Zambia

Hope, Means, Future project (SG015.15)

Petauke District, Eastern Province

Bringing Hope and Means for Future of Ongolwe Women Development Association –Executive Committee

End of Report Project, April 2017

Project summary

The Hope, Means, Future project, initiated by Send a Cow in the Petauke district of Eastern Zambia, aimed to give smallholder agro-pastoral households the ability and confidence to make a sustainable living from their own landholding. Project beneficiaries were subsistence farmers living in poverty, with extremely poor nutrition levels.

Overall objective: *1,100 farmers of Petauke district have improved household income and food security by providing them with the hope and means to secure their futures from the land.*

The intervention was designed in partnership with local community organization the Ongolwe Women's Association, in response to a request for support issued to Send a Cow. Core project activities included delivering packages of training and support in Sustainable Organic Agriculture, Improved Animal Management, Water Management and Gender & Social Development to 1,045 families, working in partnership with government extension officers and Farmer organization Support Program (FOSUP), our local technical partner.

Although only 12 months long, the project successfully trained 1,157 farmers in a broad package of skills. This training has been widely implemented and is already starting to have an impact:

- 38 Community Livestock Auxiliaries were trained, embedding practical animal husbandry skills in the project area long-term
- 25 groups were trained in successful poultry management and supported with infrastructure inputs. In just a few months the groups have started to make connections with local markets and generate a sustainable income
- Practical water management skills were widely adopted, and communities engaged en masse with infrastructure construction. Following the recent rainy season, the newly built tanks and reservoirs are full and already acting as a resource for local communities both for domestic and agricultural use
- Groups were given capacity development training to enhance their internal governance and ensure allow them to operate sustainably after the project intervention

Both staff and beneficiaries were anxious to deliver the project activities before the onset of rains in November/December. In fact, the rain was significantly heavier than usual, damaging crops and making some roads in the project area impassable. The seasonal rains also slightly lowered attendance at project events, as farmers tended to stay and work on their own fields rather than join group activities. This was more significant given the short length of the intervention, and the pressure that this placed on project staff and volunteers to deliver a real breadth of activities within a single year.

Harvest in Petauke is generally in June / July, unfortunately slightly outside the funded project period, and trained farmers are eagerly awaiting the anticipated boost in outputs that this season will bring. Implementation levels of trained techniques are high, particularly in sustainable agriculture, so we expect further significant project impact in the near future.

Progress against specific project objectives

Objective 1

Objectives	Baseline	Milestone	Evaluation Results
*Farming households (HH) are **confident** that their farms can meet their family's basic need.*	43%	770HH (70%)	*The data evaluation analysis report indicated an increase in confidence levels from 43% (at baseline) to 55%, an improvement of 12%.*

Delivering a package of training in sustainable organic agriculture, improved animal management and Gender and Social Development, supported by key follow ups from staff and volunteers, successfully increased farmer confidence in the productivity of their own land holdings from 43% to 55% in just one year. Given further practical application and support, we are confident this figure can increase, reflecting improved household nutrition and income, and greater resilience to shocks.

Core training delivery was supported by the creation of a dedicated support infrastructure of staff and volunteers, including Peer Farmer Trainers (PFT) drawn from host communities and groups. PFT, alongside cluster leaders and government extension workers, were offered additional training in crop diversity, conservation agriculture, soil preparation and manure composting.

Photos (left and right): Composite training sessions

Photo (left)
Mr. and Mrs Zulu and their family, members of Chisoyo Cluster, in their garden. Crops grown include tomatoes, sweet potatoes, cabbage, rape, bananas, impwa, and rice in a garden of 0.25 hectares. In the future, they want to diversify and begin fish farming. The family is ambitious and plans to acquire a treadle pump to improve irrigation and increase yields.

Objective 2

Objectives	Baseline	Benchmark	Evaluation Results
*Farming households have improved **food security** through greater crop diversity, higher yields, and improved animal management*	6% HH were food secure	70HH (70%) *HH with improved food security.*	*The data evaluation report indicated an increase in household food security from 6% to 11%. This is a positive result in such a short space of time, with no formal harvest expected until June / July. Farmers are already harvesting early crops like green maize, pumpkins and traditional vegetables*

A core package of SAC training in Sustainable Organic Agriculture and Improved Animal

Management was delivered to 1,014 beneficiaries. In addition to this, beneficiaries were also trained in Farm Systems management. This included:

- Identifying and improving farm output – a range of practical exercises aimed at improving linkages within local communities and from farms to markets, at identifying and addressing system inefficiencies within individual farms, and understanding the farming context represented by the local environment
- Farm resource mapping – identifying local resources and their optimization. Analyzing maps of existing resources and reviewing connections
- Optimizing resources - ensuring the broadest use of farm resources, embedding a culture of recycling and reusing, advocating hygiene in the compound, compost making and waste sorting
- Building gardens as teaching aids for field principles, particularly in the planting and management of vegetables
- Embedding the principles of passing on the gift, a Send a Cow cornerstone value, by encouraging and facilitating beneficiaries and volunteers to roll out training to copy farmers and throughout their communities

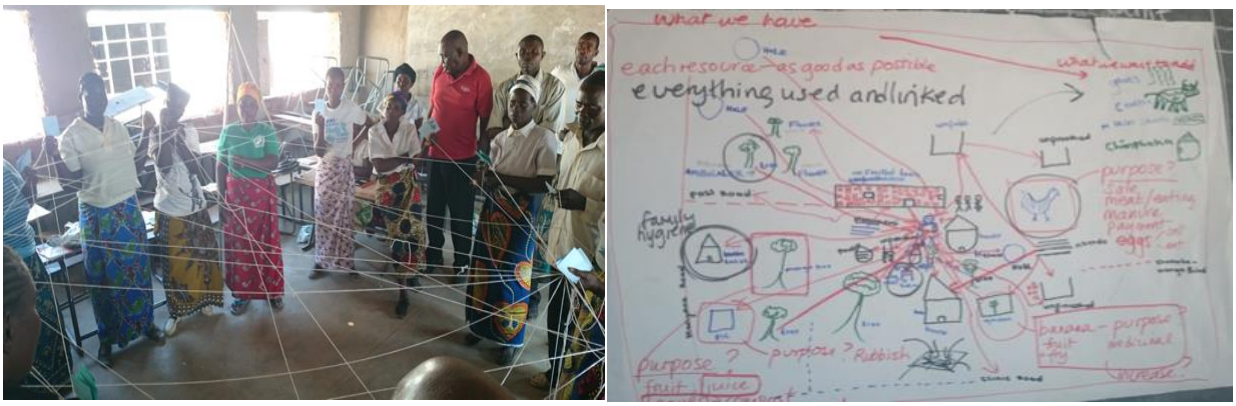

Photo: Beneficiaries undertaking farm resource mapping training.

The project distributed several types of legume and vegetable seeds including sunflower, beans, ground nuts and vegetables in order to diversify crop production and enhance food and nutrition security at household level. At baseline, 92% of project households ate less than six food types per day. After each crop has been established, farmers will share seeds and knowledge with other groups in order to share knowledge and increase diversification.

Photo (left): Bertha Tembo and Aledi Phiri of Kwaza Women Development Club and their sunflower crop. Photo (right): Mr and Mrs Roy Tembo of Mondola Agriculture Club and their crop of groundnuts.

A further 25 groups received additional training and support in poultry infrastructure and management. Improved poultry housing has already reduced the incidence rates of some common infections like Newcastle disease.

Photo (left): Chiwamila Women Group *Photo (right): Livestock Management trainees*

Photo (left): Providing veterinary support services to Ongolwe Women's Development Association

The project provided the Ongolwe Women's Development Association with a central Veterinary Kit comprising assorted equipment and drugs under the supervision of a Government Veterinary Department in collaboration with the 38 trained community livestock Auxiliaries. So far, 91 farmers from different groups have accessed a range of drugs and equipment for livestock management.

Outcome indicator 3

Objectives	Baseline	Benchmark	Evaluation Results
Farming households have increased knowledge and practice to **sustainably manage natural resources as key resources** for improved livelihoods (vegetation, **water, soils** and renewable energy technologies).	Less than 10% knowledge in sustainably manage natural resources as key resources	70HH (70%) have increased knowledge and practice	*The data evaluation analysis report indicated an increase from less than 10% at baseline to 99% at Evaluation.*

Training and practical demonstrations on year round water harvesting, purification and storage for both domestic and livestock use was delivered and shared to 1,089 beneficiary households selected from a range of groups. There was real appetite for this training as the region has experienced significant water fluctuations in recent years, including both drought and damaging heavy rains. Exchange visits to see storage tanks and water harvesting structures were extremely popular and over-subscribed. Farmers responded positively to training and had begun to erect their own water management systems in just a few months (see photos below). There is a real excitement and desire within beneficiary communities to improve resource management and see it developed and used more sustainably. This is driven by a history of massive natural resource degradation in the area, particularly deforestation, in recent years.

Works on Rain harvesting facility (left) for Ongolwe Women Development Association. Photo (right) is Mr Muumba and his family enjoying the rain water harvesting facility for their domestic use and crop production.

The learning visits demonstrated that it was possible to turn the knowledge of water management and harvesting into practice in a short period of time using basic materials. Beneficiaries responded well to being offered useful, practical solutions to pressing problems they and their communities were facing.

Outcome indicator 4

Objectives	Baseline	Benchmark	Evaluation Results
Women will have increased participation in household decision making	46% women participated in decision making at HH	770HH(70%) women will have increased participation in household decision making	The data at evaluation report analysis indicated that 76% of women were actively participating in household decision-making.

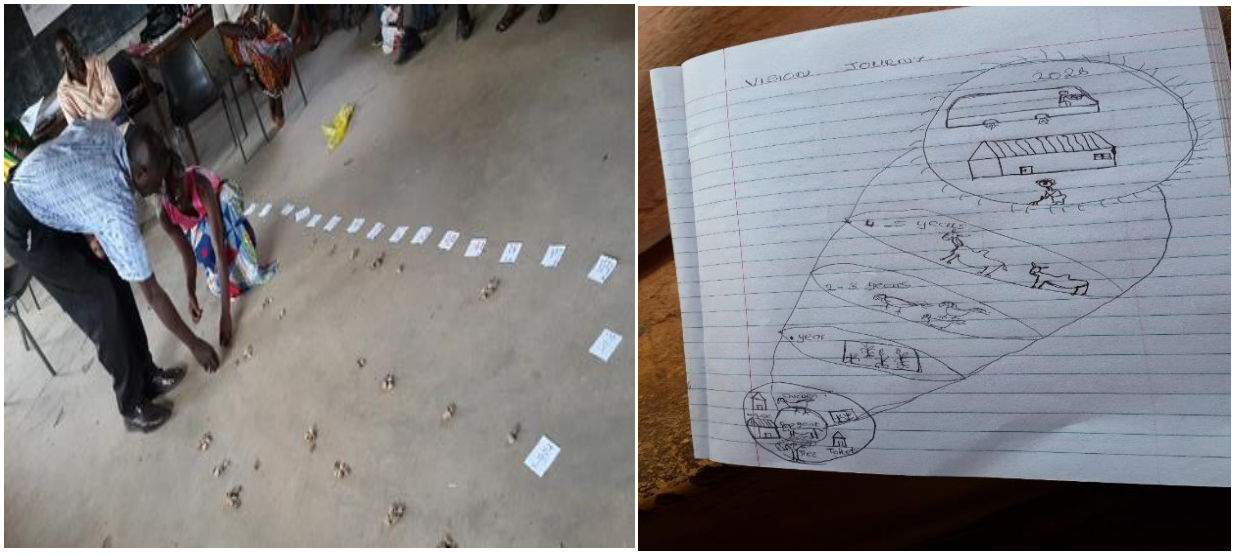

Photo (left): Completing the THM practical exercise. Photo (right): A beneficiary diagram illustrating linkages between farm systems and resources

Send a Cow delivered a proven package of Gender and Social Development training that included poverty and development, Send a Cow's cornerstone values, individual and group envisioning and shared awareness-raising and the Transformative Household Methodology (THM), which encourages participants to identify imbalances in household workloads and how household chores can be more equitably shared. The overall aim of the training was to raise awareness of the challenges women and girls faced in traditional communities and help break the tradition of dependency by promoting equity, job-sharing within families for the collective good and self-reliance. One significant finding from the training and the use of THM was the burden of work placed upon children within families, and the effect this has on their wider growth and development.

We were delighted to see an improvement from 46% to 76% of women participating in household decision-making in just 12 months. Improving gender equality is a core component of the Send a Cow model, and a necessary precondition for future, sustained success within households in terms of boosting nutrition and income.

Expenditure against budget

Activity	Budget	Actual Spend	Variance
1. Capital			
	£ 1,352	£ 141	-£ 1,211
Sub-total	**£ 1,352**	**£ 141**	**-£ 1,211**
2. Training			
Farmer Training: Gender and Social Development	£ 18,625	£ 17,852	-£ 773
Farmer Training: Sustainable Agriculture	£ 12,570	£ 19,758	£ 7,188
Farmer Training: Improved Animal Management	£ 13,627	£ 18,977	£ 5,350
Farmer study tours and exchange visits	£ 1,294	£ 813	-£ 481
Sub-total	**£ 46,116**	**£ 57,400**	**£ 11,284**
3. Agricultural & Livestock			
Improved seeds and planting tools	**£ 1,059**	£ 766	-£ 292
Veterinary kits	**£ 3,388**	£ 823	-£ 2,565
Solar powered egg incubators	**£ 4,706**	£ -	-£ 4,706
Shallow wells	**£ 1,529**	£ -	-£ 1,529
Sub total	**£ 10,682**	**£ 1,590**	**-£ 9,093**
4. Salaries			
Salaries	**£ 5,810**	**£ 8,795**	£ 2,984
Sub-total	**£ 5,810**	**£ 8,795**	**£ 2,984**
5. Administration			
Monitoring, evaluation & lesson learning	**£ 3,739**	**£ 3,739**	£ -
Overheads	**£ 2,300**	**£ 2,300**	£ -
Sub-total	**£ 6,039**	**£ 6,039**	**£ -**
TOTAL	**£ 70,000**	**£ 73,964**	**£ 3,964**

Explanation of significant budget variances

- **Procurement of Veterinary kits**: One central kit was bought, and was replenished regularly. This was done in consultation with the government Veterinary doctor who advised the better control of an expanded central kit, with local requests for specific use, rather than 60 local kits each administered by Community Livestock Auxiliaries. The central Vet Kit is serviced by a qualified government Veterinary Assistant based within the project site, working together with the Ongolwe Women Development Association.
- **Rain Water Harvesting:** This overspend was generated when project supplied additional inputs to those budgeted to improve the design and quality of the final water

harvesting structures. Inputs of cement and mesh wire were supplied, but iron sheets, metal poles, roofing nails and planks were also required.

- **Solar powered Incubators:** The Solar incubators were not readily available on the local market except for those which operated on an AC current and were therefore unsuitable for use in the project area. This cost line was therefore utilised to improve the delivery of another related project component, poultry infrastructure, in order to enhance the production of local village chickens

Contributions from the local community

The local community contributed by providing catering services, cooking and preparing their own food when hosting various training sessions. The practical component of the rain water harvesting training was supported by the provision of resources including river sand, stones, water, bricks and skilled labour from the local community. Embodying the Send a Cow cornerstone value of Passing on the Gift, farmers and their families undergoing Gender and Social Development training held sensitization events to share their learning with the wider community. Demonstration sites were established and run by volunteers to encourage copy farming of learnt techniques and promote greater understanding of farm systems methodology.

Unexpected challenges or successes

Successes. The enthusiasm with which training in **natural resource management**, particularly rain water harvesting, was greeted was a major success. The training, offering practical solutions to real problems faced by beneficiary communities, was adopted amazingly quickly, with communities rallying round to install water harvesting infrastructure before the start of the rainy season. Farmers recognised the value and additional resilience that the water storage facilities offered, particularly after the sporadic and unpredictable rainfall patterns of the past few years, which had caused real hardship. Building the water harvesting infrastructure brought a real sense of unity to communities now united in a common purpose. It also created a real point of reference and physical legacy in the host communities for both the Isle of Man Development Committee as the funder, and Send a Cow as delivery agency, increasing visibility and impact. The knowledge and awareness of the importance of natural resource management left in the community is extremely high, with positive responses from over 99% of survey respondents after one year, up from less than 10% at baseline.

Challenges – **Project duration** was slightly too short to see real change in the beneficiary communities. All training was delivered as planned, but impact will take time to really emerge. The first harvest where farmers can demonstrate their newly learnt skills will not take place until June / July (Zambia has one main rainfall season from November to April) and we expect to see a real uplift in the volume and diversity of crops produced, starting to address the poor nutrition endemic in the region. Other training delivered, for example in gender and social development, requires a change of mindset, and this is a gradual process, grounded in experience, that evolves with time.

The onset of the rainy season in November / December brought **sustained, excessive rains** that damaged planted crops and even damaged and destroyed infrastructure like roads in the remote target communities engaged by this project (see photographs below).

Photo (left): crops damaged by sustained, heavy rainfall. Photo (right): Flooding damaged and destroyed the road infrastructure leading to project communities, causing delays in some aspects of delivery

Conclusion - impact and effectiveness of the project

This has been a significant project. Within a short delivery timeframe of just one year, the knowledge base of the farmer beneficiaries, their families and communities has increased significantly, as demonstrated by the results of the Evaluation survey conducted at project end. There is a clear direction for future project development, focussing in on specific target groups, including the most disadvantaged members of the community, and ensuring that the benefits of the intervention are shared as broadly as possible. Peer Farmer Trainers and government extension workers will provide a valuable ongoing resource, but may need further, refresher training in future. The Hope, Means, Future project has laid a good foundation for developing local enterprise by teaching and promoting the idea of farm systems as businesses in order to not only enhance household nutrition but also generate much needed income. The project is also a window of opportunity for rural youths to transform their livelihoods.

Future developments or applications of project learning

Future development will be to raise awareness and integrate training in Water and Sanitation (WASH) into the project communities, building on the increased knowledge base of natural resource management being exhibited. Rain water harvesting techniques could be further developed to really strengthen year-round supply in the face of drought, providing real resilience to local farmers. Social change needs further advancement, addressing issues still prevalent in the local area like children's rights, particularly through reducing the prevalence of early marriage and child labour. This package of measures will work to further build confidence in the independence of both individuals and communities, promoting resilience and reducing dependency to bring about real, sustainable change and a positive outlook for all.