there are cross breeds of Brahman and Illa local breeds and Angoni cross breeds as well. Dairy cattle are very few as most farmers keep beef breeds, however these days a company called Parmalat has set up a milk collection center and farmers are able to supply milk but the money realized is still used to purchase more animals and crop production is the last priority most for most of the farmers.

**Recommendations**

From what has been discussed above and our own observations, we recommend the following for the Baambwe community in order for it to increase crop production and income generation, improve food security and nutrition:

1. Government policy on Maize should change so that other crops are not disadvantaged.
2. Extension massages should not concentrate on maize only but also on other crops grown and capable to be grown in the area. Value addition should also be emphasized by training the community in food processing and quality control.
3. Community members should invest in opening up shops in Baambwe that will stock seeds, fertilizers and other Agricultural equipment that farmers require.
4. Commercial Banks and Financial Lending Institutions (FLIs) should provide Conservation Agriculture (CA) equipment loans/ assistance to the farmers, especially small and medium scale farmers and entrepreneurs.
5. Government and Key stakeholders to intensify sensitizations to communities to change their mindset and value the importance of crop production as it compliments animal production.
**GENERAL CONCLUSION**

Choma and Monze CoPs predominantly relay on subsistence agriculture, while in Namwala livestock is the main agricultural activity. All the three CoPs have not been spared by effects of climate change and have initiated ways of adapting to it. Climate change poses challenges to the local communities to adapt to the effects if climate change and variability. In spite of challenges, local people look up to the government/departments and NGOs in the area for support and relief. Government ministries, departments and NGOs are doing recommendable works to assist the local communities in various areas in their specialisations. What seems to be coming out prominently in all the CoPs is that there is need for continued sensitisation and support to communities regarding climate change, variability and adaptation. Besides sensitization, there is need to design short courses tailoured at equipping local communities with knowledge and skill of managing the environment in the face of climate change.