

Between reefs and rising tides: Community voices, fisheries, and the future of conservation in the Togean Islands

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At dawn in the Togean Islands, the sea appears deceptively calm. From the stilted houses of Bajau settlements to the coral-fringed shores of Una-Una, the water reflects a quiet resilience—one that masks the profound changes unfolding beneath the surface. For generations, the sea has fed families, shaped identities, and anchored cultures across this archipelago in Central Sulawesi. However, fishers, women, elders, and youth across Kepulauan Togean National Park (KTNP) speak with a shared concern: the sea is no longer as generous as it once was.

Over the past year, a series of consultations, perception-mapping meetings, fisheries monitoring activities, and field observations—conducted under the ASEAN ENMAPS initiative in collaboration with the Ministry of Forestry, KTNP, local governments, non-governmental organisations, and communities—have revealed a complex and deeply human story. It is a story of declining fish stocks, eroding traditional practices, rising seas, governance challenges, and, crucially, community-driven solutions that are struggling to take root.



Kabalutan Village, Togeans Islands, Central Sulawesi

Declining catches, deepening worries

Across the villages of Tiga Pulau, Kabalutan, Pulau Enam, Tongkabo, and beyond, fishers describe a consistent pattern—what once took hours now takes days, and what once was plentiful now requires venturing farther from shore.

In Tiga Pulau, fishers recalled that octopus harvesting has pushed them to increasingly distant reefs since 2020. *Layang* (*Decapterus* sp.) catches began declining as early as 2018. In Kabalutan, one of the largest Bajau settlements in the Togeans, the situation is even more stark. Fishers reported that landed catches have fallen to nearly one-fifth of their levels two decades ago, with noticeable declines beginning around 2004.

“These changes didn’t happen overnight,” one fisher explained. “But every year, it becomes harder.”

The targeted species reflect both economic necessity and ecological stress. High-value demersal fish such as *sunu super merah* (*Plectropomus leopardus*) and *kerapu tiger* (*Epinephelus fuscoguttatus*) remain prized, while octopus (*Octopus cyanea*) has emerged as both a critical livelihood species and a symbol of community-led conservation. Pelagic species like *lolosi* (*Caesionidae*) and *jukueja* (*Nemipterus japonicus*) are still landed in volume, though even these are showing signs of pressure.

The problem has been compounded over the past decade due to the widespread use of night spearfishing with compressors (*hookah*), particularly in Kabalutan and other villages. While *hookah* and destructive fishing are formally banned by regency regulations and National Park rules, enforcement remains uneven, and no additional village-level regulations have been established in most locations.

Informal discussions further suggest that limitations in awareness and understanding persist regarding the combined use of spearguns and *hookah* during night fishing, particularly in relation to the potential risks to fishers’ health and the ecological rationale behind restrictions on compressor use. Strengthening community-level information and awareness on these issues may help foster greater compliance and support for existing regulations.

The wisdom of names and the silence of traditions

Among the Bajau (or *Sama*, as they culturally identify themselves) the sea has never been an uncharted space. Long before zoning maps and patrol schedules, Bajau communities developed their own spatial knowledge systems, encoded through names, stories, and taboos.

Reefs were named not arbitrarily, but relationally. *Sappa Buntar* referred to a rounded reef formation; *Sappa Matilla* described a bright, clear area. Other sites bore the names of fishers closely associated with them, *Sappa Loong* or *Sappa Mbo Tukang*, while places like *Sappa Ruma* recalled the presence of a small resting hut built above the reef.

Some names carried deeper meaning. *Sappa Kokko*, or “devil rocks,” was an area believed to be spiritually dangerous. For generations, this belief discouraged fishing there, resulting in higher fish biomass compared to surrounding reefs. Fear, in this case, functioned as conservation.

Yet many of these practices have faded. Daily rituals are rarely observed. Customary rules are no longer enforced. Younger generations, facing economic pressure and changing social norms, no longer rely on cultural taboos to guide resource use.

“The knowledge is still there,” one elder noted quietly. “But it is no longer followed.”

Community experiments in conservation

Despite these challenges, pockets of innovation and hope have emerged. In Kadoda Village, the Kogito Conservation Fishers Group (“*kogito*” meaning octopus in the Bajau language) has worked with the Natural Resource Management Advocacy Network to implement a seasonal octopus closure system. Supported by KTNP, this initiative represents one of the clearest examples of community-based fisheries management within the national park. Informal conversations with the villagers revealed that they have already observed positive ecological signals due to *kogito*, notably increases in the size and weight of harvested species, which have contributed to improved production during the harvesting period from January to March.

Kadoda Village, Togean Islands, Central Sulawesi





Pulau Enam village, Togean Islands, Central Sulawesi

KTNP has also supported fish cage establishment in Saloli to diversify livelihoods and improve household income, while piloting “smart patrols” involving community members twice a week. These patrols combine enforcement with *biota*¹ monitoring, reinforcing the idea that communities are not merely beneficiaries of conservation, but active stewards.

The national park leadership has expressed a clear vision: to move away from perceptions of the Park as a restrictive authority, and toward an enabling institution that empowers sustainable local enterprises. Optimising the Togean Islands’ status as a UNESCO Biosphere Reserve, they argue, could unlock new opportunities for eco-tourism, value-added products, and sustainable fisheries.

Women, youth, and the missing middle

In community meetings across the Togeans, women’s voices have grown more visible—yet structural gaps remain.

In Tiga Pulau, there is no formal Gender Action Plan or organised women’s livelihood group. Women primarily identify as housewives, though many supplement household income by selling baked goods or processing salted fish. They participate in village development planning meetings, but lack targeted programs to strengthen skills or scale enterprises.

In contrast, Pulau Enam has integrated women’s empowerment into its Medium-Term Village Development Plan. Women’s groups are active, and access to clean water, a basic need still unmet in Tiga Pulau, has transformed daily life. Every household in Pulau Enam receives

¹ *biota* - all living organisms found in a particular area

piped water, enabling better health outcomes and more time for productive activities. Kabalutan presents a more complex picture. Women there assert that they enjoy equal roles with men, including fishing and income generation. Some have developed skills in seafood processing and recycled crafts. Teachers among them voiced concern over early marriage trends and have begun informal mentoring programmes for students. There remains significant potential to enhance educational opportunities, alongside expectations for broader development progress as village leadership arrangements are put back in place.

Across all villages, youth participation is recognised as critical but underdeveloped. Without alternative livelihoods or pathways for engagement, many young people see fishing as their only option, even as catches decline.

Governance gaps and grievance pathways

One of the most consistent messages from communities concerns governance, specifically, consultation, communication, and accountability.

KTNP has confirmed the existence of a grievance redress mechanism (GRM), though in practice, most complaints are communicated informally via phone or messaging apps to field officers. Through the ASEAN ENMAPS Project, village-level (Tier 1) GRM systems have been developed and formally linked to the initiative, with signed agreements and documented FPIC processes in Tiga Pulau, Kabalutan, and Pulau Enam.



Village head of Pulau Enam signing the Free, Prior, and Informed Consent (FPIC) document of ASEAN ENMAPS



Women representatives of Tiga Pulau Village signing the FPIC document of ASEAN ENMAPS

Communities have been clear about their preferences: direct meetings remain the most trusted communication channel, supported by suggestion boxes and printed materials. They also expect regular updates (every three or six months) on project progress.

In Kabalutan, frustration with absent village leadership dominated discussions. Residents cited stalled infrastructure projects, such as an unfinished bridge, as evidence of governance failure. Any engagement strategy here must navigate existing tensions carefully, ensuring inclusion of both formal authorities and respected informal leaders, including former fishers involved in destructive practices.

Una-Una: A different path

On Una-Una Island, the story takes a slightly different turn. Here, agriculture and tourism, rather than fishing, form the backbone of local livelihoods. Village leaders openly acknowledge the value of healthy reefs, not only as fish habitat but as tourism assets.

A rapid coral reef survey conducted on the island's eastern side confirmed their claims: healthy coral cover, abundant ornamental and herbivorous fish, low algae presence, and indicators of climate resilience. Dive guides corroborated that reefs near inhabited areas have been actively protected by local residents, while uninhabited western areas still suffer from occasional blast fishing.

For Una-Una, the recommendation is clear: maintain fishing as an artisanal, subsistence activity, while strengthening sustainable tourism and agriculture.

Toward an inclusive seascape

What emerges from the Togean Islands is not a simple narrative of decline, but a layered landscape of challenge and possibility. Fisheries are under pressure. Climate impacts are increasingly visible. Governance structures are uneven. Yet, communities are not passive observers.

They are naming problems, proposing solutions, reviving elements of tradition, and demanding a seat at the table.

As ASEAN ENMAPS moves forward, success will depend not only on stronger regulations or better data, but on trust built through transparency, inclusive engagement, and tangible benefits. Conservation here cannot be framed as restriction alone. It must be experienced as empowerment.

In the words of one community participant, "We do not want the sea to be closed to us. We want the sea to stay alive."

Between reefs and rising tides, the future of the Togean Islands will be shaped by how well policies listen to people, and how deeply people are invited to shape the policies that govern their seas.

The project *Effectively Managing Networks of Marine Protected Areas in Large Marine Ecosystems in the ASEAN region (ASEAN ENMAPS)* aims to improve marine protected area network management in key Large Marine Ecosystems across Indonesia, the Philippines, and Thailand. It applies science-based strategies to conserve biodiversity and sustain fisheries. The project also aims to strengthen governance, build the capacity of stakeholders, promote knowledge sharing, and advance sustainable financing for long-term conservation. ASEAN ENMAPS is implemented by the United Nations Development Programme through the funding of the Global Environment Facility, and with the ASEAN Centre for Biodiversity as the executing agency.

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