



INTRODUCTION

With the rapid development of the tourism and fisheries sectors, the Maldives has enjoyed a long period of robust economic growth. The average rate for real GDP increase between 2000 and 2009 has been 6%, which is one of the highest in Asia. Multiple developmental projects, categorized as climate mitigation and adaptation projects, are announced each year from harbour construction and land reclamation to housing, water and sanitation.

However, this development comes at a cost. This governance update will highlight the issues and costs of undertaking developmental projects without long term considerations of climate change mitigation and adaptation.

As Margareta Wahlstrom, the UN Assistant Secretary-General for Disaster Risk Reduction stated, "Climate change is treated as a disaster but it is a very fundamental development issue."

The majority of the aforementioned projects are in the form of loans and grants from various international donors and organizations, worth millions of dollars, to aid the country in its efforts to combat the negative effects of climate change.

We will also be touching upon the importance of community consultation and participation when implementing developmental projects and the negative consequences of failing to do so.

DH. MEEDHOO LAND RECLAMATION

The Dh. Meedhoo land reclamation project is one such project where disregard for the recommendations of the Environmental Impact Assessment (EIA) and lack of community participation in the planning and implementation of a developmental project resulted in dire consequences for the local community.

The reclamation work inaugurated in 2014 and completed in 2016 was carried out by Boskalis International on contract for the Ministry of Housing and Infrastructure. Firstly, it was started without setting up a bund wall, which had to be in place before starting the filling process. Secondly, they opted for the rainbowing technique – the propulsion of materials through the air in a high arc

– instead of using pipelines to take the the sand closer to the land. This resulted in fine sediments 'raining' on rooftops and on the vegetation cover near the shore and inland. In addition to the destruction of the island's "heylhifah" or shoreline vegetation, the house reef was also destroyed. Layers of sedimentation found on some rooftops were 2-3 inches thick and much of the community suffered serious property damage from broken floors to rusted roofs and damaged walls.

According to Ahmed Aslam, President of the Meedhoo Island Council, neither the Council nor citizens were made aware of the requirement for mitigation measures. After complaints were lodged by the community, the EPA issued a halt notice to the Ministry of Housing and Infrastructure.

Further complaints were lodged by the community, the Council and the local NGO ECOCARE to the Ministry of Housing and Infrastructure, at which point the Ministry assured the island council of compensation, even going insofar as to collecting information of damages incurred.

However a year later, there has still been no compensation. "The Island Council has followed up with the Ministry but they have given no definite answers," says Ahmed Aslam.

Maldives has been an outspoken champion of "Loss and Damage" on behalf of Small Island States in the international climate change arena. As the Chair of AOSIS (Alliance Of Small Island States) which celebrated success in including "Loss and Damage" as a separate Article in the historic Paris Agreement last year, it is cause for concern that Maldives cannot provide similar compensation at the local level.

RASFANNU MISCONDUCT

Another high profile case where the Ministry of Housing and Infrastructure and implementing parties disregarded recommendations by the EPA as well as the EIA is Rasfannu, the artificial beach that was developed on the western waterfront of Male'.

The EIA found that the project could cause water pollution, reef slope failure, and damage the coastline of the capital island.

Malé's west coast has been "free from direct human influence" to date, the EIA noted, but the development project currently underway has "the potential to cause damage to reefs and reef ecological system", causing loss in organisms due to mortality and forced migration.

The EIA also flagged the presence of faecal matter in the water.

The EIA decision statement granted permission for the construction of Rasfannu Beach on the condition that the two sewage outfall lines in the area be relocated. However the Ministry of Housing and Infrastructure decided that extending the pipe would be enough. This option had not been explored in the EIA and the EPA insisted on further testing of the water for faecal matter and other dangerous bacteria.

The Ministry of Health has stated that "regular monitoring tests of the new artificial beach water show no faecal contamination and meet the standards for recreational water."

Local experts have insisted that faecal coliform is not the most appropriate index organism to measure bacterial contamination in salt water and recommended that the area be tested for Enterococci.

Raajje TV reported in March that it had commissioned independent tests, and found "dangerous levels" of Enterococci and faecal coliform bacteria, which cause infections such as urinary tract infections, typhoid and gastroenteritis.

Amid concerns raised by the public and civil society groups like ECOCARE and Dhi Youth Movement about the serious threat posed to swimmers by the untreated medical waste and sewage outfall in the area, the Ministry of Housing and Infrastructure has stated that they are working on creating a secondary treatment plant by mid 2016.

On 17 May 2016, tidal surges caused extensive damage at the Rasfannu beach uprooting lampposts, toppling chairs and bins, and

displacing large swathes of sand inland. The Beach also had to be closed on 21 March 2016 when an underwater sewage pipe in the area burst.

Another issue surrounding the construction of the USD 2.5 million swimming area, is the removal of parts of the protective tetrapod seawall and the dredging of the lagoon. Many have criticized the removal of the tetrapods citing concerns that it will increase the capital's vulnerability to climate change.

Shamau Shareef, a Male' city councilor who had previously expressed concern over the Rasfannu project, told the *Maldives Independent* that the damage from the storm surges "was a preview of worse to come." The upcoming southwest monsoon brings storms and tidal surges to the Maldives.

Mohamed Aslam, former Environment Minister, meanwhile questioned the financial burden of maintaining the Rasfannu beach: "By the looks of it, it appears this is a cost that all consecutive governments will have to bear, perhaps several times in a year."

NOLHIVARANFARU SANITATION CRISIS 1

In 2014, the Ministry of Health and the Ministry of Environment and Energy (MEE) were alerted by the Nolhivaranfaru Island Council when the first sewage pump broke down. However, no solution was found.

On 26 February 2016, the second sewage pump broke, causing sewage to overflow. Even after the relevant authorities were informed, citizens were left living in unsanitary conditions for more than 2 months.

According to the President of the Nolhivaranfaru Council, Ahmed Riyaz, they resorted to utilizing a petrol pump as a temporary solution but had been unable to stem the overflow of raw, untreated sewage.

Finally on 2 May 2016, FENAKA, the Government owned utility company whose mandate is to provide island communities with electricity, water, sewerage and waste management services, fixed the pumps on the island. However due to a lack of materials the panels are yet to be fixed. Thus the island is still running on a manual pump as of this writing.

According to Riyaz during the initial installation, experts noted shoddy workmanship where proper techniques were not used, such as during the laying of the pipes where the ground was not leveled evenly causing disruptions to the smooth flow of sewage. In addition, the outfall pipe into the ocean had degraded as it had not been installed properly causing the sewage to wash back onto the shores of the island.

The sewage system was installed in 2011, however as in the case of Dh. Meedhoo, the Council and the community were not provided with any of the pertinent information.

There was also a failure to follow the proper procedure. Project implementing partners are supposed to handover such services to a managing party before any service is opened to the public. According to the Public Services Act 4/96, before any public service is provided, it must be registered at the EPA.

When the pump broke, no official authority had been charged with maintaining the system. Even before the incident, several letters had been sent to the MEE enquiring about who was to be charged with the responsibility of operating the system, to no avail.

It is also important to note that all expenditure in dealing with this crisis has been taken out of the emergency response budget line of the council budget.

"The issue is not the pumps being damaged, it is the system that doesn't have clarity, does not allow us to get information and doesn't recognise inclusivity.", stated Ahmed Riyaz.

¹ In the climate change arena, sanitation is considered an important issue with regards to climate resilience of communities and their health and well being. In Maldives as well, socio-economic projects such as water and sewerage are considered as climate finance projects. As such the case of the recent Nolhivaranfaru sanitation crisis is of importance to this governance update.

territory of the island, but when these projects and hold implementing agencies accountable. are implemented, there is no supervision from the government ministries and they don't officially Most importantly inter agency cooperation include councils in the process. So how can we know if the projects are done according to the plan or EIA or even that the quality of work and need to be streamlined and strengthened in order materials are up to the standard?." continued to reduce avoidable damages, such as in the Riyaz.

CONCLUSION

The common issues prevalent across all three cases is a lack of community consultation and, processes.

There are multiple socio-economic projects still The theme for this year's Environment Day "Join information proactive disclosure of strengthening community participation so that future.

"By law, councils are given power over the communities are better empowered to monitor

between government authorities such as the EPA. MEE and Ministry of Housing and Infrastructure above cases.

In addition local community members can still be included in the decision making process. Parties implementing these projects must not only participation, a lack of proactive disclosure of respect the principle of free, prior and informed information, and a disregard for recommendations consent, but must also treat communities as equal on mitigation measures and not following due partners in creating a new paradigm for their local development.

in the planning stages as well as many more the race to make the world a better place" sends ongoing projects across the country. It is not too a clear message about the need for everyone to late to build better mechanisms for transparency; get involved in environment and climate change and related issues in order to build a more resilient