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Viewpoint

Dynamite fishing in Tanzania

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Fishing using explosives is common in Tanzanian waters; it is considered to be more widely practised now than at any other point in history. Mwambao Coastal Community Network, a Tanzanian NGO carried out a multistakeholder consultation in April 2014 initiated through the concern of private investors and tourism operators. Consultations were held with villagers, fisheries officers, government officers, hoteliers, dive operators, fish processors, NGOs and other key individuals, and shed some light on key factors enabling this practice to flourish. Key areas identified for attention include engendering political will at all levels, upholding of the law through a non-corrupt enforcement and judicial system, and defining clear roles and responsibilities for monitoring and surveillance. The work identified other successful initiatives which have tackled this pervasive practice including projects that build local capacity for marine governance, villages that have declared themselves intolerant of blast-fishing, and private–public partnerships for patrol and protection.

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Fishing using explosives is common in Tanzanian waters and reports indicate that it has been practised here since the 1960s (Samoilys and Kanyange, 2008). Despite being made illegal by the Tanzanian Government in 1970, it is currently considered to be more widely practised now than at any other point in history, to the extent that on some parts of the coast it is becoming 'fishing as usual'. Mwambao Coastal Community Network, a Tanzanian NGO based in Zanzibar, was approached to carry out a multi-stakeholder consultation by the Hotel and Tourism Association of Tanzania (HAT) and was funded by BEST-AC, IUCN and the Lighthouse Foundation. Mwambao's vision is that Tanzanian coastal community livelihoods are improved and sustainably supported by the ecosystem services provided by a healthy bio-diverse coastal environment. The consultation took place in April 2014 and involved meeting with stakeholders from the village of Mkubiru on the southern border with Mozambique, to the village of Moa on the northern border with Kenya. The work was initiated through the concern of private investors and tourism operators on the Tanzanian coast who are witness to the rampant nature and recent surge in 'blast fishing' in areas that they operate. Consultations were held with villagers, fisheries officers, government officers, hoteliers, dive operators, fish processors, NGOs and other key individuals, and shed some light on key factors enabling this practice to flourish. The work also highlighted isolated initiatives which have shown success in tackling this pervasive practice.

The historical evolution of dynamite fishing in Tanzania was confirmed by various elders in Mtwara and Kilwa including Mzee Omari Ali Kionga of Somanga in Kilwa District. According to Mzee Omari,

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fishermen from Mtwara were the first to practise dynamite fishing in their coastal waters and soon the practice spread further north and reached Kilwa. The practice was promoted by the collaboration of business individuals from Dar es Salaam who came with dynamite supplies and cool boxes for collecting fish. These fishers from the "South" soon moved to other coastal waters of Tanzania from Msimbati in Mtwara, to Moa in Tanga (Fig. 1).

The practice of fishing with explosives is considered to be the most destructive of all human impacts on coral reefs (Wagner, 2004). Each blast completely reduces the reef to rubble within a few metres of the blast site, while killing all fish and most other organisms within a 15–20 m radius (Guard and Masaiganah, 1997). Devastation over the years has been severe; Horrill (1996) in a north coast survey of 14 coastal reefs, 17 inner patch reefs and 27 outer patch reefs, estimated that 12% of reefs were completely destroyed, 24% were in good condition with the remaining 64% in poor or moderate condition. Information from communities and monitoring indicated that most of the damage to reefs north of the Pangani River was the result of dynamite fishing. It is an ecological calamity on par with elephant poaching and arguably worse, as it results not only in the destruction of large numbers of marine organisms but also in complete obliteration of their habitat.

"I can no longer take guests to these 'dead areas' — it is like bombing in the middle of Ngorongoro crater but because no-one sees the damage under the ocean, no-one cares". *Dar es Salaam dive operator*.

Major towns such as Mtwara, Dar es Salaam and Tanga appear to be the hubs from which most of the 'dynamite fishing' originates with powerful well-connected businessmen and others financing the operation and using local villagers as crew (Fig. 2). These locations are also the

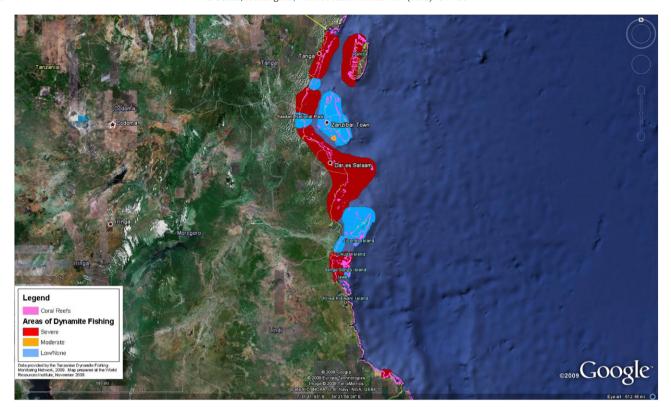


Fig. 1. Map showing incidence of dynamite fishing in Tanzania, 2009. Copyright World Resources Institute.

final market destination for fish caught in this manner. Village fishers also engage in the practice at a local level on their own, both on foot at low tide, and using local boats. Explosive devices no longer rely on traditional sticks of dynamite; home-made bombs are easily created using plastic bottles, granular fertilizer, petrol, detonator caps and small amounts of explosive gel (Fig. 3). One 'bomb' might cost less than Tsh. 15,000 (\$8). Fishers are well aware of the detrimental effects of blast fishing on the environment — they complain that blast fishing is affecting their livelihood. They recognise that dynamite has resurfaced with great vigour in the last five years and report that it is normal to hear from 20 to 50 blasts a day in the major affected areas. Local fishers use dynamite due to the pressures of poverty and the

quick returns afforded by the use of explosives — they realise that they are often operating as pawns in a larger game.

There has always been frequent and widespread fisher migration along the East African Coast with fishers operating seasonal camps far from their home village. As boat engines have become more accessible, people travel further and can reach market more quickly. The 'de facto' open access to fisheries is a challenge, limiting the control that government and resource users have on fisheries management.

(You ask) "why haven't people changed their ways — they feel the natural resources are not theirs. People don't cut down their own cashew trees to get cashew nuts. We need to convince people that



Fig. 2. Blast fishing off of the Dar es Salaam coast.

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