

Project Update: February 2022

Activity: Community Conservation Education and Awareness Rising Outreach Program at Makao Village Community

Background information

Conservation

Biodiversity is a variety of all life forms and their communities including the ecological and evolutionary processes that keep them functioning. Conservation involves a careful preservation and protection of biodiversity, through a planned management of natural resources to prevent neglect, over-exploitation or extinction. Successful conservation includes four main strategies: in-situ conservation (in natural settings under protective laws), ex-situ conservation (in sanctuaries or fenced conservation areas), education or awareness rising programs and scientific research.

Conservation education and awareness rising programs

Conservation education involves training and making the public aware on the value of nature and conservation benefits, done by government agencies or organizations through campaigns, media or trained personnel. This is among the most important strategies towards successful conservation because it helps change people's attitudes and negative perceptions on species e.g., beliefs on superstitions related to some species like bats, owls etc., which could hinder conservation efforts. It as well allows exchange of ideas and knowledge that could be used to intervene conservation issues because of chances to meet diverse groups.

Local community involvement and participation in conservation

Human beings and nature are interdependent and related to a large extent economically, culturally, physically and spiritually (Moore et al., 2007), that one can't live without. Even so, it is evident that human beings are disrupting and altering the Earth's physical, chemical, and biological systems, and has eventually become a major threat to biodiversity, human health and well-being (Moore et al., 2007). As a result, with rising awareness on the importance of nature, local communities word wide have emerged as ambassadors in conservation and sustainability of natural resources through establishment of protected areas and land care groups to improve human health and protecting biodiversity for future generations (Thaman et al., 2016).

It is important to note that most conserved areas where the local communities are involved provide remarkable rewards including economic growth and cost-effectiveness; a sense of ownership of natural resources; integration of traditional and local knowledge into the decision-making process; and direct community involvement in managing activities i.e. planning, monitoring, and law enforcement e.g. anti-poaching programs in protected areas (Thaman et al., 2016). On the other hand, there are evidence showing some protected areas to have succeeded in conservation without local participation due to strong law enforcement or state ownership. This has resulted to question whether local community's involvement has a bearing in conservation success or not (Mutanga et al., 2015). However, despite local opposition being viewed as a minor impact towards conservation, the idea of not including local communities in

conservation brings a sense of lacking ethics since people and nature are related interdependently (Mutanga et al., 2015).

Therefore local community consultation and public involvement are important aspects to include in decision making and conservation as studies suggest that the more local communities are involved in conservation the more close to success due to increased compliance and less conflicts from resource use restrictions (Rodríguez-Izquierdo et al., 2010).

Conservation education and awareness outreach at Makao village community

Despite research being a major priority in conservation of threatened species, conservation education has been mentioned in various studies to increase efficiency in meeting conservation goals. This is evident through the fact that changing people's perceptions and attitudes towards cultural and traditional beliefs related attributes is a long process which requires devotion, efforts and a friendly tongue rather than scientific approaches.



A photo with our project leader (Ms. Sarah Adiel) in the classroom educating primary school children on the important of conservation and threats to biodiversity.

Looking upon this, our project not only conducted scientific research on invasive species control but also involved in educating and making aware the surrounding communities around the study site, (Mwiba Wildlife Ranch). We visited communities around the ranch in a village land called Makao, Simiyu region Tanzania, and had an opportunity to visit one primary school and one secondary school to educate school children on the

importance of conservation and threats of biodiversity. We had separate sessions during the meeting where we taught on the general concept on biodiversity, conservation and threats to conservation and had a Q&A session which was very interesting to measure how much the students know about conservation and what they did not know about conservation. This also helped to know and understand other conservation gaps like "health benefits of joining conservation groups or clubs", as asked by the majority of the students. We used posters and questionnaires during teaching sessions with pictures and short notes to make students active and awarded pens and pencils to students who actively answered questions correctly.



Photo of primary school students writing the importance of conservation after getting educated by the trainer (project leader, Ms. Sarah Adiel)



Photos of our project leader (Ms. Sarah Adiel) in the classroom providing questionnaires to secondary students on naming species they identify and state their cultural values.

After visiting and educating the school children, we had an opportunity of visiting village leaders and a few villagers at the Makao Centre, where we presented on our study results and educated them on invasive species management. We also provided brochures for summary and future learning and provided t-shirts as an incentive for participating.



A photo of brochures with conservation notes on invasive species management of *Gutierrezia cordifolia* (study species)



A photo of villagers reading the brochures provided on the management of invasive species (*Gutenbegia cordifolia*)



A photo of a happy village member after receiving a t-shirt with a printed Rufford Foundation Logo



A photo with some village members after the awareness rising meeting with trainers



A photo of the project leader (Right) and project coordinator and supervisor (Left) after successfully completing the outreach at Mwiba Headquarters

Challenges

- Covid-19 pandemic limited chances of visiting other communities around since extra precautions were needed not to contract a large number of people
- Time was another major limitation since the study was delayed due to covid-19 outbreak

Acknowledgement

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