The Bay of Bengal Association for Sustainable Development: A Speculative Framework for Governance

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ABSTRACT The task of developing a regional framework for the governance of a shared natural resource is fraught with challenges. It requires political will and stability, consistent funding, and clear goals and indicators. In the Bay of Bengal, institutionalisation efforts are so far defined in the BIMSTEC–a high-level governmental organisation working on broad economic objectives for the region. This brief speculates on a new framework that is quasi-governmental with a clear mandate and specific goals to revive economic activity in the region in a sustainable manner. It outlines the key goals for such a framework that will aid sustainable development in the region.

INTRODUCTION

The Bay of Bengal is the largest bay in the world with an area of more than two million sq km (it is followed by the Hudson Bay in Canada with an area of 1.2 million sq.km).[1] It is located in the northeastern part of the Indian Ocean which forms a bay along the rims of India and Sri Lanka to its west, Bangladesh to its north, Myanmar to its east and Indonesia (northern tip of the Sumatran island) to its southeast.[2] Institutionally, the governance of the Bay of Bengal region (BOB) is overseen by the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)— a regional framework comprising seven countries in the littoral and adjacent areas of the Bay of Bengal: Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand.[3]

BIMSTEC is a high-level governmental platform that has jurisdiction over 14 broad objectives through several centres to promote collaboration in economic, social, technical and scientific fields of common interest. In recent times, however, the threats from climate change on the BOB littorals have become more intense, that there is an imperative to focus on sustainable resource management. This brief suggests a framework— to be called the Bay of Bengal Association for Sustainable Development of the Region (BOBAS)—for working towards increasing economic activity in the Bay of Bengal in a sustainable manner. BOBAS will run parallel to BIMSTEC, although it will have autonomy and will be of a polycentric and track-two[4] nature. The BOBAS, unlike BIMSTEC will begin as a small, focused group comprising several multilateral stakeholders

with tangible goals for the sustainable development of the BOB ecosystem and resources. The scope of this brief is limited to proposing an initial design for the new BOBAS framework.

EXPLORING A POLYCENTRIC GOVERNANCE STRUCTURE FOR THE BAY OF BENGAL

The governance of a regional commons such as the Bay of Bengal requires a polycentric approach that involves all relevant stakeholders (state and non-state) spanning different sovereign nations. These stakes are political, social, environmental, and economic. To succeed in governing a resource that is shared with many other actors, what is required is a polycentric, quasi-governmental structure such as the BOBAS. In this context, quasi-governmentality is the idea of involving both state and non-state actors under a polycentric governance model.

Exploring the benefits of a polycentric approach for the governance of a common resource is fundamental to the work of renowned economists, Vincent and Elinor Ostrom.[5] The term "polycentric" connotes a complex form of governance with multiple centres of decision-making, each of which operates with some degree of autonomy. Since the mandate of BOBAS will focus on particular aspects of the sustainable use of the BOB's resources (discussed later in this brief), it is pertinent to note that scholars of natural resource governance have been steadily championing polycentric governance models over purely governmental ones for three main reasons:

(i) polycentric governance systems are better able to adapt when faced with social and environmental changes;

(ii) they provide a good institutional fit for complex natural resource systems; and

(iii) they mitigate the risk of institutional failure and resource losses on account of a failure in existing institutional structures,[6] particularly in cases of political changes.

The growing interest in polycentricity is evident in the volume of scholarly work that consider its advantages for sustaining natural resources.[7] It is in this backdrop that the structure of the proposed BOBAS is being outlined in this brief.

Participating Countries

The BOBAS will begin as a cooperative framework between stakeholders from India, Sri Lanka, Myanmar and Bangladesh as preliminary member countries. They can serve as initial members considering their more direct stakes in the Bay of Bengal, whether geographical or economic. The membership should eventually expand to include Nepal, Thailand, Indonesia, and other similarly littoral countries dependent on BOB.

Secretariat

The Secretariat of the BOBAS can be hosted in Kyaukpyu in Myanmar. India could benefit from strengthening relations with Myanmar, particularly in light of the fact that China has a multi-billion-dollar deep-sea port project in Kyaukpyu.[8] That indicates future economic development of Kyaukpyu, which will require sustainable narratives. Having BOBAS in the

Rakhine State could also help contribute to the political stability of the region. Further, Ngapali is the most popular beach destination in Myanmar and is around 270 km away from Kyaukpyu. Since beach-based tourism is an integral part of the proposed structure, it makes sense to explore a centre that is close to a tourist hotspot.

Alternatively, the secretariat could be set up in the southeastern/eastern coast of Sri Lanka, where China has been expanding its footprint in recent years. Since 2018, China has acquired a major port in Hambantota and today owns 15,000 acres of land around the city.[9] The eastern coast is also Sri Lanka's biggest fishing hub and is developing as a major tourist attraction.[10] Places like the Arugam Bay and Passakudah in Batticaloa are being promoted as international surfing destinations,[11] bringing in a lot of traffic to the east coast of Sri Lanka, which is still underdeveloped unlike other parts of the country. This could mean more opportunities for development.

Stakeholders

In the 1980s, Elinor Ostrom studied the commons to understand how humans achieve and maintain self-governance in the context of complex and dynamic social and physical environments, such as when looking at oceanic resources that are shared by several state and non-state actors. One of Ostrom's most influential contributions to commons theory was her formulation of eight institutional design principles that she found to be associated with robust institutions for maintaining common-pool resources (E. Ostrom, 1990). The eighth principle is that the robustness of institutions is determined by

their organisation in "multiple layers of nested enterprises."[12] The BOBAS is to have government departments from India, Bangladesh, Sri Lanka and Myanmar, universities from these four countries and some select private players to form the core group.

From the government side, officials of various ministries can comprise BOBAS, including foreign affairs, environment and energy, agriculture and fisheries, and law. They must be involved from the very beginning to avoid bureaucratic bottlenecks and gaps in understanding technicalities.

Select universities from the BOBAS States will be equal partners in the BOBAS Secretariat. This is to ensure student exchange in the four countries, partnerships between universities as well as academic and political convergence on the goals of BOBAS. Stakeholders from universities will include heads of departments or senior professors of international law, mathematics and statistics, environmental economics and philosophy or literature. There can also be a "youth task force" which will be a smaller consortium of undergraduate students attached to specific projects. This will ensure continued interest in BOBAS' objectives through the next generation as well as training them for the future. Moreover, having governments and universities working together fulfills Ostrom's requirement of having multiple layers that are interconnected for institutional robustness.

The BOBAS can hire external consultants (i.e., companies and organisations registered in one of the BOB States) to help in the governance of specific aspects of relevant projects. For instance, companies specialising in high-quality environmental and economic impact assessments can test the veracity of proposals.

MANDATE AND GOALS

BIMSTEC's mandate is broad: 14 overarching objectives looking at economic, social, technical and scientific fields. For its part, BOBAS' mandate should be highly focused: it will work towards the sustainable development of all coastal areas surrounding the Bay, while improving the region's environmental ecosystem. BOBAS must draw lessons from the successes, for instance, of the Organisation pour la mise en valeur du fleuve Senegal (OMVS)[13] and Okavango River Basin Commission[14] in Botswana. Both organisations have received massive funding because of their demonstrated economic and political successes in managing a shared water resource using principles of sustainability and equitable sharing of benefits. Both organisations started with narrow objectives mainly pertaining to food, energy and climate change. The aims were later extended after the initial successes.

For the BOBAS, these objectives will be formulated under two main themes: documenting projects that outline the food-water-energy nexus, and reducing marine pollution by promoting select tourism indicators.

Quantifying "sustainable development" through the food-energy-water nexus

Amongst the various definitions of "sustainable development", the most

commonly used one was articulated in the Brundtland Report, 'Our Common Future':[15] "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." On a conceptual level, there is no visible contradiction in the definition. However, articulating how the governance of a natural resource should appear procedurally is a difficult task. This is the reason why it is suggested that the mandate and goals of BOBAS be specific, quantifiable and symbiotic between governments, the ecology and other stakeholders – in theory and procedure.

BOBAS will serve as a data repository for the governance of the Bay of Bengal. This information includes the following:

- Wastewater treatment plants functioning along the BOB rim before the major rivers from India, Myanmar and Bangladesh flow into the Bay

- Power plants that derive energy from BOB – this would include hydro-power dams, tidal, offshore wind and Ocean Thermal Energy Conversion (OTEC)

- Fishing activities in the Bay, both of small and medium-scale boats (including artisanal and mechanised boats) and their catch. The Bay of Bengal Programme in which India, Sri Lanka and Bangladesh signed the BOBP-Inter-Governmental Organisation Agreement focuses on fisheries management[#]. BOBAS' database will start with collecting information on

vessels and catch rather than the BOBP-IGO's focus on overall sustainable fisheries development and management.[16] The database maintained by BOBP-IGO is restricted to information about fisheries and aquaculture research institutes and individual scientists.[17]

The above indicators contain the food-energy-water focus, which can then be used for the following:

- Increasing infrastructure in wastewater treatment plants so that water may be recycled and the overall availability of potable water and water for irrigation may be increased.

- Understanding on-ground issues to increase sustainable fishing for food security and fish stock exports for BOBAS member states.

- Increasing small-scale power plants that contribute towards energy autonomy and security in the region.

Projects that are trans-boundary with clear benefits to the region rather than only individual countries will be given precedence over projects in exclusive sovereign jurisdictions. This is to ensure that BOBAS will serve the Bay of Bengal in its entirety as a region and infrastructure benefits can be shared equitably amongst the littoral states. Doing so will increase stakeholder confidence in the BOBAS, strengthen ties between countries and increase political stability.

\# The Bay of Bengal Programme (BOBP) is an Inter-Governmental Organisation mandated to enhance cooperation among member countries, other countries and organisations in the region and provide technical and management advisory services for sustainable coastal fisheries development and management in the Bay of Bengal region.

Increasing sustainability-based tourism by reducing marine pollution and promoting sports with zero environmental impacts in the Bay

Definitions of "sustainable tourism" range from having a consumer-demand for sustainability during travel[18] or the more encompassing definition by UNESCO (United Nations Educational, Scientific and Cultural Organisation) which states, "sustainable tourism is defined as tourism that respects both local people and the traveller, cultural heritage and the environment.[19]" India's Ministry of Tourism, for instance, has developed detailed criteria for sustainable tourism under its 'Incredible India' programme.[20] In the document, the task of pollution reduction covers greenhouse gas emissions, sewage, pesticides, and even swimming pool disinfectants.[21] There is no mention, however, of marine pollution which is emerging as one of the biggest problems in the tourism sector. Indeed, the BOBP-IGO has an Environmental Impact Assessment Report from 1994[22] which does not view plastics as one of the biggest pollution markers in BOB.[23] The BIMSTEC looks at environmental concerns only through the prism of disaster management and has no reports on the problem of marine pollution and how it should be addressed.[24] However, there have been numerous reports citing plastic pollution as one of the biggest problems threatening the Bay of Bengal.[25] One of the major mandates of BOBAS will be to document, address and reduce marine pollution in the Bay of Bengal, starting with the data repository, which will collate information on the amount of marine pollution in BOB and record all current systems in place to address the issue. Marine pollution shall be defined as marine plastic and ghost nets.[26]

This will be done in conjunction with programmes and projects increasing tourism in BOB countries, thereby creating a positive revenue model that takes a holistic look at the BOB ecosystem as an economic resource. Indeed, zero-impact sports have increased without state or private sector support in the region in the last five years. With adequate support, the adventure sports industry has the potential to create a massive growth spurt in jobs, infrastructure and investment in the region.

The data repository will collect information on all zero-environmental impact sports centres (surfing, sailing, kayaking and canoeing) in BOB as well as information on the growth of the tourism industry in those areas. Doing so will help upscale those models to increase jobs and revenues from tourism in the area, especially since these models have low investment requirements for initial capital. Re-emigration of young population in the area would also be guaranteed if this particular industry is promoted. This will also help tourists and locals view the Bay of Bengal as an economic resource that they must conserve in order to reap financial benefits. Further, the ground-level impact of these activities (pollution reduction and developing small-scale tourism) will also instill trust of local populations in participating governments, which will help maintain political stability and foster partnerships in the region.

Promoting a solutions-driven approach by incubating businesses that address any of the objectives above

The BOBAS shall be a platform for small and medium-size entrepreneurs and innovators from the participating member countries to

bring their business models to tackle the issues explored in this brief.

- Monitoring and continued surveillance of fish stocks, fishing vessels, and marine pollution

- Sustainable aquaculture (particularly with regard to fish feed)

- Small-scale power projects along the BOB coastline that aim at energy efficiency or energy generation. Special emphasis on scalable projects that focus on mini-grids or off-grid technologies

- Low-energy wastewater solutions and desalination projects

Role of BOBAS

Overall, the following will be the tasks for BOBAS:

1. Data repository

2. Project incubator

3. Platform for negotiating equitable benefits from a project – Since the infrastructure projects would have a transboundary nature, investment terms and equitable sharing of benefits will need to be negotiated efficiently. The BOBAS will be tasked with ensuring that such negotiations are smooth, symbiotic and long-term.

4. Adjudication and arbitration over projects overlooked by BOBAS – BOBAS will also have an adjudicatory function over any of the projects it has reviewed, incubated or sanctioned. Foreseeable conflicts could be in the form of benefit sharing, particularly with regard to contentious issues like water, fishing and energy. It would be part of BOBAS' mandate to adjudicate those matters and its decision would be formal and binding.

CONCLUSION

Polycentric metropolitan regions tend to reduce opportunistic behaviour even though no institutional arrangement can totally eliminate opportunism with respect to the provision and production of collective goods. Allowing citizens to form smaller-scale collective consumption units encourages face-to-face discussion and the achievement of common understandings.[27]

The BOBAS will start small with this initial purpose: to start a track-two BOB management system for specific projects. Eventually, other domains of BOB governance can be explored and covered by BOBAS. For a regional framework to succeed meaningfully it must not only have financial stability, but also the commitment to convene regularly. It also needs to generate trust so that it is able to assert its role even during periods of political turmoil, and must have defined functions, roles, responsibilities as well as operational procedures.

Resilience is built when results are seen, not merely surmised. If implemented properly, the BOBAS framework has the potential to serve as an effective platform for exploring the rational, sustainable and coordinated exploitation of the Bay of Bengal's resources and negotiating equitable benefits for the littoral states. ◉RF

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ENDNOTES

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2. The author has come up with this demarcation on the basis of several sources and maps read together.

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4. A track-two framework in this context refers to a multi-track regional framework consisting of governmental as well as non-governmental, informal and unofficial contacts and activities between non-state and state actors to co-manage specific aspects of the resources of the Bay of Bengal.

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6. Ibid at 3.

7. Andersson & Ostrom, 2008; Bixler, 2014; Blomquist & Schlager,2005; da Silveira & Richards, 2013; Galaz, Olsson, Hahn, Folke, & Svedin, 2008; Marshall, 2005, 2009, 2015; Nagendra & Ostrom, 2014; Newig & Fritsch, 2009; Pahl-Wostl & Knieper, 2014; Pahl-Wostl, Lebel, Knieper, & Nikitina, 2012.

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12. Carlisle and Gruby, "Polycentric Systems", 4.

13. L'Organisation pour la Mise en Valeur du Fleuve Sénégal (Organisation for the Development of the Senegal River) is an institutional framework signed between Guinea, Mali, Mauritania and Senegal for the sustainable management of the Senegal River. Its principles are based on the sustainable use of the Senegal River through co-ownership of infrastructure projects and equitable benefits among the countries. infrastructure managed by the OMVS generates 800 GWh per year of clean affordable energy, and provides 375,000 hectares of irrigable lands. See http://www.omvs.org/ and http://blogs.worldbank.org/nasikiliza/setting-example-cooperative-management-transboundary-water-resources-west-africa, Accessed April 18, 2019.

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based on sustainability of the river. The Okavango River s recognized as one of the few "near pristine" rivers in the world. The main focus of the ecology-based governance of the river is through the sustainable use of its resources and tourism. http://www.okacom.org/, Accessed April 18, 2019.

15. UNGA Res 42/187 The Report of the World Commission on Environment and Development, commonly known as the Brundtland Report or 'Our Common Future' was written to capture the spirit of the Stockholm Conference.

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17. Ibid.

18. "Sustaining Tourism" Accessed April 18, 2019, https://sustainabletourism.net/sustainable-tourism/.

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21. Ibid, 18.

22. BOBP/REP/67, "An Environmental Assessment of the Bay of Bengal Region" (Swedish Center for Coastal Development and Management of Aquatic Resources), Accessed April 17, 2019, https://tnsdma.tn.gov.in/app/webroot/img/document/library/77-Environmental-asst-of-the-Bay-of-Bengal.pdf.

23. The EIA only talks about plastic factories in Bangladesh, whilst having conducted no assessment of the amount of plastic in the Bay of Bengal. See para 29.9, page 107 of the report above.

24. The author searched the BIMSTEC website for programmes and documents on "pollution" but came up with no results. However, a quote by Winston Churchill featured under "no results for pollution" - *Success is the ability to go from one failure to another with no loss of enthusiasm*, Accessed April 18, 2019, https://bimstec.org/?s=pollution.

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