

Application Form submitted by the initiatives to participate in the Transformative Cities People`s Choice Award

GENERAL INFORMATION	
Location:	KITALE town, Kenya
Title of the Transformative Initiative:	Waste Management Innovation For Food Security, Climate Change Mitigation and Clean Habitat.
Name of organization:	Dajopen Waste Management
Type of organization:	A Civil Society, Community Based Organization, catering for all Gender.
Website:	
Category and Edition:	FOOD. Transformative Cities Award 2 nd edition (2019).
STORYTELLING	
Summary	
<p>Educating the community on the usefulness of utilizing waste with valuable recycled products, that can be economically viable enterprise engagements, especially in the mushrooming slums in the urban set up and to have clean housing habitation, increasing food productivity and green energy.</p>	
Context and problem definition	
<p>This is a Multi-Ethnic community group which is operating and generates a lot of Bio –degradable and inert waste, whereby, they do not have knowledge on how to recycle/utilize the waste economically by engaging the said waste into viable enterprise which could change their socio –economic status. Therefore they could acquire clean housing, increased food production and energy for cooking and lighting in their respectful slum houses.</p>	

The social groups which were affected are the women, men and the youths in the informal settlements. The women had problems in cooking due to lack of energy sources. To make matters worse, women were to fight out chest complication caused by the smoke from the firewood, thus bringing the Briquettes innovation. This was a great relief to more than 35,000 families who were to look for other sources of energy for cooking and lighting, which were too expensive for the community e.g. the paraffin and liquefied petroleum gas. And by the way we have come with an innovation of packaging natural gas, from the slaughter houses waste. Research and feasibility studies have been done, and we are soliciting for the funds to roll out the project, to cater for more than 200,000 people for the 2 years. The men had challenges in getting affordable farm inputs e.g. fertilizer in order to grow enough food to sustain their families.

Design and Initiation

The group was formed by the community and identified several initiatives like cleaning their area of residence, collection and recycling of waste and tree planting in public lands, to increase the forest cover. After forming the group Kenya Agricultural and Livestock organization (KALRO) came to our aid through Agricultural Training Information and Research Initiative (ATIRI), which was a World Bank funded project. The scientists and technical staff from (KALRO), trained and financed the group, for two weeks. Women were trained in hygienic waste handling during collection, processing, cleaning the same and using them to weave various products; baskets, caps, floor mats, table mats, beads, necklaces and bags.

Youths were trained in making briquettes, from charcoal dust and pulp papers, thus improving their lot in the society by earning a living.

Men were trained in recycling plastics by making fencing posts and roofing tiles from the said plastic. Also they were trained to make compost manure from the bio-degradable solid waste both green and food wastes

The key actors and organization were:

- ⌘ Ministry of Agriculture and livestock Development
- ⌘ Ministry of Health (Public Health Dept.)
- ⌘ Ministry of Environment and Natural Resources.
- ⌘ Ministry of Local government culture gender and social Services.
- ⌘ Ministry of Housing.
- ⌘ Ministry of culture gender and social services.

KALRO through (ATIRI), organized for the above Ministries to come on bond for both training and groups organization. The ministry of Agriculture brought technical staff to train the group in compost making and utilization on crop production. The Ministry of Health, department of public health, trained the group in waste handling, disposal and utilization. Ministry of Environment and Natural Resources came and trained the group on disposal of Hazardous waste and licensed the group to transport and recycle the said waste. The Ministry of local Government were overseeing the collection of solid waste from there garbage dumping sites. The Ministry of Housing trained the group on how to keep the residential areas clean by cleaning and sweeping, to eradicate mosquito’s flies and rodents, which hibernate in the uncollected waste. The Ministry of Gender, Culture and Social Services trained the group on gender parity, group dynamics, group leadership, cohesiveness, record keeping and financial management. The group management committee had an executive wing that is responsible for the management of the group limited resources e.g. movable and immovable assets.

Implementation

The first challenge was to bring the members of community to form the group and launch the implementation of initiative. At the beginning the community was against it, but later after learning how useful it was, everybody embraced it, and this is after public “baraza” using the local administrator’s opinion leaders. The sources of the problems were mainly, High poverty level and illiteracy in the informal settlement. Most organization and government agency embraced the formation of this group and the implementation of these initiatives.

The workers were the members of the group, who participated in the collection of recyclable waste materials as per the training done by the above mentioned institutions and organizations. The tools which were used are Questionnaires and Groups interview.

Questionnaires were developed in a formative manner to capture the aspiration of the community at large, on the work done by the group. A total of 150 questionnaires were administered to the community using technical staff from KALRO and other line ministries and organization in this group work.

Also the Ministry of Housing was routinely checking the slums area and seeing how clean is the habitation, while the Ministry of Health was counting on how many garbage heaps had been cleared, thus eradicating the breeding zones of mosquitoes, flies and rodents which are the cause of malaria cholera and plague.

Ministry of Agriculture counted in terms of percentage of farmers using recycled products made by the group and the crop yield per acreage. Therefore the benchmark was 30% and the respondent who were using the recycled products were 40%. The users were the community members and the neighbors, where the group is based. For the interviews, 10 groups of men, women and the youths were interviewed separately by the Ministry of Culture, Gender and Social Services staffs. Lastly the groups were brought together and interviewed using check lists. Each group was composed of 25 participants. Therefore both ways were useful.

Results achieved and Evaluation

The relevant results achieved are the uptake of organic farming using Organic manure. Use of Briquettes instead of firewood for cooking, use of plastic fencing post instead of wood post this is to alleviate pressure on deforestation. Clean environment within the community and the Municipal market has been achieved, due to our effort in collecting and recycling of the waste.

Most of the community members who are also the small scale farmers have increased their food production due to the usage of organic manure and the training which we got from our mentors. Due to usage of organic manure, the soil fertility has increased, thus increasing crop yields per acreages; result into excess production, therefore having food security in the nuclear family and surplus for sale to generate cash income. The organic fertilizers made, used and sold by the group members and neighbours has changed the soil structure from disease inducing soil to disease suppressing soil (Soil Amendment).

The beneficiaries up to date are 21,000 people and all gender catered for, as per our link provided. Also after selling other recycled items, the community has been able to send their children to school by catering for the pupils needs, from the proceeds. The effective results were health people, clean environment, Cash flow to members pocket and increment in Afforestation activities, which has increased forest cover. The most relevant results were addressing the excessive use of inorganic fertilizer and chemical pesticides that are applied heavily in the fast degrading agricultural soils in Kenya. The soil which has lost structures and texture due to excessive exploitation with sound conservation know how, has started rejuvenating due to our activities. Also local farmers who more often than not, keep adding large quantities of inorganic, chemical fertilizers in order to maintain target yields, without caring to revitalize the soils for sustainable use, have changed and now they are using organic fertilizer.

Political Strategies

There was a political good will from the start, when we formed the group and during implementation of initiatives, there were no local politicians, who opposed it, because it was creating employment, cleaning and greening environment, alleviating hunger and generating income to the community. This was as per Sustainable Development Goals (SDG) and Vision 2030 as a National Government Strategic Plan. Therefore no political hindrance was observed, because even the politicians feared to be voted out if they could go against the will of the Society.

Related legislations

The policy of Kenya Government is to create more employment opportunities in both informal and formal sectors. Also to increasing food security, clean and green environment, better and affordable Housing in the Urban,Rural and Peri-urban areas, especially in the informal settlement. These are also in tenden with the legislation and policies of the Kenya government. The solid waste management Bill has been tabled in the county assembly waiting to be debated.

Lessons learned

- (a) Working as a group is better than working individually, for such initiative because you will have collective bargain power with any institution or organization.
- (b) Disseminating the outputs of such initiatives take off faster within the community. with low level of education and high poverty level.
- (c) For the dissemination such outputs to be realized properly, the group needs enough funding and regular inflow of the funds, so that the work can be done.

- (d) Working with organizations and institutions is very important for such initiative to succeed through training, funding and the provisions of other resources. In future we need to incorporate more of these policy makers for longer periods. Improving in the strategies for taking that technologies/output to more communities for sustainable action.
- (e) The efforts being made are, every member of the group is to make sure that all members have embraced at least one technology in there extended households and farms. Also the members are at liberty to share the technologies with other non-members in the communities. I will do it differently in that, I will start cottage industries for the recycled products, which can also be replicated in any urban area.

EXTRA INFO

Supporting documents

<https://www.world-habitat.org/world-habitat.../dajopen-waste-management-project/>

<http://www.netfund.go.ke/our-beneficiaries/dajopen-waste-management-dwm/>

<https://www.youtube.com/watch?v=NvYpJ8iX4ig>

<http://www.fao.org/family-farming/network/network-detail/en/c/172290/>

<https://www.youtube.com/watch?v=rBJXo69FQIM>