

Project Update: September 2021

Introduction

This report is an accomplishment of the project's Work Package 200 (capacity building-trainings, mentorship, education and awareness) and 400 (assessment and monitoring of turtles nesting activities) that have been conducted between May and September 2021. The activities involved beach patrols, surveys, education, awareness and training pupils on turtle biology, conservation and waste management skills through organised lectures and collaborative events (Sea Turtle Festival and International Coastal Clean-up-ICC) with local conservation NGOs and Kenya Wildlife Service (KWS). The project has reached and engaged eight learning institutions and 10 community Turtle Conservation Groups (TCGs) with about 50 teachers and 250 pupils; and 180 community members respectively. A total of four training events, eight official RSG funded beach patrols and four joint beach clean-ups have been conducted during this project period. A total number of 360 turtle tracks scrawls, 176 nests (174 green turtle nests and two olive ridley turtle) have been registered with about 8,289 turtle hatchlings successfully hatched made it safely back to the ocean under the watch of our monitoring team across all sites during the project period. Two rescues, nine sightings (Shimoni only), and 16 turtle mortalities (one hawksbill and the rest green turtles), with five suspected and four confirmed cases of fibropapiloma (FP) tumours and 17 poaching cases have been registered.

1. Work Package 200 (capacity building-trainings, mentorship, education and awareness)

1.1 Turtle Ambassadors Trainings and Workshops

Four training sessions have been conducted between May and September 2021, one in Mombasa at St Charles Lwanga Secondary school, two in Kwale at Mtakuja adult centre and Waa Primary school and one at Msambweni Resource Centre hosted by Msambweni TCG. The trainings were spearheaded by the project field coordinator, Neville Agesa who also doubles as a representative of Diani Turtle Watch (DTW). The training at Lwanga was basically organised for teachers and was attended by over 20 teachers representing different schools in the area. The purpose of the training was to officially introduce the sea turtle conservation to all the invited teachers and support them through its incorporation in their schools' activities. The other training events at Waa primary school and Msambweni was for environmental club pupils, and youths who are newly recruited TCG members respectively. The major topics addressed were turtle biology (species identification), nest identification and relocation techniques, turtle management issues in the region and marine litter management opportunities. All the events were funded by the RSG project.

Training outcomes

- Registration for schools represented with Wildlife Clubs of Kenya.
- Formation of Kwale Wildlife Clubs Patrons Action Group (KWAPAG Network) - a
- conservation team of teachers based in Kwale.
- Established plan for field excursion at Kisite Mpunguti Marine Park to learn more

about turtle conservation and the marine park at large. This was successfully conducted with the financial support of our RSG project, Green World Campaign and Base Titanium and teachers own contributions.

- Established plan to establish areas of collaboration among the teachers to achieve the project's goal of sea turtle protection and conservation education in the schools.
- Enhanced knowledge, motivation, and rekindled energy among teachers in Msambweni, Matuga and Mombasa.
- Awarding of certificates of participation and successful completion of the training course by the event organisers.



Trainings and awards of certificates at Waa primary school (top left), Msambweni and Lwanga Secondary School

1.2 Teachers Retreat- Kisite Marine Park Field Excursion:

This excursion was attended by 40 teachers who visited Kisite Mpunguti Marine Park for an educational tour. It was as a result of the training conducted earlier at Waa primary school, Lwanga Secondary school and Mtakuja adult centre. The event took place on 11th September 2021 with the aim of enabling the teachers to get first-hand practical

experience of existing environmental (marine) resources and management challenges in the area. The exposure was meant to provide them with opportunity to identify management opportunities to the challenges facing marine wildlife, empower them and provide positive engagement in management and create awareness on the need for sustainable use of marine resources. The teachers were given lectures on and visited coastal habitats (sand beaches, mangroves, seagrass, and coral reefs), marine life, trends and challenges and potential environmental club activities for sustainable education in schools. The event was sponsored and supported by the teachers through the KWAPAG Network (own pocket contributions), The RSG provided lunch, Wildlife Clubs of Kenya (WCK), Marine Education Center and Base Titanium through provision of transport. The teachers will be mentored to pass over the acquired knowledge to their students through their clubs.



From left, teachers' arrival, briefing at Kisite Marine Park Education Center and Boat boarding for excursion



Teachers boat trip to Kisite (left), praying in the island (middle) and a group photo at the Kisite Island

1.3 Sea turtle festival day

This was the second time this event was conducted in celebration of World Sea Turtle Day. This year's event held on Sunday 13th June 2021, organised by Marine Education Centre in collaboration with RSG project and other conservation partners (ERACOMA, Conservation Education Society, Diani Turtle Watch, Olive Ridley Project, Oceans Alive, Kwale Plastic Plus Collectors, Valor 2 Virtue and the REEFolution Foundation) at Safari Beach Hotel. The event brought together eight conservation organisations and over 200 students from schools in Kwale spent the day learning about sea turtles. RSG

project facilitated the turtle ambassadors from different schools who participated in the event through various competitions, games and performances. All the students who attended were awarded with reusable water bottles as a way of reducing single use plastics. Special guests were also invited from State Department for Tourism, Kenyatta International Conference Centre, Tourism Fund Corporations and representatives from KWS. Local youth and women groups businesses were also supported as Kaya Kinondo Women group were hired to provide school lunches and two local artists (youths) who made the main art piece and photo stand booth as well as local young and upcoming photographer from Mombasa. RSG university students were also invited and took part as volunteers offering education and other support services during the event as part of their exposure.



Students Artwork for voting during the Sea Turtle Festival event



Mentorship and Performance during the Sea Turtle Festival event by the turtle Ambassadors



Students following up lectures/education programs during Sea turtle Festival

2. Work Package 400 - Assessment and monitoring of turtles nesting activities

2.1 Beach patrols

Nesting activities and beach quality in terms of marine litter have been conducted through beach patrols and turtle surveys in collaboration with our local partners Tiwi turtle police, Diani turtle watch, Msambweni turtle and marine conservation, Funzi turtle conservation group, Shimoni turtle watch and Kenya Wildlife Service (KWS). A total number of 17 RSG project organised beach patrols have been conducted since our project inception in February 2021, with each patrol per sections monitored by the TCGs covering the entire Kenyan south coast strip covered by the project. The patrols have been done by the project team, students, KWS and community members through TCGs.



Volunteers group photo at the Sea turtle Festival



Turtle monitors (Ambassadors) and students conducting beach patrols

2.2 Patrol Outcomes

2.2.1 Nesting Occurrence

A total of 176 nests have been safely established with a total of 174 green turtle nests and two olive ridley turtle were unsafely established and relocated to safe areas in the

area. Out of the nests recorded, four belonged to hawksbill, two olive ridley turtle while the rest were for green turtles. The distribution of the nests along the region is shown below. Additionally, a total of 360 of turtle tracks scrawls have been recorded during the project period. Most green turtles nested in the border zone and in the open zone, over 20 turtles were recorded with a false crawl emergence. The highest number is observed in the DTW monitored sites followed by the area under Tiwi Turtle police with Shimoni turtle watch registering nine green turtles under water as major part of the site hosts critical feeding sites for the turtle. The low nests in Funzi can also be due to poaching as the area is isolated making it unsecure and expensive for frequent monitoring. The number of nests already reported are 100% above of the total number of nests reported last year in the DTW territory that registered 74 nests (unpublished data) throughout the year along Diani, Chale and Funzi beaches.

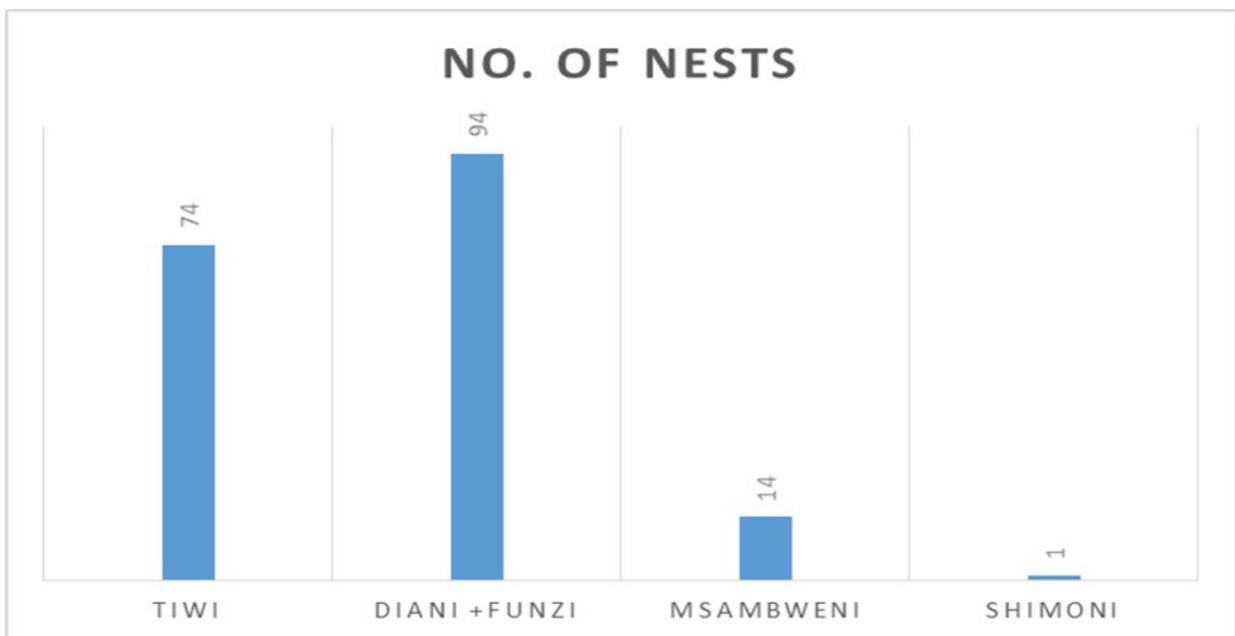


Figure 1: Quantity of nests registered at each beach during the project period

2.2.2 Nest relocation

A total of 61 nest have been relocated to various nest relocation sites in the area. The highest nests have been hosted at Nomads with 42.6% of the nests relocated. The area is exposed to massive human activities exposing the nests to poaching and damage. See Figure 2 below for the distribution of nest relocated per site.



Turtle monitor (left) measuring the width of the turtle truck and nest relocation at Diani Beach

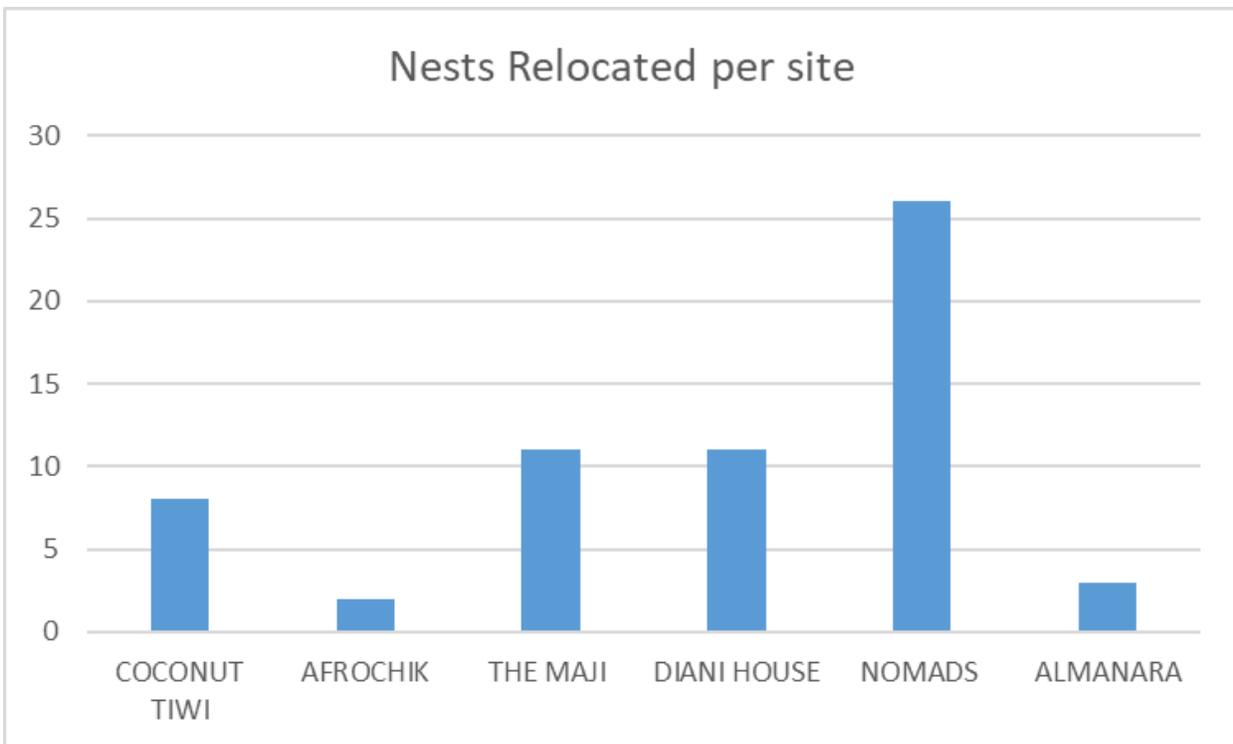


Figure 2: Quantity of nests relocated in the nest relocation sites



Nest Relocation activity by turtle monitors at Coconut Beach

2.2.3 Hatching Successes

An estimated 8,289 turtle hatchlings hatched from a total of 105 nests that were laid between January and July 2021 made it safely back to the ocean under the watch of our monitoring team across all sites. About 63% of the nests were registered in Diani area, 26% in Tiwi, 9.5% in Tiwi and only 1% in Shimoni. See Figure 1 below. The high number of nests in Diani can be attributed to high number of monitors and volunteers in the area, which is supported by Diani Turtle Watch.

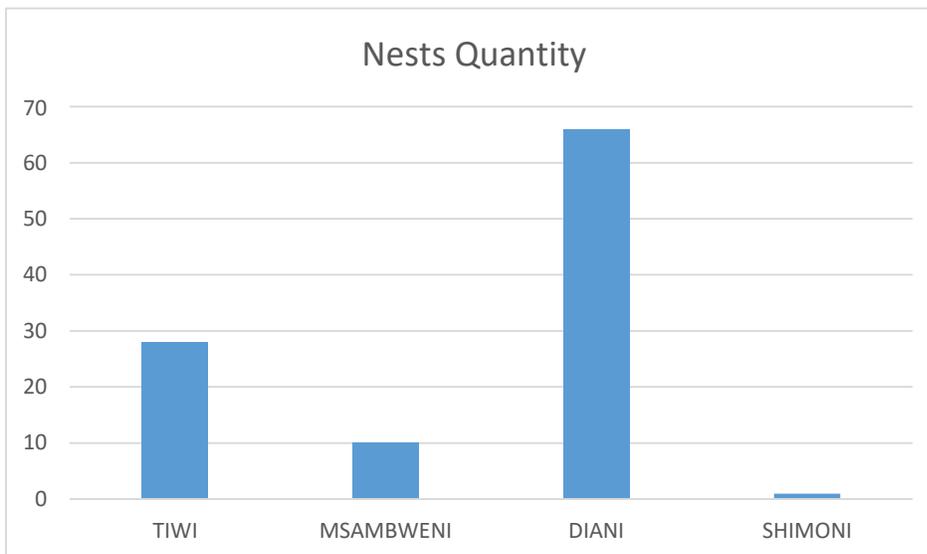


Figure 3: Number of nests established in different project sites



Turtle Hatchlings released at Nomads nest relocation site, Diani Beach

2.2.4 Turtle sightings

Turtle monitoring in the ocean has been conducted by RSG newly established turtle conservation group- Shimoni turtle watch in Shimoni. The by community divers sighted about nine turtles in the reef in Shimoni during their diving expedition.



Green turtle sighted at Shimoni Dive site

2.2.5 Turtle mortalities

Sixteen carcasses of turtle were found dead on the beach as per monitoring records. 10 dead turtles have been recorded in our data book, one hawksbill and the rest green turtles. Most of the green turtles were decapitated. Five of the green turtles were confirmed for fibropapiloma (FP) showed signs of the disease. FP tumours were found on four turtles during the routine body check by Diani Turtle Watch turtle experts.



RSG student - Brian Omondi (left) and Turtle monitors burying carcass of green turtle at Copa Cabana, Diani Beach and far right, turtle monitors taking data of a dead turtle at Shimoni Beach

2.2.6 Turtle rescues

One green turtle was found alive, following by catch in fishermen's nets. The turtle was confirmed for fibropapilloma (FP) as it showed signs of the disease. It was released successfully released back to the ocean and the fishermen compensated for the repairs of their nets later. Additionally, Shimoni turtle watch rescued a juvenile turtle that was covered with lots of barnacles during their diving patrols. The turtle was released back safely to the ocean after successful removal of the barnacles. Besides these, fifteen hatchlings were rescued from discarded fishing gears along the beach.



Rescued Juvenile turtles at Shimoni (left) and Funzi trapped in fishing nests

2.3 Poaching Trends

Poaching of turtles and their products by humans in the region was on the rise. The poaching was mainly reported in Funzi for nesting females, and Kinondo for juveniles and this could be due to its

isolation and low human population in the sites. The areas are also vulnerable to poaching due to inaccessibility, with accessibility only possible by boats, making frequent patrols expensive. The fishermen, who frequent the area during their fishing activities thus take advantage of the situation to collect the turtles and their products. A total of six nesting turtles were poached in Funzi Island and 11 juveniles in Kinondo as confirmed with their carapace remains that were collected and transported to KWS Kisite Marine Park. This event was followed by intensified anti-poaching patrols by turtle monitors from local TCGs and KWS rangers with financial support of the RSG project resulting to no poaching record for July 2021. Furthermore, civilian anti-poaching police has been implemented by the KWS who reside in the area, keeping watch of nesting turtles. The police were trained by the project team and are capable of identifying and relocating turtle nests. The anti-poaching police are government employees, recruited through the recent massive youth employment in the country under Kenya coast guards. We are happy to be part of the campaign and hopeful the anti-poaching campaigns will be sustainable given the current involvement of the government.



Anti-poaching patrol team collecting turtle remains at Funzi (left) and Kinondo

2.4 Marine Litter Management

While most beaches have been under frequent clean-up by the BMUs and the TCGs, a worrying condition was observed at Msambweni beach that has experienced high supply of both human and organic litter from the ocean with less clean-up due to its inaccessibility. In collaboration with Rufford Foundation, Msambweni turtle watch, Hifadhi initiative a local CBO and Ubuntu Kwale Youth Network organised a beach clean-up activity that brought up about 40 community members to make a difference in turtle habitats. The team collected a total of 286 kg of litter with over 70% made up of plastics. See Figure 4 below. Additionally, several clean-ups were conducted at different beaches in the project area during the International coastal clean-up. The RSG project supported the events through provision of clean-up materials like litter bags, gloves and snacks.

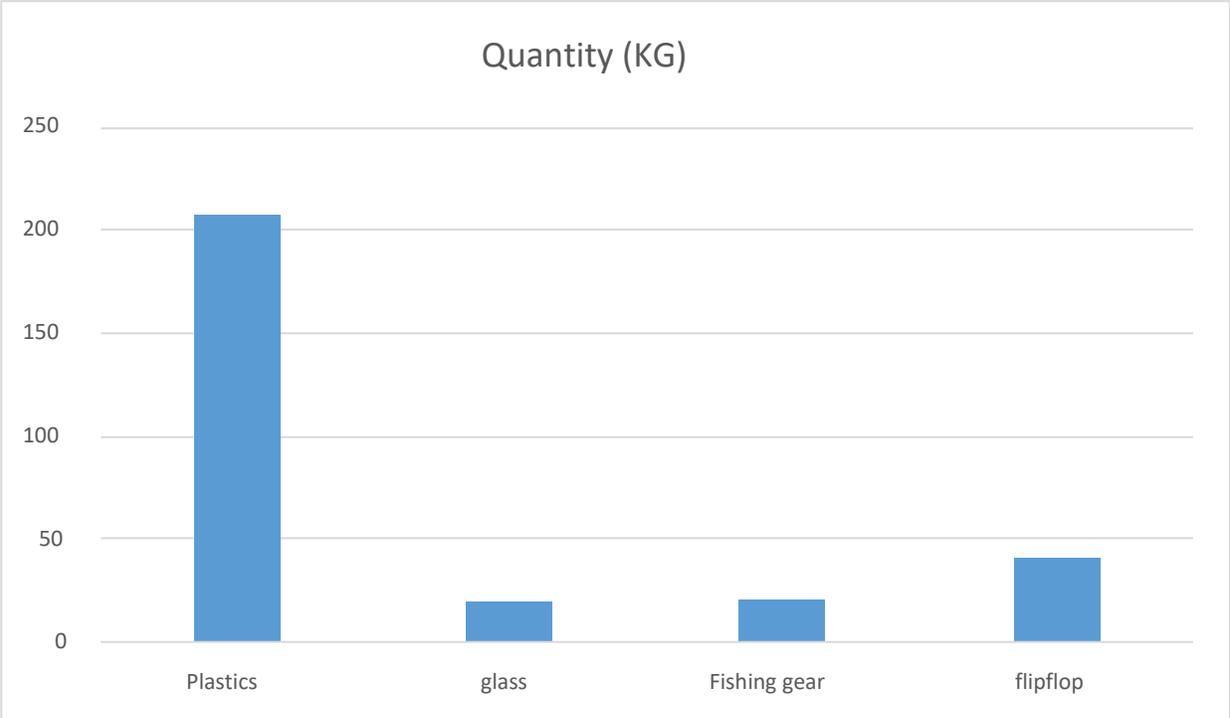


Figure 4: Marine Litter composition of Beach Clean-up in Msambweni



Participants during a beach Clean-up event at Msambweni Beach



International Coastal-clean-up event photos in selected project sites

Plans for the next three months (Final Quarter)

The remaining quarter of the project will be dedicated to intensified beach patrols including nest monitoring and anti-poaching campaigns in the area. One meeting (project follow-up) will also be conducted with all the turtle monitors to verify the progress of the supported TCGs. Additionally, the project team shall build the capacity of the monitoring team and award sea turtle monitoring certificates and t-shirts as a motivation to the monitoring team. The project team are also planning to source for resources (funds) and install new information exhibits for sea turtles at the Msambweni turtle conservation centre.