



Lessons learned from the 'Adding Value to the Arc Project: Forests and Livelihoods in the South Nguru Mountains'



PROJECT IMPACT ON POVERTY REDUCTION AND CLIMATE CHANGE RESILIENCE



Farmers in Kinda Village who received training on conservation agriculture.

Key findings of the Adding Value to the Arc project in the South Nguru Mountains of Tanzania:



32% of participants in income generating activities supported by the project, had moved to a higher wealth rank by the close of the project. This is equivalent to at least 1400 households.



The majority (79%) of participants in the project's livelihood activities were able to diversify their livelihoods as a result of the project's support. Livelihood diversification is considered to be an important pillar in enhancing climate change resilience.



Village Savings and Loans Associations (VSLAs) were the most effective and cost-effective intervention in terms of improving household wealth. VSLAs also strengthen both self-organisation and buffer capacity, two of the three key pillars in climate change resilience.



89% of the farmers trained by the project adopted one or more conservation agriculture technique. Optimal crop spacing, cover-crops and minimum tillage were the three most widely adopted techniques. There remains a need for more research and clearer guidelines on strategies that small-scale farmers can adopt to improve their resilience to climate change.



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Project impact on poverty reduction and climate change resilience

There is widespread poverty in communities living in the South Nguru Mountain landscape. Most households depend on small-scale agriculture for their livelihoods. Their dependence on agriculture, and limited alternative livelihood options, means that these communities are particularly vulnerable to climate change. In order to improve and diversify livelihoods and thereby enhance climate change resilience, the project supported over 4000 people from 173 groups in 30 villages to participate in Village Savings and Loans Associations. The project also supported various forest-based enterprises including Allanblackia nut collection, sustainable charcoal and honey production, and eco-tourism. Important progress in promoting more sustainable

agricultural practices was made, including training an average of 40 farmers per village in 31 villages.

The 'Adding Value to the Arc' Project

The Tanzania Forest Conservation Group in partnership with the Tanzania Forest Services Agency, Mvomero District Council and MJUMITA successfully implemented the project 'Adding Value to the Arc: Forests and Livelihoods in the South Nguru Mountains' between 1 January, 2013 - 31 March 2018. The project was funded by the European Union.

The project aimed to alleviate poverty and improve economic resilience amongst marginalised rural, and natural resource-dependent communities living in Mvomero District. One of the expected results of the project was the development of conserva-

tion-compatible enterprise opportunities at community level, that would be resilient to climate change. In this document, we present key results and lessons learned in the pursuit of this result.

The initiative was implemented in the South Nguru Mountains, a globally important site for biodiversity conservation, due to the presence of many endemic and threatened plant and animal species. Rapidly increasing pressure on the forests and woodlands of the South Nguru Mountains threatens to undermine rural livelihoods and results in biodiversity and habitat loss. Therefore, the project targeted communities who directly benefit from the forests and successfully helped to improve the standard of living of villagers, coupled with the provision of more effective and participatory forest management measures.

Allanblackia Nut Collection

411 people (187 women, 284 men) from 15 villages earned a cumulative income of TZS 42,870,600 from Allanblackia nut collection in 2017. By 2017 the % that were able to purchase corrugated iron roofs for their homes had increased from 29% (prior to AB nut collection) to 85%.



My name is Fatuma Omary Matumbo, Digoma Village. I farm and do beekeeping, which helps me earn money. Since the age of 18, my late father taught me how to keep bees. In 2009 I had two traditional hives and was able to harvest 3 litres of honey per hive, which is the same as 4.5kg of honey per year per hive. In 2014, I was lucky to be given training using modern hives; and I managed to get 1 hive which improved my honey harvest from 6 litres to 26 litres, which equals 39kg, an additional 20 litres per year. I continued to add more modern hives and now own 19 and harvest 500 kg of honey every year. My quality of life has improved a lot to the extent that I managed to build a modern house and I now own 10 acres of land used for farming rice, maize and soya beans.



"Most of the villagers who joined the project, especially the Village Savings and Loans Associations and conservation agriculture have managed to change the appearance of their houses. I previously owned a pole and mud thatched house but now I own a burnt-brick house, with an iron sheet roof."

- Mama Masawe, Kanga Village



Reducing poverty and enhancing climate change resilience in the South Nguru Mountains

At the start of the project, agriculture was the main livelihood activity for 91% of households in the South Nguru landscape. In order to increase resilience to climate change, the project sought to diversify livelihoods, strengthen social and economic safety nets, improve education, increase overall wealth and improve people's understanding of climate change risks and adaptation measures. The project began by consulting with communities on their priorities in terms of livelihood support. Access to capital and markets; livestock; and improved agricultural skills, were amongst the priorities that were identified. In many cases, communities requested the project to provide inputs directly, such as providing improved poultry and other livestock. The project also identified 54 existing Village Savings and Loans Associations (VSLAs).

Comparing the communities' priorities with the resources available to the project, the project decided to focus on improving access to micro-finance by expanding access to VSLAs, and improving agricultural skills including crop production, agroforestry and poultry (in 2017). The project also supported forest-based enterprises including Allanblackia nut collection, beekeeping and eco-tourism, whilst sustainable charcoal and timber production were added in 5 villages in the final year of the project, once the Village Land Forest Reserves had been established. The project provided training and other support on livelihood activities to women and men in 40 villages. Most villages benefited from capacity building in 2 - 3 enterprises. Local media communicated information about the project's livelihood support activities with a view to promoting more widespread adoption.

Number of individuals and villages benefiting from the project's livelihood support activities

Activity	Women	Men	Total	Number of villages
VSLAs	2,399	1,583	3,982	30
Beekeeping	48	79	127	4
Allanblackia	187	284	411	15
Conservation Agriculture	673	719	1392	31
Poultry	207	205	412	14
Sustainable Charcoal			90	3

The most widely adopted livelihood interventions were the VSLAs and conservation agriculture. For sustainability, the project trained community-based trainers to provide continued support on VSLAs and conservation agriculture beyond the project lifespan. For each of the livelihood groups, the project provided training on basic business skills including marketing and financial planning. The VSLAs were also supported to register and open bank accounts.

The project measured the impact of the livelihood activities using a simple comparative wealth ranking tool. The results of this study showed that 32 % of participants in income generating activities supported by the project, moved to a higher wealth rank after participating in activities. When extrapolated across all those who participated in the project's livelihood activities, this is equivalent to 1,399 households. The largest shift was from the lowest wealth category to the middle wealth category. Categories were based on housing materials, and ownership of land, livestock and other assets.

Wealth status before and after the project

	Movemnet	Sample Size: 364		Total Beneficiaries: 4317	
		Number of Households			
Moved to a higher rank	Bottom to Mid	89	118	1056	1399
	Bottom to Top	21		249	
	Mid to Top	8		95	
Moved to a lower rank	Mid to Bottom	3	6	36	71
	Top to Mid	1		12	
	Top to Bottom'	2		24	
Remained the same	Remained at the Bottom	135	240	1601	2846
	Remained at Mid	94		1115	
	Remained at the Top	11		130	
		364		4317	

In terms of livelihood diversification, the project successfully introduced two new enterprises to the landscape: sustainable charcoal production and Allanblackia nut collection. 79% of respondents in the wealth ranking assessment stated that the project had supported them to earn an income from an enterprise that they were not previously involved with. Many VSLA members used loans to start new enterprises such as kiosks, and small restaurants. However, overall communities remain dependent on agriculture, with the project's endline household survey finding that agriculture was the primary economic activity for 98% of respondents.

Lessons learned

Overall it is clear that the project's income generating activities have benefited participants with 91% of those interviewed stating that the project has improved their livelihoods.

In designing interventions to enhance climate change resilience, the project adopted an approach designed to enhance households' buffer capacity, self-organisation and capacity for learning². The project's interventions achieved positive results in all three areas. However, more research is needed to understand the degree to which these different attributes translate into increased climate change resilience particularly given the interplay of factors at a local level.

Comparing the cost of implementation with the impact on participants' livelihoods, the project's support to Village Savings Loans Associations proved to be the most cost-effective.

The project conducted various awareness raising events on climate change. Despite these events, the percentage of people who said that they understood the term climate change remained at about 1/3 between 2014 and 2017. In general levels of education remain low with more than 80 % of respondents in 2014 and 2017 stating that they left formal education at primary school. Improving education is critical for improving livelihoods and climate change resilience. Low levels of formal education are a significant barrier to adopting strategies to enhance climate change resilience and improve livelihoods.



Recommendations

The project has laid a firm foundation for new forest-based enterprises in the South Nguru landscape including eco-tourism, Allanblackia nut collection, sustainable charcoal and sustainable timber. Stronger links with the private sector and more technical support are still needed to amplify the benefits of these enterprises, both in terms of the numbers of people benefiting and their impact on household wealth.

Practical guidelines on how to enhance communities' resilience to climate change are needed, including information on best practices for small-scale farmers.

¹ 2 households had Teak or grevillea plantations of more than 0.5 acres before the activity but not after the activity. Hence, they moved out of the top rank. All other assets placed them in the bottom rank after the activity.

² <http://dx.doi.org/10.1016/j.gloenvcha.2014.06.005>

ABOUT THE PROJECT PARTNERS

The Tanzania Forest Conservation Group (TFCG) is a Tanzanian Non-Governmental Organisation. TFCG's mission is to conserve and restore the biodiversity of globally important forests in Tanzania for the benefit of the present and future generations. tfcg@tfcg.or.tz www.tfcg.org

The Tanzania Community Forest Conservation Network (MJUMITA) is a national network of community groups which enables forest adjacent communities to engage more actively in participatory forest management. mjumita@mjumita.org www.mjumita.org

Tanzania Forest Service (TFS) is a national agency which has been given a mandate to manage national forest reserves and plantations on general lands. mpingo@tfs.go.tz www.tfs.go.tz

Mvomero District Council (MVDC) is one of the six districts of Morogoro Region. dedmvomero@yahoo.com

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