HANDOUT 2 – Environmental Stewardship Tool (EST)

Practice Scenarios

***Objective:***

***Your agency plans to fund a humanitarian or development programme. Partner staff are working with you to develop the new design but have yet to complete an environmental risk assessment of the proposed project activities. Select one of the three scenarios below. Then, using the Environmental Stewardship Tool and information provided from the selected scenario, assess the proposed activities for any potential risks.***

**Scenario 1: Development Livelihoods Programme**

The proposed program site is located in a mountain valley in the district of Nambutu where a single river is the main source of water for a growing population of 4,000 people as there is limited rainfall in this area. Farmers rely on the river source for both drinking water, household use, and for crop irrigation. The river is sourced from a mountain lake hundreds of kilometres away which is refilled by snowmelt. In recent years, mountain snow levels have lessened, resulting in less water for downstream communities. Alternative water sources can take a day’s walk.

The village is located in a poor, isolated part of the country, almost 150km away from a large economic centre. 45% of households in the village do not have the capital to buy or raise their own animals to either sell for profit or use for consumption. A small catch of fish frequents the river system near the village but is not enough to sustain the village if there was a crop food shortage, some villagers have expressed concern that the fish are smaller than they were in previous years and may eventually not be a viable food option for anyone. Crops such as maize (which is the staple grain in the area) have been depleted in the last several years due to lack of rainfall. Local forests are currently being used for charcoal to cook with in small stoves located inside homes. In the past 5 years, deforestation has increased rapidly as some households are using the wood for charcoal production to sell to other households. Only some households have expressed a concern over depleting this natural resource. On hot days smoke haze often causes respiratory issues for children and the elderly. As summers and winters have recently become warmer than before, nearby forest fires have become a regular occurrence.

A government representative from the agricultural extension office does come by the village 1 – 2 times a year to share messaging about the impact of cutting down local forests. However, there is not follow up from the government as to the increasing deforestation other than messaging.

**Program Approach:**

Your agency, along with local partner Caritas Nambutu are developing an Integrated Community Development program aimed to achieve an increase in food security through introduction of climate resilient agricultural techniques, animal husbandry methods, developing additional water sources a through community-led well initiative and introducing bio-gas as an alternative fuel source for cooking and heating. The program will provide training on diversifying agricultural production away from maize including drought tolerant varieties like, small grains (millet and sorghum). The program will deliver training to select families to learn how to raise, reproduce and care for selected animals such as chickens, ducks or goats. The community is familiar with raising chickens and goats, this is the first-time ducks have been introduced in the area. Following this, a second set of trainings will show how to select the proper location to raise the animals and building techniques for each family to make animal enclosures at their home. Each family has agreed to passing on some of the first reproduced stock to other families so they can raise their own for the same purposes. Once building of enclosures are completed by each family and checked for quality by program staff, livestock and a months’ worth of food will be delivered to each household.

Water has increasingly become a priority topic in the community, as less clean water can be taken from the river due to decreased snowfall and runoff from the distant mountains. The community has indicated that new wells would be a welcomed source of clean water for the growing population. Some of the proposed wells first identified by the community are to be located 50 meters from the river bank and close to latrines, so people will also be able to wash their hands as part of a hygiene initiative.

The program aims to introduce bio-gas in the homes of some of the poorest and most marginalised in the community to reduce the amount of wood used, and give extra productive time to work on livelihood activities instead of foraging. A community training session will introduce the main concepts of bio-gas, how to build, use, and maintain. The bio-gas tanks will be made from sand/mud bricks sourced from streams and cement, fuelled by animal and human waste, and piped into home stoves through metal piping directly to stoves.

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| **Activity Plan Years 1 - 3** |
| **Project Implementation** | **Y1** | **Y2** | **Y3** |
| Training on climate resilient agricultural techniques | x | x |  |
| Training on animal care  | x | x |  |
| Training on building animal enclosures | x |  |  |
| Construction of animal enclosures – family led |  | x | x |
| Supply of chickens, ducks and/ or goats to program families |  |  | x |
| Assemble materials needed for well |  | x |  |
| Approval from village head on location of well |  |  | x |
| Local construction of well hole and well cover |  |  | x |
| Community workshop on well safety, maintenance and hand washing initiatives |  |  | x |
| Training on bio-gas methods, construction and maintenance of water tanks |  | x |  |
| Construction of bio-tanks covered with cement. |  | x |  |
| Training on proper use and safety of bio-gas, how to clean and use correctly in the home |  | x |  |
| Construction of at home bio-gas tanks |  |  | x |

**Scenario 2: Humanitarian Shelter, WASH and Livelihood Refugee Response Programme**

In the past 6 months, over 400,000 refugees have fled their home country as they have been victims of violence, including sexual assault and burning of villages, leading to mass displacement. The majority of the refugees have moved in and around the town of Haratapar, a city of 200,000 people roughly 200 kilometres east from the refugee’s place of origin. Rebel forces involved in the longstanding conflict are present and threaten security within the area. Due to security issues, return to their country is unlikely for the coming months and possibly years. The host government has provided land for the refugees to settle and are utilizing the humanitarian cluster system to coordinate the response. The camp where these migrants have settled lies on land that is exposed to monsoons and cyclones. Additionally, the environment in this area is fragile through years of deforestation as residents seek cooking fuel. This deforestation has accelerated dramatically as people seeking refuge in the area also not only require fuel for cooking but are clearing land for their settlements. Not only has this caused tension with the local, host population, but has led to question the sustainability of current practices of cutting down local trees.

In the camps, limited space and high density have been the primary challenges during the response. People are constructing their shelters and WASH facilities on land that is at risk of flooding and landslides. Several cases of small, localized landslides have already resulted in injury and death. Government representatives have places “warning” signs around steep slopes and have warned of construction in these areas, however their efforts do not reach all the camps and the messaging is not in the language of the refugees. To date, because of the impact of these traumatic events experienced by the refugees focused on simply meeting their most immediate needs, there is limited evidence of the community trying to improve or maintain the site, other than cleaning around the immediate vicinity of their shelters. As a result, solid waste from food scraps and plastics have begun to collect in abundance around public spaces and walkways. Access to safe drinking water in the coming months could also be an issue as the drilling of additional boreholes could impact the already stressed water table, this is because the proposed sites are located nearby existing tube wells. As the camps are located not too far from the ocean, there is a fear of salt-water intrusion during storms.

**Programme Approach**

In response to this humanitarian emergency, your agency, working through local partner, Caritas Haratapar has agreed to fund a Shelter and WASH response, with some livelihood support for an area in the camp currently hosting 10,000 refugees. In addition to providing shelter kits with standard building materials for basic T-shelter construction for new arrivals, the project will also look to identify areas to develop “child friendly spaces” to provide support to the many young children arriving to the camp. Labor for construction of these structures would come through cash for work programmes with the refugee population. These are larger structures, intended to be used for community activities and child education activities conducted by other NGOs. In the WASH sector, the project will aim to construct additional tube wells, bathing spaces and latrines. Furthermore, in the WASH sector, the programme aims to mobilize the community in solid waste management efforts to clear and deposit the waste in centrally located areas. While this would be an improvement, there is not agreement as to where the best place to locate the waste as of yet. Additionally, as the inhabitants of the camp are not allowed to work legally in their new environment, Caritas Haratapar has proposed a small livelihoods project targeting women. The project would train women on soft skills and handicraft production, with the goal of them gaining access to some of the limited opportunities for income around the camp. There has been discussion about handicrafts and the need for proper disposal of the chemicals and waste products involved in their production or a need for alternatives.

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| **Activity Plan (12 months)** |
| **Project Implementation** | **Q1** | **Q2** | **Q3** | **Q4** |
| **Outcome 1: Shelter/NFI** |
| Distribution of shelter materials to new arrivals | x |  |  |  |
| Construction of child friendly community spaces |  |  | x | x |
| **Outcome 2: WASH**  |
| Construction of drainage in target area |  |  | x |  |
| Construction of bathing spaces |  | x |  |  |
| Construction of additional latrines |  | x | x | x |
| Construction of tube wells for increased drinking water |  | x | x |  |
| Community managed solid waste management |  |  | x | x |
| **Outcome 3: Livelihoods** |
| Formation of women’s livelihood group | x |  |  |  |
| Training on soft skills and handicraft production |  | x | x |  |

**Scenario 3: Urban Recovery Programme**

3 months ago, torrential rains caused a major landslide and flooding in Porttown, a coastal, tropical urban centre home to nearly 500,000 inhabitants. The landslide immediately buried over one hundred homes located on steep hillsides and extensively flooded others located in the downstream, coastal areas. Final numbers of deaths are over 900, with over 50 people still missing and presumed dead. Immediate humanitarian response initiatives were undertaken after the event, providing those in need with emergency shelter, food, water, sanitation and healthcare services. This event was extreme; however, it was not new to Porttown as torrential rains are a yearly feature, with heavier precipitation occurring from June to October. A previous massive rain, just two years earlier, destroyed homes and displaced more than 5,000 people.

In all these events, water and sanitation facilities and households are compromised then and now, especially in the informal areas, which are prevalent throughout the city. The increased rainfall is expected to increase in the upcoming years. Generally, the disaster events are caused by the following factors:

1. Construction in flood-prone areas along the creeks and coasts;
2. Inadequate and inefficient rainwater drainage systems;
3. Blocked drainage systems because of inadequate solid waste management;
4. Restricted water flows in rivers and creeks due to encroachment of buildings.
5. Slope destabilization caused by construction and deforestation

The government of Porttown is currently developing their Master Plan which calls for removal of some (not all) of these “slum areas” that were in the most heavily impacted zones. This is a contentious issue due to the amount of time many of these communities have been present in the area, however the risk of future flood/landslide events is also a concern. The Master Plan is not scheduled to be finalized for another 2 years.

**Programme Approach**

Your agency, working with local partner Caritas Porttown is developing a 12-month DRR and WASH programme to recover from the recent landslide/flooding event and to building resilience to future events. This includes: establishment of community DRR committees to plan for the development of evacuation routes and evacuation centres in which vulnerable HHs can go to prior to and during landslide and flooding events, ensuring safe protection and management of drinking water resources, construction and rehabilitation of water sources, and developing improved community managed solid waste management systems. In addition to developing evacuation centre, the programme calls for improved messaging around early warning to ensure that vulnerable communities have more time to prepare their homes and evacuate from the area if necessary. There is also some discussion around developing a shelter component to the recovery programme as well. This would involve reconstruction of destroyed houses and improvement of other “at risk” houses should future events occur. Another component related to shelter is around working alongside government to establish public space which acts as a “no-build” zone where no permanent structures will be built. This is a contentious issue as the most at-risk communities, which have been established for nearly 20 years are located in unsafe land. Activities involving the improvement of shelter foundations will need to take land tenure and long term needs into consideration.

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| **Activity Plan (12 months)** |
| **Project Implementation** | **Q1** | **Q2** | **Q3** | **Q4** |
| **Outcome 1: DRR** |
| Community based DRR committees develop action plans for DRR and WASH | x |  |  |  |
| Awareness raising sessions around early warning | x |  |  |  |
| Establishment of evacuation routes in most at-risk communities |  | x |  |  |
| Establishment of evacuation centres  | x | x |  |  |
| **Outcome 2: WASH**  |
| Construction of drainage in target area |  | x |  |  |
| Community led solid waste management initiative |  |  | x |  |
| Establishment of water user committee to protect and manage water resources |  | x | x |  |
| Reconstruction of damaged latrines and flooded water points |  | x | x |  |
| ***Outcome 3: Shelter (potentially)***  |
| Reconstruction of destroyed HH’s of elderly and female headed houses  |  |  | x | x |
| Improve foundation of other “at risk” buildings not impacted by initial landslide/flooding event |  | x | x | x |
| Establish buffer areas using natural vegetation or use of public space to discourage settlement on most vulnerable land |  |  |  | x |