

# **Community Seed Banks and the Community Based Agrobiodiversity Management (CBAM) Malawi**

## **A project appraisal**



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## **Department of International Environment and Development Studies, Noragric**

### **Norwegian University of Life Sciences**

Department of International Environment and Development Studies is part of the Faculty of Social Sciences, Norwegian University of Life Sciences (NMBU). The Department's activities include research, education and assignments.

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Cover photo: Mkombezi CSB (in the background) and a Diversity Block where various crop varieties are grown for multiplication and rejuvenation. Photo: Leonard Manda, BCI

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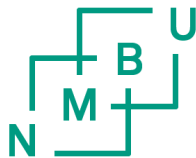
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## **Executive summary**

This is an evaluation report on the Community Seed Bank (CSB) component in the Community Based Agrobiodiversity Management (CBAM) project in Malawi – a project implemented by the Biodiversity Conservation Institute (BCI) and funded by the Development Fund (DF) Norway. The overall conclusion of the report is that the CSBs represents a valuable effort to increase community seed security in the current Malawian agricultural development context. The performance of the CSBs evaluated is satisfactory in light of the short time-span since the start of operation (3 growing seasons), however efforts should be made to better utilize the comparative advantage of the organizations involved in DF funded activities in the area. In order to increase project impact this report recommends that the implementing partner Biodiversity Conservation Institute (BCI) focus on seed multiplication and access provision through the seed loan scheme.

### **The CSB space**

The CBAM and the CSB is part of a rather small, but important alternative approach to agricultural development in Malawi. Within the dominant approach to agricultural development in general and seed system development in particular there are particularly two development policies that provide important context for this evaluation: the Farming Input Subsidy Programme (FISP) and the new National Seed Policy (still in the making, but likely to be adopted soon). The FISP is the major government involvement in agriculture when it comes to seeds and seed systems<sup>1</sup>. The FISP is generally acknowledged for having increased national self-sufficiency of maize, but it is also widely criticized for having created a maize political economy in the interest of a few large government and commercial actors and for having potentially negative nutritional security implications due to the maize dominance in the Malawian diet. The draft seed policy is criticized for focusing solely on strengthening of the formal/commercial seed system and for disregarding the informal seed systems currently supplying most of the seeds smallholders use. The negative side effects of FISP in increasing dominance and dependency on a homogenized maize model agriculture and the blind spots (unintentional and intentional) of the new seed policy was highlighted by all non-governmental actors interviewed as part of this assessment, including FAO and NASFAM. It is my impression that the CSB work provide an alternative pathway to the seed system development “motorway” charted by FISP and the new Seed Policy. It is in my view desirable to maintain

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<sup>1</sup> According to IFPRI, up to 90% of the agricultural budget has some years been allocated to FISP (Mazunda 2013). Currently FISP and Green Belt initiative account for 70% of the budget according to FAO (FAO 2016).

space for such alternatives and I consider DF and its international and local networks to play an important role in this regard.

### **The CSB core function**

The project's output #1 is "Increased farmers' access to, and knowledge of, locally adapted agricultural biodiversity". The core activity towards this output is the seed multiplication and loan scheme. Other activities towards this objective include various approaches to map crop diversity, promotion of crop diversity through seed fairs and demonstration plots, participatory variety selection in maize as well as a training program in community based agrobiodiversity management. In addition, the project lists two other outputs: Increased knowledge and planning skills on climate change adaptation amongst smallholder farmers (#2) and; Gender activities integrated in all project activities (#3). While all activities are laudable, the project appears too broad in scope given the human, organizational and financial resources involved. Thus, a central recommendation of this report is that BCI and the CSBs focus on the core function of multiplying and making available locally adapted improved and traditional varieties. Currently, the CSB membership base and the quantity of seeds produced and made available is limited to about 250 households and about 5000 kg of seeds<sup>2</sup>. However, these indicators are increasing and by focusing more on this activity the project impact is likely to increase accordingly.

It is outside the scope of this evaluation to assess impact on the higher level outcome of the project in terms of increased household food security in the face of climate change. However, the project provides participants with increased access to knowledge and resources for cultivating a broader portfolio of crops and this is potentially (while not necessarily) useful to increase resilience and adaptive capacity.

The CSB approach to increase seed security was positively assessed by FAO and NASFAM in the interviews conducted with officials from those two organizations. Furthermore there seems to be an increased interest in CSBs and other approaches to support local seed systems from international and national NGOs (e.g. Bioversity International, African Centre for Biodiversity) and also for more integrated approaches to seed system development (e.g. Wageningen University's Integrated Seed System Development project). Thus, the time is ripe for this type of projects and the DF supported CBS's in Northern Malawi are part of a quest to find entry points to enhance the local seed systems that for the foreseeable future will continue to supply most poor smallholders with the bulk of the seeds they use.

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<sup>2</sup> These figures are self-reported by BCI in the presentation given to the consultant in August 2016. See annex 3.

This report brings out recommendations at different levels, for different actors:

*Recommendations for DF and BCI:*

*Project focus.* The project should focus on its seed multiplication and seed system function (access to locally adapted improved and traditional varieties of a broader portfolio of crops than what's available in FISP). The primary objective is (and should continue to be) increased seed security and other objectives, including on farm conservation, should not distract from this focus. The conservation role could eventually be played by one of the CSBs in the network while the others should mainly be about utilization/access. This is both a question of allocating more resources and time on the seed multiplication scheme relative to the conservation role of the CSB and a question of "framing" the project differently in proposals and reports; on farm management of diversity is a means, not an end. Furthermore, the organizations involved should take a critical look at how the CSB component operates in relation to other projects and initiatives funded by DF in the area. The comparative advantage of the different organizations working with DF in Malawi should be harnessed in overlapping areas. Some of the activities currently organized by BCI could probably be organized by FyF, thereby allowing BCI to hone in on multiplication and seed loan.

*Institutional capacity:* Related to the above. BCI should strengthen its capacity on seed security. The organization has a strong capacity on PGRFA conservation, but the main activity of the CSB should be seed production and improving farmers' access to locally adapted seeds. The need for technical training on seed multiplication, seed cleaning, treatment, quality control etc. should be assessed and institutional capacity be built accordingly.

*Networking and capacity building.* DF is one of a few international development actors working from the local to the international level with efforts to strengthen seed security through informal seed system interventions. The experience and know-how in this regard is a central part of DFs niche in the agricultural development field. DF should continue to utilize its network to enhance the function and capacity of relatively new partners like BCI. BCI and the CSB leadership at the local level would benefit from more capacity building, technical training and knowledge-sharing through this network.

*CSBs and policy.* The CSB is the practice wing of CBAM as a policy and practice program. CBAM should to a larger degree utilize and harness the CBS project as a practical example in its policy work with the new draft national seed policy. This evaluation did not cover the activities of Centre for Environmental Policy and Advocacy (CEPA) – the organization with the main responsibility for the policy

and advocacy work in CBAM. However, a review of the analysis and recommendation documents from CEPA in response to the draft national seed policy<sup>3</sup> shows that BCI and CEPA have complementary strengths, but there is limited integration of the CBS experience with the policy message. This is as much a challenge to CEPA as to BCI.

*Scale, numbers and expectations.* It is important to manage expectations in this project. First, it is important to distinguish clearly between number of households participating in the multiplication and seed loan scheme and the number of people attending trainings, seed fairs etc.<sup>4</sup>. Second, while it is realistic to increase this number substantially it is also important to manage expectations on the donor side. Participation in the multiplication scheme represents a substantial involvement and the number of participants will remain low in comparison to e.g. CA training programs utilizing networks of lead farmers. Given the current size of the facilities, the number of farmers actively taking part in the multiplication will probably not exceed 50-150 per CSB, but the CSBs can increase community seed security outside this group by maintaining a diverse crop gene pool.

*Specific recommendations:*

Not all CSBs should do conservation. Diversity plots is a good idea, but it is not necessary for all BCI seed banks to do this. There is unnecessary duplication of efforts in the current set-up with all CSBs doing all the same activities. A possible model going forward is that one out of four CSBs have a diversity management function by which a broader array of crops than the portfolio accessible through the loan scheme are multiplied and maintained.

There are plans for expanding with three CSBs. The focus should rather be on increasing impact of the already existing CSBs. BCI should show 'proof of concept' before scaling up.

Seek to be legally registered as seed producers. The informal agreements with the public extension services might not suffice if/when Malawi adopts its new national seed policy.

Implement a quality control system for the multiplication scheme. Control and document the quality of the multiplied seeds. The "Quality Declared Seed" system promoted by FAO is a useful resource in this regard.

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<sup>3</sup> Shared with the consultant in Lilongwe

<sup>4</sup> DF chapter in Vernoy et al (2015) says 13,400 households have "access" to the benefits of 14 CSBs in Malawi. This is a stretch given the current 250 members in four operative CSBs.

Work to accommodate CSBs in national seed policies. In Malawi the space for CSBs and other efforts to strengthen seed security through informal seed system is according to the Global Forum on Agricultural Research<sup>5</sup> and other actors narrowing. BCI is uniquely positioned to champion the role of CSBs in the national policy.

Although the scale is small and the impacts still limited, I believe it would be premature to end the project at this stage. The project should be given five to six years to improve core activities and show proof of concept.

## **2. Objective**

The purpose of the evaluation is to provide The Development Fund of Norway with sufficient information to make an informed judgement about the performance of the Community Based Agrobiodiversity Management (CBAM) project and the recommended way forward for the implementation and follow-up of this project. The evaluation will concentrate on the activities and results during the period 2012 to the time of evaluation. The project evaluated is the CBAM project implemented by BCI with the main focus on CSBs. The evaluation will cover the activities of user groups, BCI and DF.

## **3. Background/Context**

The Development Fund (DF) is supporting a project on Community Based Agrobiodiversity Management (CBAM) in the northern region of Malawi. CBAM project is part of DF's global program on Agrobiodiversity and Climate Change (ABC) that aims at contributing to sustainable climate adaptation among farmers and pastoralists. The project is implemented through local partner, Biodiversity Conservation Institute (BCI). BCI receives direct financial and technical support from DF. DF-Lilongwe office has the responsibility to follow up the implementation of the project on the ground i.e. implementation of plans and appropriate use of funding. An advisor from DF-Oslo office has had the responsibility to give technical back-stopping to the project.

In addition, DF is supporting a program on sustainable food security through other local partners namely Mzuzu Agricultural Development Division (Mzuzu ADD) and Find your Feet (FyF) in the same northern region of Malawi where the CSBs are.

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<sup>5</sup> <http://www.gfar.net/news/analysis-and-recommendations-draft-malawi-national-seed-policy-and-strategies-2014>



### **What kind of CSBs are the BCI/DF banks?**

The concept Community Seed Banks have been used for about 30 years and describes quite a variety of approaches. A recent book on CSBs edited by Bioversity International experts (Vernooy et al. 2015) groups the services of CSBs into three core areas: (1) Conservation of Plant Genetic Resources, (2) access and availability of diverse seeds and planting materials according to farmers' needs and interests, and (3) seed and food sovereignty.

The CSBs of the CBAM project is by DF said to have the following objective and function: "The main objective of CSB is to ensure that farmers have access to diverse seeds that are adapted to local conditions and good quality seeds that have high germination rate and perform well. The seedbank has the main function to store and distribute seeds to members through seed loan system and act as backup source for seeds in times of crisis. One of the key activities connected to the seedbank is the multiplication of improved seeds which come from national breeding programs, gene bank and selection from farmers' own fields."<sup>6</sup>. Thus DF (in Norway) mainly frames the CSB project as an "access to seeds" project (Seed Security) and places less emphasis on the conservation and seed sovereignty aspects.

The framing of the CSB project is somewhat different in the BCI project plan: "There is need, therefore, to increase smallholder farmers' access to local seed in order to improve and sustain their livelihoods. This project intends to increase the adaptive capacity of smallholder farmers to climate change by way of strengthening on-farm conservation through use of participatory approaches."<sup>7</sup> There is no disagreement between BCI's approach and DF's goals, but the emphasis of the different core areas are a bit different. BCI is more focused on conservation.

There is limited scholarly literature on CSBs and their performance. Most of what is written is written by development actors supporting CSBs and it is not published in the peer-reviewed literature. We therefore have limited empirical evidence on the impact of CSBs on higher level indicators like food security and adaptive capacity.

When considering the role of the CSB project of DF/BCI it is important to consider it in the context of the dominant agricultural policy, the Farm Input Subsidy Program (FISP). The goal of the FISP is to enhance food self-sufficiency by increasing smallholder farmers' access to and use of improved agricultural inputs. The program has targeted roughly 1.5 million rural farm households

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<sup>6</sup> From TOR for this study

<sup>7</sup> From BCI Project Application from 2016

annually (approximately 50 percent of all farmers in Malawi). The FISP is subject to considerable public debate and scholarly contestation. The gist of the debate is that FISP has indeed greatly increased maize production and thereby reduced national food insecurity, however this success has come at considerable fiscal cost (about 90% of the agricultural budget according to IFPRI) and both its economic sustainability, seed security implications as well as nutritional security implications are criticised. Maize is the country's main staple crop and accounts for more than 60 % of total food consumption in Malawi (IFPRI: (Mazunda 2013)). During this fieldwork both FAO and NASFAM expressed that FISP and the maize focus was too dominant and that it was important to promote alternatives. NASFAM is involved with CSBs with a focus on a loan/multiplication scheme with improved been varieties. FAO works with CSR and others in organizing seed fairs (voucher based) as a means to increase access to more diverse seed options. The CSBs evaluated also represents an alternative to the dominant efforts in agricultural development in Malawi.

### **Fieldwork**

The consultant visited the project sites in Rhumpi, Mzuzu and interviewed stakeholders and other relevant organizations in Lilongwe and Mzuzu in the period 8-12 August 2016. At the time of the visit the harvest was concluded and seeds from the loans and multiplications were in the storage of the CSBs. The consultant visited two CSBs. See annex 2 for other interviews.

At the time of the visit the Malawian government had declared a state of emergency due to the El Nino induced droughts. According to the government and aid agencies 6,5 million Malawians are currently in need of humanitarian assistance.

## **4. Response to questions in TOR**

### **A. Results**

*A. 1 What are the status of outcomes and outputs compared to the stated outcomes and outputs as of August 2016?*

The baseline for answering this question is the 2016 project plan and interviews and observations during the fieldwork.

The desired outcome is: **Adaptive capacity to climate change among smallholder farmers in Malawi increased.**

Out of the two indicators listed toward this outcome, one is difficult to measure and the other is cancelled. The first indicator is about the number of CSBs operating and the number of beneficiaries in terms of number of households diversifying their crop portfolio. Four CSBs are up and running and the project

activities are undoubtedly reaching a number of households also outside the formal CSB membership. BCI counts as beneficiaries all those receiving training and attending events conducted as part of the project. The highest number of beneficiaries are based on a count of attendants to the “Food and Seed Fairs” – an exhibition of local agrobiodiversity organized by BCI and the CSBs. The indicator about establishing two Climate Adapted Villages (CAVs) was cancelled due to budget cuts.

The status of the four outputs are assessed in table 1. This evaluation focuses on the outputs directly relevant for the operation of the CSBs. The table footnotes are central to understand the status of the output indicators reported. The results from the 2015-2016 season are currently processed by BCI, thus the numbers presented here are preliminary and many are likely to change by the end of the year.

Outputs	Baseline	Actuals 2015	Target 2016	August 2016
<b>1. Increased farmers' access to, and knowledge of, locally adapted agricultural biodiversity.</b>  1.1 # of farmers using quality seeds from the community seed banks 1.2 # of crop varieties developed by farmers with Participatory Variety Selection 1.3 # of varieties restored and rejuvenated by farmers at CSBs 1.4 # of households maintaining indigenous crop varieties 1.5 # of target groups (farmers, youth, partners) exchanging knowledge and experiences	0 0 0 0 0	60 4 16 120 200 farmers (120F;80M) 40 youth (25girls;15boys)	500 4 25 500 1500 farmers (50%F) and 500 youth (50% girls)	254 <sup>1</sup> 4 <sup>2</sup> X <sup>3</sup> 254 <sup>1</sup> 1481 <sup>4</sup>
<b>2. Increased knowledge and planning skills on climate change adaptation amongst smallholder farmers.</b>  2.1 # of documentations carried out 2.2 Participatory adaptation plans supported and functioning	0 0	1 2	2 4	Assessed in more general terms throughout document
<b>3. Gender activities integrated in all project activities</b> 3.1 # of gender analyses conducted 3.2 # of gender audits carried out	0 0	4 4		Assessed in more general terms throughout document
<b>4. Incentives and marketing strategies promoting on-farm conservation developed</b>  4.1 # of farmers trained in farm business management 4.2 # of farmers trained in entrepreneurship skills	0 0	0 80		Assessed in more general terms throughout document
<b>4 Institutional capacity for BCI and Community Seed Banks to conserve and manage local agro-biodiversity strengthened</b>  5.1 # of functional CSBs 5.2 # of workshops/meetings on agro-biodiversity related issues for BCI 5.3 # of BCI staff and Board meetings	0 0 0	4 11 10 staff meetings & 1board meeting		Assessed in more general terms throughout document

<sup>1</sup>254 is the number of members in all four operating CSBs as of August 2016 according to BCI.

<sup>2</sup>The four varieties referred to are maize varieties of unknown origin. Some might stem from early colonial introductions of maize landraces from the Americas while others probably originate from germplasm introduced by CIMMYT and others in breeding programs in the 1970s-1980s. While the output is about “variety development” it is clear from the project proposal and earlier project documents that the activity referred to not is about developing new varieties, but maintaining existing varieties. Hence, the use of the term “Participatory Variety Selection” rather than “Participatory Plant Breeding”. What the project does is to involve CSB members in mass selection of seeds from maize plants that fits the “ideal” for four existing local maize types. The purpose is to “restore” and “purify” these local varieties which according to the participants have become more heterogeneous than desired due to cross fertilization in the field.

<sup>3</sup>The number of “varieties restored and rejuvenated” reported by BCI is 25. In the two CSBs visited during this consultancy 9-13 varieties of 6-8 crop species were part of the seed multiplication activity. In the room with conservation seed samples a few more varieties were maintained. In all the four CSBs combined this may well amount to 25 varieties under some kind of management by the project. However, there is a need for a clearer formulation of the objective and the activities undertaken towards this output. Probably the term “maintain” is more accurate than “restore and rejuvenate”. The maize varieties in the PVS activity above are under a management regime than can be said to be about restoration.

<sup>4</sup>This number is from a BCI presentation shared with the consultant. The consultant is not able to assess the number of participants in trainings and events counted against this output.

Table 1. Seed multiplication in 2015/16 cropping season according to BCI<sup>8</sup>

	Crop Type/Variety	No of Farmers	Seed			
			F	M	Area (Ha)	Harvested (Kg)
1	Bambara nut (mixed)	49	34	15	5.0	1279
2	Ground nut var. Tchailosi	48	36	12	4.8	1155
3	Finger millet var. Nthanga	17	6	11	0.7	298
4	Sesame	3	1	2	0.1	8

<sup>8</sup> BCI: RESULT BASED REPORT PERIOD 2013-2016 Annex 3

5	Green gram	10	6	4	0.4	74
6	Ground nut var. CG7	21	10	11	2.1	419
7	Ground nut var. Chalimbana	13	6	7	1.2	608
8	Ground nut var. Chaholi	6	4	2	0.4	75
9	Beans var. Jandalala	11	7	4	1.9	362
10	Beans var. Sugar beans	10	9	1	1.6	318
11	Beans var. Nyauzembe	27	17	10	2.3	542
		<b>215</b>	<b>136</b>	<b>79</b>	<b>20.6</b>	<b>5138</b>

**Rank of importance by number of farmers, area & quantity of seed**

1	Ground nut	<b>88</b>	<b>56</b>	<b>32</b>	<b>8.5</b>	<b>2257</b>
2	Bambara	<b>49</b>	<b>34</b>	<b>15</b>	<b>5.0</b>	<b>1279</b>
3	Beans	<b>48</b>	<b>33</b>	<b>15</b>	<b>5.8</b>	<b>1222</b>

A. 2 Are the reported outcomes/outputs coherent with what you observed during the evaluation?

I have no reason to believe that the figures given to me by BCI staff and leaders/members of the CSBs visited not are correct. The most important aspect of the project is not these numbers, but whether or not the project contributes meaningfully towards the overarching goal of enhancing the adaptive capacity and resilience of the livelihood of the smallholders participating in the project. The project represents an alternative pathway to adaptation and resilience than the dominating agricultural development approach in Malawi today.

Thus with regard to output 1&2 about increased access and knowledge the observations during the evaluation are coherent with the activities and results reported by BCI. Also regarding outputs 3,4 and 5 about gender mainstreaming, market approaches and capacity building of BCI the evaluation observations are in line with the proposed objectives. It must however be stressed that this evaluation did not include an inspection of documentation of activities etc, but is based on observations and interviews.

A.3 What are the benefits of CSBs as stated by the users? How many farm households gain each of these benefits?

The members in Chikwawa solicited the following three major benefits: 1) “Lost varieties” have been recovered; 2) Access to a diversity of seeds has increased; 3) Improved nutrition for participants. The number of households eventually gaining these benefits directly are restricted to the membership of the CSB which in Chikwawa currently is 44. In Mkombezi, the farmers we spoke to said that the CSBs had considerably increased their knowledge about the diversity of seeds and its importance in the face of CC. They emphasized the importance of the project as a platform for networking and learning from each other as well as with other communities involved. Also the components involving youths from local schools as well as the gender focus were highlighted by several farmers as positive. Many of these benefits are hard to quantify in terms of number of households benefitting, but there is reason to believe that the project message reaches further than the membership. The farmers themselves say also other members of the community benefit as the message spreads.

The project also claims to play a role for conservation of local varieties. As such the project can be said to contribute to conserve a public good – thus benefitting society in a broader sense. Seed samples of the local varieties included in the project are sent to the national germplasm collection at Chitedze Agricultural Research Station, Department of Agricultural Research. It is outside the scope of this evaluation to determine if the varieties managed as part of the CSB activities are unique for the project area or if their conservation is sufficiently well managed to support claims about long term conservation. However, the focus of this project is (and should be) on the users of crop diversity and not on conservation *per se*. The project does not have a quality management system in place to ensure that the local varieties are conserved according to the necessary standards for plant genetic resource conservation.

That said, farmers involved with the CSB activities did show an awareness about the importance of separating outbreeding varieties in the multiplication plots etc. This indicates that the project also has positive long-term conservation dividends.

It is outside the scope of this evaluation to assess impact on the higher level outcome of the project in terms of increased household food security in the face of climate change. However, the project provides participants with increased access to knowledge and resources for cultivating a broader portfolio of crops and this is potentially (but not necessarily) useful to increase resilience and adaptive capacity.

A.4 What are the benefits of CSBs as stated by the implementing partners and by DF, but not stated by the users? Please assess if these benefits are likely.

The users' story is largely the same as the implementing organizations' story. The three major aspects of the project; on farm conservation of agrobiodiversity, climate change adaptation and food security all feature high also in the CSB members accounts of why they participate in this project. These are quite "high-level" benefits and depends on "primary level" factors such as "local varieties are more drought tolerant" and "local varieties are more important as for household consumption than hybrids". Both levels were present in the discussion, but sometimes the more abstract level of food security and climate adaptation are stated without a primary level basis. This is a common problem in development projects where global level rhetoric is adopted by those at the receiving end – partly because that's the name of the game. I am therefore less worried about benefits only stated by the implementing partners than for lofty statements of benefits repeated by users. However, the information from the users in this project are quite down to earth and in my opinion the project outputs are indeed likely to have an impact on the higher level outcomes.

A.5 Are there benefits or disadvantages of CSBs that are not intended, but are likely? (unintended results).

In my view the most likely benefit of the project is strengthening of the local seed system. This is an important output in itself, as well as a means for achieving food security and climate adaptation goals. As correctly stated in project documentation the "informal" or "farmer managed" seed system dominates in Malawi and interventions that can enhance this system have a high impact potential. However, the project documentation associates the informal system only with "local varieties" – this perspective is too limited as informal systems also supply improved varieties that have entered the local seed system. According to BCI director Mkamanga, the likely origin of some of the maize varieties in the PVS scheme originates from public breeding programs and CIMMYT lines. Also one of the groundnut varieties and possibly some of the other pulses are recycled improved varieties. This wider role of the local seed system is under communicated in the project documentation. A strengthened local seed system is important for seed security – irrespective of the seeds flowing being truly local in origin or if they originally stem from the formal system.



A.6 How many people are official members of each CSB? Of these, how many are active in using the CSB? Are there any non-members that benefit from the CSBs?

The reported membership number is given in table 1. The number reported by BCI and the numbers reported by the CSB Executive Committees are in agreement. Members take part in different activities and there seems to be variation between the CSBs in how many are taking part in the seed multiplication scheme. In Chikwawa I was told that all members multiplied seeds on a small plot of land (ca 0,25 acre) and in Mkombezi I was told that only about 50% of the members multiplied. In the first case I was told that new members that had not taken part in the multiplication would get a small starter amount of seeds for free the first year, in the second case I was told that new members would pay a small prize for seeds. The number of non-member beneficiaries of the CSBs are reported against the different outputs in table 1 – these are, however, not directly benefiting from the CSB activities per-se, but from associated projects.

A.7 What are the reasons given by members for not using CSBs?

I did not interview previous members or members not using the CSB – the people available at the sites all appeared to be using the CSBs either directly or by attending some of the training courses. However, when asked about the turnover of members and the reason why some opted out I was told that the major reason probably was the small scale of the project. The current members in Chikwawa said that the amount of seed for multiplication only allowed for a quarter of an acre per farmer and that this should increase to have an impact. Perhaps the goal should be to provide at least as much seed as what is subsidized by FISP. FISP subsidize 5 kg of maize seeds which is sufficient for 0,5 acre.

A.8 What are the main challenges of this project? (specify which of the challenges are difficult to control/beyond the influence sphere of BCI and DF)

Challenges within the control of DF and BCI:

*Focus:* The project should focus on its seed multiplication and seed system function. It should focus on seed security and improving households' access to seeds. The conservation role could be done by only one of the CSBs in the network while the others should mainly be about access.

*Institutional capacity:* Related to the above. BCI should strengthen its capacity on seed security. The organization has a strong capacity on PGRFA conservation, but

the main activity of the CSB should be seed production and improving farmers' access to improved seeds.

*Scale:* The number of members in the CSBs are low compared to other DF projects in Malawi. The projects with Find your Feet (FyF) are of a different kind (CA++) and they count many more beneficiaries. While there are relatively few members in the CSB this kind of project will never reach the scale of the CA projects – simply because they are more demanding, more knowledge intensive and less scalable. Thus this challenge is partly constructed by the aid industry itself (everything should be scaled up) and partly something that BCI and DF needs to focus on.

*Sustainability:* The project is currently dependent on external funding and I did not see a clear plan for long term sustainability. The classical challenge for projects of this sort is to become part of a lasting institutional framework – this could be the public extension system, a local university program or as a cooperative. According to the 2016 project plan registration as a cooperative is under way. The latter framework was suggested by several members as the way forward. Also on a positive note, the government extension officers and the local agriculture officials interviewed were all positive about the project. Thus, while the project is not part of the public system it is not disapproved by them either.

Challenges difficult to control for DF/BCI:

*Access to foundation seeds and involvement in Quality Declared Seed production or similar:* The project plans says that “the project will also consider varieties developed by the formal research institutes (DARS)” for multiplication. This has not happened and according to the BCI management the reason is that DARS are unable to supply sufficient amounts of seeds. I do not know how many and how good varieties DARS have in their portfolio, but it would be good to include also fresh foundation seeds in the multiplication scheme. This is the only way the seeds can be QDS – an alternative to certification. It is not realistic that BCI will be able to get some kind of certification status for the varieties currently included.

*Frame conditions and legal status.* According to the assessments of the new seed policy from DF, CBAM partners and other organizations like Africa Biodiversity Institute, the new seed policy in Malawi will ban the sale of uncertified seeds. This means that part of the activity of the CSBs effectively will be illegal and that the idea of developing the CSBs into coopeatives relying on seed sale probably will be impossible. DFs partners are meeting this challenge proactively and say they work to accommodate CSBs in national seed policies.

## **B. Roles of BCI and DF in implementation and design**

B.1 Describe the technical follow-up by BCI and DF and assess the follow-up capacity as well as areas to be improved.

BCI has a strong capacity on agricultural diversity, especially through the director, Professor Godwyn Mkamanga. Mkamanga is now retired from his position as professor at Mzuzu University. He has previously held two positions that makes him extremely well qualified as regards the agricultural diversity focus; in the 1980s he was head of Department of Agricultural Research (DARS) at the national level and in the 1990s he was head of the regional genebank operated under the Southern Africa Development Community in Lusaka, Zambia. Professor Mkamanga comes across as a down-to-earth person and he is clearly committed to work with local seed systems because as he puts it “I know the shortcomings of the formal seed system when it comes to reaching smallholder farmers”. The project manager, Leonard Manda, is the right hand of the director and clearly the one who does the day to day management of the organization. Manda is also a staff at Mzuzu University and the BCI job is part-time. My impression of Manda is that he knows the subject area well, and while he does not have the experience that Mkamanga has he is probably able to maintain the professional level of the agrobiodiversity work also when the day comes that the director withdraws from the position as leader. However, my impression is that the professional integrity of the agrobiodiversity work to a large extent depends on Professor Mkamanga, and it is important to follow the development of the organization closely. Also, DF should assess whether BCI is skilled and rigged for running the community organization part of the project. My view is that they should rather focus on the agrobiodiversity aspect and leave it to a more experienced organization to run the community organization, trainings etc.

The local staff of BCI connected to the two CSBs visited (Chikwawa and Mkombezi) appeared very able. The BCI has paid field officers living close to the communities where they are responsible. The field officers works with the CSBs which are organized with an “executive committee” with chairperson and all other organizational roles in place.

BCI have other financial feet in addition to the CSB project; they are part of the Operation Days work and receive some funding for work with school children. They will also be part of a project funded by the Benefit Sharing Fund. This project is led by the Zimbabwean organization Community Technology Development Trust <http://www.ctdt.co.zw/biodiversity-programme/> and is a partnership between several organisations in Malawi, Zimbabwe and Zambia. The impression I got was that this project would allow BCI to expand with 3 more CSBs.

The overall impression of the organization is: 1) the small size and the importance of the director, the part-time position of the project manager etc. makes it vulnerable to changes; 2) the BCI hq staff is professional on the subject matter, but appears to be less experienced on community project management.

B.2 Should the project design be different? In which way?

Yes. First, the project should focus more on seed access and less on conservation. This entails including improved varieties (not hybrids) from the formal sector in the crop portfolio. Second, the project implementation should remain with BCI, but FyF should step in to organize other activities/project components not directly connected to the CSB operation. The history as I understood it is that FyF constructed the CSBs in 14 EPAs, but when BCI was engaged by DF to take over the CSB operation FyF rolled back all their activities in these EPAs. BCI thus took on more than just the operation of the CSBs in these areas. I question if this was the best way to do it. Also, I heard nothing that would make it difficult for FyF and BCI to work together in the same areas –both organizations focusing on what they are best at.

B.3 How can the project create synergy between various DF program components including linkages with Government of Malawi and other development programs

If DF, FyF and BCI agrees to redesign the project in line with the recommendation above, I believe there will be more synergies than there already are between the projects in the Mzuzu area. That said, my impression is that DF works well with both BCI and FyF as well as the public ADD.

B.4 How can the project increase the chance of sustainability (of the results) and ownership of CSB among user groups?

The goal should be to become an integrated part of the local seed system. If the benefits of collaborating to multiply and produce seeds outweighs the costs, this project could become a natural part of an enhanced local seed system. If, on the other hand it is necessary to continue using new funding each year to maintain and increase the seed production, this project will either stop functioning when the donor pulls back unless it becomes part of a more permanent institutional structure (govt or university).

## B.5 How can the project be scaled up to benefit more people?

The project is already expanding in a natural way by increasing the amount of seeds produced every year. More seeds, means more participants. The seed storage facilities of the CSB buildings are relatively small and there are physical boundaries to how big this project can grow. The current production by crop is included in annex 3. I think the organization of the project according to government geographical division (EPAs, ADCs and VDCs) is good and I believe the project can benefit more people by continuing to work alongside the extension system. As long as the extension system is supportive and the seed production keeps increasing I do not see any need for redesigning the basic idea of the seed multiplication scheme.

## C. Relevance

### C.1 Is the project goal relevant to the needs of the target groups?

The goal to increase seed security is directly relevant to the target group. The second goal to manage and conserve agrobiodiversity is only directly relevant when it is a means to achieve the first. The overall outcome to increase adaptive capacity to climate change is relevant to the target group as it is generally agreed that the climate in the area is becoming more unpredictable and that climatic stress is a major stressor in their livelihood. It is however important to underline that climatic stress is just one among many stressors and that the goal of enhancing seed security is relevant independent of long term climate trends.

### C.2 Should the project be continued? in parts or as a whole?

My overall impression of this project is relatively good. After three seasons the project is well under way and although the seed production and the number of members are quite small (especially compared to number of beneficiaries in CA promotion projects etc.), it is likely that the impact and outreach will increase in tandem with increased seed quantity turnaround.

There are several reasons why the project should not be aborted at this stage. Here, I single out three major reasons for continuing:

- 1) Do no harm. Starting a project like this comes with a responsibility. The CSB local leadership and members have invested time and effort in the start-up and it would be potentially harmful for them (in terms of social capital) if this project is ended already now.

- 2) Potential shown. As stated above the increase in seed turnover from year to year suggests increased impact on overall community seed security and it would be premature to abort this project already at this stage.
- 3) Alternative to mainstream. The FISP is promoting input intensive agriculture, including hybrid maize seeds. The CSB project represents an alternative pathway – one which is complementary, represents a diversification and contributes to more pluralism in the sector.

Of the three options discussed in the executive summary, it is my opinion that the project should continue, but with a sharper focus on seed security (more on this in ES and C3 below).

C.3 If the project should be continued, give recommendations for follow-up actions by BCI and DF.

In order to become a more significant seed security project I believe two things should happen on the organization side: 1) BCI should focus more on the seed access and provision part of the project than on conservation. This might entail strengthening of their expertise and capacity in this regard. They should i.e. look at how NASFAM operate their CSBs. 2) DF should assess the organizational capacity of BCI and FyF (and possibly ADD) and consider a redesign of the project in which BCI can focus on the CBS operation and FyF organizes the other trainings and program components.

**Below are some more specific recommendations:**

**Reframe:**

Frame the project as a seed security project within the context of CBAM as a farmers' rights project. The Plant Treaty states that farmers have "*the right to save, use, exchange and sell farm-saved seed and other propagating material, and to participate in decision-making regarding, and in the fair and equitable sharing of the benefits arising from, the use of plant genetic resources for food and agriculture, are fundamental to the realization of Farmers' Rights, as well as the promotion of Farmers' Rights at national and international levels*". CBAM works to promote this right from policy to practice. The CSBs represents the practice.

The emphasis should rather be on helping to maintain choice in the face of homogenization (the hybrid maize push) than on on-farm conservation. FISP and other policies drives a development towards a more and more important role for hybrid maize. The problem with this is that farmers have access problems due to low purchasing power and also that the hybrids have certain shortcomings in terms of preference and adaptability to low input conditions. Thus, the danger

with this situation is that farmers actually can end up being more vulnerable than before.

**For BCI management of the project:**

Implement a quality management system. This is particularly important to ensure quality in the seed multiplication scheme. The FAO publication "[Quality declared seed – Technical guidelines on standards and procedures](#)" will be a useful reference. The CSBs' aim should be that the seeds produced and distributed fulfill QDS quality standards.

Should include OPVs and varieties of other crops from DARS as stated in proposal, but not done so far (see details above).

Assess the need for more lead farmers (too limited according to FG in Chikwawa).

Organize seed fairs. There was a drop in number of fairs organized and number of participants in 2015 compared to 2014. Seed fairs represents a potentially important forum for exchange of knowledge and seeds. Collaborate with FAO in their new focus on seed fairs.

Should maintain a database over the varieties conserved, multiplied etc. This database should include information of both modern varieties and traditional varieties ((in Nepal, seed banks keep 'community biodiversity registers (DF chapter in Vernoy et al.)). The database should ideally be accessible through the BCI website and also state if the varieties are sent to the National genebank.

Should report on what workshops and policy processes they are part of and show how they contribute.

In conclusion: Focus, focus, focus. BCI are currently spreading its resources too thin by pursuing youth involvement, training in marketing, gender perspectives and climate change adaptation planning. These are all important aspects, but given the slim staff of BCI and the organization's core competence alternative organisation models should be considered. Furthermore, also within its "seed focus" should BCI focus more on seed security (the multiplication scheme) than on the conservation function. I am worried that the conservation function might have overshadowed the seed security focus when BCI now plans to expand to make a network of national seed banks focusing on one crop per bank in "centres of diversity": "plans are underway to construct CSB in districts where non existed before e.g. in Mzimba (targeting Bambara nut, Salima (targeting Cowpea),

Zomba (targeting Pigeon pea)<sup>9</sup> The logic of focusing on one “mandate crop” makes sense from the conservation perspective, but not from the seed security perspective.

### **References**

Mazunda J (2013) Budget allocation, maize yield performance, and food security outcomes under Malawi’s farm input subsidy programme  
Vernooy R, Shrestha P, Sthapit B (2015) Community Seed Banks: Origins, Evolution and Prospects. Routledge

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<sup>9</sup> BCI: RESULT BASED REPORT PERIOD 2013-2016 Annex 3



# **Annex 1 TOR**

## **1. EVALUATION PURPOSE**

The purpose of the evaluation is to provide The Development Fund of Norway with sufficient information to make an informed judgement about the performance of the Community Based Agrobiodiversity Management (CBAM) project and the recommended way forward for the implementation and follow-up of this project.

## **2. BACKGROUND**

The Development Fund (DF) is supporting a project on Community Based Agrobiodiversity Management (CBAM) in the northern region of Malawi. CBAM project is part of DF's global program on Agrobiodiversity and Climate Change (ABC) that aims at contributing to sustainable climate adaptation among farmers and pastoralists. The project is implemented through local partner, Biodiversity Conservation Institute (BCI).

The CBAM project in Malawi is anchored on Community Seed Banking (CSB) approach. The main objective of CSB is to ensure that farmers have access to diverse seeds that are adapted to local conditions and good quality seeds that have high germination rate and perform well. The seedbank has the main function to store and distribute seeds to members through seed loan system and act as backup source for seeds in times of crisis. One of the key activities connected to the seedbank is the multiplication of improved seeds which come from national breeding programs, gene bank and selection from farmers' own fields.

DF supports a local non-government organization, BCI, based in Mzuzu to implement the project which has CSB as the main component. BCI received direct financial and technical support from DF. DF-Lilongwe office had the responsibility to follow up the implementation of the project on the ground i.e. implementation of plans and appropriate use of funding. An advisor from DF-Oslo office had the responsibility to give technical back-stopping to the project.

In addition, DF is supporting a program on sustainable food security through other local partners namely Mzuzu Agricultural Development Division (Mzuzu ADD) and Find your Feet (FyF) in the northern region of Malawi.

## **3. SCOPE OF THE EVALUATION AND SPECIFIC QUESTIONS TO BE ANSWERED**

The evaluation will concentrate on the activities and results during the period 2012 to the time of evaluation. The project evaluated is the CBAM project implemented by BCI with the main focus on CSBs. The evaluation will cover the activities of user groups, BCI and DF.

## **A. Results**

A. 1 What are the status of outcomes and outputs compared to the stated outcomes and outputs as of August 2016?

A. 2 Are the reported outcomes/outputs coherent with what you observed during the evaluation?

A.3 What are the benefits of CSBs as stated by the users? How many farm households gain each of these benefits?

A.4 What are the benefits of CSBs as stated by the implementing partners and by DF, but not stated by the users? Please assess if these benefits are likely.

A.5 Are there benefits or disadvantages of CSBs that are not intended, but are likely? (unintended results).

A.6 How many people are official members of each CSB? Of these, how many are active in using the CSB? Are there any non-members that benefit from the CSBs?

A.7 What are the reasons given by members for not using CSBs?

A.8 What are the main challenges of this project? (specify which of the challenges are difficult to control/beyond the influence sphere of BCI and DF)

## **B. Roles of BCI and DF in implementation and design**

B.1 Describe the technical follow-up by BCI and DF and assess the follow-up capacity as well as areas to be improved.

B.2 Should the project design be different? In which way?

B.3 How can the project create synergy between various DF program components including linkages with Government of Malawi and other development programs

B.4 How can the project increase the chance of sustainability (of the results) and ownership of CSB among user groups?

B.5 How can the project be scaled up to benefit more people?

## **C. Relevance**

C.1 Is the project goal relevant to the needs of the target groups?

C.2 Should the project be continued? in parts or as a whole?

C.3 If the project should be continued, give recommendations for follow-up actions by BCI and DF.

#### **4. METHODOLOGY**

Methods should include:

Literature review (project feasibility study, plans, reports, documentations, baseline and monitoring data and other relevant secondary source of information); (Project documents will be supplied by DF)

Interviews with relevant people in the Development Fund in Oslo and Malawi country offices;

Interviews with key external stakeholders including DF donors(in Norad and at the embassy in Lilongwe) and collaborating NGOs (CEPA, FyF and Mzuzu ADD) and government organizations (NPGRC/DARS) in Malawi;

Field visit and data collection at CSB sites/interviews with target groups and BCI staff; ground observations.

#### **5. REPORT**

The final evaluation report shall be not longer than 20 pages, excluding annexes. Executive Summary is a maximum of one page.

All questions posed in the TOR must be answered to the point and as precisely as possible.

TOR, List of interviewees and dates of interview, main documents reviewed shall be included in the annexes.

## **Annex 2 Meetings conducted (schedule)**

8.8 Monday

Arrival and introductory meeting with Thor Oftedal, country director DF Norway

9.8. Tuesday

1. Meeting with DF staff (Victor, Michael (M&E) and agriculture expert)
2. Meeting with NASFAM: Wycliffe Kumwenda ([wkumwenda@nasfam.org](mailto:wkumwenda@nasfam.org)) and Frank Masankha ([fmasankha@nasfam.org](mailto:fmasankha@nasfam.org)) both from “farmer services” department.
3. Meeting with FAO, Luis Fernando Amaya-Ortiz. Agricultural Emergency Coordination Support.

10.8. Wednesday

1. Travel to Mzuzu. Rumpi district.
2. Meeting with project staff BCI hq: Dr Godwyn Mkamanga (Director), Leonard Manda (Project manager), Fredrik (Project coordinator).
3. Dinner with country director of Find your Feet (Dan Taylor) and local director

11.8.

Visit and meetings in CSBs Chikwawa and Mkombezi: Group meetings attended by 15-25 both places. Meetings with the committees, chairpersons and tour of seed banks with explanations.

12.8.

1. Meeting with ADD (Ministry of agriculture, extension services) in Mzuzu: Martha Bvumbwe, Deputy Program Manager
2. Wrap up meeting with BCI

**Annex 3**

## COMMUNITY BASED AGRO-BIODIVERSITY MANAGEMENT (CBAM) PROJECT

### RESULT BASED REPORT

PERIOD  
2013-2016

*Biodiversity Conservation Initiative (BCI)*  
August 2016

### Project sites

- Baliro Community Seed Bank, Katowo EPA
- Chikwawa CSB, Bolero EPA
- Kawaza CSB, Bolero EPA
- Mkombezi CSB, Mhuju EPA



Mkombezi CSB (in the background) and a Diversity Block where various crop varieties are grown for multiplication and rejuvenation. Pic: Leonard Manda

### Introduction

- In 2013, BCI started working in two CSBs, Chikwawa and Mkombezi with a farmer membership of 90 (45 per CSB).
- Later, two more sites (Baliro and Kawaza) were added.
- Currently, they are 254 registered members:
  - Baliro 52 (33F:19M); Chikwawa 82 (53F:29M); Kawaza 50 (28F:22M) and Mkombezi 70 (41F:29M)

### Introduction

- The concept of a CSB being new, more effort was in the initial years dedicated to creating awareness on the role of CSBs in the conservation and utilisation of local agro-biodiversity
- In addition effort was also on the capacity building of the CSB members as well collection and restoration of plant germplasm
- Capacity building areas included agro-biodiversity management tools and practices, participatory variety selection, seed multiplication and storage, role of gender in agro-biodiversity management, and agribusiness.

### Introduction

- With these capacity building and awareness raising, the Community Seed Bank concept and its values is now gaining ground not only in Rumphu but in across Malawi through the CBAM project
- For instance, plans are underway to construct CSB in districts where non existed before e.g. in Mzimba (targeting Bambara nut, Salima (targeting Cowpea), Zomba (targeting Pigeon pea)
- It is thus expected that more farmers within the catchment area of the CBAM project will join the CSBs in the coming years, and therefore increasing the number of farmers that would multiply and eventually access seed

## Outcome and Outputs

### Outcome

Adaptive capacity to climate change among smallholder farmers in Malawi increased

### Outputs

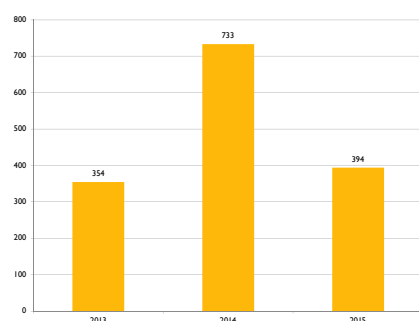
1. Increased farmers' access to, and knowledge of, locally adapted agricultural biodiversity
2. Increased knowledge and planning skills on climate change adaptation amongst smallholder farmers
3. Gender activities integrated in all project activities
4. Incentives and marketing strategies promoting on-farm conservation developed
5. Institutional capacity for BCI and Community Seed Banks to conserve and manage local agro-biodiversity strengthened

## #1: Increased farmers' access to, and knowledge of, locally adapted agricultural biodiversity

### Activity: Seed and Food Fairs

- Conducted to enhance sharing of seed and associated knowledge
- BCI has to date conducted a total of six (6) seed and food fairs
- A total of 1,481 farmers (739F:742M) participated, exchanged seed and associated knowledge

Participation at Seed and Food Fair



## #1: Increased farmers' access to, and knowledge of, locally adapted agricultural biodiversity cont'd

### Activity: Field Surveys

- 2013:
  - Over 40 crop varieties used for food and agriculture were identified in Chikwawa and Mkombezi
- 2014:
  - Similar crop varieties were found in Baliro and Kawaza areas

## #1: Increased farmers' access to, and knowledge of, locally adapted agricultural biodiversity cont'd

### Activity: Participatory Four Cell Analyses

- A rapid tool used to assess the amount and distribution of crop diversity as well threats and conservation strategies
- Done in 2013 to gather data on status of the surveyed crops and develop conservation strategies in all the 14 CSBs



A section of farmers during the Participatory Four Cell Analysis (2014)

## #1: Increased farmers' access to, and knowledge of, locally adapted agricultural biodiversity cont'd

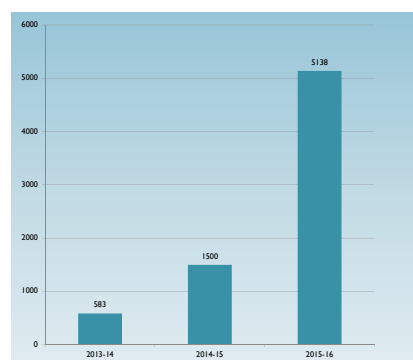
### Activity: Seed multiplication

- Initiated on beans, ground nuts, bambara nut, finger millet, green gram and sesame
- A total of 5,138 kg of seed of diverse crops excluding maize was ready by the time of this reporting
- Multiplication on maize was awaiting some cleaning and segregation of varieties through participation variety selection by mass selection
- When processed, the Foundation Seed of maize will be added to this amount



Field visit to a bean multiplication site by DF Programme Manager, BCI and farmers in 2016. Pic: Leonard Manda

### Quantity of Seed Multiplied (2013 – 2016)



### Seed multiplication in 2015/16 cropping season

Crop Type/Variety	No of Farmers	Seed Area Harvested (Ha)			Seed (kg)
		F	M	(Ha)	
1 Bambara nut (mixed)	49	34	15	5.0	1279
2 Ground nut var. Tchailosi	48	36	12	4.8	1155
3 Finger millet var. Nthanga	17	6	11	0.7	298
4 Sesame	3	1	2	0.1	8
5 Green gram	10	6	4	0.4	74
6 Ground nut var. CG7	21	10	11	2.1	419
7 Ground nut var. Chalimbana	13	6	7	1.2	608
8 Ground nut var. Chaholi	6	4	2	0.4	75
9 Beans var. Jandalala	11	7	4	1.9	362
10 Beans var. Sugar beans	10	9	1	1.6	318
11 Beans var. Nyauzembe	27	17	10	2.3	542
	215	136	79	20.6	5138

#### Rank of importance by number of farmers, area & quantity of seed

1 Ground nut	88	56	32	8.5	2257
2 Bambara	49	34	15	5.0	1279
3 Beans	48	33	15	5.8	1222

### Seed multiplication

- Through the project, there is an increasing demand for Bambara nut and some lost varieties of ground nuts e.g. Tchailosi in all the 4 CSBs
- Bambara nut requires low inputs incl. labour, yet has multiple uses: can be boiled and eaten as nuts both fresh or dried; made into a paste and eaten as such; nuts can be used as relish; can be used to make milk just as Soy bean; can be mixed with ground nuts, boiled and eaten as a snack
- Ground nut var. Tchailosi is an early maturing variety and therefore acts as a cushion against hunger while the other crops are still in the field
- Seed multiplication has been rather slow due to a number of factors:
  - small seed samples that were started with because in the first place it was difficult to find adequate samples of seed amongst the communities
  - small multiplication factor of legumes
  - small land holding capacities
- Bean var. Nyauzembe is a sweet bean variety that also cooks well
- Seed for these varieties can only be found amongst farmers i.e. are Farmers' Varieties

**#1: Increased farmers' access to, and knowledge of, locally adapted agricultural biodiversity cont'd**

**Activity: Demonstration/Diversity plots established**

- 2013: 2 blocks at Chikwawa and Mkombezi CSBs
- 2014: 4 blocks at Baliro, Chikwawa, Kawaza and Mkombezi CSBs
- 2015: 4 blocks at Baliro, Chikwawa, Kawaza and Mkombezi CSBs
- 2016: 8 blocks at the four sites and in farmers' fields



A cross-section of people from around Baliro CSB during a Field Day: Members viewed the diversity of crops in the diversity block. Pic: Leonard Manda (22/03/2016)

**#1: Increased farmers' access to, and knowledge of, locally adapted agricultural biodiversity cont'd**

**Activity: Participatory Variety Selection**

- Done to improve the local varieties using mass selection
- Initiated on four local maize varieties (Bingo, Kafula, Kampalapati and Lokolo)
- In 2015/16 cropping season 12 farmers were involved and seed is being processed
- The selected seed in 2015/16 is foundation seed which will be multiplied and made available to farmers
- This is expected to increase the quantity of seed multiplied by several folds. Subsequently, the number of farmers accessing seed from the CSBs will also greatly increase



Bingo maize variety



The diversity within local maize

**#1: Increased farmers' access to, and knowledge of, locally adapted agricultural biodiversity cont'd**

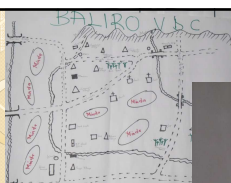
**Activity: Training in Community Based Agrobiodiversity Management**

- 122(70F: 52M) farmers and 44 (24F: 20M) youth were trained in 2013 from Chikwawa and Mkombezi CSBs
- 22 farmers (over 50% women) were trained from Baliro and Kawaza who trained fellow members, average of 50 farmers per site

**#2: Increased knowledge and planning skills on climate change adaptation amongst smallholder farmers**

**Activity: Participatory Vulnerability analysis was done in Baliro VDC**

- Members identified different areas where different resources were/are found; what has changed and what ought to be done
- Key adaptation strategies suggested included tree planting, crop diversification and natural tree regeneration



A sketch map for Baliro made by communities during a PVA



A lady going through certain key changes that had occurred in Baliro with time, from 1945 -2014 during the PVA at Baliro CSB



### #3: Gender activities integrated in all project activities

#### Activity: Gender mainstreaming

In 2013:

- 426 (273F:153M) were trained in gender mainstreaming in Chikwawa and Mkombezi

In 2014:

- 388 (over 50% women) were trained in Baliro and Kawaza
- Gender audits are done every year to identify gender gaps



Representative members of Baliro and Kawaza CSB posing for a photo together with BCI staff during a Gender Mainstreaming Training at Rumphu in 2014

### #4: Incentives and marketing strategies promoting on-farm conservation developed

- 74 farmers trained in agribusiness management (2014)
- Draft constitution for associations was developed (2015)
- 44 (21F:23M) farmers trained in leadership skills and lobbying (2014)
- 44 (21F:23M) farmers trained in seed management (2014)
- 40 (20F:20M) youth trained in CBAM practices (2014)



Youth and their Patrons from the 4 CSBs and BCI staff posing for a photo during a CBAM training at Chikwawa CSB. Pic: Leonard Manda (2014)

### #4: Incentives and marketing strategies promoting on-farm conservation developed cont'd

- 90 farmers (over 50% women) trained in agribusiness management (2015)
- 85 farmers participated in Focus Group Discussions on challenges to marketing of indigenous crops (2015)
- 30 farmers trained in farm business management (2016)

### #5: Institutional capacity of BCI and Community Seed Banks strengthened

- 4 CSBs are operational and maintained (more room and demand for upscaling)
- BCI staff have actively participated in various workshops on agrobiodiversity, Farmers' Rights, seed policy and national agriculture policy
- BCI staff actively participated in the FAO/GFAR National Conference on Farmers' Rights (2015)

## Summary & Future Plans

- The CBAM project has popularised the CSB concept in Rumphi and across Malawi (even the draft Seed Policy recognises the role of CSBs)
- Seed multiplication is going on well but slow due to a number of factors including the small seed samples that BCI started with
- With the seed volumes that we have now, added with the PVS Foundation Seed of maize, the quantities are expected to increase several folds at the end of each subsequent cropping season
- More farmers are also expected to join the CSB because of the increased volume of seed of diverse crops, and therefore increased access to it
- BCI is planning to use the existing Lead Farmer Model approach, to reach out to the other 10 idle CSB banks in Rumphi as a one way of scaling out
- BCI has also put in measures to trace the seed that farmers access from the CSB: the extent to which seed goes either through sharing or selling by those farmers that access it. This way, a better picture of beneficiaries of seed from the CSB would be established