GCCA+
THE GLOBAL CLIMATE CHANGE ALLIANCE PLUS INITIATIVE

Funded by the European Union

TANZANIA

13 CLIMATE ACTION

GCCA TANZANIA

ECO-VILLAGES IN TANZANIA: A MODEL FOR CLIMATE CHANGE ADAPTATION

2018 HIGHLIGHTS

ABOUT GCCA TANZANIA AND GCCA+

ECO-VILLAGES IN TANZANIA: A MODEL FOR CLIMATE CHANGE ADAPTATION

Welcome to the second GCCA Tanzania highlights report for 2018. Since the first report was written in 2017 there have been project improvements made in terms of promoting pro-poor approaches, by exempting poor households from payments for water, to ensure access to water. By-laws are beginning to be enforced to protect natural water sources from contamination for example, and policy briefs are being developed to advocate for a better policy environment concerning climate change adaptation activities. Climate change adaptation interventions are being mainstreamed into local district budgets and plans to ensure a sustainable future for all. 2018 also saw a GCCA Tanzania project manager reaching the finals of the BBC Outlook Inspirations Awards for outstanding work in the face of resilience. Overall, 2018 has witnessed communities draw on innovative approaches to strengthen their resilience in the face of extreme weather conditions and battle on. It's with these people in mind, the water-committees, the bee-keepers, the tree-planters, the leather-tanners, the women's groups to name a few, that GCCA Tanzania dedicates this report.

The Global Climate Change Alliance (GCCA+) globally

The Global Climate Change Alliance was established by the European Union (EU) in 2007 to strengthen dialogue and cooperation with developing countries, in particular the least developed countries (LDCs) and small island developing States (SIDS). It started its work in just four pilot countries. Today it has a budget of more than €300 million and is one of the most significant climate initiatives in the world. It supports 51 programmes around the world and is active in 38 countries, 8 regions and sub-regions and at the global level.

In 2014, a new phase of the GCCA, the GCCA+ flagship initiative began. The GCCA+ focuses its technical support on three priority areas:

- Climate change mainstreaming and poverty reduction
- Increasing resilience to climate-related stresses and shocks
- Sector-based climate change adaptation and mitigation strategies

GCCA Tanzania

The overall objective for GCCA Tanzania is to strengthen the resilience of vulnerable Tanzanian rural communities to the adverse effects of climate change and contribute to poverty reduction. The GCCA Tanzania programme started with a first phase from 2011 to 2013. Under the second phase from 2015 to 2019, five projects are supported that use the eco-village approach to increase the climate change resilience of the target communities. The support comprises project funding, as well as dedicated technical assistance (TA) to strengthen Monitoring & Evaluation (M&E) and Visibility & Communication (V&C) activities.

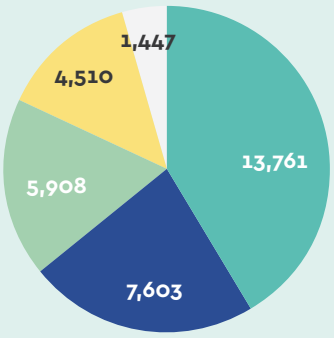
The eco-village concept aims to regenerate social and natural environments in villages around the world. While there is no one way of being an eco-village, there are three core practices at the heart of the eco-village approach:

- Being rooted in local participatory processes
- Integrating social, cultural, economic and ecological dimensions in a whole systems approach to sustainability
- Actively restoring and regenerating social and natural environments

GCCA TANZANIA 2018 RESULTS AT A GLANCE

33,229 households reached, distributed as follows

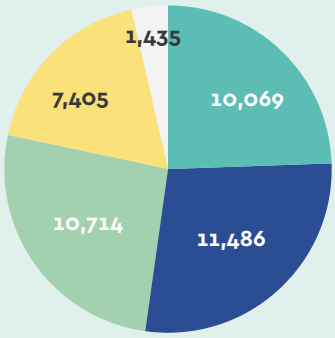
2017



- AGRICULTURE
- OTHER*
- ENERGY
- FORESTS / NRM
- WATER

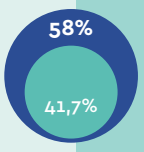
41,109 households reached, distributed as follows

2018



- AGRICULTURE
- OTHER*
- ENERGY
- FORESTS / NRM
- WATER

(*Other includes training on climate change adaptation and support to savings and loans groups)

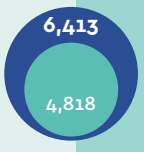


% of women beneficiaries increased from 41,7% to 58%

Area brought under sustainable management: increased from 1,505 ha to 25,520 ha:

- **1,407 ha of forests**
- **24,111 ha of pastoral land**

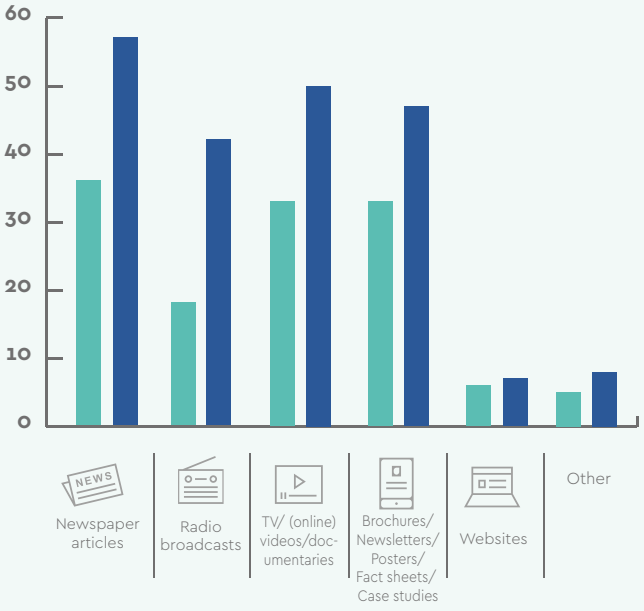
Trees planted around houses and schools and on degraded land increased from 454,349 to 953,943



Fuel Efficient Cook Stoves constructed from local materials by local artisans increased from 4,818 to 6,413

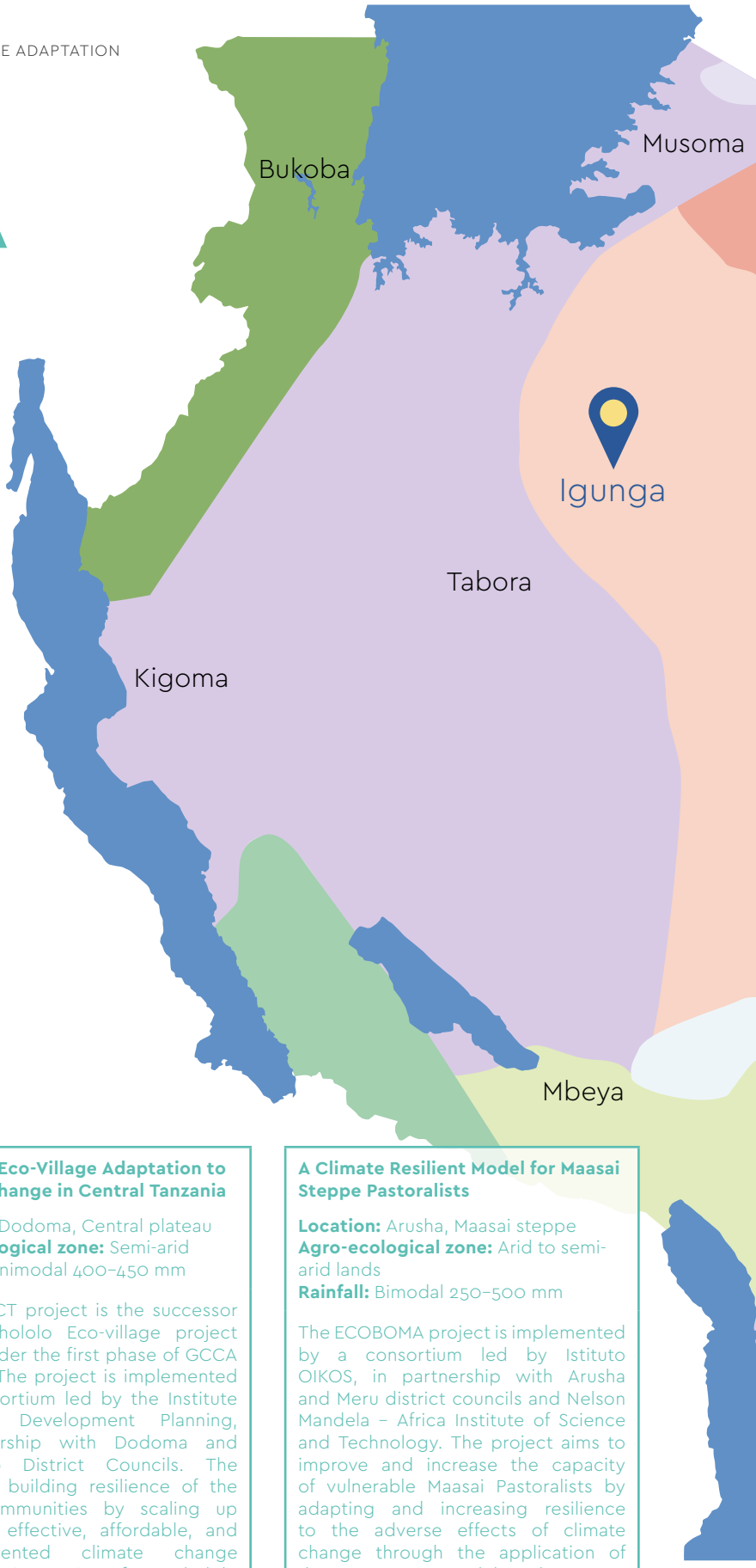
Local government staff engaged in project activities and capacity building increased from 279 to 376

Visibility and communications products show a notable growth in 2018



- TOTALS BY END 2017
- TOTALS BY END 2018

THE GCCA TANZANIA PROJECTS



GENERAL CHARACTERISTICS

- located in different agro-ecological zones
- climate change adaptation activities in four main sectors: agriculture, water, forests and energy
- working closely together with village and district government authorities
- explicit attention for knowledge sharing and communication activities

CF PEMBA – Scalable Resilience: Outspreading Islands of Adaptation project

Location: Wete, Pemba Island
Agro-ecological zone: Coastal
Rainfall: Bimodal 700–1200 mm

The project is implemented by Community Forests Pemba in partnership with Community Forests International and the Wete District Authority. The project builds on the achievements of the precursor project "Resilient Landscapes for Resilient Communities in Pemba", which was funded under the first phase of GCCA Tanzania. The project supports 26 rural communities on Pemba island and surrounding islets to build a green economy while adapting to climate change. Activities include tree planting, agroforestry, renewable energy generation, rainwater harvesting and permaculture kitchen gardens.

EcoACT – Eco-Village Adaptation to Climate Change in Central Tanzania

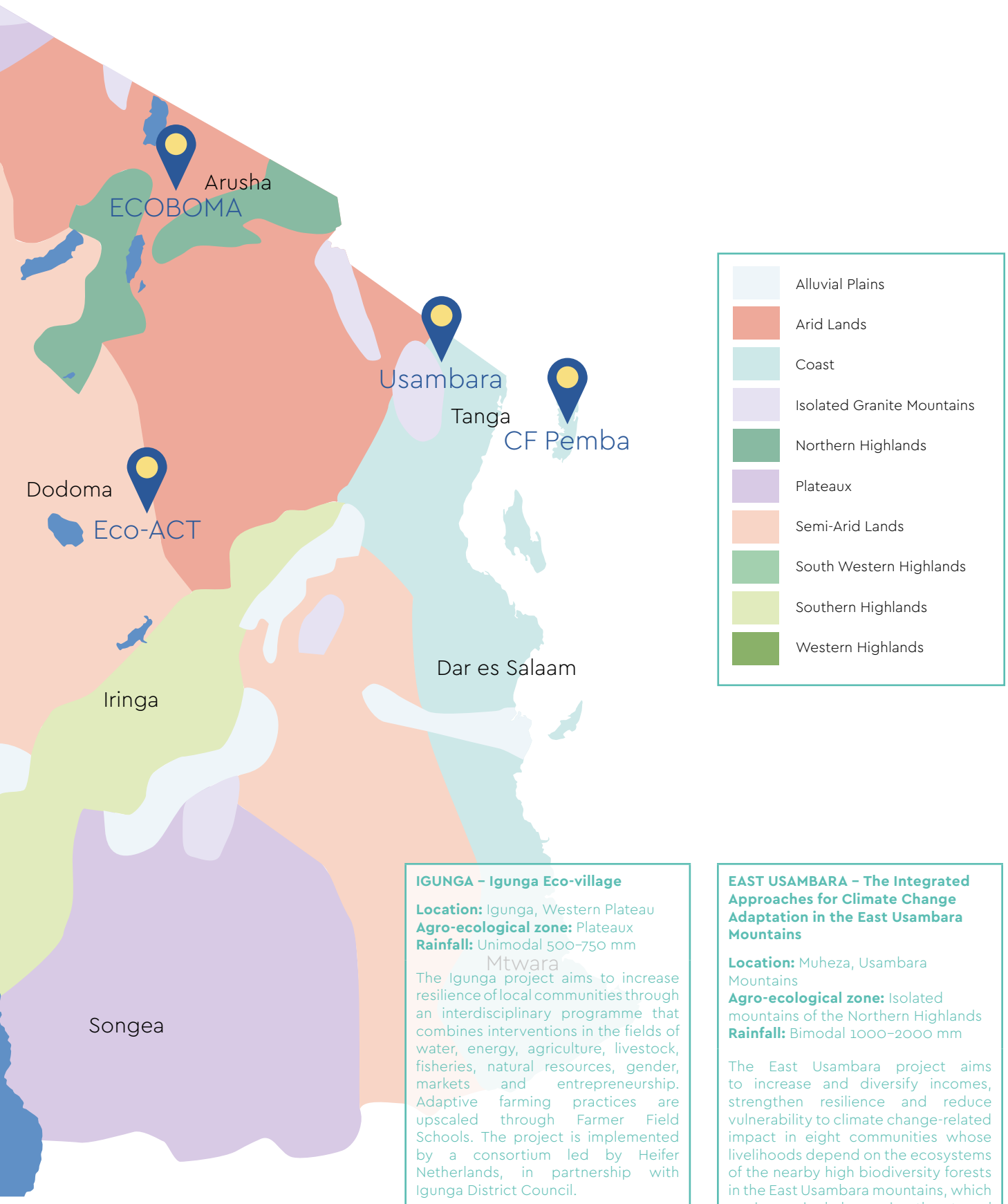
Location: Dodoma, Central plateau
Agro-ecological zone: Semi-arid
Rainfall: Unimodal 400–450 mm

The EcoACT project is the successor to the Chololo Eco-village project funded under the first phase of GCCA Tanzania. The project is implemented by a consortium led by the Institute of Rural Development Planning, in partnership with Dodoma and Chamwino District Councils. The project is building resilience of the target communities by scaling up the most effective, affordable, and gender-oriented climate change adaptation innovations from Chololo Ecovillage in water, agriculture, energy and forestry.

A Climate Resilient Model for Maasai Steppe Pastoralists

Location: Arusha, Maasai steppe
Agro-ecological zone: Arid to semi-arid lands
Rainfall: Bimodal 250–500 mm

The ECOBOMA project is implemented by a consortium led by Istituto OIKOS, in partnership with Arusha and Meru district councils and Nelson Mandela – Africa Institute of Science and Technology. The project aims to improve and increase the capacity of vulnerable Maasai Pastoralists by adapting and increasing resilience to the adverse effects of climate change through the application of the ECOBOMA model: a low cost, culturally acceptable, replicable model of holistic solutions to vulnerable pastoral systems.



IGUNGA – Igunga Eco-village

Location: Igunga, Western Plateau
Agro-ecological zone: Plateaux
Rainfall: Unimodal 500–750 mm

The Igunga project aims to increase resilience of local communities through an interdisciplinary programme that combines interventions in the fields of water, energy, agriculture, livestock, fisheries, natural resources, gender, markets and entrepreneurship. Adaptive farming practices are upscaled through Farmer Field Schools. The project is implemented by a consortium led by Heifer Netherlands, in partnership with Igunga District Council.

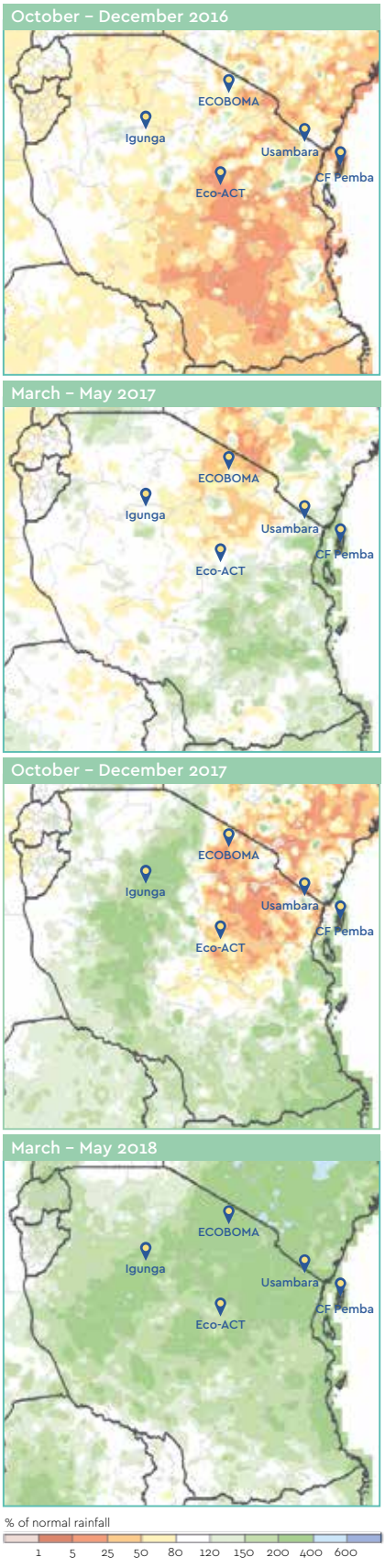
EAST USAMBARA – The Integrated Approaches for Climate Change Adaptation in the East Usambara Mountains

Location: Muheza, Usambara Mountains
Agro-ecological zone: Isolated mountains of the Northern Highlands
Rainfall: Bimodal 1000–2000 mm

The East Usambara project aims to increase and diversify incomes, strengthen resilience and reduce vulnerability to climate change-related impact in eight communities whose livelihoods depend on the ecosystems of the nearby high biodiversity forests in the East Usambara mountains, which are increasingly becoming threatened due to climate change. The project is implemented by a consortium led by Spanish NGO ONGAWA, in partnership with Muheza District Council.

FROM DROUGHT TO HEAVY RAINFALL

Comparison rainfall anomalies Tanzania rainy season 2016–2017 and 2017–2018



In most project areas, the rainfall during the 2017/2018 season (from October 2017 to around June 2018) was average to above average. As the maps on the left show, rainfall was in fact considerably higher than average in all project areas in the main March to May rainfall months (bottom right map). Rainfall also continued longer in most areas than normal.

Although the overall rainfall situation was good, problems were reported in several project areas because of a prolonged drought period within the main rainy season and, conversely, because of very heavy rainfall events that led to soil erosion, damaged crops and crop contours, unpassable roads, and damage to some infrastructure works. Both these drought periods and very heavy rainfall events can be seen as a manifestation of climate change and are likely to occur more and more frequently in future.

In spite of these challenges, the overall good rains have led to good yields for almost all farmers in the project areas, as well as improved grass and water availability for pastoralists. This is a much more positive picture than after the 2016/2017 season when below average rainfall in all project areas except East Usambara and Pemba led to reduced harvests and lack of pastures and water for livestock.

One side effect of the difference between the 2016/2017 and 2017/2018 rainy seasons is the fact that it has been difficult to assess the impact of drought tolerant seeds and improved agricultural practices as promoted by the projects. Since most of these interventions are meant to increase resilience against droughts, they have little to no effect on yields in years with good rainfall. In fact, they may have a slightly negative effect: drought tolerant seeds may produce less than normal seeds in years with good rainfall, and water conservation measures like contour ridges may lead to crop rot if soils are fully saturated for a long period.

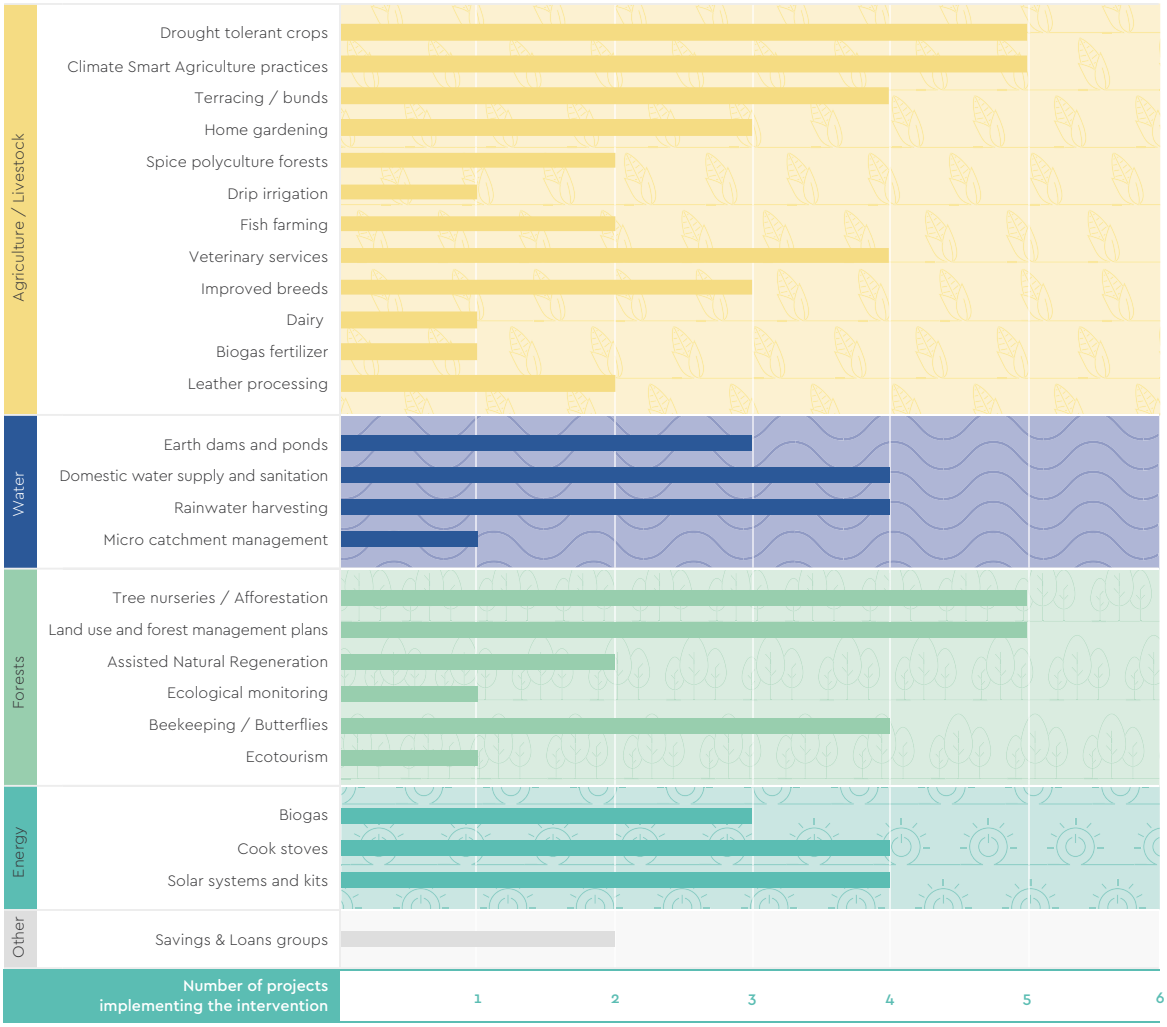
(Map source: Climate Prediction Centre – NOAA; Arc2 satellite rain estimates)

SUMMARY OF RAINFALL SITUATION IN PROJECT AREAS 2017-2018 AND IMPACT ON AGRICULTURAL AND PROJECT ACTIVITIES

PROJECT	AGRO-ECOLOGICAL ZONE	SUMMARY OF THE RAINFALL SITUATION FROM OCTOBER 2017 TO DECEMBER 2018	MAIN IMPACT ON AGRICULTURAL PRODUCTION AND ON PROJECT ACTIVITIES
Eco-Act	**Arid / semi-arid / plateau**	The amount of rainfall received during 2017/2018 cropping season was above average (550 mm) with 948 mm in Kikombo ward and 664 mm in Idifu. Much higher than the average rainfall of 400 mm in 2016/2017 season.	Excessive rains in January across project sites resulted in poor germination of seeds and hence poor crop establishment. It also led to strong soil erosion and washing away of crops and of contours made by the farmers. To take advantages of rains in March and April, farmers across action sites re-planted drought tolerant crops (Pearl millet and cassava) and re-planted additional crops like cassava, sweet potatoes and cowpeas. All in all, the good rains resulted in good harvests for almost every farmer. However this resulted in low prices for the crop produce. A 20 litre tin of sorghum and millet was sold at TZS 3,000/= instead of TZS 10,000/= in previous years.
Eco Boma	**Arid / semi-arid / plateau**	In 2018 the long rains were average, with a cumulative rainfall of 294 mm by August. This was much better than the 166 mm in the 2016/2017 season.	Grass and water availability returned to normal levels, allowing pastoralists to remain in the project area longer than the previous year, when drought conditions forced them to go in search for pastures elsewhere for long periods. This allowed the project to make good progress on project activities, which had been delayed in 2017 due to the long absence of many beneficiaries. Some extreme rainfall events led to floods and to damages to one water infrastructure in one of the villages.
East Usambara	**Highland**	Rainfall was above average in 2018, with total rainfall around 1,900 mm, which is near the top of the maximum range for the area. This amount is similar to the 2017 rainfall.	The above average rainfall during the long rainy season from March to June negatively affected some crops promoted by the project, in particular beans, maize and black pepper. Crops planted during the short rainy season from November to January performed better. Heavy rainfall also required some maintenance work to be undertaken on already completed water infrastructure.
Igunga eco-village	**Plateau**	Overall rainfall in Igunga was about average with 655.7 mm, given the range for the area is between 500 and 750 mm. The rainfall distribution was however not average, with heavy rains in December 2017 and January 2018 followed by severe drought in February 2018.	Farmers who planted late were hit by the drought and most of the crops (maize, green gram and cotton) were attacked by army worms that invaded the area. This resulted in poor yield of crops across the project area and beyond. Poor yield of crops have negative effects in some ways to the project and beneficiaries. Farmers rely on income from the crops to invest in other technologies, such as biogas, fuel efficient stoves and brooders. Low income limits farmers' ability to invest in the technologies. Passing on chickens was also affected, because affected farmers (low crop harvest) had to sell chickens to buy food for their families.
CF Pemba	**Coastal**	As in the 2016/2017 season, the rains in the 2017/2018 season were above average, both during the short rainy season and the long rainy season.	The good rains have led to good yields overall by project beneficiaries.

MAIN INTERVENTIONS PROMOTED BY THE GCCA TANZANIA PROJECTS

MAIN PROJECT INTERVENTIONS AND NUMBER OF PROJECTS PROMOTING THEM



Women and men in the East Usambara project make decisions together to borrow loans from Village Savings and Loans Groups to create micro-enterprises.

PROGRESS ON RESULTS

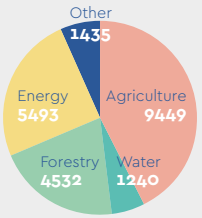
All projects have made good progress in 2018. The focus of the work has shifted from introducing new interventions to consolidating the results so far achieved and promoting replication of these interventions amongst non-beneficiaries.

Consolidation was primarily done by weaning beneficiaries off direct input or financial support (free or subsidised agricultural inputs, free tree seedlings, free or subsidised fuel efficient stoves and solar equipment etc.) and instead focusing on capacity building and advisory support. Most projects have in fact stopped altogether with the provision of free or subsidised inputs. It means for example that farmers now have to buy seeds themselves and households have to pay for cook stoves. Payment systems for communal services like water supplies are also being introduced. With few freebies left for beneficiaries, the level in which beneficiaries continue to adopt the new interventions will now become a good indicator of the relevance of the intervention in the perception of the beneficiary and therefore of the long term sustainability prospects of each intervention.

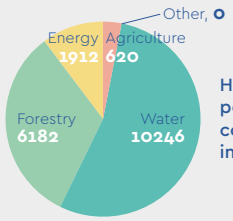
Capacity building for beneficiaries has in particular focused on village committees like COWSOs and NRM committees, but also on developing business skills of local artisans who produce and repair latrines, cook stoves and water supply systems and farmers who grow cash crops. This is a shift from the more technical training on the introduced interventions during the first years of implementation.

Beneficiaries

The number of beneficiaries has not increased substantially from 2017 to 2018, confirming the trend towards consolidation of results rather than starting up new interventions. Beneficiaries of community interventions are mostly in the water (e.g. community water supply schemes) and forest (e.g. forest and pastoral land management) sectors. Beneficiaries of household level interventions are primarily found in the agricultural sector (mostly climate smart agriculture interventions) and to a lesser extent the forestry sector (fuel efficient cook stoves).



HH beneficiaries per sector for HH level interventions



HH beneficiaries per sector for community level interventions

Agriculture/Livestock

All projects have continued to promote Climate Smart Agriculture practices, albeit only at small scale in the ECOBOMA project given its target group is mainly pastoralists. The practices promoted include, inter alia, terracing, mulching, composting, use of bio-fertiliser, construction of bunds for rice growing, minimum tillage, use of drought tolerant seeds, intercropping and agroforestry. Examples of other main interventions promoted by the projects:

- The Igunga project distributed improved chicken breeds to 1,500 households, with simple brooder technology helping to reduce chick's mortality rate from 70% to 30% according to the farmers. Out of 68 farmers visited by project staff, 57% were reported to have chicken ranging from 50 to 300.
- In the EcoACT project a total of 3,830 farmers across two wards had access to improved seeds (sorghum, sunflower) that were locally produced and certified by TOCSI (Quality Declared Seeds). A total of 48 seed producers were certified in 2018, up from 34 in 2017. National policies that require households to plant drought tolerant crops in part of their plots is likely to ensure good long term demand for these seeds.
- ECOBOMA trained Veterinary Service Providers in four wards. This activity was a game changer among target pastoralists who until now did not have access to any livestock veterinary service but depended on informal advice from drug salesmen on livestock market days.
- East Usambara started with dairy farming in 2018 and this was picked up quickly by beneficiaries. 80 out of 160 people trained joined an existing dairy cooperative, which supplies Tanga Fresh factory with milk.
- CF Pemba has reached a total of around 21,000 farmers for agricultural interventions including agroforestry, kitchen gardens, beekeeping and spice forest polyculture. That is almost double the initial target of 10,400 farmers.

The projects have maintained a good balance between male and female beneficiaries.

Projects have also made sure that women do not only benefit from more social interventions (like water supplies), but also from income generating activities.

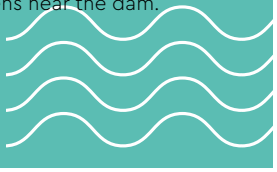
This was done through awareness raising, training and some specific activities like:

- Development of gender responsive business curricula.
- Focusing on increasing income opportunities in areas that are traditionally the domain of women, such as the introduction of improved chicken breeds.
- Explicitly targeting women for activities such as leather processing.

Water

Water interventions have focused on improving both domestic water supply and water for livestock and agriculture. The main technologies promoted are rainwater harvesting, gravity water schemes, dam rehabilitation and maintenance, solar borehole pumps, small ponds and shallow wells with rope pumps.

- Dam rehabilitation and construction in ECOBOMA has increased water storage capacity with 47,000 m3, up from 41,150 m3 in 2017. The total volume of water managed by the newly established dam committees is 47,000 m3. This translates into at least 1,250 families benefiting from a reliable water source for livestock in their areas.
- East Usambara has so far constructed 37 fully functional domestic water supply points serving around 1,370 HHs. This represents a coverage of 47% population in the target communities. Three villages have already introduced monthly payments ranging from TZS 1,000 to 3,000, with the poor and the elderly being exempted from such payments.
- In Igunga, 4 new shallow wells were built in 2018 (in total 7 functioning wells have now been constructed, serving around 2,000 HHs). Local artisans were contracted to construct 9 rainwater harvesting tanks for individual households (total now 19 tanks). Three more village ponds were constructed for irrigation and livestock (total now 5 ponds).
- Through construction of community rainwater harvesting systems and construction of community taps, CF Pemba has improved access to domestic water for 356 HHs and to water for agriculture for another 241 HHs.
- EcoACT has rehabilitated an earth fill dam, leading to an increase of water availability for livestock of around 31,000 m3. As an unexpected side effect, villagers are using the newly available water to start small horticultural gardens near the dam.



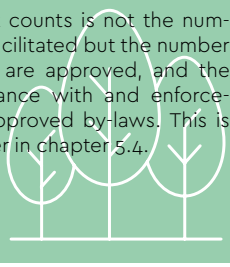
Forests / NRM

All projects have continued to provide support to tree nurseries and transplanting trees to either community lands or individual household plots. A total of 953,943 tree seedlings have now been transplanted, more than double of what was achieved at the end of 2017. Importantly, survival rates are good (72%, up from 65% in 2017). Projects measure survival rates in different ways, but all ensure that they take enough samples to ensure reliable estimates. The success of tree planting is also helped by supportive national policies that require all households to plant at least 10 trees per year.

All projects have also continued with development of by-laws focusing on protection of natural resources. Although the increase in reported by-laws from 2017 to 2019 is very modest (from 46 to 49), the actual increase is more substantial since it was decided during the internal event in September to count "sets of by-laws" as integrated in e.g. a forest management plan as one by-law, rather than each and every individual by-law mentioned in such a plan (this explains why CF Pemba reported less by-laws by end of 2018 than by end of 2017). Examples of issues covered by by-laws include:

- dam management and community forest management (ECOBOMA)
- control grazing near transplanted tree areas, ensuring passing on of handed out items in line with Passing on the Gift principles, requirement to have a latrine and using trained artisans to construct them (Igunga)
- Protection of water infrastructure against non-planned modifications and allowing access to protected forests for poor HHs during times of drought (East Usambara).
- Protection of Investment land against farming, settlements, fire and destruction of infrastructures (Eco ACT).

Ultimately, what counts is not the number of by-laws facilitated but the number of by-laws that are approved, and the level of compliance with and enforcement of such approved by-laws. This is discussed further in chapter 5.4.

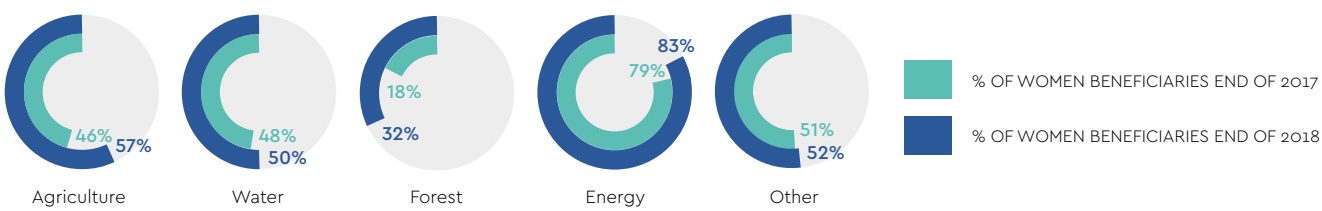


Energy

In the energy sector, all projects except ECOBOMA have continued to focus on the promotion of cook stoves. A total of 6,413 stoves have now been installed across these 4 projects. CF Pemba concluded that the portable cook stove they initially promoted is prone to breaking and has now switched to training community groups on producing fixed cook stoves, as all projects. Other energy outputs:

- ECOBOMA had by the end of 2018 constructed a total of 20 biogas installations, with 6 fully functional and 14 in feeding stage.
- Igunga installed a total of 58 biogas digesters across its 10 target villages, of which 18 are demonstration sites and 40 are paid with a small contribution from the household themselves. The owners also followed a two-day training about proper usage of the digester such as the application of bio slurry on their fields as fertilizer to increase crop production.
- CF Pemba has installed 1 community-wide renewable energy stations, and 3 more renewable energy stations in conjunction with the community-level rainwater harvesting systems.
- East Usambara has concentrated all its energy sector work on fuel efficient stoves and appears to have developed a model that is well suited to the area. It has now covered 71% of the population in the target villages, up from 60% in 2017.
- EcoACT has rehabilitated one community water supply system with a solar borehole pump. This has created interest at national level to adopt solar pumps more widely for boreholes, especially in off-grid areas where diesel generators were so far used.

Trend in % women beneficiaries in HH level interventions



MOVING TOWARDS REAL IMPACT

Interventions and technologies introduced by the projects are being adopted and used by the beneficiaries. This can be seen in the promotion of drought tolerant seeds (and Quality Declared Seeds in particular), cultivation of spices, introduction of improved chicken and livestock breeds, optimising rangeland management, tree planting and Savings & Loans groups. Beneficiaries also make effective use of water that is now available through rehabilitated or constructed earth dams and ponds for livestock and horticulture.

There are already some encouraging examples of by-laws being enforced. A major challenge however is the limited capacity at LGA level to help ensure effective follow-up and promote (or enforce) compliance.

- In Igunga it has been reported that farmers are penalized for letting their cattle graze close to transplanted trees, which is prohibited under new village by-laws. Village leaders are also closely monitoring compliance with Passing on the Gift and following a pay-back system as indicated in the bylaws.
- ECOBOMA reports law enforcement related to environmental protection by the Village Game Scouts trained by the project, which translate into confiscated charcoal bags, fines for illegal tree cuttings and poaching. Law enforcement shows a very good collaboration between the VGS and the District Game Officers who assist the VGS in the more complex and serious cases.
- In East Usambara, at least 8 cases of illegal human activities polluting the surroundings of water sources have been addressed and have now ceased.
- In Idifu village, Chamwino district in the EcoACT project a community member was fined 50,000/= (EURO 20) for destroying a by-law poster (and was also required to replace the poster) in land allocated for village forest.

Preparing for project closure

With all projects set to close in 2019, they have started developing and implementing an exit strategy in 2018 to promote sustainability and continued support for the project interventions.

Common elements of the exit strategies applied by all or most of the projects include:

- Handing-over of project activities to other actors such as LGAs (village / ward / district level), Community Water Supply Organisations (COWSOs), NRM committees and, in some cases, the private sector.
- Building the capacity of community people strongly involved in the activities like Community Based Trainers, local artisans and rangeland monitors.
- Intensifying the collaboration with relevant government stakeholders, in particular district level government, water authorities, etc.
- Development and approval of by-laws to maintain and protect project interventions, in particular as they relate to sustainable use of natural resources.
- Linking income-generating groups to financial institutions like micro-credit organisations.

Livelihoods diversification is delivering alternative income

- Improved livestock and chicken breeds in EcoACT and Igunga have fetched much better prices on the markets than the traditional breeds.
  - » In Igunga, improved breed pullets range between TZS 11,000/= and 13,000/= as compared to TZS 8,000 to 10,000 for indigenous chicken. Simple brooder technology introduced in Igunga has also helped to generate income from selling chicks from the improved chicken breeds.
  - » EcoACT: improved chicken are sold at TZS 12,000 – 15,000/= while local chickens are sold at 6,000/= – 8,000/= . Improved goats at the age of 12 months are sold at a price of 60,000/= while local goats at the age of 24 months are sold at 40,000/= .
- Savings & Loans groups in East Usambara and Igunga have allowed members to develop income generating activities that help them diversify away from a too strong dependency on rainfed agriculture. E.g. 200 S&L group members in Igunga earned an average TZS 16,000/month, while in East Usambara a total of 548 loans with a value of TZS 60 million have already been issued.
- In CF Pemba and East Usambara the successful promotion of growing various spices through agroforestry and spices polyculture has provided an additional income to the farmers. Spices are perennial crops that are generally more resilient to droughts than annual rainfed crops. Different spices can also be harvested in different times of the year, allowing for income spread throughout the year. By eliminating the middle men from the value chain farmers in Pemba, 1 kg of vanilla has increased from around TZS 400,000 to TZS 900,000.
- Leather processing in EcoACT and ECOBOMA is providing income that is mostly benefiting youth and women. The leather tannery supported by the ECOBOMA project produced and sold leather for 26 million TZS, with all income shared among the 13 women that are part of the Enyuata group.
- Beekeeping in EcoACT and Pemba is providing an additional income while also promoting protection of the forest resources on which the bees depend for the production of honey.

VISIBILITY AND COMMUNICA-TIONS

▶ https://www.youtube.com/watch?v=9wZaaQ6Okmo

▶ https://www.bbc.co.uk/programmes/p066pr27

In 2018 GCCA Tanzania produced products and activities at overall GCCA Tanzania level. GCCA Tanzania multimedia content was regularly updated on GCCA+ channels including the GCCA+ website, Cap4Dev, and EuropeAid Facebook and Twitter feeds. The box below presents some of the most successful activities and products that were produced with direct support from the V&C expert.

Some of the successful Knowledge Management products and activities produced by GCCA Tanzania in 2018 include:

- Factsheets of each project that provide a quick and accessible overview of the projects' objectives, geographical scope and main activities and successes.
- Annual GCCA Tanzania 2017 highlights report, summarising the combined results achieved by all 5 projects that form the GCCA Tanzania programme.
- The GCCA Tanzania internal learning event, with participation of all projects and selected district staff, hosted by IRDP Dodoma.
- The GCCA Tanzania national conference, with participation of high level policy and decision makers including the Tanzania Minister for the Environment under the VPO office and the Head of the EU Delegation in Tanzania.
- Case studies and stories from the field in multimedia formats including video and text.
- National media coverage of project events including ECOBOMA (Wildlife protection) and dissemination of Pemba's Islet of Hope documentary through EU Info-Point channels.
- BBC Outlook Inspiration Awards 2018 Mbarouk Mussa Omar from the Pemba project receives international coverage as a finalist.

LESSONS LEARNT

Need for flexible programming

All five GCCA Tanzania projects were awarded through a detailed Call for Proposals, with defined objectives and results, structured in a logical framework. Experience so far shows that for projects like these ones that pilot new interventions (in this case in the field of climate change adaptation) a rigid logical framework can sometimes be a hindrance in optimising effectiveness since it does not allow for much flexibility. Given the innovative nature of the projects, some of the anticipated successes may not be realised. This in itself should not be a problem since piloting new interventions carries an inherent risk of failure. The problem comes when the project is held accountable for the expected result of those interventions because it is included in the approved project results framework. To increase effectiveness and Value-for-Money for this type of innovative projects, it would be useful to use a more iterative process of project design and implementation that allows for regular adjustments of the project activities and expected results.

Realistic and transparent participatory approaches

Selection processes used by the GCCA projects for identification of beneficiary communities and households have all been highly participatory. Communities were also extensively consulted on the selection of interventions, but during the qualitative evaluation it became clear that this has at times led to high expectations that the projects can't meet because of limited funding and the boundaries set by the CfP guidelines. The lesson here is that projects should be transparent to the beneficiaries right from the start with regard to the project's objectives and funding and the limitations this sets to the type and number of interventions it can undertake. An open discussion with communities is recommended, explaining what the scope of the programme is and what eligible activities are, and to discuss which ones of those are most needed in the community.

Pro-poor approaches

It is clear from the experience of the five projects that targeting the poorer and more vulnerable households in communities is not easy. For more effective pro-poor approaches it is important to mainstream this element in all aspects of project design. This means for example:

- ensuring poor and vulnerable households are represented when using participatory approaches to design interventions.
- ensuring barriers for poor households for participation in and adoption of proposed interventions are identified
- reduce such barriers by giving preferential treatment for poor households (e.g. highly subsidised or free inputs) and using low-cost technology where possible.
- if needed, set minimum criteria for percentage of poor households in activities

Ideally, a pro-poor mainstreaming strategy should be developed at the start of projects to capture these issues. Where possible, indicators should also be disaggregated for poverty levels of beneficiaries.

Local champions and mediators

Project staff are not always the most trusted source of information for community leaders and members. Effectively communicating with target communities and gaining their trust to work openly with the project can be greatly enhanced by working with local champions and mediators. These can be well-respected government staff (low or high level, ideally originating from the region) or a well-respected member of the community who may have been exposed to new knowledge and experience elsewhere but has returned to his/her roots. In the case of GCCA Tanzania, there have several examples of how such champions and mediators can help promote good communication and collaboration between project and communities: a regional commissioner in Igunga and a district commissioner in East Usambara advocating for the projects in the target communities, a respected Maasai in ECOBOMA facilitating dialogue between traditional leaders and the ECOBOMA project.

Importance of mixing direct and indirect climate change adaptation measures

The experience from the GCCA projects has confirmed the importance of mixing direct and indirect climate change adaptation (CCA) measures. The drought in 2016/2017 has shown that direct CCA measures in agriculture and livestock can only go so far in cushioning the impact of climate change. In spite of the use of drought tolerant seeds and climate smart agricultural practices, most farmers in drought-hit project areas had very poor to zero yields. In such years, indirect measures that can provide alternative income sources will be crucial.

Appropriate technology

Appropriate technology in community level interventions is often equated with low-cost technology. This is in many cases a good approach, and the five GCCA Tanzania projects have in fact successfully applied low cost technology. Sometimes however, more advance technology can be equally appropriate. The use of a solar powered borehole pump in the EcoACT project is an example of this. While this technology is relatively expensive in terms of investment, operation & maintenance cost are relatively low compared to the alternative (electricity from the grid or diesel generator in off-grid areas).

Local authorities have collaborated with the projects to include climate change adaptation activities into their budgets. To ensure a sustainable future.

Eco-tourism is a growing sector in Tanzania and provides communities with an income.

OIKOS

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For further information please visit www.gcca.eu and https://eeas.europa.eu/delegations/tanzania_en

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