SURVEY REPORT COMMISSIONED BY `SEED FOR LIFE. FEED FOR LIFE`

Survey Report

Prepared for

The Seed for Life. Feed for Life Project

Prepared by

Andrew Namakhoma

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1.0 INTRODUCTION

The **Seed for Life. Feed for Life project** sought the services of Andrew Namakhoma to conduct a quick survey of the project site in Ntcheu district being implemented by Bemvu CCAP church of Blantyre Synod. Bemvu CCAP church has a total of over seven hundred members, however, the project is expected to target one hundred members in year one and is expected to reach to all the seven hundred by the end of three years. The project will cover twenty six villages from three Traditional Authorities of Makwangwala, Kwataine and Champiti. Five Prayer houses will be implementing the project with Bemvu Mission as a coordinating hub of the project.

The survey aimed at verifying the actual situation on the ground in as far as the project aims and objectives are concerned. At the same time to check on basic things which are very crucial to the implementation of the project. These include: Land availability, crops grown and potential harvest, time scale of the growing period, required inputs, storage facilities, road accessibility for the transportation of both inputs and produce, practicalities of sale of produce, training requirements and finally recommendations.

The field visit was conducted on the 8th and 9th of May, 2017 whereby all the implementing prayer houses were visited together with the Ministry of Agriculture, Irrigation and Water Development (MoAIWD) Nsipe Extension Planning Area (EPA).

The report has also looked at the potential stakeholders that the project could collaborate and network with in the course of its implementation. This will help with sustainability of the project which is one of the key issues that needs to be addressed before the onset of the project. It has also tackled on the relevance of the project as this will lead to the commitment and support of the project by various stakeholders including the beneficiaries themselves, hence the ownership of the project.

2.0 SITUATION ANALYSIS

Ntcheu district is one of the best agricultural districts in Malawi whose both economy and food and nutrition support derives from agriculture. Bemvu area in particular is a potential area for the production of maize, soy beans, groundnuts as well as horticultural crops such as tomatoes, carrots, green maize, vegetables such as cabbages and other crops such carrots.

3.0 MAJOR CHALLENGES FACED BY FARMERS

The information above indicates how potential the area is in as far as the production of soy beans, groundnuts and maize is concerned. However, the farmers face a major challenge of access to hybrid and certified seeds for maize, soy beans and groundnuts. This results in farmers growing local varieties and recycled seeds whose output levels are low. Fertilizer is another input which is hardly accessed or afforded by many farmers. This results in farmers applying minimal amounts hence low levels for productivity beyond the potential levels.

4.0 RELEVANCE OF THE PROJECT

The survey has realized that the Seed for Life. Feed for Life project will therefore provide farmers first and foremost with access to hybrid and certified seeds maize, soy beans and groundnuts. This will result in farmers producing enough for household consumption (food and nutrition security) and sale of surplus (Income security). This will create a hunger and poverty free communities. Additionally, it will enable farmers to access extension services which will be provided by different stakeholders including government, non-governmental organizations and other projects operating in the areas. Thirdly, the project will supply Bemvu primary school with food stuffs which will be used for school feeding programme, allowing school children, mostly infants to enroll and stay in school.

5.0 LAND AVAILABILITY

The area has enough land for the production of the proposed crops (soy bean, maize and groundnuts) both for commercial as well as home consumption for enhanced food and nutrition security. The survey learnt that the average land holding for the smallholder farmers (the targets of the project) is 3-7 acres (1.2-2.8 hectares). Most farmers use such available land for growing an average of two crops per agricultural season. The soil type is very ideal for the production of the proposed crops which is well drained sandy loamy soils.

6.0 CROPS GROWN AND POTENTIAL HARVEST

The major crops being grown in the area include: Maize, groundnuts, soy beans, common beans, Irish potatoes, sweet potatoes; fruits such as mangoes, guavas, pawpaw, vegetables such as cabbages, tomatoes, carrots. Some farmers also grow tobacco whose popularity has overwhelmingly gone down due to poor prices of the past five years.

The area is describe as a normal harvesting area of all the proposed crops. By normal it means the farmers are able to produce enough crops for household consumption with minimal surplus for sale. However, due to limited economic activities, alternatively majority of farmers sale crops such as maize to support their households.

Figure 1&2: Women busy harvesting maize in one of the targeted areas

7.0 TIME SCALE OF GROWING PERIOD

Ntcheu district as whole is divided into two major areas when it comes to time when the planting rains start and finish. The northern and the central parts receives the first rain first (between November and October) and ends in April and Southern part which receive their rains late (between December and January) and ends in March to April.

The Seed for Life. Feed for Life project impact area is situated in Ntcheu central which is characterized by receiving good rains from between November and October and end in April. According to the information corrected from Nsipe Extension Planning Area (EPA); which is the government agricultural extension service provider; indicates the rainfall pattern in the area for the past three growing season as follows:

Table 1: Rainfall amounts and number of days

Agriculture Season	Months							Total rain (mm)	Total Rain days	Month people planted
	Oct	Nov	Dec	Jan	Feb	March	April			
2014/2015	0	0	143.7	483.4	184.5	59.4	101.4	972.4	36	December
2015/2016	0	40.5	134.1	158.7	168.1	259.0	25.4	785.8	35	December
2016/2017	22.8	82.1	138.7	237.9	374.5	116.3	19.0	991.3	58	November
Total	**22.8**	**122.6**	**416.5**	**880.0**	**727.1**	**434.7**	**145.8**	**2,749.3**	**129**	

Source: Nsipe Extension Planning Area (EPA) Offices, Ntcheu

The table above indicates that the three seasons' rains started in three different months i.e. December (2014/2015), November (2015/2016) and October (2016/2017). However, it is indicated that of all the three seasons, 2015/2016 was the worst year with a total of 785.8mm of rains which despite starting in Novembers but planting started in December. The best season is the just ended, 2016/2017 with a total of 991.3mm of rain. Nevertheless, these are higher levels of rainfall as compared to other districts in the same rain seasons.

8.0 REQUIRED INPUTS

The farmers from the targeted area, as earlier indicated, their major challenge is access to hybrid and certified seeds for maize, soy beans and groundnuts and insufficient fertilizer. As such, the farmers expect the project to support them with the following inputs:

Table 2: Quantity of Seeds and Fertilizer Required

Inputs	No. Farmers			Acres/farmer	Quantity/ farmer	Total Inputs required
	Male	Female	Total			
Hybrid maize seed	60	40	100	2 Acres	20kgs (Hybrid)	2,000kgs(200 packets each 10kgs)
Certified Soy beans	30	20	50	1 Acre	32kgs	1,600kgs(16packets each 2kgs)
Soy inoculant	30	20	50	1 Acre	50grams	150grams (3 packets each 50grams)
Certified groundnuts	30	20	50	1 Acre	32kgs	1,600kgs(16packets each 2kgs)
Fertilizer: NPK	60	40	100	2 Acres	100kgs	10,000kgs (200 bags each 50kgs)
UREA	60	40	100	2 Acres	100kgs	10,000kgs (200 bags each 50kgs)

The project will target 60% females and 40% males. This percentage derives from the fact that the EPA has more female farming families (55%) than male farming families (45%). In reference to the table above, a total of 2,000kgs of hybrid maize seed will be required, 1,600kgs of soy beans and groundnuts seeds respectively, 10,000kgs of NPK fertilizer and 10,000kgs of Urea fertilizer will be required for one hundred farmers.

Maize: It is recommended that all one hundred farmers should be supported with 20kgs of hybrid maize seed and four bags of fertilizer (2 bags of NPK and 2 bags of Urea).

Soy beans: All (50) soy beans farmers will also receive 32kgs of soy bean seeds each and 3packets (150grams) of inoculant. This is a Rhizobium for high grain yield targets as it boosts growth and productivity.

Groundnuts: Each farmer of the 50 farmers will receive 32kgs of groundnut seeds enough for one acre piece of land.

9.0 FRUITS AND HOMESTEAD AND OTHER TREES

Both the fruit and homestead trees will be first planted around Bemvu mission which has enough land to accommodate different trees. These fruit trees would be source food for the school children at and around Bemvu primary school. As for the homestead trees, they will provide protection to the building (wind breakers) and source fuel wood for school feeding programme. The church started planting other trees, however, they need to be increased.

Apart from Bemvu mission, all the prayer houses have enough land around their churches where both fruit and homestead trees can be planted. The rest of the trees will be distributed to the individual beneficiaries who will plant them around their homes and garden. In the second year the project could even go further and target other places like along river banks and hills for tree planting for the environmental protection.

The proposed fruit trees include: mangoes, paw-paws, avocado pears, and grapes. As for homestead and agro-forestry trees the following are the ones mentioned by the farmers: Msangu, Nkunkhu, Keisha, blue gum as well as nthethe.

Figure 4: One of fertilizer trees (Msangu) in the Area

Figure 5: One of Homestead trees also used as firewood

Table 3: INPUT COSTING

No.	Inputs	Quantity(Packets)	Pack size	Unit Cost(MK)	Total Cost(MK)
1	Hybrid maize seed	200	10kgs	7,500.00	1,500,000.00
2	Soy beans seed	800	2kgs	1,800.00	1,440,000.00
3	Soy Innoculant	150	50grams	1,800.00	142,500.00
4	Groundnuts seed	800	2kgs	900.00	1,440,000.00
5	NPK (Basal dressing)	200	50kgs	23,000.00	4,600,000.00
6	UREA(Top dressing)	200	50kgs	20,000.00	4,000,000.00
7	Fruit trees				870,000.00
8	Assorted tree seeds				500,000.00
Total					**14,492,500.00**

10. 0 PROJECTED ACCUMULATIVE HARVEST, LOAN REPAYMENT AND CONTRIBUTION TOWARDS SCHOOL FEEDING PROGRAMME (100 FARMERS)

It is projected that the one hundred farmers can produce various crops as follows:

10.1 Maize: Maize productivity is estimated at 2,000kgs per acre. A total of 400,000kgs of maize (400Metric Tonnes) which means an average of 4,000kgs (4 Metric Tonnes) per farmer. At total of 100,000kgs (100 MT) representing 25% will be paid back as loan to cover the cost of maize inputs (seed and fertilizer); 80,000kgs (80MT) representing 20% will be contributed towards school feeding programme and a total of 220,000kgs (220 MT) representing 55% will be the farmer's benefits for their Labour and land used.

10.2 Soy beans: Soy beans productivity is estimated at 200kgs per acre. A total of 10,000kgs of groundnuts (10Metric Tonnes) which means an average of 200kgs (0.2Metric Tonnes) per farmer. A total of 2,500kgs (2.5 MT) representing 25% will be paid back as loan to cover the cost of maize inputs (seed and Innoculant); 2,000kgs (2MT) representing 20% will be contributed towards school feeding programme and a total of 5,500kgs (5.5 MT) representing 55% will be the farmer's benefits for their Labour and land used.

10.3 **Groundnuts:** Groundnuts productivity is estimated at 200kgs per acre. A total of 10,000kgs of groundnuts (10Metric Tonnes) which means an average of 200kgs (0.2Metric Tonnes) per farmer. A total of 2,500kgs (2.5 MT) representing 25% will be paid back as loan to cover the cost of maize inputs (seed and Innoculant); 2,000kgs (2MT) representing 20% will be contributed towards school feeding programme and a total of 5,500kgs (5.5 MT) representing 55% will be the farmer's benefits for their Labour and land used.

Table 4: Projected Harvest and Repayment

No.	Crop	Farmers	Total Acreage	Total Production	Loan (25%)	School feeding (20%)	Farmers portion (55%)
1	Maize	100	200 Acres	400,000kgs	100,000kgs	80,000kgs	220,000kgs
2	Soy beans	50	50 Acres	10,000kgs	2,500kgs	2,000kgs	5,500kgs
3	Groundnuts	50	50 Acres	10,000kgs	2,500kgs	,000kgs	5,500kgs

11.0 STORAGE FACILITIES

Storage facilities are available at Bemvu mission station for both the loan repayment as well as school feeding programme. Currently, the church is constructing a brick fence around the storage house as well as the kitchen which will be used to store the produce as well as cooking the food for the school children.

Figure 6: Building for cooking and food storage

Figure 7: Storage house and part of the brick fence

12.0 ROAD ACCESSIBILITY FOR THE TRANSPORTATION OF INPUTS AND PRODUCE

In all the proposed impact areas, the road network is good and accessible. Most of the roads are paved now and it is expected that come the rain season the road will still be passable. However, it is important that all the inputs should be procured and distributed to the beneficiaries before the onset of the rains.

13.0 PRACTICALITIES OF SALE OF PRODUCE

The market for the produce is there. There are a number of markets which the farmers access, these include: ETG, NASFAM, ADMARC, and vendors. What is key when it comes to market is to mobilize the produce at one point and negotiate the bulky selling other than selling in small quantities.

The project should work towards linking the farmers with markets, and that be an informal linkages whereby the project should advertise the project with various buyers.

14.0 PROJECT SUSTAINABILITY

It is important that the sustainability plan of the project should be clear and accepted by all key players. These include the beneficiaries, the financial supporters as well as the coordinating Bemvu Mission. It has been learnt that the church membership is in excess of 700 members and that it is the project's desire to reach all the 700 members with the much needed support. However, it should be appreciated that not all members are needy there are some that are able to support themselves. This is the first level of sustainability as the resources will target the most hot spots of poverty.

Secondly, those supported will be encouraged to pay back their loans which they will access in the forms of seeds and fertilizer. The repaid loans will be able to support other farmers in the second year. For example, if the project target 100 farmers in year one, should they repay their loan 100 percent, these resources, without asking for more funding from Netherlorn church, should be able to support 200 farmers. This again translate into 400 farmers in third year. In total the project has the potential of reaching 700 farmers in three years.

The third level of sustainability of the project is transparency and accountability of the care takers of the project. It is important that the caretakers should be open and transparent in the way they will be running the project. This will be from the beneficiary identification, procurement and distribution of inputs, collection and storage and or selling of the collected produce.

The forth sustainability strategy is the involvement of various stakeholders in the areas. These include, government (Ministry of Agriculture, Irrigation and Water Development), Department of Forestry, Hunger Project, as well as Improved Forestry Management for Sustainable Livelihood Programme (IFMSLP).

15.0 TRAINING REQUIREMENTS

The farmers expressed the need for training in various areas. It was also explored the various stakeholders include government and other project would play as follows:

Table 5: Type of Trainings to be provided

No.	Area of Training	Training provider
1	Tree nursery management	Department of Forestry
2	Improved crop production (soy and groundnuts)	Ministry of Agriculture-Nsipe EPA
3	Village Savings and Loans and Vision development	
4	Food Storage, Preparation and utilization	Ministry of Agriculture-Nsipe EPA
5	Other crosscutting issues	

16.0 Project management structure

The project has committees that will be tasked with the day to day management of the project starting from the Bemvu Mission to all participating Prayer houses. These committees are known as Partnership Committees. The Partnership committees comprise of both men and women. It is envisaged that the Partnership committee at Bemvu mission will be responsible for overall management of the project overseeing all other Prayer house level Partnership committees. The Prayer house Partnership Committees will be responsible for identification of beneficiaries, distribution of inputs, monitoring of project progress and collection and delivery of collected produce to Bemvu Mission.

Figure 8: Part of Bemvu Partnership Committee

Figure 9: Part of Kalimasiya Partnership Committee

17.0 RECOMMENDATIONS

These recommendations are based on the findings from the situation on the ground where the project will be implemented.

17.1 Crop production

It is recommended that all the three proposed crops should be provided in all the project years. However, the farmers should be divided into three categories as follows:

17.1.1 Category 1 (Maize production): 100% of the 100 targeted farmers to receive 20kgs of hybrid maize seed, 2 bags of NPK and 2 bags of Urea. These inputs are enough for 2 acres (0.8 Hectares) of land. These inputs will be able to produce 4,000kgs of maize of which 25% will be used to repay their inputs loans, 20% farmer contribution towards school feeding programme and finally remain with 55% of the total harvested maize for the farmer's consumption and sale.

17.1.2 Category 2 (Maize and Soy beans production): 50% of the 100 targeted farmers receive 32kgs of soy bean seeds and 3 packets of Innoculant. These inputs are enough for 1 acres (0.4 Hectares) of land which can produce 200-400kgs of soy beans out of which 25% will go towards loan recovery (seed and Innoculant), 20% towards school feeding programme and the farmer will remain with 55% for seed for the next season and some for sale.

17.1.3 Category 3 (Maize and Groundnuts production): The remaining 50% of the 100 targeted farmers should be supported with 32kgs of groundnuts seed which is enough for 1 acre (0.4Hectares). This is enough to produce 200-400kgs of groundnuts out of which 25% will go towards loan recovery (seed and Innoculant), 20% towards school feeding programme and the farmer will remain with 55% for seed for the next season and some for sale.

17.2 Fruits and Homestead tree

Regarding fruit trees and homestead trees, the fruit trees should be sourced as seedling from reputable fruit nurseries. However, homestead trees should be bought as seeds and distributed to prayers houses who through their members (targeted for the project) will raise the nurseries with the support of the Department of forestry. This will build the capacity of the farmers in tree raising and management other than receiving seedlings.

17.3 Community Sensitization and Beneficiary identification

It is recommended that community sensitization and project beneficiary identification should start as early as possible (probably the month of June). This will enable those farmers to be part of the project to spare enough land for the growing of the proposed crops.

Project sensitization should include notifying the traditional leaders (Traditional Authorities, Group village heads, Village heads, Government and Non-Governmental Institutions and the general members of the targeted communities. This will enable the project to thoroughly explain the aim of the project, beneficiary eligibility criteria, and crops to be promoted, amount of land required for each crop, role of various stakeholders involved in the project and finally signing of Memorandums of Understanding (MoUs) between Seed for Life. Feed for Life project and identified beneficiaries.

17.4 Procurement and distribution of inputs

This is one of the most critical stages of the project. This is where trustworthy, transparency and accountability of the people managing the project will be appreciated as this will also lead to the project's sustainability. It is therefore recommended that the maize seeds should be hybrid whereas the soy bean seeds and groundnuts seeds should be certified seeds. This will help to maximize on productivity at the same time be able to re-use as seed for the next season more especially soy and groundnuts.

Regarding the distribution, after the inputs are procured, they should be distributed at prayer house level. This will reduce on challenges of transparency as the targeted farmers will be able to appreciate how much inputs have been allocated for their prayer house and hence able to trust their leaders.

17.5 Storage facilities

Proper food storage is crucial for the attainment of food and nutrition security. In Malawi it is reported that farmers experience 40% post-harvest losses due to poor storage facilities and practices. The collected produce (Loan repayment and school feeding programme) will have to be transported to Bemvu mission where they will be stored in secure place with proper fumigation and documentation as to how much has been collected as loan repayment and for school feeding programme. At the agreed time, the loan repayment produce can be sold and the proceeds be used for the procurement of inputs for the next group of beneficiaries. At beneficiary level (the 55% of the harvest), the farmers will have to be trained and encouraged to store their produce in a well-constructed and protect areas with adequate fumigation or application of recommended insecticides.

17.6 Project management structure

Currently, each prayer house include Bemvu mission has a partnership committee which responsible for the overseeing of all project's activities. This is very important as it will have a team that is accountable for the project. However, the committees needs to be empowered by developing specific Terms of References (ToRs) which can be evaluated in order to assess the performance and impact of the project.

17.7 Coordination, Collaboration and Networking with others

For the purposes of project sustainability, the project collaborate and network with stakeholders available in the impact area. These include; Ministry of Agriculture Irrigation and Water Development—Nsipe Extension Planning Area (EPA), Hunger Project (Non-Governmental Organization in similar project of food and nutrition security and farmer empowerment), Department of Forestry, well as Improved Forestry Management for Sustainable Livelihood Programme (IFMSLP) a project operating in the villages within the Seed for Life . Feed for Life project.

This will create project sustainability at the same time being able to tap and utilize skills that these other projects and institutions have for the benefit of the Seed for Life. Feed for Life project. The skills and capacities of the identified stakeholders include: Community mobilization, knowledge and expertise in improved crop production, crop storage using communal grain bank approach, tree nursery raising and management. All these are key to the sustainability and goal attainment of Seed for Life. Feed for Life project.

17.8 Training

The targeted farmers should be provided with various trainings for the success of the project. The proposed trainings include:

- Tree nursery and woodlot management
- Improved crop production with focus on soy beans and groundnuts
- Food storage, preparation and utilization
- Village Savings and Loans as well as Vision development
- Other cross-cutting issues which include Gender, HIV and AIDS and Child Labour mainstreaming.

These trainings will enable the farmers acquire knowledge and skills for improved agriculture and livelihood standards at individual, household and community levels.

18.0 ANNEXES

18.1 ANNEXE 1: LIST OF GROUP OF PEOPLE CONSULTED

No.	NAME	Gender	POSITION	INSTITUTION/GROUP
1	Reverend JJ Sakala	Male	Church Pastor	Bemvu CCAP Church
2	Dikirani Gwaza	Male	Project Contact person	Bemvu Food Project
3	Tinyade Chazuka	female	Partnership Secretary	Bemvu Mission
4	Suwema Lemani	Female	Partnership member	Bemvu Mission
5	Florence Kabota	Female	Partnership member	Bemvu Mission
6	Mike Kameta	Male	Partnership member	Bemvu Mission
7	William Kanani	Male	Partnership member	Bemvu Mission
8	A Kanchunjulu	Male	Partnership Chairperson	Kalimasiya CCAP
9	N. Kamtimaleka	Male	Partnership Member	Kalimasiya CCAP
10	S. Mphangula	Female	Partnership Secretary	Kalimasiya CCAP
11	B. Makhani	Female	Partnership Member	Kalimasiya CCAP
12	G. Faiti	Male	Partnership Member	Nakambale CCAP
13	A.Chiwaya	Male	Partnership Member	Nakambale CCAP
14	E. Majamanda	Female	Partnership Member	Nakambale CCAP
15	S. Ziyaya	Male	Partnership Chairperson	Dzunje CCAP
16	M. Chimombo	Male	Partnership Member	Dzunje CCAP
17	N. Namaona	Female	Partnership Member	Dzunje CCAP
18	C. Dinala	Female	Partnership Member	Dzunje CCAP
19	Chibwana	Male	Extension Officer	Nsipe EPA, MoAIWD