

Report for #SaveNeykurendhooKandoofaa

for activities funded by the Commonwealth Human Ecology Council (CHEC)



**Save Maldives Campaign, Neykurendhoo Island Council (Maldives)
in collaboration with Mangrove Action Project (MAP)
supported by Commonwealth Human Ecology Council (CHEC)
September 2020**



Table of Contents

<i>Introduction</i>	2
<i>Purpose of the report</i>	4
<i>Neykurendhoo Mangrove</i>	4
An overview.....	4
Mangrove wilting away	5
<i>Activities undertaken to #SaveNeykurendhooKandoofaa</i>	8
Snapshot of activities undertaken.....	9
.....	9
Conducting meetings with council and other governing bodies to discuss the way forward to address the mangrove die-off	10
Community meetings to raise awareness on the significance of mangrove ecosystems and improve social cohesion for community-based mangrove restoration effort	11
Field visit to mangrove area to collect data, samples, document the mangrove die-off	14
Documenting the journey to produce knowledge / communication products	15
Documenting the activities, social media, advocacy and expansion of #SaveNeykurendhooKandoofaa.....	16
<i>Outcomes</i>	19
<i>Way forward</i>	19
<i>Conclusion</i>	20
<i>References</i>	21
<i>Annex A</i>	22

Introduction

The island of Neykurendhoo is located in the center of Haa Dhaal atoll. The island has a land area of 169 hectares of which 28.3 hectares are mangrove/wetland areas. The mangrove/wetland area is significantly small in ratio when compared to the total land area of the island. (Technical Report on H.Dh.Neykurendhoo Mangrove and Wetland – 2017)

Situated in the Northern most administrative division of Maldives, Neykurendhoo has the largest known mangrove in an inhabited island of the country. According to the census report of 2014, Neykurendhoo has a population of 743, which includes 328 men and 415 women. The island is 168.6 hectares but the total land area used by the small population of 750 people in the island is only 31 hectares, which determines to be 4.4 people per hectare.

The majority of the islanders depend on tourism and fishery as their main source of income, however the islanders living within the island depend on agriculture for their daily needs as well as to generate income though the sale of their produce to the capital Male' as well as nearby islands. The main crops produced by farmers in Neykurendhoo include bananas, coconuts, chilies and breadfruits. Groundwater is being used for agriculture as well as household purposes. The island freshwater lens is well maintained probably due to the mangrove/wetland.



Photo: Environment Protection Agency- 2018



Photo: Environment Protection Agency 2018

Purpose of the report

This report aims to summarise the activities that were conducted by the Neykurendhoo Council on June 25th-26th, 2020 on the island as a part of the #SaveNeykurendhooKandoofaa campaign that was funded by the Commonwealth Human Ecology Council (CHEC) to address the mass die-off of the mangrove ecosystem in Haadhaal Neykurendhoo, Republic of Maldives. Stakeholders that collaborated with the Neykurendhoo Council in this activity include the Save Maldives Campaign with the assistance of Mangrove Action Project (MAP), Mangrove Specialists Group of the IUCN (MSG-IUCN) and local level stakeholders.

Neykurendhoo Mangrove

An overview

The wetland area of Neykurendhoo is continuous on the eastern side of the island; majority of the wetland area is inaccessible due to thick vegetation. According to the Bluepeace Maldives Baseline Study 2016 of the island, the entire wetland is estimated to cover an area of 28.3ha; 16.7% of the whole island. Two separate water bodies can be found within the wetland area, the larger of the two (Site A) measuring about 0.3ha while the smaller one is estimated to be 0.1ha. It should be noted, these two are expected to grow during wet season with heavy rainfall and shrink during the dry season. The entire wetland area is covered by mangrove flora and fauna as the survey could determine. Figure 1 below shows the land use of the island compared to the wetland area.



Fig 1: Wetland Areas and general land use of HDh Neykurendhoo- Bluepeace Maldives Baseline Study – 2016

Technical Report on Neykurendhoo Mangrove and Wetland (2017) states that there are various reasons to why the mangrove ecosystem is significant to the island in general, the report lists the following reasons:

- Mangrove/Wetlands are known to be diverse areas which are the nursery grounds for many species of fishes and birds. Also, these areas are known to be suitable habitats for seasonal migratory birds.
- Maldives being a low-lying and small land area, it is important to have mangroves/wetlands which increase the nutrient content in the soil and make the soil more fertile for healthy growth of different species of plant.
- The roots of the mangrove/wetland plants have features which enable them to stabilize the sediments around them and they also act as water absorbent; during the rainy season the water is absorbed by these roots and transferred to the water lens of the island. Maldivian islands tend to have thin water lens, therefore this natural process recharges the water lens and is very beneficial.
- The “true mangrove species” helps to remove the toxic substances in the water bodies and help to remove contamination of the water lens as well.
- Mangroves/wetlands help to minimize the effects of extreme monsoonal events such as sea swells and flooding. This helps to protect infrastructure and people.
- Acts as a carbon dioxide sequestrate. Studies show that mangrove/wetlands absorb 25.5 milli tonnes of carbon dioxide each year. Hence mangroves/wetlands are recognized as a natural defense mechanism against the effects of climate change and global warming.

In addition to the above mentioned it is noteworthy to list the following:

- The mangroves at Neykurendhoo was designated a protected environmental site on 30 December 2018 and is among the largest and most ecologically rich mangrove ecosystem in the country.
- Largest Kan'doofa (mangroves ecosystem) in the country.
- Has both historical and cultural values and services that the mangrove ecosystem provides.

Mangrove wilting away



Residents of Neykurendhoo began to discover the status of the prized wetlands when they ventured into the area to collect mangroves for Ramadan (around April) in 2020. The wetland of Neykurendhoo, is among the largest in the country. The most prominent mangrove in the area is the small-leafed orange mangrove, locally called *kan'doo* (*Bruguiera cylindrical*). Residents of Neykurendhoo grew up by sourcing food from these trees. The strong wood from the small-leafed orange mangroves was used to build boats. The area is nature's gift for the island and remains as its pride.

The area has been plagued by an unknown phenomenon since March, leaving the trees yellowed and dried up. The Island Council has previously expressed concern over the phenomenon that was devastating the area. The mangroves of Neykurendhoo are a protected area of the country and the matter was brought to the attention of the relevant authorities.

Photo: Neykurendhoo Council- 2020

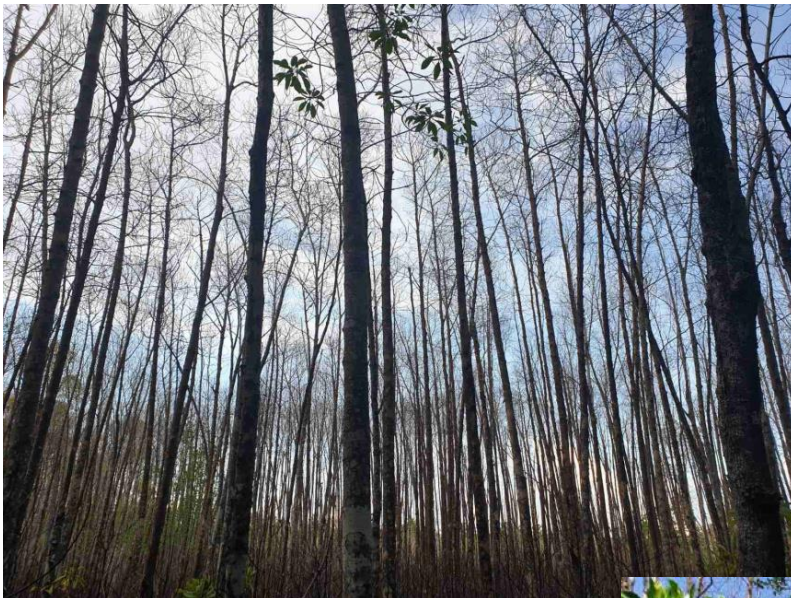


According to the Social Survey Report (2018) of EPA, most of the mangrove/wetland area of this island is still in its natural state without much human intervention as the area is very large and accessibility is very limited. However, the large mangrove trees such as *Bruguiera cylindrical* and *Bruguiera gymnorhiza* are cut down for their timber uses, and to transport these timber a path was cleared by removing the vegetation. In addition to that, plastic pollution and removal of saplings from the area has left the withering mangrove under graver threats.

In addition to Neykurendhoo, other islands in the north, including Kelaa , Uligam in Haa Alif Atoll, Haadhaal Vaikaradhoo, Nolivaram, Feydhoo, Farukolhu, Goidhoo in Shaviyani Atoll and Kendhikulhudhoo in Noonu Atoll, have also reported mangrove die-off in their wetlands.



Photos: Zeem- Mode for Neykurendhoo Council- 2020



“We used to fish from the mangrove, it was used as a large fish tank to keep fish, when fishing is bad, we use the fish in the mangrove to eat”

A Resident of Neykurendhoo

“People used to say back then that even a bullet could not pass through the mangroves. That the mangroves were so thick, that even a bullet could not pass through. As long as I can remember, there were a lot of small-leaved orange mangroves.”

Ali Adam, ,H.Dh. Neykurendhoo Council president



Photos: Neykurendhoo Council- 2020

Activities undertaken to #SaveNeykurendhooKandoofaa

Below are the details of the activities conducted by the Neykurendhoo Council on June 25th-26th, 2020 with volunteers from the Save Maldives Campaign on the island as a part of the #SaveNeykurendhooKandoofaa campaign that was funded by the CHEC. The key objectives of #SaveNeykurendhooKandoofaa project are as follows.

- To create public awareness of the value that mangrove ecosystems provide to local communities. These intangible benefits that the ecosystem provides are invaluable.
- To capture the indigenous knowledge on how the mangrove system in the island was managed and sustained.
- To facilitate storytelling and folklores surrounding the mangrove.
- To enhance the Island Council's capacity in managing donor funds and support community driven and community-based activities.
- To strengthen the relationship and promote social cohesion within local authorities and civil society, CBOs, NGOs and movements fostering wider stakeholder engagement
- Increase the technical know-how and knowledge of the Island Council and other partners to better manage and respond to such mangrove related issues

All these activities were designed in close consultation with the Island Council and other partners. [Community-Based Ecological Mangrove Restoration \(CBEMR\)](#) techniques promoted by MAP are used as the basis of the project design and implementation.

Annex A consists of the supporting documents. A separate report on financials including expenditure and budgets were produced as supporting documents of this report.

Snapshot of activities undertaken

February 2020 onwards

Observations were made by locals which were initially reported in the local news outlets

March 2020 onwards

As per estimations from the Island Council [close to 10,000 mangrove plants](#) have died and the remaining healthy plants are under threat. The die-off became more visible which has attracted a lot of attention and social media campaign #SaveNeykurendhooKandoofaa was born.

June 2020

- Island Council reached out to Ministry of Environment officially in June 2020 reporting the mangrove die-off.
- Save Maldives began a collaboration with [Mangrove Action Project \(MAP\)](#) and the [Island Council of Haa Dhaal Atoll Neykurendhoo](#)
- Local Technical Group was formed
- Youth and community mobilization groups formed
- Community meetings and other activities were held on the island during 25th-26th of June 2020
- Conducted a [preliminary field assessment](#) of [Neykurendhoo mangroves](#). The initiative is in response to alarming [reports](#) of an unexplained phenomenon causing the die-off of huge swathes of mangrove trees in Neykurendhoo island

July 2020- 6th July 2020

EPA team along with Ministry of Fisheries, Agriculture and Marine Resources team arrived on the island for their [field survey](#)

August 2020 onwards

- Save Maldives is preparing a joint report with partners
- The EPA is expected to issue a report based on their field visit to the Neykurendhoo mangroves in July 2020

Conducting meetings with council and other governing bodies to discuss the way forward to address the mangrove die-off

Despite the small population of the island, due to deeply rooted island politics and weak social cohesion, all the local authorities do not fully coordinate and communicate well enough to make a long-lasting impact. To increase stakeholder communication between various local governing authorities, Save Maldives facilitated virtual meetings through phone conference calls.

Meetings held with governing bodies including the Island Council, health center, school and other government bodies locally to enhance coordination and communication to better understand the situation to seek a long-term solution. This was also used as a tool to enhance coordinated efforts and improve working relationships among local authorities. Key government stakeholders based on the island took part in these meetings and they were all informed and engaged in the entire process to sustain the results of the joint effort to address the mangrove die-off. This activity was conducted at the start of the all the other activities to get their participation and to build consensus to reduce conflict and support cohesion.

Governance is key in implementing a sustainable project and strengthening it is one key component of this joint effort by transferring knowledge and supporting the enhancement of communication and PR for the Island Council. As a part of this effort, soft skill development like social media management, PR and communication experiences and guidance continues to be offered by Save Maldives team. Such partnership has expanded from the island community to the national experts offering assistance.

A local technical group was organically formed since the #SaveNeykurendhooKandoofaa expanded through social media, interested local experts on areas relevant to mangrove management came together to provide their expert knowledge and experiences in finding the causes that are contributing to the sudden mangrove die-off. They are working out of passion and as a way to contribute to the cause.

The local technical group consists of volunteers who reached out to Save Maldives campaign offering their assistance, the local group is guided by IUCN MSG and MAP with their technical expertise. This group is active and working to further analyze previous data and documents to better understand the factors to determine the causes for the rapid mangrove decaying and to produce a report based on it. They meet regularly to discuss the next steps and technical aspects of the issues.

Youth of the island were mobilized and engaged as a result of their interest to assist the process. A chat group was formed which worked in providing assistance and creative ideas for the expansion of the social media campaign. The youth group has also mobilized local graphics designers and artists to find ways to collaborate and contribute to the cause.

Community meetings to raise awareness on the significance of mangrove ecosystems and improve social cohesion for community-based mangrove restoration effort

Meetings with the general public were held regarding the die-off and awareness sessions were conducted at the island with guidance and assistance from Save Maldives volunteers.

On June 25th-26th, 2020 the Island Council hosted community based public consultations with residents in Neykurendhoo to obtain local knowledge and insights. All activities were carried out with

Photo: Neykurendhoo



Council- 2020'

strict adherence to social distancing practices and relevant guidelines from the Neykurendhoo Island Covid-19 Taskforce. A total of 24 females and 16 males, totaling up to 40 members from the community took part in these meetings. This includes youth and the elderly members of the public. Meetings included a general overview of the situation and the proposed plan of activities, group activities to identify the fauna and flora in the area and awareness components.

The Island Council used the meetings to inform the public of their plans for the mangrove area and to seek their consultation to further enhance those efforts. They presented the key challenges they faced in terms of resources and how best it could be resolved. Participants also highlighted the importance of managing the area and to sustain the resources. Their experiences and concerns were shared and discussed.



Photo: Neykurendhoo Council- 2020

Through these consultations it was evident that the island community is well aware of the ground situation and was willing to support the Island Council in implementing the activities.

Their worries of delayed action or inaction was apparent. They were keen to question about the plans and proposed timeline of activities.



Photos: Neykurendhoo Council- 2020

“We strongly believe that bringing the community together to discuss about the issue and using their knowledge is key to achieving a sustainable solution; this way people are more engaged, and they own the issue leading to meaningful engagement”

Vice- President of Neykurendhoo Council



“The mangrove is very important to us! We take pride having this mangrove. We use it for food, firewood, boat building too! We can’t bear to see the mangrove die”
Resident of the island

“During World War I & II Kan’doo was used as a staple food and we survived without running out of food because of the mangrove, making it so important”
Resident of the island



“The replica of the legendary Kalhu-oh-fummi vessel used by Mohamed ‘Bodu’ Thakurufaanu to drive away the Portuguese colonialists from Maldives centuries ago was built in Haadhaal Neykurendhoo using the wood from the islands mangrove, depicting the significance of the mangrove and its services”

Field visit to mangrove area to collect data, samples & document the mangrove die-off

A team of locals, council members and volunteers from Save Maldives made a field trip to the mangrove area on 25th- 26th June 2020. The team had the mission of better inspecting the area from a technical point of view to gather data, collect samples and document the scope of mangrove die-off. A well-planned field guide was provided to the team with required tools and equipment to document and collect data from the mangrove area. The team was headed by a volunteer of Save Maldives with technical know-how and experiences of mangrove ecosystems.



Photo: Neykurendhoo Council – 2020

Close to 15- 20 participants including both male and female members of the island community also took part in the field visit despite the unpleasant weather conditions. The team collected water samples from different areas of the mangrove and documented the decaying of mangrove plants. A team of videographer/ photographer joined to document the status of the mangrove and the journey of the community. Observations and findings were recorded to further analyze some samples were collected. The samples collected were not tested as planned due to the unexpected delays and inability to get the water samples tested due to in-country capacity/access limitations. Work is underway to produce a report based on the key findings that will include both a technical, socio-economic impacts, historical information and indigenous knowledge. The report is expected to be published by mid-September 2020. The local technical group along with key partners MAP and MSG-IUCN are providing guidance in the process.

The findings from this preliminary field survey will be used to compile a preliminary report that will be submitted to relevant government authorities to support conservation efforts. We are encouraged to see that since our study visit, the Environment Protection Agency has also visited Neykurendhoo to make an assessment of the mangrove die-off.



Photo: Neykurendhoo Council- 2020

Documenting the journey to produce knowledge / communication products

Production of a short video to showcase the journey of the community in the effort and their observations is delayed due to COVID19 pandemic and the ongoing closure of government., It is expected to be completed by early September.

Publication of the news article capturing the human element of the mangrove ecosystems along with the technical findings from the survey and analysis in both local and English language is also expected to be completed in early September.

A PowerPoint presentation was developed as a tool to inform the general public in local language highlighting the planned activities, significance of mangrove ecosystems, along with key coordination and proposed activity briefs that was the guiding document for the collaboration with Neykurendhoo council and Save Maldives.

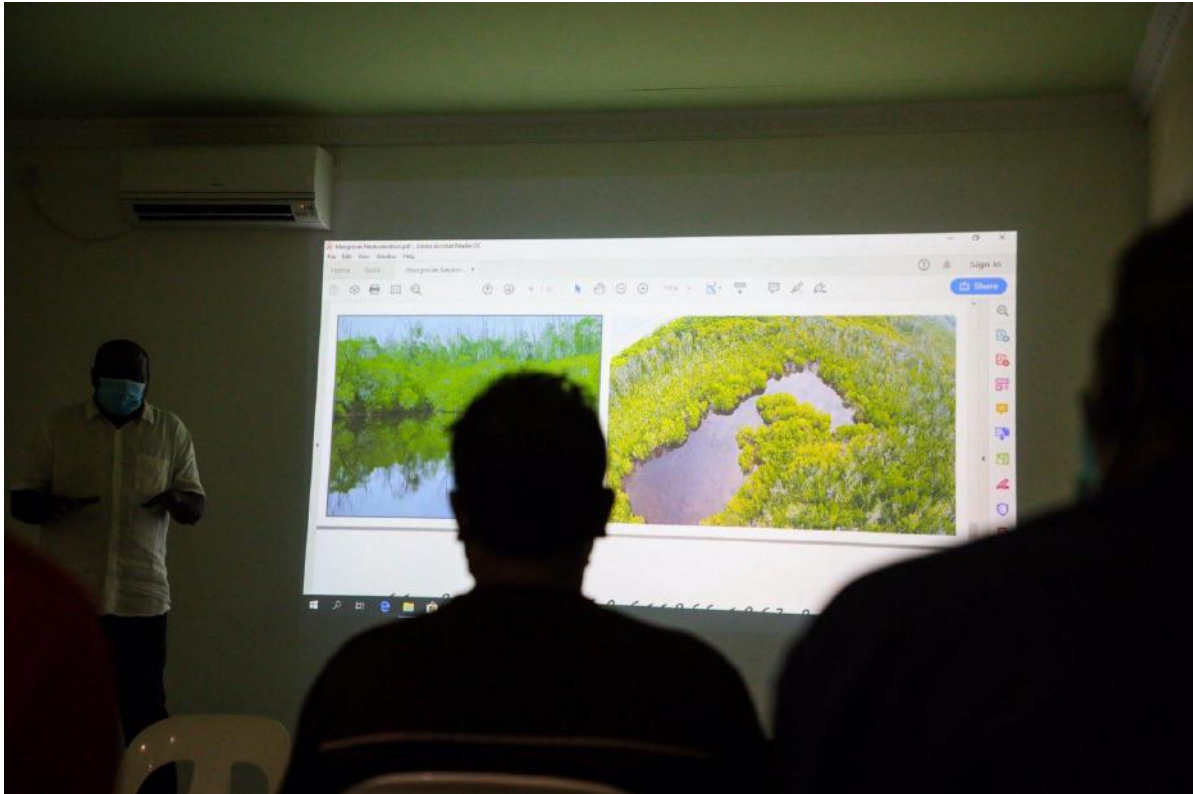


Photo: Neykurendhoo Council- 2020

Dedicated formats were produced, and all meetings were well documented using attendance sheets, meeting minutes and photographic evidence.

Documenting the activities, social media, advocacy and expansion of #SaveNeykurendhooKandoofaa campaign

Efforts to raise the issue nationally and among external stakeholders to garner more attention for the cause by expanding the social media campaign was effective and impactful. By investing in more coordinated, well planned advocacy plan was rolled out with the Island Council, leading to various and numerous publications in the local outlets. It is noteworthy to mention that none of the below activities were funded by any source, but rather was assisted by locals of the island and concerned public.

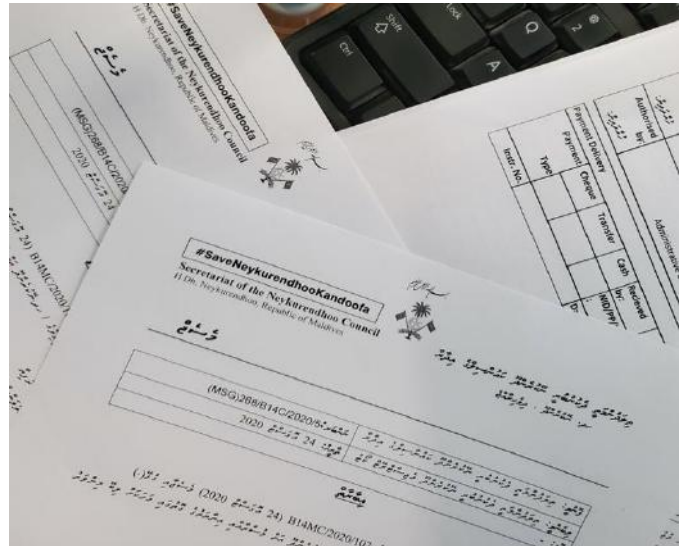
The issue was brought up at the Parliament sitting held on 07th July 2020 by the Member of the Parliament from the constituency and was brought to the attention of the Environment and Climate Change Committee – ECC of the parliament. An inquiry was launched by the committee to find out the delays by the Ministry of Environment – MoE and EPA in sending a field team to investigate the issue and why it took a month for the report to be officially lodged by the Island Council. The inquiry is ongoing and a report is likely to be published based on their findings and recommendations to the Ministry of Environment.

The expansion of the social media included capturing indigenous knowledge and history of how the mangrove area was managed. This included engaging with the online communities via social media accounts, for instance the art of harvesting and preparing Kan'doo was

captured, [human element stories](#) were published in local language. Various online discussions and content was produced giving more exposure to the issue. Using various communication methods the social media campaign is growing.



Neykurendhoo council devised new trendy ways of building attention around the issue, the council staff raised funds to produce custom made face masks with the campaign hashtag on it. They also made a formal decision to use the hashtag on all formal documents of the council. These creative ideas are factors contributing to the expansion of the mangrove campaign. The social media campaign created dedicated posts developed with the messaging to advocate and push for climate action. In addition to that Island Council proactively engaged with the Member of the Parliament – MP of the constituency, which led to an inquiry into the delays caused in attending to the matter urgently given that the area of mangrove lost is approximately 5 hectares, 10,000 mangrove plants.



Photos: Neykurendhoo Council- 2020

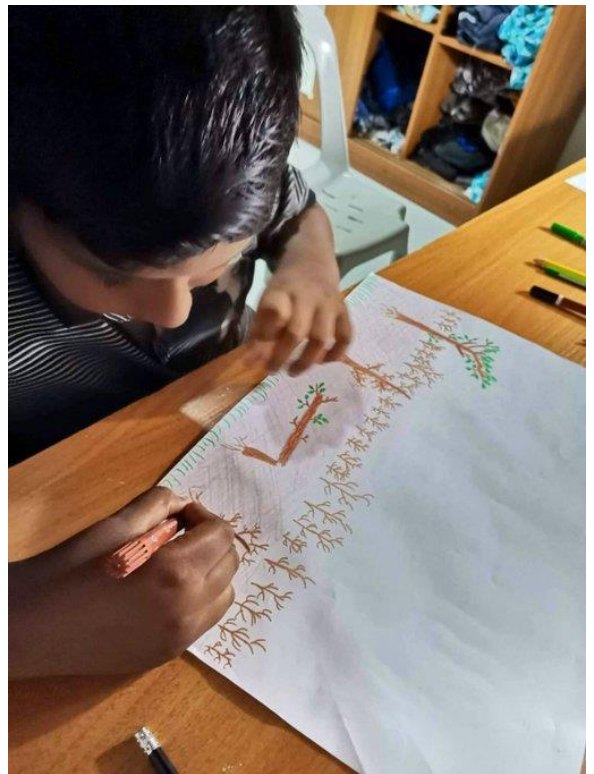


[MAP 19th Children's Mangrove Art Contest](#) was underway and through this campaign the promotion of the art contest continues to be undertaken. MAP has been keen to get art submissions from the Maldives and the issue of Neykurendhoo came about as a window of opportunity. Leading to formal virtual [meetings](#) with Minister of Arts, Culture and Heritage and with the island school. Formal communication to introduce and pilot mangrove curriculum is also ongoing.

Students of Neykurendhoo School [took part](#) in this contest following [information sessions](#) conducted by Save Maldives on the significance of the mangrove on the island. Sessions were also conducted for [all teachers](#) of the school. Neykurendhoo School was the only school which formally endorsed and took part in this global contest.



Photo: Neykurendhoo School- 2020



Outcomes

Below outcomes were achieved by implementing the activities:

- Coordination and communication amongst the local authorities enhanced.
- Heighten the awareness levels of the general public on the significance of the mangrove ecosystems.
- Used lobbying and advocacy to push for political will and increased accountability of the state by working with politicians and using Right to Information Act 1/2014 – RTI act as a tool.
- Assisted the Island Council to better organize, coordinate and collaborate on common issues of interest.
- Contributed towards building consensus among the politicians and the local community to take immediate action to find out the causes and to commence restoration efforts.
- Documented indigenous knowledge and information on mangrove management.
- The mangrove die-off cause became a vessel of bridging the gap between the Island Council and the community, positively contributing towards a healthy relationship and lifting the community spirit to work together.
- Visibility on the issue increased leading to various collaboration and network expansion for all parties involved.

Way forward

On the International Day for the Conservation of Mangrove Ecosystems, July 26th more commonly known as World Mangrove Day, Neykurendhoo Council reaffirmed their commitment towards strengthening efforts to #SaveNeykurendhooKandoofaa. Save Maldives and other partners are seeking ways to expand the activities, as a part of this effort more research and funding opportunities are been looked into. There is a dire need to engage more meaningfully with the island community to use this opportunity as a window to engage, inform, strengthen awareness, educate and create a better understanding of mangrove ecosystems. This community driven approach is proving useful as interested groups have become engaged.

Following are the proposed key activities to be implemented if funding is secured.

- Hosting awareness sessions for the local communities
- Hosting a mangrove talk webinar series
- Conduct mangrove clean-up activities
- Expanding the existing public campaign #SaveNeykurendhooKandoofaa and introduce the submission of the personal human element stories, compile the human element stories into an e-book or a print book by working with a local journalist or author or editor.
- Capturing and documenting indigenous knowledge as videos and infographics as human element stories and share on the social media platforms of the partners
- Introduce and conduct Multi- Sectorial Dialogues (MSD) locally on the island with all island level stakeholders and come up with long-term monitoring mechanisms in place
- Conduct activities designed specifically for the school students and youth of the island

Conclusion

Neykurendhoo island community has practiced a way of life that makes the mangrove of the island as their pride. As mangroves have cultural, historical and social ties, the island community is determined to restore the mangrove ecosystem. Mangroves are of importance to local communities. Wood from the trees has been used to make boats previously, and people even utilized the plants as a food source during food-scarce times such as during WW II.

Expanding the activities of the project is crucial to provide the support required to restore, sustain and manage the mangrove ecosystem. It will help the local community to be better informed, aware and engaged in the processes of environmental management. The increased public participation is important to sustain the results and to make a long-term impact. To achieve the objectives, funding sources and in-kind contributions are much needed.

References

Technical Report on Neykurendhoo Mangrove and Wetland (2017) Environment Protection Agency

Social Survey Report – Sustainable Management of H.Dh.Neykurendhoo Mangrove / Wetland (2018) Environment Protection Agency

Conservation and Management of Maldivian Mangrove Habitats – Baseline Study
Haa Dhaalu Neykurendhoo – Bluepeace Maldives

Cover photo credit: Zeem Mode – 2020 (for Neykurendhoo Council)

Annex A

Schedule of Activities

Date	Time	Activity	Details
25 th June 2020 (Thursday)	1600 hrs – 1700hrs	Departure from Haa Dhaal atoll Kulhudhufusshi to Haa Dhaal atoll Neykurendhoo	Participants from Haa Dhaal atoll Hanimaadhoo came to Haa Dhaal atoll Kulhudhufusshi and from there left to Haa Dhaal atoll Neykurendhoo
	1730hrs – 1800hrs	Meeting with council members and stakeholders	Information regarding planned activities and a brief introduction given
	2030hrs – 2200hrs	Meeting with locals	Information given to locals and awareness session conducted. Selection of team to do field visit to mangrove selected and discussion conducted with locals
26 th June 2020 (Friday)	0830hrs – 1030hrs	Field Visit to mangrove site	Samples taken from site, pictures and videos taken, survey questions answered after observation
	1430hrs – 1530hrs	Field Team Meeting	Observations noted down and discussed
	1600hrs – 1700hrs	Departure back to Kulhudhufussi and Hanimaadhoo from Neykurendhoo	