



## 1. Introduction

Coastal modifications are activities that significantly change the natural coastline of islands. Reef reclamations, dredging, and harbor construction cause irreversible damage to island ecosystems and often have long-term impacts on the surrounding islands. Consequently, Environmental Impact Assessments (EIAs) and the Environmental Protection Agency (EPA) approvals are mandatory before any such activity. In this case study, we focus on the process of coastal modifications to Thumbafushi (island) and Thunbafalhu (lagoon) in Kaafu Atoll.

## 2. Locations

Situated North of Male', close to Helengili, with Gaafaru and Dhiffushi as its closest inhabited islands, Thumbafushi is a small uninhabited island in Kaafu Atoll which was leased to Ma.Champhaage, Mohamed Moosa for agricultural activities (mainly poultry and fish processing) on 22 August 1999. When it was leased by the Ministry of Fisheries and Agriculture (MFA) then, it represented only part of the island to the right in Figure 1.



*Fig. 1. Thumbafushi, Thunbafalhi*  
Source: Google Earth

### 3. Issue and EPA's response

In 2011, a large part of the reef was reclaimed to expand Thunbafushi. The EPA considered these coastal modifications to be illegal and done without EIAs. The EPA states that their staff visited the island thrice to investigate and assess the damages. Although the impacts of these coastal modification activities were not clearly understood at the time, local fishermen from the Kaafu Atoll fishing community reported that they had witnessed diminished bait fishery in the area after reclamations had taken place. Coastal modification activities, even with authorized reclamations, cause irreversible damage as it is not possible to revert to the previous state and structure of the reef and lagoon.

### 4. Legal Implications

According to the Regulation on Environmental Liability (2011), the damage assessment can be done area-wise with an incremental approach if the area is more than five square meters; calculated based on quantity and the period in which the breach was carried out. If offenses are repeated, then the level of penalties increases; considering the period between the cases and the repeated number of similar offenses. Moreover, fines can be increased based on failure to fulfill administrative requirements and documents (EPA, 2011/R-9, clause 5.1). It was reported that damages were calculated at the rate of MVR 65,000 per square meter, as per the Regulation on Environmental Liability (2011) (Robinson, 2011).

The leaseholder of Thunbafushi is accused of having committed the following violations:

- *Reclamation of Thunbafalhu without authorization from the Maldivian government:* This authorization comes from conducting an EIA (to be paid by the leaseholder) and approval from the EPA of Maldives.
- *Use of Thunbafalhu lagoon as a dumping ground:* During further investigation by EPA, it was discovered that the lagoon was used as a dumping ground, and there were waste material, batteries, and oil drums leaching into the marine environment (Robinson, 2011).

According to the EPA, the value of the damage is estimated at MVR 2,730,293,566. However, this figure would have been higher if the impact of sedimentation from dredging was included. The sedimentation caused by dredging impacts coral several kilometres from the site (Robinson, 2011). However, a total fine of MVR 100 million was imposed on the leaseholder of Thunbafushi (Lubna, 2011) – citing the overall damage to the environment. This was the maximum fine that can be imposed under the Environmental Protection and Preservation Act of Maldives 1993 (EPP Act).

The leaseholder decided to challenge the fines and took the case to court. In their defence, the leaseholder argued that the government of Maldives lacked the technical capacity to assess damages, and thus a fine of MVR 100 million was overstated (Lubna, 2011) and had prominent environmental professionals speak out against the EPA's ruling. However, the EPA's stance was that the imposed fine was lower than the estimate as per the damage assessments done by EPA. When reefs are changed, it causes irreversible damage, with long-term implications, and future generations would be deprived of those resources.

The main defending argument was that the baseline condition of the environment was not known, and thus, such a high fine could not be imposed or justified. Rather than reviewing the fine, it was annulled and invalidated by the court. According to the judge, EPA's stance that the defendant violated environmental regulation was not clear (Azif, 2011).

It is very clear based on this case that the judiciary lacks awareness and knowledge of environmental issues, and there is a need to sensitize the judiciary in this regard.

## 5. Chances of Repeating

Given the lax application of the regulatory requirements, as evident in the case of Thunbafushi, it is possible that in the future, coastal modifications such as reclamations will be carried out by other parties without an EIA, particularly with the precedent that there are no actions taken against such offenders. It is also worth noting that even if the fines are paid, there is room for the offender to take advantage of the fine amount which may be lower than the benefit for the company – based on a simple cost-benefit analysis. Thus, alternative procedures for preventing illegal coastal modifications and other methods for sentencing are needed urgently.

## 6. Lack of Monitoring

There has been no monitoring done regarding impacts at the location and nearby islands of Thunbafalhu/ Thumbafushi. As the lessor of uninhabited islands, the Ministry of Fisheries and Agriculture (MFA) should have also had monitoring and reporting systems in place to correct any illegal activities before the damages had gotten as severe. In the case of Thunbafalhu, there were reports that reclamation was done even in the past, without an EIA or other required approvals. However, it seems that there was not much coordination between MFA and EPA.

## 7. Other Related Issues

In 2014, an EIA was done for the same company (as the leaseholder) to extend Thumbafushi by reclaiming a part of the reef (CDE, 2014). According to the EIA report, the reason for reclamation was that in Kaafu Atoll, there was no other uninhabited island available for them. However, in 1999 it was not the reef that was leased, but only a small islet on the eastern side of the lagoon. According to the Anti-Corruption Commission (ACC), the company had breached the lease agreement by carrying out activities not approved in the lease agreement. Dredging, construction of a seawall, and reclamation were done without EIAs. In May 2006, MFA requested the Environment Research Centre (relevant authority for environmental monitoring before the formation of EPA in 2008) to act. However, on 9th November 2006, MFA signed an agreement with the same company to extend the lease period. As per a statement by the Presidential Commission on Asset Recovery, Thumbafushi was leased by MFA for an annual lease fee of only MVR 100 from 1999 to 2004. From 2006 it was given for 21 years for 100,000 Rufiyaa per annum. But between 2004 and 2006, it was used with no agreement and no lease payment (Haveeru, 2011).

No actions were taken against any parties involved in the reclamation except for fining Mohamed Moosa (Champa Moosa). Even contractors who do the actual work need to be aware and take an extended corporate responsibility to ensure that the activities in their projects are legal activities. It is a risk that as per Regulation on Environmental Liability (2011), third parties may also be held accountable. Therefore, all parties need to be aware and abide by the rules and regulations.

Regarding this case, the Director General at EPA resigned from his position. According to him, this was a politically motivated case, and the assigned fines did not correspond to environmental damages. This is also relevant because environmental destructions have occurred in the past as well, and unless it is regarded as a priority by authorities, it is not considered an environmental offense. From this aspect, it is possible that comparable environmental destruction had taken place in the past and no action was taken.

## 8. Conclusion

Environmental governance in the Maldives needs significant improvement. There is an urgent need to put in place stronger systems for monitoring and information sharing among the enforcement agencies. The case study indicates that no actions were taken against coastal modifications in Thumbafushi prior to 2011 because the enforcement authorities were not aware – the MFA had not shared that information with the EPA. The case study also reveals that there are limitations in the damage assessments and enforcing penalties. According to the civil court judge related to this case, the EPA’s argument was not clear in determining whether Thumbafushi leaseholder had violated a regulation. It was evident in this case that EPA does not have adequate human resource capacity in environmental law, and therefore lacked the legal wherewithal compared to the corporate sector that can hire more experienced legal and environmental experts who can support them. The judges may not have understood the situation clearly either as environmental matters have not been raised in courts until recently.

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