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**MIHARI: Networking coastal communities
to manage Madagascar's small-scale
fisheries sustainably**

Índice

Abstract	53
Résumé	55
Introduction.....	56
Evolution of community based management in Madagascar.....	58
LMMA communities facing challenges	60
Networking communities through MIHARI.....	62
The MIHARI Network's achievements so far.....	63
National ambitions for rights-based fisheries management.....	64
Next steps for the MIHARI network	65
Conclusion.....	66
Acknowledgement	67
References	68

MIHARI: Networking coastal communities to manage Madagascar's small-scale fisheries sustainably

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Abstract

The past decade has seen a groundswell of interest in community based marine conservation in Madagascar, with locally managed marine areas (LMMAs) being championed at the highest levels of government, and now covering over 12% of Madagascar's seabed. Given Madagascar's weak infrastructure, most of the country's LMMA are located in remote areas, thereby presenting practical barriers to exchange and communication to discuss common challenges. The MIHARI

network was created as a means of linking up isolated coastal communities to allow community leaders to share ideas and successful models through peer-to-peer learning, as well as to represent the interests of small-scale fishers at a national level; in particular fisheries policy development. Network members include all LMMA communities and the non-governmental organizations that support them. Government authorities are regularly consulted in the network's activities. While the network is still only three years old, and in the early stages of development, much progress has already made. For instance, annual learning exchanges between LMMA communities have taken place, culminating in the third national MIHARI forum in October 2015. The past year has also seen the launch of regional forums, of which one was organized in 2014 and four organized in 2015. Priorities going forward are to reinforce the structure and independence of the network, ensure the active participation of communities, and secure sustainable sources of funding for the network over the long-term.

Keywords: LMMA, learning Network, community based natural resources management, small-scale-fisheries, partnerships, peer to peer learning exchange.

MIHARI: Networking coastal communities to manage Madagascar's small-scale fisheries sustainably

Résumé

Au cours de la dernière décennie, Madagascar a développé un intérêt croissant pour la conservation communautaire des ressources marines. Les Aires Marines Gérées Localement (AMGLs) sont, notamment, soutenues au plus haut niveau par le gouvernement, et couvrent désormais plus de 12% des fonds marins de Madagascar.

Compte tenu de la faiblesse des infrastructures du pays, la plupart des AMGLs sont situées dans des régions isolées, rendant ainsi difficile les échanges et la communication relatifs aux défis communs qu'elles rencontrent. Le réseau MIHARI a été créé comme un moyen de connecter les communautés côtières isolées pour permettre à leur dirigeants de partager des idées et des modèles de réussite par l'apprentissage entre pairs, ainsi que pour représenter les intérêts des pêcheurs traditionnels au niveau national ; en particulier dans le cadre du développement de la politique des pêches. Les membres du réseau comprennent toutes les communautés AMGLs et les organisations non gouvernementales qui les soutiennent. Aussi, les autorités gouvernementales sont régulièrement consultées au sujet des activités du réseau.

Des progrès significatifs ont déjà été réalisés, alors que le réseau ne date que de trois ans et qu'il n'est qu'aux premières

étapes de son développement. Par exemple, des réunions d'échanges annuels d'apprentissage entre les communautés AMGLs ont eu lieu avec, en octobre 2015, le troisième forum national MIHARI. Au cours des dernières années, des forums régionaux ont également vu le jour, dont l'un organisé en 2014 et quatre en 2015.

Les futures priorités sont de renforcer la structure et l'indépendance du réseau, d'assurer la participation active des communautés et d'assurer des sources de financement durables pour le réseau.

Mots clés : Mots clés : AMGL, réseau d'apprentissage, gestion communautaire des ressources naturelles, pêches à petite échelle, partenariats, échanges de connaissances entre pairs.

Introduction

Madagascar's marine ecosystems harbour globally important marine biodiversity, and underpin the livelihoods and food security of more than 256,000 traditional fishers living along Madagascar's 4,828 km coastline (ONAR, 2005). These so-called small-scale fishers include communities who are amongst the poorest people on earth, and many of the island's coastal communities have no

MIHARI: Networking coastal communities to manage Madagascar's small-scale fisheries sustainably

alternative to fishing for survival. Over recent decades these critical ecosystems have been decimated by overfishing, sedimentation and climate change. Declining catches, rapid population growth and a lack of livelihood alternatives have pushed traditional fishers into more intensive fishing; consequently, speeding the collapse of stocks and trapping them in a poverty cycle. Given the limited capacity of the national government for fisheries management, there is great urgency for practical efforts to support communities to manage and rebuild their fisheries at a local level. From 2003, Non-Governmental Organizations (NGO) working with fishing communities began developing the concept of Locally Managed Marine Areas (LMMAs) in Madagascar in response to community needs. LMMAs are areas of nearshore waters that are fully or largely managed by coastal communities, which are empowered to create and implement management rules. Due to their isolation, and lack of environmental management experience, communities in Madagascar often lack knowledge of processes available to them to secure rights for managing their resources effectively. The MIHARI network was created as a way of linking up isolated coastal communities to allow community leaders to share ideas and successful models through peer-to-peer learning, as well as to represent the interests of small-scale fishers in national policy development.

Evolution of community based management in Madagascar

Madagascar's first LMMA was introduced in 2005 and the initiative has since gained momentum among communities, government authorities and conservation organizations. These LMMAs are found throughout Madagascar and contain a rich diversity of marine and coastal environments from offshore coral archipelagos to coastal mangrove forests and a broad range of targeted fisheries and people dependent on them. There are now over 100 discrete community-based marine management efforts around Madagascar's coasts, covering more than 12,000 km² and over 12% of the island's seabed. Madagascar's LMMAs range in size from a few hectares to the vast 4,500 km² Barren Isles protected area, the country's largest protected area, and the largest community managed MPA in the entire Indian Ocean. In total, the marine area covered by LMMAs in Madagascar surpasses that of the national parks network (under management by Madagascar National Parks service) by around a third. The rapid expansion of local marine management was responsible for Madagascar meeting its 2003 Durban commitment to triple the coverage of its protected areas in 2014.

MIHARI: Networking coastal communities to manage Madagascar's small-scale fisheries sustainably

LMMA in Madagascar use a range of legal mechanisms to secure local management rights:

- i. Co-managed protected areas under Madagascar's Protected Area System (SAPM). This type of LMMA is classified as Category V or VI under the International Union for Conservation of Nature (IUCN).
- ii. Areas of coast and ocean governed by communities using traditional laws, called Dina.
- iii. Areas of mangrove forest where management rights have been formally transferred to community associations with legal contracts, through a legal framework called "*Gestion Locale Securisée*" (Gelose).

These LMMAs unite resource users in the collaborative management of inshore resources, and employ a range of fisheries management tools including temporary closures for certain species, permanent no-take zones, bans on particular gears, alternative livelihoods initiatives, and mangrove forest restoration management. At a growing number of sites, these grassroots efforts have helped many communities secure local fisheries management rights and progress towards the successful management of economically important fisheries.

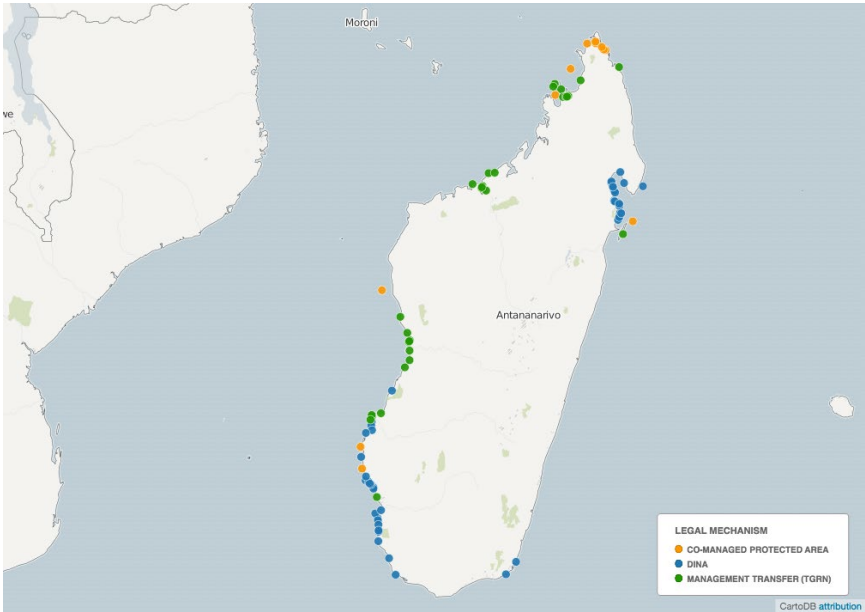


Figure 1: Map showing the location of LMMAs in Madagascar.

LMMA communities facing challenges

Despite the important progress made towards coastal protection and small-scale fisheries management, the sustainability of local efforts to safeguard marine biodiversity faces a number of challenges. Malagasy coastal communities are amongst the poorest on earth, depending on the exploitation of fisheries resources for income, livelihoods and food (World Bank, 2013). The poverty and low level of education of many

MIHARI: Networking coastal communities to manage Madagascar's small-scale fisheries sustainably

isolated coastal communities leads to a low capacity and resource management experience, causing severe practical challenges in the development of community based conservation efforts. The voice of small-scale fishers is also rarely represented in high-level policy and decision-making.

No legislative structure currently exists which pays homage to the LMMAs. The array of legal mechanisms which serve to develop management rights to local communities including Gelose, Dina and Protected Area are not inclined to the LMMA perspective, neither were they shaped with LMMAs in mind. Although there is a lack of legal framework that recognizes the existence of LMMA, the communities are really motivated towards resource management and Community based management fisheries is supported by the Malagasy Government. In addition to that, due to the chronic lack of infrastructure in Madagascar, most of LMMA are located in isolated areas, limiting their opportunities and market accessibilities to sell their catches. They have to rely on middlemen to collect their catches that are sold at a very low price. The isolation of the communities has also impacted their access to alternative livelihoods, which limits their activities to be based and focused on fisheries only. The remoteness of LMMA also creates limitations preventing exchange with other LMMA managers in learning successful models and best practices.

Networking communities through MIHARI

Located in remote coastal areas, the majority of LMMA-implementing communities in Madagascar had limited opportunities for communication with other LMMA managers prior to the establishment of the MIHARI network. Inspired by the Pacific LMMA network (www.Immanetwork.org), Madagascar's first national LMMA forum was held in June 2012 bringing together community representatives from 18 LMMAs with the aim of addressing these problems through peer-to-peer learning and sharing of experiences. This event resulted in the creation of Madagascar's national LMMA Network called: "MIHARI", an acronym, which stands for "*MItantana HAreana-dRanomasina avy eny Ifotony*". MIHARI is a platform bringing together all coastal communities involved with marine resource management and the organizations that support them. The network currently includes over 100 individual LMMAs with discrete management structures and rules supported by more than 10 partner institutions. The network structure is developing organically, but relies on the active engagement of the range of partners. A coordinator at the national level supports partner organizations to coordinate activities at the local level and communicate with communities. Since its creation, MIHARI has grown as a way of promoting the spread

MIHARI: Networking coastal communities to manage Madagascar's small-scale fisheries sustainably

and successful development of LMMAs, and aims to address the systemic challenges faced by communities by facilitating and supporting collaboration amongst a range of actors, to foster the exchange of best practices, to increase the visibility and legitimacy of LMMA, to reinforce the voices of coastal communities, to strengthen the capacities of coastal sharing know-how and experiences between fishers, and to advocate for the interests of LMMA communities in national policy.

The MIHARI Network's achievements so far

The core activities of the MIHARI network are to exchange visits between fishing communities and forums of LMMA managers. Fisher exchanges are a powerful tool in the spread of fisheries management practices and governance. Informal peer-to-peer experience sharing has been an integral part of the spread of community-led octopus fishery management measures along the southwest coast of Madagascar. We have also witnessed the role of these exchanges in building leadership and engagement in management efforts.

Further to that, regular forums bring together community leaders representing LMMAs all around Madagascar's coast. These forums are being held both at the regional and national level. They allow leaders to share their experiences, success

stories and challenges encountered; in addition, they foster a sense of community spirit and solidarity between LMMA communities. Three annual national forums have been organized so far, and this year, four regional forums were held grouping communities with a similar context. Ongoing communication tools through local radio are being developed to maintain regular communication and sharing of stories outside of these events.

At the national policy level, the MIHARI network has contributed to new national fisheries policy and protected area policy representing the interests of small-scale fishers. The network is also working with Government ministries to develop legislation that reinforces the legal status of LMMAs.

Through regular consultation with LMMA implementing communities network partners now have a better understanding of the challenges they face and the capacity gaps and support they need, and the network is commissioning specialist training in priority areas for community leaders.

National ambitions for rights-based fisheries management

At the 2014 World Parks Congress in Australia, Madagascar's President Hery Rajaonarimampianina committed to tri-

MIHARI: Networking coastal communities to manage Madagascar's small-scale fisheries sustainably

ple the total coverage of marine protected areas, providing an unprecedented climate of national support for this growth in community-based management of small-scale fisheries. The island is also in the process of revising its legal code for community-based fisheries management to help protect and promote the rights of small-scale fishers to secure management authority over local fisheries resources. Other coastal states in the Indian Ocean region are now seeking to emulate MIHARI's experience, with growing interest in the role LMMA networks can play in supporting locally led marine conservation efforts across the western Indian Ocean.

Next steps for the MIHARI network

The priorities for the MIHARI network in the next phases of its development are to continue to increase engagement and ownership of the network from community managers, while building the network's capacity and sustainability in the long term. To do this, a strategy has been developed that includes:

- Building the MIHARI network's presence in key regions through regional hubs that will be able to maintain momentum at a local level and facilitate coordination and communication.

- Focusing on capacity building of community leaders in priority subjects such as: fishery management measures, engaging with the private sector, governance and leadership; and using regional hubs to extend this support to sites with less support from technical partners.
- Reinforcing the structure and sustainability of the network by increasing community ownership, independent fundraising and raising the profile at the national level.

Conclusion

While top down management measures have often failed to bring about positive engagement from communities; Madagascar's rapid expansion of community-led marine management efforts over the last decade has been driven in large part by community exchanges and dialogue, facilitated by supporting partner organizations. The surge in locally-led marine management seen in Madagascar over the past decade has demonstrated the enormous value of community exchanges and networking in building capacity and solidarity for local fisheries management among community groups from different regions, economies and fisheries. The 'peer networking' approach has shown its effectiveness in inspiring, advising and mentoring communities in the adoption of local fisheries man-

MIHARI: Networking coastal communities to manage Madagascar's small-scale fisheries sustainably

agement efforts, both in Madagascar and further afield. As the civil society network representing the interests of LMMA communities, the MIHARI network's experiences are providing invaluable input in helping shape ongoing national efforts to safeguard the rights of small-scale fishers. Madagascar's evolving LMMA network provides critical learning in the role that a nascent national network can play in supporting and championing the needs of marginalized coastal populations in Madagascar's unusual context: a large, populous, highly biodiverse country facing so many entrenched economic, environmental, infrastructural and governance challenges. Its experiences help highlight the degree to which a small and largely informal civil society network – with no official national mandate – can succeed in advocating for community-based marine and fisheries management, specifically through its progress in influencing and shaping the Government's stated commitment to act decisively in reinforcing and expanding LMMAs in Madagascar.

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References

- BARNES-MAUTHE, M., OLESON, K. L., & ZAFINDRASILIVONONA, B. (2013). The total economic value of small-scale fisheries with a characterization of post-landing trends: An application in Madagascar with global relevance. *Fisheries Research*, 147, pp.175-185.
- ONAR. (2005). *Madagascar, Tulear fishing communities support project (PACP) appraisal report*. Department of Agriculture and Rural Development for North, east and south regions
- WORLD BANK. (2013). *Madagascar Emergency Food Security and Reconstruction Project*. World Bank Report No: ICR2816.