

## COMMUNITY BASED CLIMATE CHANGE ADAPTATION FOR ENHANCING LIVESTOCK AND WILDLIFE CONSERVATION IN LONGIDO DISTRICT

**Project No:** TAN/SGP/OP5/Y3/STAR/BD/13/06

**Grantee Organization:** TANZANIA WILDLIFE  
RESEARCH INSTITUTE (TAWIRI)

**Location:** LONGIDO DISTRICT

**SGP Contribution:** USD. 15,385

**Cash Co-Financing:** USD 17,361

**In-Kind Co-Financing:** USD 1,540

**Project Duration:** ONE YEAR

**Focal area:** BIODIVERSITY CONSERVATION

### Background

Due to weak cattle night enclosures, indigenous communities who live adjacent to the Serengeti ecosystem usually face night attacks to their livestock by big cats mainly lions and leopards. The big cats would break the weak enclosures and attack the cattle killing one or more for food.

After such attacks, indigenous communities especially the youth would group up and pursue the big cats for retaliation. Studies conducted by local researchers indicate that when a lion or a group of lions kill one head of cattle, the indigenous communities will kill more than five lions in retaliation. As a result, these attacks and

counter attacks have been ending up with two negative impacts: The indigenous local communities losing cattle, which is a source of their livelihood and wealth. On the part of nature, the retaliatory killings have been decreasing the population of lions in the Serengeti ecosystem.

Through the SGP supported project, indigenous local communities in collaboration with a local wildlife research institution discovered an innovative enclosure. The new enclosure was low cost, fortified and stronger. They cannot be broken into by lions and their height is higher, no big cat can jump over it. SGP with support from GEF and UNDP Country Office in Tanzania supported the establishment of 120 demo enclosures with over 3,000 people. The 120 demo enclosures can protect over 24,000 livestock. During evaluation of the project last year, an Elder Maasai known as Lengwanani told the evaluation mission that night attacks to livestock in his enclosure has remained history whereas no big cat has been killed through the infamous retaliatory killings. He further said, the innovative fortified new enclosures supported by SGP, GEF and UNDP have eliminated the scale of human – wildlife conflict in those areas.

### Project Objectives and Key Activities

#### Objective:

To build capacity through demonstration of improved cattle enclosures that reduce livestock predation by large carnivores and conserve forest through reduction of indiscriminate tree cutting for establishment of [unsustainable](#) cattle enclosures.

**Activities:**

1. Promote use of improved cattle enclosures that use wire fences and poles from acacia tree species (*Commiphora Africana*).
2. Target Pilot group of 31 households

**Environmental Impact**

Through additional support from UNDP Country Office and a group of tourists who visited the village, target households increased from 31 to 120. Records by district authorities indicate that no incidences of livestock depredation by large carnivores has occurred to all the 120 households with improved enclosures. On the other hand, no lions or any other large carnivores have died through retaliatory killings by indigenous communities. On the part of forest conservation, indigenous communities testify that the poles that are used to establish improved enclosures, re-generates instead of wearing out. Therefore, all the 120 households have not gone to the natural forests to cut down thorny trees to repair their enclosures as it was the practice before the project whereby, they would go to the natural forest to cut down thorny trees once every year to repair their cattle enclosures. Both impacts contribute to global environmental benefits. Reduction in the killing of lions through retaliatory actions has helped to conserve the lions, which are already endangered animal species. Reduction of deforestation for repair of traditional cattle enclosures helps to increase the extent of forest cover, which is an important global benefit since it contributes to enhancing the process of carbon sink.

**Socio-Economic Impact**

The 8 villages that participated in this project now have new structures of improved enclosures. The new structures pictured below are made up of tall poles and wire fences. These structures look different from the weak traditional cattle enclosures that are commonly used by pastoral communities. The project has contributed to learning of new technology of establishing improved enclosures. Furthermore, the project has contributed to wealth creation to 120 households with 3,000 people. For pastoral communities, cattle are a source of wealth and pride. The bigger the herd of cattle, the richer you are. Pastoralists with bigger herds have more influence in society and receive high respect from his peers. Night attacks to livestock by large carnivores used to reduce the cattle numbers and make affected pastoralists poor. However, with the elimination of livestock depredation, livestock numbers are on the increase, which means wealth creation is growing.



Improved Night Cattle enclosure *Photo credit: Tanzania Wildlife Research Institute (TAWIRI)*

### **Youth Engagement and Participation**

Retaliatory killings of lions and other large carnivores is usually carried out by Youths. Youths are also responsible for grazing livestock during the day and guarding it against lion attacks at night. With the improved enclosures, the guarding work at night has been relaxed compared to the situation before the project

### **Gender Equality and Women Empowerment**

In pastoral communities, it is the women who construct and repair cattle night enclosures. With the improved enclosures, annual repair work is not carried out anymore because of the sustainable nature of the structures. Therefore, improved enclosures have reduced workload on the part of women. Women along with men have been trained on how to establish and maintain improved enclosures. Both men and women are using their knowledge so acquired from this project to train other pastoralists.

### **Replication, scaling-up and policy impact**

Initially, the project began with 31 households through an SGP grant of USD 15,385 in 2014 (TAN/SGP/OP5/Y3/STAR/BD/13/06). The UNDP Country Office was impressed by the project

impact. In 2017, UNDP Country Office decided to support a scale up phase to expand the project impact. The SGP was used as a delivery mechanism and through the UNDP grant of USD 100,000, the project rolled out to 89 households. The holding capacity of improved enclosures rose from 3,000 to 24,000 livestock. At the local level, the district Authorities are promoting wider use of the improved structures by pastoralists.

### Lessons learned

- **Demonstration is an effective tool for learning.** At first, it was difficult to get volunteers to establish improved structures in their homes. After a lot of persuasions, 31 pastoralists volunteered. When other pastoralists saw the impact of the 31 enclosures, it was easy to get 89 volunteers who participated in the scaled-up phase. Now, pastoralists in the target district and neighbouring districts are too sensitized and are ready and willing to adopt improved enclosures by using their own financial resources.
- **Integrated nature of pastoralism and conservation of natural forests.** With traditional enclosures, a lot of thorny trees are cleared for establishment of cattle enclosures. However, with the improved cattle enclosures, fewer acacia trees are used. The pastoralists now understand that improved enclosures use less poles and are appropriate for forest conservation.
- **Conservation of lions and other large carnivores.** Through the project, the pastoral communities were sensitized to refrain against retaliatory killings of lions and other large carnivores because this malpractice would eventually wipe out these animal species and this will be a loss to mankind.