

INCEPTION REPORT TO TEST PILOTED SCHEME FOR WASTE FISHING NET AT NYANYANOR, CENTRAL REGION GHANA

BY

Sampson Atiemo (PhD)

**CENTRE FOR SUSTAINABLE CYCLES
(SCYCLES GHANA)**

CLIENT

AMBER FOUNDATION

Adjacent
Mount Pleasant Hotel
Obosomase-Akuapem
c/o P. O. Box 1424 Koforidua
scyclesghana@gmail.com

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1.0 BACKGROUND OF THE PILOT SCHEME FOR WASTE FISHING NET IN GHANA

The fisheries sector plays a major role in Ghana's socio-economic growth by making a significant contribution towards reducing poverty, food security and sustainable livelihoods. Ghana's marine ecosystem is inundated with myriad of sanitation challenges chief among them coming from plastic waste. Various studies have predicted that unless some interventions occur, with the current per capital waste generated, the volumes of plastics entering the marine environment could double by the end of 2025. Discarded and abandoned waste fishing nets constitute a significant proportion of marine plastics litter. Waste fishing nets have serious impacts on fishing activities by damaging propellers of fishing vessels, in addition to negative consequences on seafood, wildlife and humans.

As plastics continue to inundate the tons of waste generated in the country, there is an urgent need for a national action to address this problem. The prevalence and scale of plastic litter that finds its way into the marine environment coming from waste fishing nets both onshore or at sea is of great national concern. As a result, Oeko-Institut contracted Centre for Sustainable Cycles (SCYCLES Ghana) to undertake a pilot testing of a collection scheme for (plastic) waste fishing nets in Ghana in April 2020. The project spanned for a period of six (6) months. The research team was tasked to:

- Conduct an assessment of current management practices for waste fishing nets in one fishing community in Ghana;
- Identify current management pathways and whereabouts of waste fishing nets in this fishing community and beyond;
- Identify potential environmentally sound reuse, recycling and disposal options for waste fishing nets in Ghana;
- Interact with the community and elaborate potential ways to improve collection and management of waste fishing nets in the given location;

- Plan and design a pilot collection scheme for waste (plastic) fishing nets that considers inputs and findings from the steps above for the chosen location/community;
- Present the plan for a pilot collection scheme;
- Implement the pilot collection according to the developed plan;
- Analyze the impact and lessons learned of the measure, including types and volumes of collected waste fishing nets, logistical aspects, downstream solutions, associated costs, potential unintended effects;
- On the basis of the analysis, develop options for scaling-up and wider implementation of the collection scheme;

The pilot study was carried out in Jamestown located in the Greater Accra Region based on the following considerations:

1. Jamestown is a densely populated fishing community that generates huge volumes of plastic litter
2. Budget constraint made it unfavourable to select other locations outside the Greater Accra region

The pilot research is ongoing although few unexpected delays occurred as a result of the COVID-19 outbreak. Despite the global pandemic, researchers were present in the early stages of the epidemic to involve stakeholders on this significant operation, which has a high potential to increase the production of fish. Responses from stakeholder engagement with the fisher folks and general public within the community was overwhelming as they all welcomed the idea of the pilot scale project for collecting abandoned fishing net.

2.0 CURRENT STATUS OF PROJECT IMPLEMENTATION

Following the stakeholder consultative meetings, biweekly sampling collection scheme at landing site was adopted where individuals with derelict fishing nets (categorized into cotton or nylon) conveyed at an assembly point at Jamestown. Based on several methodological approaches to retrieve waste fishing nets from the beaches and the community, a buy – back scheme was adopted. The model was initially based on visual observation per volume of sack used. Later, a more precise and accurate measurement was developed based on weight of the waste fishing nets. The buy-back scheme aims to provide incentives to individuals for collecting waste nets and encourage fishermen to collect the nets for sound management. The total dry mass of waste net collected during the pilot study is close to 600 kg.

2.1 Sustainable Downstream Options

Despite being reused for backyard farming or domestic purposes as observed during the preliminary investigation, a chunk of dilapidated net end up abandoned on the beaches or discharged into the sea. The lack of appropriate solid waste management options compounds the sanitation conditions in the area. Currently, one of the promising options is to identify international markets for recycling of waste fishing nets. Advances are being made with local representatives of such international organizations (Aquafil and Sea2sea) engaged in recycling the waste net into other useful forms. It is recommended that routine collection is carried out to determine the quantity of fishing nets discarded on the beach. The municipal assembly have to establish a waste fishing net delivery center where individuals who have in their possession waste nets can deposit. This could provide data on the amount of waste net available for collection within a period of time for recycling. Safe disposal of other forms of fishing gears such as lines and floats that do not have downstream options for recycling/reuse should be adopted.

2.2 Dialogue and Dissemination of Findings with Policy Makers

There is an urgent need for intensive consultation at both local and national levels with operators of the fishing activities, government agencies and relevant stakeholders to design well-developed continuous education and awareness-raising initiatives. It should be aimed at promoting sustainable fishing practices and other behavioural changes towards leakages of waste net on the beaches and at sea. This will assist in promoting proper management of waste generated by their activities. There is the need to disseminate the results for the pilot scheme developed through appropriate stakeholders' workshops including government agencies such as the Ministry of Science and Technology, Accra Metropolitan Assembly, Ministry of Tourism, Sanitation and Fisheries with support of opinion leaders from the Ghana Fishermen Association. Appropriate policy reform and law enforcement that intends to reduce marine plastic end-of-life fishing net and other forms of plastic litter should to encouraged.

3.0 TESTING PILOTED SCHEME IN A NEW FISH LANDING COMMUNITY

Waste generated from discarded/abandoned end-of-life fishing net does not just pertain to only James town fish landing site, but other landing beaches across the county. So far, the collection of waste fishing net has been successfully piloted at Jamestown in the Greater Accra Region of Ghana. In order to further test the scheme at different landing locations, Nyanyanor located in the Central Region, an extension of the eastern to central coast of Ghana has been chosen. Preliminary site reconnaissance visits revealed stockpiles of end-of-life fishing gears abandoned on the beaches. In the current location, the buy-back scheme previously developed for the pilot project would be tested in the current identified location for people with waste fishing nets to be incentivized based on weight of the nets brought to the buy-back centre.

4.0 FRAMEWORK FOR CONTINUITY FOR IMPLEMENTATION OF PILOTED SCHEME

Stringent strategies to minimize plastic fishing net disposal through clean-up campaign, awareness creation, improved recycling/reuse and waste management are promising options towards overcoming the global plastic problem. It is envisaged that the circular ocean agenda is promoted to test new solutions to sustainable management of plastic waste net as it has a high potential for transboundary transport away from the point of origin.

As the government of Ghana continues to promote the activities of fishing by providing subsidies and incentives for the fishing industry, there is the need to cope with expected increases in waste generation and management options such as supporting recycling and reuse for waste net in the environment. Policy directives should include curative measures intended to deter and minimize waste forms and if possible, to eliminate this problem in the long term. Further conscious efforts should be made to retrieve lost “ghost” fishing net abandoned at sea.

5.0 USE OF FUNDS PROVIDED BY THE AMBER FOUNDATION

5.1 Stakeholder engagement:

The new site for the pilot testing fall within the Awutu Senya East Municipal Assembly of the Central Region. There is therefore the need to engage with different set of stakeholders to get their buy-in. Informal meetings with some fishermen in the community reveal very high level of acceptance hence part of the funds provided by Amber Foundation will be deployed in that direction. The project plans to engage with the waste management department, Ministry of Fisheries and Aquaculture Development and other non-state actors in the community and the municipality. This will provide details on the municipality's willingness to participate in the proposed exercise of waste fishing net collection strategies necessary to mitigate influx of abandoned waste net on the beaches or at sea.

5.2 Pilot Incentivized Collection of Waste Fishing Nets

As already discussed, the pilot collection in Jamestown provided insight and lessons for upscaling in future. The financial support of the Amber Foundation will be used to incentivize the collection of waste fishing nets at Gomoa Nyanyano using the lessons learnt from Jamestown. In all, about four collection campaigns are anticipated over the pilot period. The collections campaigns will be done every two weeks. The activities will mainly focus on the collection of nylon 6 waste fishing nets using the pricing mechanism (GHS1.50 per kilo) and for adopted during the pilot in Jamestown. The collected nets will be handed over for downstream processing as will be developed as part of the project.

It should be mentioned that progress of the activities towards change and implementation will be communicated with Andreas Manhart of the Oeko-Institute on a regular basis via team calls.

6.0 Project Steering and Communication

One of the key lessons learnt from the initial pilot is the need for flexibility in managing project of this nature. Therefore, the project will adopt flexible approach to managing changes, new developments and decision making to ensure that issues that may arise are dealt with promptly. In this regard, changes and implementation progress will be shared and discussed with Andreas Manhart from Oeko-Institut in a regular basis (team calls).