



## Community, Awareness, and Saving Mammals in Myanmar: A Success Story



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### Abstract

Community involvement plays a pivotal role in biodiversity conservation. Raising awareness is critical to enhancing conservation knowledge in local projects. The Marine Science Association Myanmar (MSAM) has been implementing the Locally Managed Marine Area (LMMA) project in Magyi, Shwe Thaug Yan Township, Patheingyi District, within the Ayeyarwady Administrative Region of Myanmar. This project aims to ensure the sustainability of fisheries resources to support the livelihoods of coastal communities while promoting biodiversity conservation. A landmark achievement of the project occurred on 27 April 2024, when the Magyi community successfully released a dolphin back into its natural habitat. This success underscores the transformative impact of community engagement and education in conservation initiatives.

### Introduction

Myanmar's coastal ecosystems host diverse marine life, including dolphins, which are vital indicators of ecological health. However, threats such as overfishing, habitat destruction, and

accidental entanglement in fishing gear jeopardize their survival. The LMMA project, initiated by MSAM, seeks to address these challenges by fostering sustainable practices and raising awareness among local communities. Magyi, a coastal village reliant on fishing, became a focal point for these conservation efforts.

The Magyi area, located in the southern part of the Rakhine coastal region, is rich in marine capture fisheries resources, including threatened species. Threatened species reported to the project by local communities along the Magyi coast include several species of sharks and rays, marine mammals such as dolphins and dugongs, and marine turtles. According to interviews, these species were regularly caught accidentally. The practice among locals has been to consume these species whenever they are caught, as the communities lack an understanding of their importance as indicators of ocean health and fisheries status.

Globally, dolphin conservation practices have proven effective when integrating community involvement, legal protections, and advanced technologies. In regions such as New Zealand and the United States, strict regulations on fishing gear, designated marine protected areas, and the use of acoustic deterrent devices have significantly reduced dolphin bycatch (*Dawson et al., 2013; Reeves et al., 2013*). Collaborative efforts between governments, non-governmental organizations, and local stakeholders have emphasized public education campaigns and community-based monitoring programs (*WWF, 2020*). These international examples highlight the importance of harmonizing scientific knowledge with traditional practices to achieve conservation goals. Drawing lessons from these approaches, the LMMA project in Myanmar adapts best practices to local contexts, fostering greater engagement and sustainable outcomes.

One of the project activities for establishing the LMMA involved conducting awareness-raising events to reduce impacts on biodiversity, including threatened species, and to sustain the fisheries resources that local communities rely on. The LMMA project organized a series of awareness-raising events in project villages, including schools. The goal of these events was to mitigate impacts on biodiversity and ensure the sustainability of fisheries resources to support the livelihoods of local communities.

### **Awareness-Raising**

Awareness-raising formed the cornerstone of the LMMA project. MSAM organized workshops, training sessions, and community discussions to educate locals about marine biodiversity and sustainable fishing practices. Interactive sessions highlighted the ecological importance of dolphins, their role in maintaining marine balance, and the threats they face. Traditional knowledge of the Magyi community was integrated with scientific insights to foster a sense of ownership and responsibility.

Globally, awareness-raising practices in marine conservation have demonstrated significant success in changing perceptions and behaviors. For example, in the Philippines, community theater and storytelling have been used to educate coastal communities about the

importance of marine biodiversity (*White et al., 2002*). In Australia, programs such as Reef Guardians engage schools and local businesses in reef conservation through hands-on activities and partnerships (*Great Barrier Reef Marine Park Authority, 2018*). These international practices emphasize the power of tailored, culturally sensitive approaches to raising awareness and building stewardship. Incorporating such methods into local contexts enhances the efficacy of conservation campaigns and fosters long-term commitment to biodiversity protection.

The awareness campaigns were tailored to resonate with different demographics within the community. For fishers, practical workshops emphasized techniques to prevent bycatching and minimize harm to marine mammals. School programs engaged younger generations, nurturing a culture of conservation from an early age. MSAM also utilized visual media and storytelling to communicate the plight of dolphins and the benefits of conservation.

## Outcome

The most notable outcome of the LMMA project emerged on 27 April 2024, when the Magyi community united to rescue and release a stranded dolphin (Figure 1). After attending MSAM's awareness-raising programs, the fishers and villagers recognized the stranded mammal as a priority for immediate action. Guided by the knowledge they had acquired, they carefully coordinated efforts to ensure the dolphin's safe return to the sea (Figures 2).

This event was not only a triumph for the dolphin but also a testament to the community's commitment to conservation. It showcased the success of the LMMA project in fostering a sense of stewardship among locals and highlighted the tangible outcomes of awareness campaigns.



Figure 1. Map showing the release of dolphin by the Magyi community



Figures 2. Magyi community releasing stranded dolphin into nature (photo credit to Marine Science Association Myanmar-MSAM)

## Discussion

The dolphin release serves as a compelling example of how community-led conservation efforts can yield significant results. The active involvement of the Magyi community underscores the importance of integrating local knowledge and participation into conservation strategies. By empowering residents with knowledge and practical tools, the LMMA project transformed them into proactive custodians of their marine environment.

This success story also reflects the potential for replicating similar models in other coastal areas. It demonstrates that a combination of education, community engagement, and practical support can address pressing conservation challenges while improving livelihoods. The Magyi community's actions have inspired neighboring villages to adopt similar initiatives, amplifying the project's impact.

## Conclusion

The dolphin release on 27 April 2024 exemplifies the power of community-driven conservation supported by targeted awareness-raising efforts. The LMMA project in Magyi has proven that empowering local communities with knowledge and resources can lead to meaningful and sustainable outcomes. This success story serves as a beacon of hope and a blueprint for marine conservation initiatives in Myanmar and beyond. Moving forward, continued investment in community engagement and education will be essential to building resilient ecosystems and sustainable livelihoods for coastal populations.

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