POLICY BRIEF

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Sustainable national artisanal FAD programmes: what to aim for

Purpose

The purpose of this policy brief is to highlight the key elements of a 'sustainable' national fish aggregating device (FAD) programme and to guide senior fisheries officers and policy makers towards achieving sustainability for their FAD programmes.

Key messages

- Sustainable FAD programmes are required in order to provide long-term benefits from artisanal, anchored FADs[1] to communities.
- While financial and technical support can be sought from donors or regional organisations, a recurrent source of national funding is crucial for sustaining FAD programmes.
- Monitoring FADs and their impacts is required to 'prove' their value and convince politicians that FADs are a good investment for their respective countries.
- End-user engagement helps secure communities' buy-in and co-management of national FAD programmes.

Why are sustainable FAD programmes needed?

It is widely recognised that anchored nearshore FADs are one of few marine-based solutions for maintaining the food security and livelihoods of rapidly growing populations in Pacific Island countries and territories (PICTs). FADs can have other key benefits: 1) FAD use may enhance the success of fisheries management initiatives by providing new fishing grounds to people, while management measures are implemented to help coastal fisheries resources recover from overfishing and other stressors; and 2) the transfer of fishing efforts from reefs and lagoons to more sustainable FAD-based oceanic fish resources can improve the health of coral reef ecosystems and thus increase their resilience to potential climate change effects.

Decades of FAD-based fisheries development have created some reliance on nearshore FADs for the fishers and communities whose food security and livelihoods are increasingly dependent on them. In some places, FADs are considered a crucial part of the national infrastructure, where national fisheries agencies have an obligation to supply, maintain and replace FADs for the long-term benefit of coastal communities.

[1] http://www.spc.int/DigitalLibrary/Doc/FAME/Brochures/Anon_12_PolicyBrief19_FADs.pdf

The four elements of a FAD programme's 'sustainability' (capacity, management, end-user engagement, and funding) are itemised in the following table. The table can be used by senior fisheries officers to assess the current status of their FAD programme and provide some short-term targets ('on the way to sustainability' column) and longer-term targets ('sustainable' column) for them to aim for.

Matrix for assessing progress towards a sustainable national FAD programme

	On the way to sustainability	Sustainable
Capacity		
1.a. Country-based experts are available to manage the FAD programme including the rigging and deployment of FADs	✓	✓
1.b. The national fisheries agency owns or has easy access to the infrastructure and equipment required to deploy FADs. (e.g. suitable boats with echo sounder and GPS)	✓	✓
1.c. Depending on the size of the PICT, one or more recurrent positions at the national fisheries agency are fully or partly dedicated to FAD work and this is reflected in job descriptions		✓
1.d. A succession training plan is in place to ensure that the country does not lose its FAD technical capacity when the existing FAD experts move out or retire		✓
Management		
2.a. Political stakeholders understand the contribution of nearshore FADs to food security and livelihoods	✓	✓
2.b. The national fisheries agency has strategic plans or policies that mention nearshore FADs and the FAD programme	✓	✓
2.c. A registry is used to record FAD deployments and keep track of lost FADs that need to be replaced	✓	✓
2.d. Legislation and regulations are in place and enforced to support the national FAD programme and to clarify the roles and responsibilities of FAD users		✓
2.e. The national fisheries agency has a nearshore FAD management plan or policy to guide its FAD work		✓
2.f. A monitoring framework is in place that captures fishers' use of FADs and/or catches at representative sites		✓
End-user engagement		
3.a. Partnerships are developed with end users (e.g. communities, fishers' associations, sport fishing charters, recreational fishers) for the ownership, co-management and potential cost-sharing of FADs	✓	✓
3.b. An effective feedback mechanism exists between the national fisheries agency and FAD end users	✓	✓
3.c. FAD awareness-raising and training in safe FAD fishing methods are undertaken in communities that are newly exposed to FADs		✓
3.d. Conflict resolution protocols are in place and effective		✓
Funding		
4.a. The government provides the national fisheries agency with a recurrent annual budget for the implementation of its FAD programme	✓	✓
4.b. Donors and/or the government provide occasional funding for FAD projects	(4a or 4b are in place)	✓
4.c. Partnerships with end users are in place, which include FAD cost-sharing		✓

Capacity

The full cycle of a nearshore FAD programme requires capacity in a number of areas, most of which are technical and specific to the FAD work that is to be conducted (e.g. site surveys using echo-sounders, FAD rigging and deployment and training in FAD fishing methods). Capacity wise, as covered in the table, a 'sustainable' national FAD programme should be based on:

- staff positions that are fully or partly dedicated to FAD work;
- equipment for conducting site surveys and deploying FADs, including at remote locations; and
- a succession plan to ensure that FAD technical skills and capacity are not lost over time.

Management

Few PICTs have a nearshore FAD management plan or policy in place, although this is slowly changing with FADs being incorporated within corporate plans. At a minimum, a national fisheries agency should have strategic plans or policies that clearly mention FADs and their importance to coastal fisheries.

Similarly, supporting legislation should be written, enacted and enforced to provide the legal framework that is required for the swift management of the national FAD programme and for clarifying the respective roles and responsibilities of governments and FAD users.

A FAD monitoring and evaluation framework is required to measure the impacts of FADs with the results used by senior fisheries officers to convince their political stakeholders of the importance of nearshore FADs, and the need for long-term budgetary support. Being time and resource consuming activities, FAD monitoring and evaluation should be carefully targeted, and entail clear objectives at the national or project level.

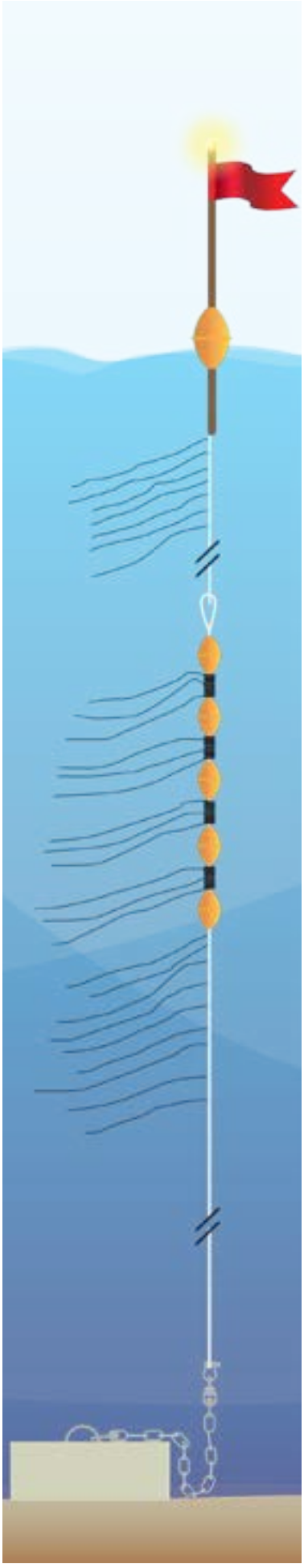
End-user engagement

Regional experience highlights that engagement processes that are consistent with local customs and traditions are a key pre-requisite to the success of community-based fisheries management or development initiatives. With regards to FAD work, end-user engagement should include:

- raising community awareness of FAD technology and expected benefits from FADs;
- involving community fishers in FAD site selection and, when possible, in FAD rigging and deployment;
- training fishers in safe and efficient FAD fishing methods (for communities that are newly exposed to FADs); and
- involving community members in the collection of data associated with FAD fishing, where FAD monitoring is undertaken.

Effective engagement with communities and other FAD users by governments will result in a win-win situation as:

- the work of national fisheries agencies is facilitated through communities taking ownership of the FAD programme objectives;
- the risk of vandalism and conflicts between users is reduced;
- community fishers maximise the benefits that they draw from the FAD as they have been consulted on the selection of the best possible FAD deployment site; and
- partnerships are explored for the long-term co-management and cost-sharing of FADs.



Funding

The recent interest of donors for nearshore FADs has resulted in the financing of numerous FAD projects in the Pacific region, as part of initiatives related to food security, livelihoods, fisheries management, climate change adaptation or disaster response. However, this external assistance to national FAD programmes is often ad hoc or short-term as the priorities of donors change or they respond to other immediate needs.

A recurrent source of national funding to fisheries agencies (covering human resources, FAD materials and deployment costs) is therefore essential if sustainability of the FAD programme is to be achieved. Ideally, an annual budget should also be made available to support the community-engagement work (including the regular delivery of training to fishers in FAD fishing skills) and some targeted monitoring.

The national budget for the FAD programme can be supplemented by funding from donors or end-user cost-sharing arrangements in order to conduct more fishers' training and to order additional FAD materials, marine electronics for site surveys or equipment for data collection initiatives.

Further reading

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For more information

For more information or technical assistance
Contact SPC's Coastal Fisheries Programme
(cfpinfo@spc.int).

Acknowledgements

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2 http://www.spc.int/DigitalLibrary/Doc/FAME/InfoBull/FishNews/150/FishNews150_37_Albert.pdf