

### Context and importance of the problem

Large Marine Ecosystems (LMEs) are defined as large regions of coastal oceans (typically over 200,000 km²), defined by their unique oceanography (bathymetry, hydrography) and ecology, including often relatively high levels of primary and secondary productivity, including complex trophically-dependent populations. It is estimated that LMEs contain nearly 80% of the world's annual fish catch, valued at well over US\$70 billion. As mainly coastal systems, their proximity to human development also comes with significant environmental threats and stressors, including issues that span political borders, necessitating cooperation and commitment from multiple countries to ensure healthy and sustainable use of marine ecosystems and resources to sustainable human livelihoods and coastal and island nation's economies.

The long-term success of shared marine resources relies on the continued cooperation of good governance among all participating countries. Within LMEs, one way countries have come together to discuss and commit to join action is through the Transboundary Diagnostic Analysis and Strategic Action Programme (TDA-SAP) methodology.¹ For countries discussing marine resources issues together for the first time, the TDA-SAP process has been highly successful in creating an enabling environment built on trust, transparency, and establishing a shared vision for transboundary conservation of natural resources that is then outlined in a SAP. The SAP is a negotiated policy document that aims for endorsement at the highest level of all relevant sectors of government, and among all countries in an LME or sub-regional area. The SAP establishes clear priorities for action to resolve the priority transboundary problems

identified in the TDA, including policy, legal, institutional reforms, or investments. A key element of SAP institutional mechanisms at the regional and national levels for successful implementation are monitoring and evaluation procedures to measure effectiveness of the outcomes of the process. Yet despite good intentions, longer term commitments outlined in the SAP are often at risk without institutional buy-in that holds each country accountable through legal adoption at the national level.

### **DEFINING GOVERNANCE:**

"The public and private interactions undertaken to address challenges and create opportunities within society. Governance thus includes the development and application of the principles, rules, norms, and enabling institutions that guide public and private interactions." <sup>2</sup>

Prior Global Environment Facility (GEF) investment experience has shown that the most successful pathway for sustained and long-term results for transboundary conservation is through binding agreements, often either the SAP document itself, or directly derived from or informed by the SAP or

1 GEF IW:LEARN TDA-SAP Methodology Manual. Accessed online May 2019: https://iwlearn.net/manuals/tda-sap-methodology/introduction/the-tda-sap

<sup>2</sup> Armitage, D., Plummer, R., Berkes, F., Arthur, R., Charles, A., Davidson-Hunt, I., Diduck, A., Doubleday, N., Johnson, D., Marschke, M., McConney, P., Pinkerton E., Wollenberg, E. 2009. Adaptive co-management for social-ecological complexity. Frontiers in Ecology and the Environment. 7(2): 95-102.











similar regional governance process (e.g. United Nations Environmental Programme's Regional Seas Program). These binding agreements can take several shapes, but often include some form of cooperative transboundary agreement among countries (such as a treaty or convention) as well as approval of national level policies that facilitate implementation of the transboundary agreement. National level policies often require ratification, legal adoption, decree, adoption, or other legislative and executive approvals depending on the country's form of government. This last national step is critical to move well-meaning transboundary governance into national policies and laws to achieve conservation goals.



Failure to legally adopt a SAP by all participating countries at the national level can have lasting impacts on LME transboundary governance within the LME. The list of impacts can be both short and long-term. To start, failure of one or more countries to legally adopt a SAP may undermine the creditability of the TDA-SAP process and unnecessarily cause hesitation among other countries to follow through with their own national adoption processes, jeopardizing the regional goals of the SAP and long-term health of the LME. Lack of SAP legal adoption can also cause uneven engagement, enforcement, and overall participation with other countries that have legally adopted, stressing already often sensitive geopolitical dynamics.

Within a country, lack of legal adoption of a SAP can also lead to lack of necessary budgeting for staff, ongoing monitoring, enforcement, and other essential services for basic management. As time progresses, failure to monitor national and transboundary resources will impact or prevent future management decisions. Worse, without SAP legal adoption at the national level often means that core government systems such as scientific research, judicial processes, and enforcement units such as coast guard, are not made available except for on an ad hoc basis. In a worst-case scenario, lack of SAP legal adoption can lead to the realization that reaching SAP goals for protection of transboundary marine resources will not be met, and ultimately, the process will have to be abandoned or restarted with new transboundary assessments. It is for these reasons that it is often concluded that legal adoption of SAP by government legislative systems is critical for long-term success. It provides the necessary support for SAP implementation with essential government systems, including budgeting/appropriations, judicial and law enforcement support, and mainstreaming into government capacities, data management systems and other technologies, and staff.

## Critique of policy options

While national legal adoption of transboundary commitments based on SAPs or other planning documents may be time intensive, the long-term results are clear. There are a few strategies that can be considered key steps in developing SAPs and engaging with government processes to seek legal adoption. A first strategy is to ensure formal national endorsement of SAP or a similar strategy planning document builds directly on regional legal commitments through existing treaties, conventions, and other mechanisms. These may include country participation in Regional Seas Conventions, Regional Fisheries Management Organizations, or regional development cooperatives.

A second strategy for building from existing regional processes that have legal support nationally, is to leverage existing institutional coordination mechanisms (e.g. committees, secretariats, etc) both nationally and regionally into transboundary marine governance early in the design phase of SAP. These strategies to build on existing national support when possible versus creating new mechanisms, builds on existing levels of comfort and familiarization within government, likely reduces the cost compared with starting new programs as existing staff time and offices can be shared, and mutually strengthens existing commitments for regional cooperation.



Lastly, transboundary governance should not stop at a policy level in national government. Engaging and facilitating cooperation among technical ministries and government agencies across the participating countries in an LME can build bottom-up support for policy adoption higher up. Often this process can be initiated by technical ministries and agencies sharing data and key information about marine resources, and discuss strategies for synergies in national long-term monitoring programs.

The Transboundary Waters Assessment Program (TWAP) analyzed transboundary issues within the

world's 66 LMEs and concluded that there are 359 transboundary issues within 50 LMEs, with at least 347 arrangements established among countries to address the issues. Yet, of the 347 arrangements, only 103 were recognized by countries through some formal process. Of the 103 arrangements, 86 (80%) were binding agreements that had gone through a national ratification process by respective governments and 17 (20%) were non-binding collaborative agreements. Of the 359 within LME transboundary issues, 136 (38%) were related to fisheries arrangements, 133 (37%) were related to pollution, and approximately 90 (25%) were related to marine biodiversity arrangements (Figure 1).

Yet while good effort has been made on securing binding agreements (well over two-thirds of all LME transboundary arrangements), it is important to note that nearly all of the binding agreements had situations where not all the countries in the LME participated. Not surprisingly, non-binding agreements had much higher levels of participation from all countries within a particular LME. This was also the case when LMEs overlapped with other regional marine conservation arrangements, such as the Regional Seas program.

The TWAP analysis concluded that drafters of policy instruments should be strategic when assessing the merits of binding and non-binding agreements. Perhaps the most important trade-off that should be considered is the level of engagement by countries versus commitment and long-term impact. On one hand, binding agreements are known to generate political momentum, country commitment, mutual accountability, often better budget mainstreaming into government planning, and ultimately a stronger foundation for a sustained and long-term impact. On the other hand, binding agreements have been shown to come at the cost of inclusive country participation for all countries engaged on LME transboundary issues. Whereas non-binding agreements have often shown to have higher levels of country participation, but likely at the expense of less sustained impact due to lower commitment and accountability of participating countries.

One of the key takeaways from the TWAP analysis was also that LME transboundary governance should focus on a holistic definition, that includes not just government actors, but also accounts for a suite of cultural, geopolitical and socio-economic factors that may influence the architecture of governance responses in some LMEs. The cultural and geopolitical context may prove to be the most influential factor when assessing options. Some nations already have established collaborative and networked-based norms that might favor one pathway over the other.

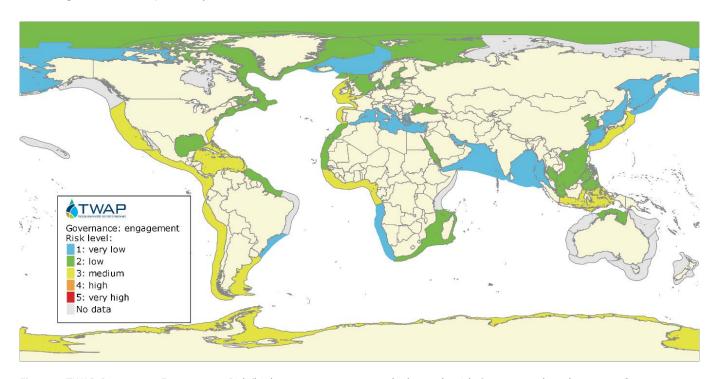


Figure 1: TWAP Governance Engagement Risk (higher engagement score, the lower the risk. Source: onesharedocean.org/Imes

# **Policy Recommendations**

Establishing effective LME governance at the transboundary scale is a complex and dynamic challenge. The long-term success of shared LME resources relies on continued cooperation among all participating countries. Establishing clear priorities for action to resolve transboundary problems, as outlined in the TDA-SAP methodology, allows for coordinated policies, institutional reforms, and investments at the national and regional level. Considering the following policy recommendations can strengthen transboundary LME governance:

- Important trade-offs should be evaluated when considering binding and non-binding agreements for long-term transboundary LME governance.
- National legislative endorsement of transboundary LME SAP or a similar strategy planning document can lead to long-term success, not just within national boundaries, but also at the scale of LMEs.



- Non-binding agreements can often encourage higher country participation but may weaken success at achieving long-term management and LME health goals.
- Regional legal commitment through treaties and conventions can build from formal national endorsement of SAP or a similar strategy planning document.
- Incorporate existing institutional coordination mechanisms (e.g. committees, secretariats, etc) into transboundary governance early in the design phase to enhance early adoption and strengthen success of long-term transboundary governance.
- Transboundary governance should not stop at a policy level, and should include technical cooperation among participating government technical ministries and agencies for data sharing and long-term monitoring

# Case Study: Legally binding support for transboundary governance in the Benguela Current Large Marine Ecosystem



The Benguela Current Large Marine Ecosystem (BCLME) is a major coastal upwelling ecosystem full of important marine biodiversity. The BCLME runs from South Africa's Cape of Good Hope east and northwards to the Cabinda Province in Angola, including all of Namibia's marine environment, and is a highly productive grounds for commercial fisheries and the extraction of nonliving natural resources, with an estimated value of approximately US\$269 billion per year for the economies of Angola, Namibia and South Africa.

Since 1995, the BCLME has had a series of investments to implement the TDA-SAP methodology to collectively manage transboundary environmental and resource issues including recovering and sustaining fish stocks, mitigating effects of offshore mining and oil and gas production, mariculture, shipping, and transport, energy production, tourism, and mining, and improving the condition of degraded coastal and marine habitats. The

BCLME SAP was developed to promote sustainable management of the LME, with the goal to implement actions agreed upon in the document by strengthening existing regional mechanisms for cooperation. As a result of this strategic move, the initial BCLME project transitioned into an international body under the United Nations Convention on the Law of the Sea (UNCLOS). This set the stage for the SAP to establish an Interim Benguela Current Commission in 2007, formalizing the three countries' participation in LME transboundary governance and greatly enhance the long-term protection of the BCLME.

In 2013, the Benguela Current Commission (BCC) became a permanent transboundary governance body with the signing of the Benguela Current Convention. Key to the implementation of the Benguela Current Convention was the establishment of general principles for the three countries to adhere to, including a cooperation, collaboration and sovereign equality principle. The Convention also establishes a ministerial governance council, a secretariat, and formalized the existing Benguela Current Commission

for management. Since its signing, the Benguela Current Convention has been successful in self-financing upwards of 100 scientific and economic research projects in the region. And finally, the Benguela Current Convention was explicit to recognize the importance of stable institutional arrangements for the health of the BCLME, stressing that participation from all three countries is essential for long term success.

# Case Study: Collaborative non-binding agreements for transboundary governance in the East Asian Seas Large Marine Ecosystems

The East Asian Seas region consists of six Large Marine Ecosystems, including the East China Sea, Yellow Sea, South China Sea, Sulu-Celebes Seas, Indonesian Seas, and Gulf of Thailand. They collectively cover nearly 6 million km<sup>2</sup> of water area, make up almost half of the world's marine fisheries harvest, and span the coastline of fourteen countries: Cambodia, the People's Republic of China, Philippines, Malaysia, Thailand and Vietnam, Brunei, Indonesia, DPR Korea, RO Korea, Singapore, Japan, Lao PDR and Timor-Leste. Yet, the land surrounding the East Asian Seas is home to more than 270 million people, competing for space with globally important marine biodiversity, including a third of the world's coral reefs



and mangroves. Threats to the marine biodiversity, fish stocks, coral reefs, mangroves, and many other marine ecosystems are on rapid pace to complete devastation in the coming decades without urgent action.

One of the most challenging issues facing the East Asian Seas LMEs is coordinating across a range of countries with varying national priorities, geopolitical histories, and systems of governance. For the region to be successful in meeting its marine conservation goals, the most critical issue has been strengthening coordination and governance mechanisms at the national and regional levels. With so many sub-LMEs involved, this can be exceptionally challenging. A suite of regional organizations and coordination mechanisms are in play. These include the Association of Southeast Asian Nations (ASEAN) Working Group on Coastal and Marine Environment, ASEAN Maritime Forum, Coral Triangle Initiative, Southeast Asian Fisheries Development Center (SEAFDEC), UN-led Coordinating Body on the Seas of East Asia (COBSEA), and the Partnerships in Environmental Management of Seas in East Asia (PEMSEA).

PEMSEA has been the central regional coordination organization for nearly two decades. It has been critical to providing a solid foundation for regional cooperation and establishing interagency and multi-sectoral partnerships to promote sustainable development. As PEMSEA has raised awareness and confidence among the local governments, it has been named as the implementing partner of choice for several key non-binding agreements, including the Putrajaya Declaration (2003) that promoted regional cooperation and launched the region's first Sustainable Development Strategy for the Seas of East Asia (SDS-SEA). This afforded PEMSEA formal legal status which continued to grow the importance of the organization in overseeing transboundary governance across the six LMEs.

While the SDS-SEA is non-legally binding, as a regional cooperation platform it has been successful framework for policy development, including promoting national commitments from participating countries to adopt Integrated Coastal Management (ICM) measures through PEMSEA support. The PEMSEA and SDS-SEA partnership has established a single recognized regional governance mechanism for integrated and collaborative planning and implementation and a international legal entity. PEMSEA was further supported by the Dongying Declaration (2011), supporting ocean governance, and the Changwon Declaration (2012) to implement Rio+20 outcomes, including promotion of the blue economy. East Asian countries now view PEMSEA as an effective platform for collaboration and cooperation between governments, local communities, public and private sector institutions, UN and international organizations, and academic and research institutions to collectively work towards conserving marine ecosystems and promoting sustainable development.

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#### **GEF LME:LEARN**

GEF LME: LEARN is a program to improve global ecosystem-based governance of Large Marine Ecosystems and their coasts by generating knowledge, building capacity, harnessing public and private partners and supporting south-to-south learning and north-to-south learning. A key element of this improved governance is main-streaming cooperation between LME, MPA, and ICM projects in overlapping areas, both for GEF projects and for non-GEF projects. This Full-scale project plans to achieve a multiplier effect using demonstrations of learning tools and toolboxes, to aid practitioners and other key stakeholders, in conducting and learning from GEF projects.

This global project is funded by the Global Environmental Facility (GEF), implemented by the United Nations Development Programme (UNDP), and executed by the Intergovernmental Oceanographic Commission (IOC) of the United Nations Educational, Scientific and Cultural Organization. The GEF LME: LEARN's Project Coordination Unit (PCU) is headquartered at UNESCO-IOC's offices in Paris.



Honorable Bernhardt Esau, Namibian Minister of Fisheries and Marine Resources, opening the Benguela Current Commission Office

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