CBF – Youth engagement for plastic waste Collection and recycling project application

Category under which the application is made

- ✓ Youth and Volunteering Development

Executive summary of the proposed initiative (max. 200 words)

In September 2020, the Kenya Red Cross Society with support from Qatar Red Crescent established I.O.Me005, a community-based innovation and prototyping space and lab supporting youth engagement and skills development. The space includes fabrication tools to facilitate skills development, rapid prototyping and small-scale manufacturing of innovative ideas/products. This collaborative space attracts young people, inspires and enables innovators to create and quickly test new concepts, products and businesses by giving them more options through access to advanced technology, materials, production methodologies, shared knowledge and peer learning. The lab serves as a center for the youth in Lamu to access different practical learning opportunities, explore their creativity and develop hands on skills for product design and development.

With the prioritization of environmental sustainability as a key element of the IFRC's Climate Resilience programme, the Kenya Red Cross is seeking support to adapt the existing lab support on youth engagement and skills development to target environmental sustainability and serve as an organizational model for wider mainstreaming of environmental sustainability within the Kenya Red Cross' services. The IFRC supported National Societies (NSs) to respond to Covid-19 pandemic with PPE for health workers, volunteers and staff. Considering the amounts of plastic waste generated during that period, this project will support the introduction of new business models to promote and incentivize the collection and recycling of that waste material as part of Kenya Red Cross Society's interventions to productively engage the youth in Lamu county and develop skills that will turn them to makers and value creators as well as catalysts for change in their local communities.

Setting up a plastic recycling initiative within the innovation lab will aim to reduce waste in local communities and maximize the use of available resources into repurposed products. The lab will host local youth and volunteers in Lamu, from design stage to final production, ensuring they are the champions of the initiative. Youth will further be supported to commercialize products created from the waste materials to widen their economic opportunities while ensuring that the community experiences an improved health environment, promotion of hygienic surroundings and access to cleaner, safer water and seafood, as they prevent the waste from polluting marine ecosystem.

What is the need/problem this initiative will address? (max. 150 words)

At a total population of 143,920 (2019 Kenya Population and Housing Census), 28% of Lamu's population is made up of the youth. A large percentage of this young population is filled with hopelessness and lack of direction. With an unemployment rate of 50% of the county's labour force (CIDP), most of them are uneducated and lack marketable skills for employment to contribute in economic activities. Available vocational institutions are poorly equipped to offer

relevant modern skills to the youth. Enrolment to these facilities is also poor due to the community attitude towards these places as they are seen as targeting those who failed final primary and high school exams.

The young population is therefore left struggling with drug and substance addiction, conflict, crime and recruitment into ideological groups.

Lamu county strongly depends on the tourism industry attracting visitors to its white beaches and employing some of its youth. 1.3 million kilograms of plastic waste are produced in Kenya on a weekly basis and unfortunately only 10% of this is collected for re-use. With poor management of these waste, the environment suffers the negative effects. The waters in Lamu have been very polluted recently with many different types of plastics and even made worse once Covid 19 protective equipment became mandatory for use. This has had a direct negative effect on the tourism industry and marine wildlife. Interestingly, plastic waste that ends up on the shores of Lamu can come from as far as Indonesia and Australia which further emphasizes on the fact that there needs to be a collective effort around the globe to reduce plastic waste pollution.

Issues around the waste from the medical sector also impose a health hazard, such as disease outbreaks, infections, and contamination of water sources. With all the waste gathering along our ocean shores, there are risks such as harm to sea life, blockage of drainage systems, pollution of air in the area.

This existing gap in the management of plastic and Covid19 waste is however an opportunity for Lamu youth and KRCS volunteers to engage on productive learning, designing and fabrication activities that results in income generation.

What will success look like? (max. 100 words)

1. By End of 2023, Kenya Red Cross Society (KRCS) would have established an environmental sustainability component as part of the capability and service offerings of the Kenya RC's Lamu center and engaged 250 youth and volunteers in skills development activities involving product design and plastic recycling reducing their chances of engaging in substance abuse and conflict, including to:
2. Test business / service models in environmental sustainability that can potentially be adapted and applied in other parts of the Kenya RC's local network.
3. Increase ownership and awareness on environmental conservation for social impact for the youth and their communities in Lamu and the surrounding areas.
4. Strengthen economic opportunities for communities in Lamu through new income generating models
5. KRCS would have contributed to reducing environmental pollution of COVID 19 waste and plastic waste by 18 tonnes (SDGs 11and 14) and have developed and implemented strategic partnerships with 3 to 6 key stakeholders (SDG 17)
6. The project will contribute to reducing environmental impact of covid19 waste and plastic waste to the communities in Lamu Kenya, by implementing effective waste management practices.
7. Build Lamu and the surroundings community resilience on waste management, empowering local initiatives.

How does this problem relate to your National Society's development priorities? How was it identified? (max 200 words)

The KRCS Strategic Plan 2021-2025 aligns to Kenya's Vision 2030, the UN's Sustainable Development Goals and the International Federation of Red Cross/Red Crescent (IFRC) Strategy 2030. KRCS contributes to Kenya's efforts towards attainment of the sustainable development Goals (SDGs) specifically: SDG 1 Poverty, 2 Zero Hunger, 3 Good Health and Well-being, 4 Gender Equality, 6 Clean Water and Sanitation, 11 Sustainable Cities and Communities, 13 Climate Action, 16 Peace and Justice and 17 Partnerships. It is firmly rooted in the right, empowerment and action of communities to drive change for themselves as individuals and for their communities.

KRCS Strategic goal 2021- 2025 has three key areas of focus namely:

Strategic Goal 3: Youth lead positive change in their communities.
Strategic Goal 2: Communities lead healthy lives and have opportunities to achieve wellbeing.
Strategic Goal 1: Communities are able to anticipate, prepare, respond to and quickly recover from crises.

In this Strategic Plan, KRCS has committed to support the protection of children and young people and facilitate initiatives that help them to reach their potential and lead positive change in their communities. To achieve this, the organization has the following specific objectives under its 3rd goal on youth:

i. Youth have improved knowledge, skills and experience for personal, social, and economic development.
ii. Youth living healthy and responsible lives maximising their innate potential.
iii. Safe spaces for youth representation, participation and meaningful engagement.

KRCS is looking at this challenge as an opportunity to empower its youth and capacity to build resilience within the Lamu community.

KRCS also endeavors to spearhead and systematically utilize innovative approaches in our action. Given the geographical location of Lamu county, it is crucial to address the issue around waste management in the county, that will also support in addressing other health related challenges in the county. The county has been known for the craftmanship of its people and artistic talents. This presents an opportunity to introduce recycled materials as an alternative to the popular wooden material. Working with communities, ensuring they are engaged at all stages of a project, are part of KRCS working strategies and priority approaches.

The KRCS youth is a key resource for the operation of all its programs. This project is nontraditional but innovative in that it explores the possibility of a sustainable KRCS youthful movement by empowering them with skills to design and make products, exposing them to alternative materials and ensuring that they understand the effect of their production and consumption activities to the environment. Th nurtures a youthful generation that can protect the future of its environment, generate income for itself and its initiatives and is equipped to serve its community.

The national society is also keen to promote circular economy and the success of this project in Lamu will provide a framework to be replicated across the other branches of KRCS in the country to improve efforts around reducing, reusing and recycling.

How will this initiative address the need/problem? (max 200 words)

- KRCS adapts its programmes and innovation initiatives to more directly contribute to the environmental sustainability ss a component of the Global targets to Climate Resilience
- Trainings and capacity building activities at the lab will target 500 youth and volunteers on waste management/ repurposing waste including collection, sorting, cleaning reusing and recycling. Others will also be trained on product design and fabrication to ensure an end-to-end engagement strategy has been adopted.
- It will provide a new source of income for community members, where youth will be supported with funds for collection, sorting, etc that will support their financial needs.
- Giving community members and youth, skills they can use daily will equip them with opportunities to continue the work in their own comfort, and village level away from the lab. This presents a more long-term sustainability plan.
- The project will collect 3 tonnes of Covid19 waste and plastic waste materials at the community level, monthly for six months totaling to 18 tonnes. The collected plastic will be process to valuable products and alternative raw materials for further recycling activities at the KRCS innovation lab in Lamu where all types of fabrication equipment is available.
- Conduct awareness-raising campaigns on the effects of Covid 19 waste and plastic waste to the environment targeting 50000 people directly and 500000 people indirectly through different methodologies and platforms.
- Form between 3 and 6 partnerships with organizations focused on environmental conservation and innovation, including local Community based organisations
- Design and produce products that are in demand, needed by communities in Lamu, its surrounding and around the country, to ensure market needs are met.
- The team will also engage Ministry of Health and Tourism to ensure all approvals are received before the project commences.

List any risks you have identified in planning the initiative, together with how you will mitigate each risk (max 300 words)

- The proposed business model will anchor the development of core capabilities of the KRCS but the replicability may require some adaption for rolled-out to other branches. The full nature of this additional adaptation will need to be identify during the duration of this project.

- Health risks through handling of contaminated and hazardous plastic and Covid 19 wastes - The project lead through support from procurement department will identify and invest on appropriate personal protective equipment (PPE)
- Logistic challenges and limitations in accessing certain communities in the forests and islands - Train Trainers of Trainees from the remote islands to be point of contact, have scheduled visits to the communities, fabricate solutions that can be user-led at community level for sustainability. The Innovation Lab's training lead will support on this. Also set up community feedback mechanism at nearby islands to relay information and update
- Machine handling and accidents - The lab's technical lead will ensure that only trained personnel will be allowed to operate the machines. Safety gear will also be provided for machine users.
- Delays due to shipping of critical equipment - Community engagement and collection of plastic and covid19 waste will begin beforehand to run activities in parallel. The project lead will initiate these activities.
- Budget overruns due to current worldwide inflation which affects prices for products and services - The Innovation lab coordinator will be responsible for this risk to ensure that certain activities are integrated with other lab projects to save on costs.

How will you ensure sustainability of the results achieved after the completion of the CBF support? (max 150 words)

Acquisition of the necessary plastic recycling equipment and tools is the most expensive investment on this project (CHF 50,000). Having developed and operational state-of-the-art innovation and prototyping facility (https://twitter.com/iome254) equipped with modern technology and technical experts, the Kenya Red Cross Society has provided an infrastructure that will be able to house, operate and maintain the machines and tools procured through this project long after the project.

A business model for sustainability and replication of the framework will be developed to produce and implement products for sale. Having trained the youth on how to design and make products out of plastic waste, the initiative will sale products to tourists, local individuals and companies for income generation, at the innovation lab level.

Excess plastic collected that may not be processed inhouse will also be sold to other recyclers both locally in Lamu, and out of Lamu. This will ensure cash flow to support implementation of activities beyond the project lifetime.

Partnering with hotels and other institutes who need creative items for their facilities, can place orders where community members are engaged to produce them using machines at the lab, and resources collected.

As a long-term investment this equipment will continue to be used as part of the standard activities with youth within the Lamu innovation center allowing future opportunities to diversify the product created and supporting the engagement of the youth and attracting young generation of volunteers to the KRCS.

Are you seeking, or have you been pledged any other resources from another National Society Development Fund for this initiative? Are you discussing this initiative with any other partner or donor? (max 150 words)

No.

If yes, please indicate to which fund(s)/ partner(s), the date of the application and the requested amount.

The crosscutting nature of this project makes it challenging to find a program that supports a crosscutting project as opposed to a single sector project.

Describe if you plan to involve partners/other actors, within or beyond the RCRC Movement, with a common interest in addressing the problem (max 150 words)

For acquisition of the equipment and expertise on plastic waste management we intend to work closely with Precious Plastic (https://bazar.preciousplastic.com) who have extensive experience in the area. They will also provide guidance on the initial molds the youth can use for making of products from molten plastic waste.
During the implementation we will collaborate with FlipFlopi (https://www.theflipflopi.com) who have also implemented innovative plastic recycling initiative by using plastic to make boats. This partnership will enable the youth and volunteers involved in the project to learn about boat making with sustainable materials.
Partnership with KEPSA to promote a circular economy culture, but also bring in private sector that can take ownership for some of the waste items that belongs to their factories. This would be for more ownership of the challenges and supporting the solution on table.

Would the National society need any support to manage the implementation of this initiative? How can this capacity be strengthened? What support will be needed? (max 200 words)

Kenya Red Cross society will manage the project internally through its Innovation Unit. Implementation will take place at the IOMe005 innovation and prototyping Lab in Lamu, a facility equipped with modern tools and experienced staff to facilitate product design and fabrication activities. The NS will need financial support to procure additional machines, and materials to support this project, but also operational costs to implement the program for the 6-month period. In terms of expertise, KRCS will work closely with IFRC and other partners to gather more information on potentials for such initiatives ensuring it is sustainable and not closed after 6 months of being operational. In terms of awareness, the NS will need support in international communication to ensure all international actors are aware of this program and its long-term prospects.

Describe the mechanisms you will use to monitor, evaluate, and learn from the implementation (max 200 words)
KRCS has a detailed MEA&L (Monitoring, Evaluation, Accountability and Learning) Manual that guides the implementation of all its programs and projects. KRCS MEA&L team will

develop the MEAL SET for the project with an aim of examining the effectiveness of program strategies towards achieving the desired results. This will include a project Indicator tracking tool log-frame and an implementation plan. The plan further seeks to track achievement of targets, document lessons learned and good practices throughout the implementation.
To ensure data protection and confidentiality, informed consent must be administered before collecting personal data from beneficiaries, including routine and non-routine data. Data will be collected using the approved KRCS data collection tools including the beneficiary tracker and standards while disaggregating data by age, gender, disability at minimum.
Monitoring will be a continuous activity throughout the life of the project, while at the same time the project will conduct surveys to measure performance. It will be done through desk reviews of project activity reports monthly while quarterly reports will compare results with outcome. Additionally, the institutional feedback and complaints mechanisms will be communicated to community members to allow them to provide feedback and complaints including on protection issues, as guided by the KRCS Accountability to Communities' framework.

Program reports will record project performance against program deliverables, highlight achievements (including those outside the project scope) and draw attention to concerns and challenges. In addition, weekly updates will be provided so that issues requiring attention can be addressed in a timely manner.