Scoping Study on Migrant Fishers and Transboundary Fishing in the Bay of Bengal

BOBLME-2012-Ecology-03
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Scoping Study on Migrant Fishers and Transboundary Fishing in the Bay of Bengal

Report Prepared for the Bay of Bengal Large Marine Ecosystem Project

by Alin Kadfak, Nathan Bennett, and Raphaella Prugsamatz
Scoping Study on Migrant Fishers and Transboundary Fishing in the Bay of Bengal

A report prepared for the Bay of Bengal Large Marine Ecosystem Project

February 2012

Authors: Alin Kadfak, Nathan Bennett, and Raphaella Prugsamatz

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Executive Summary

Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka and Thailand are working together through the Bay of Bengal Large Marine Ecosystem (BOBLME) Project to lay the foundations for a coordinated program of action designed to improve the lives of coastal populations through improved regional management of the Bay of Bengal environment and its fisheries (BOBLME Project).

One of the two major outputs of the BOBLME Project is to produce an agreed Transboundary Diagnostic Analysis (TDA) that identifies and prioritizes the major transboundary environmental concerns in the Bay of Bengal. This is a perquisite to the other major output expected from the Project, the Strategic Action Programme (SAP), which will address and remediate these concerns and will also ensure the long-term institutional and financial sustainability of the BOBLME Programme. During previous consultations on the TDA, it was suggested that the additional issue of migratory and transboundary fishing should be analysed and considered to be incorporated into the TDA and SAP. This scoping study and report is intended to provide information for future steps to be taken.

The scoping study relates to the assessment of the issue of migratory and transboundary fishing as highlighted above. It will explore the background to the issues and provide specific insight into both (i) working conditions (including reference to safety at sea, as appropriate) on fishing vessels operating outside of national waters, and (ii) issues pertaining to rights of fishing labour and extent of use of legal and illegal foreign labour. The study will cover issues concerning both nationals from the vessel port country and those concerning foreign workers from neighbouring countries. The scoping study will further (iii) cover boats and crews arrested for fishing in traditional fishing grounds that are now part of another country’s EEZ as a result of UNCLOS (either as deliberate acts or due to "straying" across boundaries).

The report is broken down into an introduction, three substantive chapters, and a conclusion. The introduction provides definitions and introduces the methodology. The subsequent chapters explore migrant fishers and trafficking, transboundary fishing and arrests, and governance and management of these issues. In conclusion, the report provides a number of recommendations for action and further research.

The methods used to produce this scoping document included a desk review and a series of key informant interviews. The desk review included an examination of available secondary documents, including reports, academic articles, policy briefs, news items, organizational websites, and other sources. Interviews were conducted with key individuals - who are particularly knowledgeable on this study’s topics - in various organizations located in Bangkok, Thailand, and Chennai, India. The limitations of this study include the short time window allotted - 40 days - and the ability of our team to work only in Thai and English.

The chapter on migrant fishers and trafficking starts by offering a definition of migrant fishers as “people who migrate to work on fishing vessels in other regions or countries”. Flows of migrants are shown to be of two types: internal migration within the nation and migration between nations. In the Bay of Bengal, countries such as India or Bangladesh may experience more internal migration for the purposes of fishing while Thailand and Malaysia may experience more migration from other countries. Fishers migrate for a variety of different reasons including socio-economic, environmental, political and historical factors but
the most important drivers in the Bay of Bengal are poverty and opportunity. Migration is facilitated by a variety of means including social networks and trafficking or illegal recruitment. Migrant fishers make important contributions to the fisheries economies of destination countries, especially Thailand, however they may also have a negative impact on the environmental outcomes of fisheries. Families of migrant fishers may suffer hardship as a result of their absence although this is an issue that is poorly studied. The mostly young migrant fishers working on Thai fishing vessels who tend to come from Myanmar, Cambodia, and Laos are met with a routine and challenging life with long and irregular hours, low pay, simple food, few breaks, and little medication. Social or health security is not provided and few migrants carry proper documentation. Registration of fishers is weak and government labour policies do not cover migrants. Three additional concerns for migrant fishers are safety at sea, piracy, and HIV/AIDS. A significant number of migrants are deceived by brokers and become the victims of trafficking and are forced to labour on Thai and Malaysian fishing vessels. They can be physically and verbally abused, forced to work exceptionally long hours, fed little, and denied breaks and medical treatment all while living in inhumane conditions. Some even witness their colleagues being murdered. Trafficked fishers can remain on boats for months or even years as their vessels offload their catch and pick up supplies from mother ships. Many victims of trafficking have escaped or been arrested; however, there are significant barriers to either repatriation or to bringing the perpetrators to justice including slow court proceedings and uninhabitable shelters for victims. As a result, the level of prosecution on the trafficking issue is small compared to the number of cases that have been reported.

The following chapter argues that transboundary fishing can be an issue because it can lead to degradation of marine resources, conflict, and the arrests of fishers. Transboundary fishing refers to “small-scale or commercial fishing that occurs across regional, territorial, and national maritime boundaries and borders”. The issue of IUU fishing is linked closely to the concept of transboundary fishing and IUU vessels may avoid following environmental regulations and international agreements resulting in significant losses for national economies. Overall, the picture of vessel flows within the region is somewhat poor since vessel registration and MCS is weak throughout the Bay of Bengal. Transboundary fishing can occur either legally – facilitated by licensing or joint ventures - or illegally – driven by historical context, environmental conditions, or unintentional scenarios. The illegal act can be contentious for many reasons particularly when national borders are crossed or when vessels transgress established fisheries zonation schemes within states. In the case of crossing state borders, UNCLOS (1982) created the concept of an EEZ that gave nations sovereign rights over and responsibility for the resources within 200 nm of their shorelines. UNCLOS does not allow for the arresting of individuals who are caught fishing within the zone. Yet there are several hotspots within the Bay of Bengal where ongoing conflicts exist and many arrests have been and continue to be made, including in Palk Bay between India and Sri Lanka and in the Strait of Malacca between Indonesia and Malaysia. Between Bay of Bengal countries and neighbouring countries there are also ongoing conflicts and arrests between India and Pakistan as well as Indonesia and Australia. The processes associated with repatriating arrested fishers are complex, politically-charged, and involve different scenarios in each case and area. NGOs tend to play a central role in advocating for the release of arrested fishers and supporting their families in their absence.
The fourth chapter reviews some of the organizations, institutions, instruments, agreements, and actions related to the governance and management of migrant fishers and transboundary fishing. It is not intended to be a comprehensive overview but rather a starting place for further exploration and discussion. A significant number of organizations, including IGOs, INGOs, NGOs, and research institutes, work on issues related to these topics. The majority of the organizations reviewed work primarily on policy, research, and advocacy. More concerted efforts could be made to collaborate on these issues between the various organizations involved. This section focuses on 1) national policies on migrant fishers, 2) guidelines on migrant fishers in the Bay of Bengal, 3) international agreements on migrant fishers, 4) bilateral and multi-lateral agreements on human trafficking, and 5) actions taken on working conditions for migrant fishers. There are a significant number of agreements and codes of conduct that pertain to these issues however both ratification of previous agreements and implementation may be weak throughout the region. Systems to prevent trafficking and provide support for bringing perpetrators to justice and for the repatriation of victims are also lacking. The standardization of processes for registration of workers and monitoring the flow of migrant fishers within the region might be an important first step. The following section reviews 1) international institutions on transboundary fishing, 2) national laws and regulations for transboundary vessels, 3) bilateral, multilateral, and regional agreements and international laws, 4) repatriation agreements and arrangements for arrested fishers, and 5) actions to prevent, deter, and eliminate IUU fishing. Since UNCLOS was established many EEZs are still disputed. Many documents and guidelines exist to prevent, deter, and eliminate IUU; however, the capacity of local countries to implement the recommendations is limited. A number of the national laws and regulations that exist that deal with fisheries management are outdated and not suited to the current context or consistent with international conventions such as UNCLOS. Bilateral agreements may be an effective means for resolving conflicts on transboundary fishing issues and for repatriation processes; however, these cannot take the place of effective action on the issues. Regional agreements and collaborative action may be more effective for establishing effective monitoring, control, and surveillance (MCS) and creating a unified vessel registration and identification system. Some actions that are encouraged to address transboundary and IUU fishing include developing national and regional mechanisms for MCS, creating standardized systems for licensing and registration of vessels, combatting flag of convenience, monitoring of ports, using market measures against IUU fishing, and implementing co-management as an alternative institution.

On the basis of the information and lessons that were uncovered during the literature review and from the interviews, we offer the following lists of recommendations for action and topics for further research as a starting place for discussions about future actions and research that might be supported by the BOBLME project.

Further Actions on Migrant Fishers Issues

1. Working Welfare
   a. Engagement of countries at the regional level in the sharing of best practices in the management of migration in the fishing sector, thereby identifying pioneers,
practical solutions, and effective strategies in improving the working conditions of migrant fishers.

b. Development of improved national systems and/or standardized regional systems for migrant registration and tracking the flow of migrant fishers.

c. Development and implementation of agreements requiring the possession of legitimate seafarer documents on fishing vessels – for example, through creating a standardized ID card (e.g., within BoB region).

d. Establishment of sound monitoring and evaluation systems to assess the effectiveness of labour policies and standards protecting migrant fishers and any corrective measures that need to be taken.

e. Supporting cooperative efforts between local governments and NGOs who work on these issues – for example through developing tools to monitor evidence of exploitation or forced labour at piers.

f. Development of national labour laws and codes of conduct for the fishing sector that include specific provisions for migrant workers, including mechanisms for enforcing the rules and regulations. These laws should include mandatory worker registration, insurance for accidents, and medical coverage. Fostering of engagement amongst local authorities and agencies to strengthen the implementation of these local policies and laws.

g. Furthering the development of and integration of international and regional codes of conduct and guidelines - on rights, working conditions, and labour practices (e.g., ASEAN declarations on human rights, rights of migrant workers, FAO Codes of Conduct on Responsible Fisheries) - into national legislation and policies.

h. Establishment of clear responsibility of port states to monitor fishing vessels for acceptable working conditions, hygiene, and worker health and address the issues that emerge.

i. Integration of safety at sea guidelines from various agencies – ILO, IMO, and FAO – and incorporation of these guidelines into national policies of BoB countries. This might include, for example, implementing annual vessel safety checks, conducting extensive programs of education and capacity building, and developing weather warning systems.

2. Trafficking

a. Greater research and ongoing monitoring of the processes of recruitment of migrant fishers is needed to guide a concerted effort to break smuggling rings and deal with corruption related to human trafficking of fishers.

b. Creation of laws that punish those responsible for trafficking rather than victims of trafficking - boat owners and captains rather than the workers who may be there against their will (e.g., impound boat or fine the captain).

c. Creation of effective mechanisms and/or organizations, or supporting and improving those that already exist, to help victims of trafficking for bringing responsible parties to justice - e.g. central body with regional offices for making complaints, improved shelter conditions, streamlined judicial processes, and incentives for reporting.
d. Development and implementation of education programs and media campaigns – oriented towards origin locations and countries – to educate about the dangers of trafficking.

e. Strengthening current systems in place through clarifying roles and responsibilities of agencies and parties involved in the monitoring and management of trafficking cases, and pushing for a more participatory process in the clamping down on trafficking networks in ASEAN and the South Asian region.

f. Advocating for regional level involvement in the tracking and recording of trafficking cases related to migrant fishers so as to create a shared level of understanding and consensus and better clarity of effective action steps to be taken to combat trafficking of migrant fishers in the region.

3. Both Trafficking and Working Welfare

a. Encouraging the use of market measures and mechanisms – e.g., international trade regulations, media campaigns, or boycotts – and media campaigns to put pressure on countries whose fishing industries perpetrate trafficking and working welfare offences or break international human rights regulations.

b. Establishment of clear authority in BoB countries for which agencies are responsible for 1) working conditions and 2) human smuggling and trafficking.

c. Strengthening the implementation of already existing agreements, codes of conduct, laws, and policies related to migration throughout the BoB countries.

d. Encouraging the collaboration of the various governmental, non-governmental, and international organizations that are attending to migrant worker, trafficking, and transboundary issues – for example, through creating regional networks and a central repository for information related to these issues.

Further Actions on Transboundary Fishing Issues

1. Transboundary Fishing and IUU

a. Establishment of effective measures for enforcement of laws that restrict encroachment of commercial vessels into inshore areas reserved for small-scale fishers This includes improving policies, building capacity, ensuring funding supports, creating effective sanctions, and addressing corruption.

b. Improvement of Monitoring, Control and Surveillance (MCS) programs on Illegal, Unreported and Unregulated (IUU) issues (e.g., Flag of Convenience (FoC), VMS, reflagging of boats) through regional coordination and bilateral cooperation. Encouraging increased financial support and capacity for MCS.

c. Expansion of the Vessel Monitoring Systems (VMS) regional and promotion as a requirement for gaining access to EEZ and preventing inshore fishing.

d. Creation of measures to deter FoC and the reflagging of vessels – e.g., through permanent markings on boats, assigning responsibility for FoC vessels to country of registration, trade sanctions, licensing processes that require a genuine link between flag state and vessel, and regional pressure against FoC vessels.
e. Regional standardization and simplification of vessel registration and licensing processes for all sizes of vessels and implementation of campaigns to educate small-scale fishers
f. Encouraging of port monitoring regionally to monitor and record landing information, including vessels, types of fisheries, and catch data.
g. Promoting of regional cooperation and systems for information sharing on the records of fishing vessels.

2. Conflict over Transboundary Fishing Grounds
   a. Experiment with co-management at local level to solve conflicts over transboundary fishing grounds.
   b. Replacement of ‘open access’ regimes with ‘limited access regimes’ in consideration of the rights of local and regional artisanal fishers.
   c. Creation of specific agreements and licensing arrangements for small-scale fishers situated near borders – particularly if historically areas for fishing were shared.
   d. Participatory establishment of best practices and clear guidelines for dealing with conflicts over transboundary fishing grounds at the local, regional, and national level.

3. Arrests and Repatriation
   a. Supporting the development of bilateral repatriation agreements between various countries within the BoB that deal specifically with migrant fishers.
   b. Developing cooperative programs at borders to decrease arrests and encourage quicker releases – for example, through establishing joint patrols or joint interrogative systems.
   c. Clarification of the roles and responsibilities of employers, including vessel owners, and governments in repatriation of arrested migrant fishers from vessels used in transboundary fishing.
   d. Promotion of the use of state run systems to warn small-scale vessels to mitigate against unintentional crossing of borders.

Areas for Further Research

1. Facilitation of regional workshops of experts to examine feasibility and assign importance for the aforementioned action items related to migrant fishers, trafficking, and transboundary fishing.
2. Quantitative in-depth studies of flows and numbers of migrant fishers, trafficked fishers, and transboundary fishing vessels and arrests within the BoB.
3. Broad analysis of national and state legislations, policies, and management documents, including those related to natural resource and fisheries management, for inclusion or exclusion of migrant fishers and transboundary fishing issues in each of BoB member countries.
4. Comprehensive examination of the ratification or lack thereof, of international agreements relating to migrant fishers, trafficking, and transboundary fishing by various countries within the Bay of Bengal and thorough examinations of the level of implementation by each nation state.
5. Studies on the relationship between the environment and migrant fishers and transboundary fishing pressure are lacking. Below are a few examples of research topics that deserve further attention:

   a. Research on how environmental change, degradation, and global climate change will impact on flows of migrants and fishing pressure within the Bay of Bengal, particularly as it relates to the long-term sustainability of fisheries resources and food security.

   b. Studies on the environmental impacts of the practices of migrant fishers – e.g., how the involvement of often young and inexperienced fishers changes fishing practices and impacts the environment.

   c. Study on the environmental pressure exerted by transboundary fishing in various locations within the BoB.

   d. Study on flows – numbers and directions - of transboundary fishing as it relates to environmental quality – e.g., examinations of whether fishers flow from countries or areas with low environmental quality and standards towards countries or areas of higher environmental quality.

   e. Qualitative research on the processes of recruitment of migrant fishers, including examinations of the politics of process, corruption, routes of smuggling, pathways to becoming a migrant, and locations where migrants originate and end up.

6. Qualitative research on the processes of recruitment of migrant fishers, including examinations of the politics of process, corruption, routes of smuggling, pathways to becoming a migrant, and locations where migrants originate and are destined.

7. The push and pull factors that lead to the migration of specifically fishers within the BoB.

8. Specific processes associated with repatriation of fishers between the various countries of the BoB to search for best practices and lessons learned.

Acknowledgements

Funding for the work presented in this report came from the Food and Agricultural Organization of the United Nations through the Bay of Bengal Large Marine Ecosystem Project. Our appreciation also goes to the individuals and organizations who took time to share their insights, knowledge, and resources with us during the writing of this report. Finally, we would like to dedicate this report to those whose lives have been negatively impacted or unnecessarily lost as a result of mistreatment while working on fishing boats, to those arrested unfairly while fishing across borders, and to small-scale fishers whose catches are impacted by the illegal practices of some commercial vessels. Fishing is a challenging, important, and honourable profession. Migration of labour and movement of fishing vessels across boundaries are natural and inevitable parts of both small-scale and commercial fisheries. It is our hope that solutions can be found and arrangements can be made to discourage disreputable practices in the future.
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Alin has worked in Southern Thailand on several Post-Tsunami livelihood development projects and in Bangkok on vocational training programs for women. Alin’s master’s research was focused on waste management in Eastern Ghana. Currently Alin is working as a research assistant for project IMPAACT (http://projectimpaact.asia) along the Andaman Coast of Thailand and as an independent consultant for FAO through the BOBLME project.

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Raphaella has worked in Southeast Asia and the ASEAN region on various development research projects related to labour economics, labour migration, human rights and labour rights, migration management and social development, social return on investments (SROI) for social programs in Thailand, and tobacco tax issues in the Southeast Asian Region. Her educational background is in Management and Organization Development with a special focus on the non-profit sector.
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACILS</td>
<td>American Center for International Labour Solidarity</td>
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<td>APFIC</td>
<td>Asia-Pacific Fishery Commission</td>
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<tr>
<td>ARIAT</td>
<td>Asian Regional Initiative Against Trafficking</td>
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<tr>
<td>ARIF</td>
<td>Alliance for the Release of Innocent Fishermen</td>
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<tr>
<td>ARMC</td>
<td>Asian Research Centre for Migration</td>
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<td>ASEAN</td>
<td>The Association of Southeast Asian Nations</td>
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<td>BoB</td>
<td>Bay of Bengal</td>
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<td>BOBLME</td>
<td>Bay of Bengal Large Marine Ecosystem</td>
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<td>BOBP</td>
<td>Bay of Bengal Programme</td>
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<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
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<tr>
<td>CITES</td>
<td>Convention on International Trade in Endangered Species of Wild Fauna and Flora</td>
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<tr>
<td>EEZ</td>
<td>Exclusive Economic Zone</td>
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<tr>
<td>EJF</td>
<td>Environmental Justice Foundation</td>
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<tr>
<td>FAO</td>
<td>Food and Agriculture Organization</td>
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<tr>
<td>FIMSUL</td>
<td>Fisheries Management for Sustainable Livelihood</td>
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<tr>
<td>FoC</td>
<td>Flag of Convenience</td>
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<tr>
<td>GPS</td>
<td>Global Positioning System</td>
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<tr>
<td>GRT</td>
<td>Gross Register Tonnage</td>
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<tr>
<td>GT</td>
<td>Gross Tonnage</td>
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<tr>
<td>ICM</td>
<td>Integrated Coastal Management</td>
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<td>ICSF</td>
<td>International Collective in Support of Fishworkers</td>
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<td>IGOs</td>
<td>International Governmental Organizations</td>
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<td>ILO</td>
<td>International Labour Organization</td>
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<td>IMO</td>
<td>International Migration Organization</td>
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<tr>
<td>INGOs</td>
<td>International Non-Government Organizations</td>
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<td>IOM</td>
<td>International Organization for Migration</td>
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<td>IOR-ARC</td>
<td>The Indian Ocean Rim Association for Regional Cooperation</td>
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<td>IPOA</td>
<td>International Plans of Actions</td>
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<tr>
<td>ISJWGF</td>
<td>The India–Sri Lanka Joint Working Group on Fisheries</td>
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<td>ITWF</td>
<td>International Transport Workers’ Federation</td>
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<td>IUU</td>
<td>Illegal Unreported and Unregulated</td>
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<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships</td>
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<td>MCS</td>
<td>Monitoring, Control and Surveillance</td>
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<td>MIC</td>
<td>Myanmar Investment Commission</td>
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<td>MMC</td>
<td>Mahidol Migration Centre</td>
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<td>MoU</td>
<td>Minutes of Understanding</td>
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<td>MPA</td>
<td>Marine Protected Area</td>
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<td>MRAG</td>
<td>Marine Resources Assessment Group</td>
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<td>NAFSO</td>
<td>National Fisheries Solidarity Movement</td>
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<td>NFAT</td>
<td>The National Fisheries Association of Thailand</td>
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<td>NGOs</td>
<td>Non-Governmental Organizations</td>
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<td>NM</td>
<td>Nautical Mile</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>NPOAs</td>
<td>National Plan of Actions</td>
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<td>RFMOs</td>
<td>Regional Fisheries Management Organizations</td>
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<td>PLANT</td>
<td>Participatory Learning Action Network &amp; Training</td>
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<td>RIs</td>
<td>Research Institutes</td>
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<td>SAP</td>
<td>Strategic Action Programme</td>
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<td>SAARC</td>
<td>South Asian Association for Regional Cooperation</td>
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<td>SEAFDEC</td>
<td>Southeast Asian Fisheries Development Centre</td>
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<td>SIFFS</td>
<td>South Indian Federation of Fishermen Societies</td>
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<td>SLORC</td>
<td>The State Law and Restoration Council</td>
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<td>SUB</td>
<td>Seafarer Union of Burma</td>
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<td>TDA</td>
<td>Transboundary Diagnostic Analysis</td>
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<td>TDFF</td>
<td>Trivandrum District Fishermen Federation</td>
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<td>TOFA</td>
<td>The Thai Overseas Fisheries Association</td>
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<tr>
<td>UNCLOS</td>
<td>UN Convention on the Law of the Sea</td>
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<td>UNIAP</td>
<td>United Nations Inter-Agency Project on Human Trafficking</td>
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<td>VMS</td>
<td>Vessel Monitoring System</td>
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<tr>
<td>WFC</td>
<td>World Fish Centre</td>
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<td>WFFP</td>
<td>The World Forum of Fisher People</td>
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<tr>
<td>WIOMSA</td>
<td>Western Indian Ocean Marine Sciences Association</td>
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Introduction and Overview

Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka and Thailand are working together through the Bay of Bengal Large Marine Ecosystem (BOBLME) Project to lay the foundations for a coordinated program of action designed to improve the lives of coastal populations through improved regional management of the Bay of Bengal environment and its fisheries (BOBLME Project).

One of the two major outputs of the BOBLME Project is to produce an agreed Transboundary Diagnostic Analysis (TDA) that identifies and prioritizes the major transboundary environmental concerns in the Bay of Bengal. This is a perquisite to the other major output expected from the Project, the Strategic Action Programme (SAP), which will address and remediate these concerns and will also ensure the long-term institutional and financial sustainability of the BOBLME Programme. During previous consultations on the TDA, it was suggested that the additional issue of migratory and transboundary fishing should be analyzed and considered to be incorporated into the TDA and SAP. This scoping study and report is the first step in that process.

The scoping study relates to the assessment of the issue of migratory and transboundary fishing as highlighted above. The scoping study will explore the background to the issues and provide specific insight into both (i) working conditions (including reference to safety at sea, as appropriate) on fishing vessels operating outside of national waters, and (ii) issues pertaining to rights of fishing labour and extent of use of legal and illegal foreign labour. The study will cover issues concerning both nationals from the vessel port country and those concerning foreign workers from neighbouring countries. The scoping study will further (iii) cover boats and crews arrested for fishing in traditional fishing grounds that are now part of another country’s EEZ as a result of UNCLOS (either as deliberate acts or due to "straying” across boundaries).

The remainder of the introductory chapter provides definitions of migrant fishers and transboundary fishing as they are used in this report, describes the methods used to complete this scoping study, and provides an overview of the report.

Definitions

In the literature on migration and fisheries, terms such as “migrant fishers” and “transboundary fishing” are often used in confusing, ambiguous, and quite different ways. One organization or author might use the same term to refer to something quite different from another. In order to be clear, for the purposes of this report we will be using the following definitions:

Migrant fishers – people who migrate to work on fishing vessels in other regions or countries.

Transboundary fishing – small-scale or commercial fishing that occurs across regional, territorial, and national maritime boundaries or borders.
Methodology of study

The methods used to produce this scoping document included a desk review and a series of key informant interviews. The study was guided by the Terms of Reference and by a list of related sub-questions that were created by our team. The desk review included an examination of available secondary documents, including reports, academic articles, policy briefs, news items, organizational websites, and other sources. We amassed a library of over 200 relevant documents (see References and Appendix A) and compiled a compendium of approximately 170 news items (see Appendix B). In addition, we conducted 15 interviews with key individuals - who are particularly knowledgeable on this study’s topics - in various organizations located in Bangkok, Thailand, and Chennai, India. Interviews were conducted with the following individuals:

- Andy Hall, Foreign Expert, Institute for Population and Social Research (IPSR)
- Max Tunon, Technical Officer, International Labour Organization (ILO)
- Rebab Fatima, Regional Coordinator and Advisor for South Asia, International Organization for Migration (IOM)
- Claudia Natali, Labour Migration Programme Manager, International Organization for Migration (IOM)
- John McGeoghan, Regional Counter Trafficking and Assisted Voluntary Return and Reintegration Specialist, International Organization for Migration (IOM)
- Phil Robertson, Deputy Director, Human Rights Watch, Asia
- Prof. Supang Chantavanich, Director, Asian Research Centre for Migration, Institute of Asian Studies, Chulalongkorn University
- Magnus Torell, Senior Advisor, Southeast Asian Fisheries Development Centre, SEAFDEC
- V. Vivekanandan, Chief Executive of South Indian Federation of Fishermen Societies (SIFFS) and convener of Alliance for release of innocent Fishermen (ARIF)
- C.M. Muralidharan, National Project Coordinator, Fisheries Management for Sustainable Livelihood (FIMSUL) project
- Dr. Chandrika Sharma, Executive Secretary, International Collective in Support of Fishworkers (ICSF)
- N Venugopal, Consultant, International Collective in Support of Fishworkers (ICSF)
- R.T. John Suresh, Executive Director, Participatory Learning Action Network & Training (PLANT)
- Anto Asirvatham, Project Co-ordinator, Participatory Learning Action Network & Training (PLANT)
- Dr. Yugraj Singh Yadava, Director, Bay of Bengal Programme – Inter-Governmental Organization (BOBP-IGO)

The interview schedule contained in Appendix C was used to guide the interviews. Before proceeding, we want to recognize the significant limitations of this study, which include the short time window allotted - 40 days, of which eight days were spent travelling - and the ability of our team to work only in Thai and English. As a result, we may have missed many important documents and our study may be more focused on certain countries than others.
Overview of the Report

The report broken down into three additional substantive chapters and a concluding chapter. The second chapter focuses on migrant fishers and trafficking in the Bay of Bengal. It offers some background on the flows of migrant fishers, the push and pull factors that cause fishers to migrate, and the impacts of migration on source and destination countries. An exploration of the working conditions of migrant fishers and the processes by which some migrants are trafficked into exploitative working situations is also offered. The third chapter focuses on the issue of transboundary fishing within the Bay of Bengal, including an exploration of flows of transboundary fishers, causes and impacts of transboundary fishing, and IUU fishing in the region. The chapter concludes with a look at the issue of arrests of transboundary fishers in the EEZs of countries within the Bay of Bengal and the processes associated with repatriation of arrested fishers. The fourth chapter examines various issues related to the governance and management of migrant fishers, trafficking of fishers, and transboundary fishing. It includes introductory discussions of the wide array organizations, institutions, instruments, agreements, and actions that relate to these issues. At the end of each chapter is a brief overview of some of the lessons learned regarding the topic under discussion. On the basis of the information and lessons that were uncovered during the literature review and from the interviews, the fifth and final chapter offers a number of recommendations for action and topics for further research. The appendices provide a list of additional resources on migratory and transboundary fishing issues, a list of news items on migratory and transboundary fishing issues, and information on additional fishing boundaries within nation states.
Introduction to Migrant Fishers Issues

Humans have always migrated from one place to another for work. Mobility for the purposes of seeking employment and making a living can be conceptualized as a basic human right. Migrant workers provide important labour for many sectors globally including fisheries. According to the definition of this report, ‘migrant fishers’ is a term that refers to “people who migrate to work on fishing vessels in other regions or countries”. In particular, this report will focus on migrants who migrate to countries other than their own to work on foreign owned fishing boats. The following sections of this report will provide background information on migrant fishers, including reviewing available information on flows of migrant fishers, causes of migration, and the potential impacts of migration on both source locations and destinations. Subsequently, we will focus on two issues that have received a significant amount of attention in recent years – the working conditions that migrant fishers are subjected to aboard fishing vessels and the trafficking of migrant fishers.

Flows of Migrant Fishers

The concept of migration flows refers to the physical movement of people from one region or country to another. The flow of migrant fishers does not include the flow of illegal boatman or asylum seekers who travel from one place to another seeking refuge - for instance Rohingyas escaping to Bangladesh or Thailand, Indonesians escaping to Australia, and Tamil escaping to Australia.

The following section will present two types of flows that pertain to migrant fishers: flow within the same country and flows across national borders. Through literature reviews and key informant interviews, general trends of migrant fisher flows can be summarised as follows. Mostly in India, Bangladesh and Maldives, migrant workers move internally to the fishing sector. In contrary, migrant fishers who work on commercial fishing vessels in Thailand have moved from neighbouring countries, such as Myanmar and Cambodia, into the sector.

Box 1 - Why is an understanding of fishers’ movement important for fisheries policy?

Case study – Western Indian Ocean Marine Sciences Association (WIOMSA) has studied the migrant fishers within five countries of the Western Indian Ocean. The results of this study show that Kenya is the location where the vast majority of the migration occurs, both within the country and from neighbouring countries. These results suggest that some regions or countries may be more important for creating legislation, policies and management practices that incorporate migrant fishers. (Further reading: Crona et al., 2010)
Flows of Migrant Fishers Within the Nation

A number of studies on migrant fishers have shown the flow of workers from inland states to coastal states (Bavinck, 2011; Sathiadhas & Prathap, 2009; Salagrama, 2004). In India, for example, there is a flow of workers from internal states to coastal states to work on fishing boats. In addition, fishers from one coastal area migrate to work as boat crews or fishing assistants in other coastal states during particular fishing seasons (See news item #7 – news items referenced in the report are located in Appendix B). For example, the fishers from Tamil Nadu might migrate to work in Northern Andhra Pradesh and there is a tendency for people to move during certain seasons to Southern Orissa (interview, C. M. Muralidharan, Jan. 23, 2012). Often migrant fishers in India will move from one state to another state during the “closing bay season” in their state (Pramod, 2010). Interviewees suggested that this type of flow of migrant fishers may be more typical of India or Bangladesh than of Thailand, Malaysia, or Indonesia where there are more diverse opportunities and fishing may not be as attractive of an option.

Flow of Migrant Fishers Between Nations

Various interviewees suggested that migrant fishers travel to Thailand, Malaysia, and Indonesia, within the Bay of Bengal, and to countries outside of the area. However, for the most part there is limited information about these flows except in the case of Myanmar, Cambodian, and Lao migrant fishers travelling to Thailand. There are, for example, a significant number of news items that discuss Myanmar migrant fishers in Thailand (See news items #69, 70, 75, 77, 82, 91, 92, 97, 98, 116, 123, 124, 163, 164). Additionally, records from Ministry of Labour in December of 2009 indicate that there were 56,578 registered migrant workers in the fishing sector, of which 14,969 were Cambodian, 1,800 were Laos, and 39,809 were from Myanmar (Ministry of Labour, 2010, cited in Huguet & Chamratrithirong, 2011). These numbers, however, are likely significantly lower than the actual numbers working in the fishing sector and even than those on fishing vessels since the majority of migrant labourers are not registered (interview, Andy Hall, Jan. 17, 2012). According to other sources, there are 300,000 working officially in the seafood industry with more unregistered (Corben, 2011 - news item #75), 35,000 registered migrants on Thai vessels (Macnamara, 2011 – news item #77), and an estimated 250,000 migrant fishers and fishworkers with only 70,000 registered (Browne, 2009 – news item #116).

On the Andaman coast of Thailand, there are likely few Cambodians or Lao migrant fishers. According to Chokesanguan et al. (2011), there are different compositions of migrant fishers on boats in the Gulf of Thailand and Andaman Sea. Crews working on fishing boats on the Andaman Sea consisted of 80% Myanmar fishers and 20% Thai fishers. Cambodian and Myanmar are the majority migrant fishers in the Gulf of Thailand and South-eastern part of Thailand (Chokesanguan et al., 2011).
Why Fishers Migrate

The movement of migrant fishers may be voluntary acts, such as moving to places where there are better working opportunities, or involuntary acts, when caused by deception in the case of trafficking. There are several drivers – often referred to as push and pull factors - that can cause fishers migrate from one area to another or that cause labourers to migrate into the fishing sector. In general, migration is caused by historical, socio-economic, political, population, demographic, and environmental drivers. At times a combination of factors will lead to increased flows of migrant – for example, in the case of flows of migrants from Bangladesh to West Bengal (Datta, 2004). Overall, there is a significant amount of literature that focuses on the causes of migration of workers but a dearth of information that focuses on migrant fishers as a distinct group. Njock & Westlund (2008) provide a useful overview of push and pull factors for fishers to migrate in an African context (see Table 1). Our research suggests that, in the Bay of Bengal, poverty and lack of livelihood opportunities are probably the main reasons that cause fishers to migrate followed by the political situations in source countries. There is little information that relates to population, demographics, or environmental drivers. We also noted that both social networks and illegal trafficking play significant roles in facilitating migrant flows.

Table 1 – Push and pull factors for fishing communities to migrate in an African context (Njock & Westlund, 2008)

<table>
<thead>
<tr>
<th>Reasons for migration</th>
<th>“Push” factors</th>
<th>“Pull” factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Push” factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoid social obligations</td>
<td>Better prices and stronger markets</td>
<td></td>
</tr>
<tr>
<td>Conflicts</td>
<td>Cheaper inputs e.g. gear, nets, fuel</td>
<td></td>
</tr>
<tr>
<td>Social pressure: remittances</td>
<td>Instrumental reasons e.g. earn enough money to get</td>
<td></td>
</tr>
<tr>
<td>Reduce consumption at place of origin</td>
<td>married, retire, allow for investments (fishing</td>
<td></td>
</tr>
<tr>
<td>Reduction in fish stock abundance</td>
<td>equipment, housing), etc.</td>
<td></td>
</tr>
<tr>
<td>Poverty</td>
<td>Better fisheries and fish stock abundance</td>
<td></td>
</tr>
<tr>
<td>Political instability in countries of origin</td>
<td>Better livelihoods: safety net (internal migrations)</td>
<td></td>
</tr>
<tr>
<td>Lack of socio-economic infrastructures</td>
<td>Better socio-economic facilities/infrastructure</td>
<td></td>
</tr>
<tr>
<td>Lack of alternatives activities to fisheries</td>
<td>Easy social integration (social and cultural networks)</td>
<td></td>
</tr>
<tr>
<td>Environmental degradation (draught, salification of agricultural areas, etc.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Socio-economic Drivers

Wealth generation is perhaps a main attraction of the fishing industry and at the same time it leads to migration of labour into this sector. Most of the key informants agreed that opportunity and poverty are the main drivers for migrant fishers in the Bay of Bengal: “The reason why people come here is because they have no choice and the demand is here. Thailand is a hub. You can satisfy both ends of the equation…The fishing industry needs people to come and work here.” (interview, IOM, Jan. 19, 2012). Job opportunities, better incomes, and improved living conditions are main pull factors for migrant fishers while poverty is a major push factor in origin countries (e.g., Datta, 2004; Sarkar, 2010). Thailand is an attractive host country for many migrant fishers to come and work both in the Gulf of Thailand and in the Andaman Sea. Thailand commercial fishing sector faces high production costs and a lack of crews (Stobutzki et al., 2006). According to estimates by the Federation of
Thai Industries in July 2008, the fishing and fish processing sector had a shortage of more than 10,000 workers (Mirror Foundation, 2011). Fishing is considered a low paying, dirty, dangerous and difficult job, which Thai people are not willing to take. Yet wages for migrant fishers may be better than wages for working in some other sectors (interview, Max Tunon, Jan. 18, 2012). For the migrant fishers of Tamil Nadu, India, international demand for shark products present a lucrative financial opportunity (Sathiadas & Prathap, 2009).

**Historical and Political Drivers**

In Thailand, the Typhoon Gay incident in 1989 was a benchmark that shifted fishing labour from Thai to migrants (interview, Andy Hall, Jan. 17, 2012). The great loss of Thai fishers during the time and the fear that it brought to many Thai workers caused a vacuum in terms of fishing labour. Myanmar, Cambodian and Lao migrant workers started to be recruited to replace Thai fishers (IOM, 2011). At the same time, the situation in Cambodia and Myanmar created political and economic environments that were undesirable and pushed people to seek employment elsewhere. For example, a history of armed conflict between the Cambodian government and the Khmer Rouge guerrillas combined with policies that restricted wood harvesting led to the migration of fishers from Kampong Thom, Cambodia to Thailand (news item #120). Myanmar migrants were also pushed to migrate as a result of political repression and lack of freedom under the military junta (Fujita et al., 2010).

Migrant fishers – both within nations and across national borders - are not always temporary and may live permanently in the place to which they migrate. For example, a general trajectory of growth in the fisheries sector in India has led to permanent in-migration of people into the sector. In India, the modern fishery commenced in the 1950s, after Indian independence. The development of the small trawler boat resulted in increases of commercial fishing along the Indian coast. This rapid growth of the industrial fishery in India was called the ‘blue revolution’ (Bavinck, 2011, p.174). In Bavinck’s Tamil Nadu case study, the number of trawlers grew from 0 in 1948 to 8,009 in 2000. Small-scale vessels more than tripled in the same period. The fishing population in the state increased significantly due to the immigration of non-fishers into the fishing sector as well as general population growth. Even though “fisher” was a low status caste in India, there were job opportunities from the fast growing business in Tamil Nadu, which caused people to migrate to this area (Bavinck, 2011).

**Environmental Drivers**

The general theory is that environmental decline in source locations and that environmental change will lead to increased migration (e.g., Walsham, 2010; Lilleor & Broeck, 2011). However, as far as we are aware, there is little empirical evidence to support whether and how this may already be happening in the Bay of Bengal region. Gorvett’s (2009 – news item #120) study of migrants moving from Cambodia to Thailand for work as a result of deforestation and subsequent policy to curb deforestation provides limited support for this theory. Sarkar’s (2010) report on migration from Bangladesh to West Bengal also suggests that environmental conditions in Bangladesh are partially responsible. Moreover, it is likely that human caused environmental degradation, particularly when combined with population
increases, and environmental change, both slow gradual changes as well as extreme events such as storms and floods, will continue to drive migration.

Social Networks

Pre-existing social networks often facilitate migration between different locations and even into compromising situations. Sarkar (2010) shows that for Bangladeshi migrants moving to West Bengal – 74% move to the same location as their family and 2% move to locations near friends. Similarly, many of the migrants interviewed during a recent study in Ranong came “through personal networks such as relatives or friends” (Fujita et al., 2010, p. 10). According to John McGeoghan (interview, Jan. 19, 2012), certain districts or provinces in Cambodia send more people to work on fishing boats as a result of strong social networks that have been created over many years.

Trafficking and Illegal Recruitment

Socio-economic, political, and other drivers may lead individuals into situations where they become victims of trafficking and end up working on fishing boats. In this case, it may be personal agency that initially guides a person to seek work in another location but acts of deception may lead individuals into unintended or undesirable situations on fishing boats. We will focus more on trafficking and illegal recruitment later in this chapter.

The Impacts of Migrant Fishers

Migration can impact both countries of origin and destination countries (ILO, 2004). The impacts of migration on source countries and locations can include reducing population pressures and unemployment, social costs such as the absence of family members particularly if arrests occur - a topic which will be covered in the following chapter – and flows of remittances. We found very little information on any of these topics as it pertains to migrant fishers within the Bay of Bengal. Many families of migrant fishers are impacted by the absence of the head of the household. The study by Sathiadhas & Prathap (2009) – wherein Tamil fishers from Kanyakumari migrate to do shark fishing - reflects the common problems of many families of migrant fishers. The families are left to their own devices and women have to run the households with the seasonal income from the male fishers. Remittances from migrants are often highly important to immediate and extended families in source countries. However, the level of remittances by migrant fishers in Thai waters is likely quite low since wages are low (100-200 baht/day and 3000-6000 baht/month) and costs are high (Fujita et al., 2010). Fujita et al.’s study indicates that households, that include fishers, remit between 0-5750 baht to Myanmar per month; however, the accuracy of these figures is questionable. Migrants can also have impacts on social, environmental, and economic conditions in destination countries (ILO, 2004). According to Chalamwong, Prugsamatz, & Hongprayoon (2010) migrant workers contribute 760 million baht to the overall Thai economy. The amount that migrant fishers contribute to Thailand’s 105,977 million baht fisheries sector is unknown (2008 statistics – FAO, 2010a). Finally, the implications for the environment of having often young and inexperienced fishers, who receive financial incentives for the amount caught, working on fishing boats and harvesting marine resources is also a topic of some concern (see
also Curran, 2002). In the context of the Bay of Bengal, there is also a significant relationship between migrant fishers and IUU vessels – however this may not be attributable to the migrants but rather to the captains and the boat owners.

**Working Conditions for Migrant Fishers**

The life of migrant fishers may not be as easy as promised or dreamed before they decided to migrate from their home countries. Yet for many migrant fishers the life of living and fishing aboard vessels may not be as bad as we are led to believe by literature and media reports on victims of trafficking. This is an important distinction to keep in mind: a migrant fisher is not necessarily a victim of trafficking and the treatment of the two groups may be vastly different. The suggestion that social networks play such a strong role in recruitment processes of migrant fishers (interview, John McGeoghan, Jan. 19, 2012; see also Pearson et al., 2006) suggests that some people may even recommend the lifestyle to friends and family. The next section of the chapter will focus on the working conditions of migrant fishers – particularly in Thailand, focusing on wages and working hours, health and sanitation issues, and incidences of exploitation and forced labour. In addition, we will briefly look at the high incidence of HIV/AIDS among migrant fishers and the issue of safety at sea – which may be a significant concern for migrant fishers departing on long fishing trips. The specific situation of trafficked fishers will be explored later in this chapter.

**Working Conditions**

Working conditions on fishing vessels are very diverse. The working environment may depend to a significant extent on the captain or owners of the vessel. Working days and hours are also quite different in different types of fishing boats and depend on the types of gear being used. For example in Thailand, there are three types of fishing vessels - local Thai fishers normally work on small vessels (>10m) while migrant fishers tend to work on the medium and large commercial fishing vessels. Larger vessels will often have only a few Thai crews on board, usually the captain, mechanics and captain’s assistant, and the rest are Myanmar migrant fishers. In Ranong, Thailand, many fishing boats will go out for 30-40 days (Fujita et al., 2010). Large vessels will fish in international waters (e.g., Myanmar or elsewhere in the Indian Ocean) and normally go fishing for up to six months or longer and have more than 40 migrant workers on board (Chantavanich et al., 2007; Fujita et al., 2010). Different types of fishing boats also require different working processes and hours. For instance, a medium-sized vessel using a “black trawl” will require 15 crew members to haul the trawl three times a day, with each laying process taking 4-5 hours. This type of trawler will depart in the afternoon and come back at dawn. The working conditions in these trawls would definitely be different than on a larger vessel doing a “dragging trawl trip”, which can take 15-20 days and require 40-50 workers. (Chantavanich et al., 2007 p. 17-18).

In Thailand, Fujita et al. (2010) describe the “harsh living and working conditions” of migrant fishers aboard a fishing vessel in the following way:

“The workers on fishing boats are only males, who are generally young. The way they work on the fishing boat is as follows. The boat searches for fish using sonar devices,
and the workers spread nets once they hit a school of fish. The boat trawls the nets for about two hours. After this operation the workers take a rest for five hours during which the boat searches for more schools of fish, then the trawling starts again. This is repeated for 24 hours. When the workers take a rest, they have meals, bathe (with seawater and rinse with freshwater) and sleep. If it is raining they sleep inside the cabin; in fine weather they lie on the deck. When they get sick or are injured, they use medicine kept on the boat. In a case where the boat has no medicine, the workers use what they have brought with them.” (p. 10)

This description brings up several important points: age of migrants, meals, health and medicine, and working hours and periods of rest. On age, Pearson et al. (2006) found that 2/3 of migrant fishers surveyed in the Gulf of Thailand were between 15-17 years of age. On meals, Fujita et al. (2010) found that provisions were provided by the boat owners for the duration of the trip and that meals consisted of rice, fish, and vegetables. On health and medicine, Fujita et al. comment that they use “medicine kept on the boat” but interviewees suggested that there is little medicine kept on the boats. Furthermore, interviewees commented that few migrant fishers are likely to have any social security or medical coverage if they are injured or ill. Working hours are generally long and irregular for migrant fishers. Pearson et al. (2006) found that 100% of migrant fishers work longer than 8 hours a day and 62% work longer than 12 hours a day. Fujita et al. (2010) indicate that crews might take 3-5 days off between trips of 30-40 days.

The specific arrangements for reimbursements of migrant fishers and the amount paid are different and depend on types of fishing gears and agreements with the owner. However, most indications are that the wage generally varies between 3,000 – 6,000 baht a month (e.g., Martin, 2004; Pearson et al., 2006; Chantavanich et al., 2007; Fujita et al., 2010). Chantavanich et al. (2007) found that the average wage of migrant fishers is 3,000 baht per month while the leader of the migrant fisher may receive 6,000 baht per month. The National Fisheries Association of Thailand (NFAT) presentation on working condition on Thai fishing vessels shows the standards salary for different positions working on board. For example, captain of the boat will receive 700 – 1,500 US dollar per month. Lower positions get paid less, the head of the crew may get 230 – 300 US dollar, crews receive 200 – 220 US dollar per month (Lertpaiboon, 2011). Sometimes the boat owners will pay every 15 days (Chantavanich et al., 2007). Often owners will pay some advance amount of money to migrant workers before the trip (Fujita et al., 2010).

The previous paragraphs paint a picture of a fairly routine albeit challenging life for migrant fishers aboard Thai fishing vessels. Migrant fishers may also face significant exploitation and abuse. As Pearson et al. (2006) point out in their study – which included 21 migrant fishers – ages ranged from 15-19, 20% were forced to work, 14% faced physical abuse, many were indebted and were afraid to leave, 71% said their ID cards were held by their employers, and all worked long hours. It is also noteworthy that many of the above descriptions come from studies with participants who were accessible to researchers and who were not expressly the victims of trafficking. These can be compared with quite different descriptions that can be found later in this chapter (see also Box 2).
This review also found several examples of Indonesian migrant fishers who have been forced to work under severe conditions and faced abuse in foreign vessels outside of the Bay of Bengal. In 2005, 10 Indonesian were seeking protections in New Zealand, due to bad working conditions on the Korean registered boat, name Sky 75. The Indonesian workers claimed that they had long hours of work, suffered verbal and physical abuse, and were fed unpalatable food on board (ITWF, 2006). Another case suggests that Indonesian workers may have no legal protection when working for foreign companies. The fishing company called Micronesia Longline Fishing Company has been accused by 28 Indonesian fishers of failing to provide legal protection – they received no payment after working for the company for three years (ITWF, 2006).

Many migrant fishers are illegal and may hold false documentation or copies on vessels. Often authorities in countries that require documents such as seaman’s book (aka – seafarer’s book) are flexible and not strict. In Thailand, crews are required to hold a seaman’s book in order to travel outside of the country to fish. Both Thai and migrant fishers can apply for a seaman’s book using an identity card or passport. Due to the high number of illegal migrant fishers, many seaman’s books are fake (Mirror Foundation, 2011). Officially, Thailand has not yet signed an agreement with any neighbour countries on the use of seaman’s books to travel into those countries - however, authorities in Indonesia may accept the seaman’s book as a means to enter the country (IOM, 2011).

In India, the situation is quite different for domestic migrant fishers. First, the Indian fishing industry involves mainly domestic migrant workers. Most of the fishers, both local and migrants, are registered as part of an association to which they pay an annual sum. In return the association will support fishers on social welfare issues. For example, if the fishers go missing or get injured, they or their family will receive compensation (interview, Anto Asirvatham, Jan. 25, 2012). Secondly, the type and size of fishing vessels is quite different. They are much smaller and generally take on crews of 4-6 people. Most of the fishing vessels in India, especially in the Chennai area, only do fishing trips of several days with long working hours (e.g., 16-18 hours). There is no indication that there are any problems concerning working conditions on these boats (interview, V. Vivekanandan, Jan. 23, 2012).
Safety at Sea

Safety at sea is an additional issue that may be important for many migrant fishers – as they may be travelling on sub-standard vessels. In Thailand, FAO supported a study to assess the safety at sea of trawlers and purse seiners in four different locations in Thailand. According to the Marine Department and Department of Fisheries, approximately 50% of trawlers and purse seiners met safety standards (Chokesanguan et al., 2011). In Indonesia, safety at sea has been studied using random sampling of 66 fishing vessels. Most of the accidents, that led to 68 cases of lost life, were due to boat capsize (46%), man over board (27%), sickness (20%), and fishing operations (7%). According to this study, the stability of small-scale fishing vessels was the main issue for ensuring safety at sea (Gudmundsson, 2009 cited in Chokesanguan et al., 2010). In Myanmar, after the training of STCW-F in 1995, accidents at sea have been reduced to 6 cases in 2009 – 2010, compared to previously when there was an average of 24 cases of fishing related accidents per year during 2003-2009 (Chokesanguan et al., 2010). BOBP-IGO has project initiatives to improve ‘safety at sea’ conditions in South Asia countries, specifically focusing on the safety of fishing vessels, for example engine installations and beach hauling devices. Other focuses of BOBP-IGO on the issues include: collecting and analyzing data to identify the cause of accidents, giving education and training of trainers, workers, fishers and inspectors, and creating an awareness outreach program to build a culture of sea-safety (Chokesanguan et al., 2010).

Piracy

There are several areas in the Bay of Bengal that face threats from piracy and this may be an additional concern for the safety of migrant fishers, particularly in Bangladesh (See news
items #49, 50, 59). In Southeast Asia, the piracy attacks are more frequent when the vessels are at the port or about to enter or leave the harbour area. In 2008, 35 out of 75 attempted attacks happened near the harbour. The most common acts of piracy in Southeast Asia that have been consistently reported are robbery and theft, then hijacking and kidnapping. Indonesia has reported the most piracy in the region, with 728 cases between 2001-2008, and in the Malacca Strait there were 208 cases in the same period of time (Bateman et al., 2009). It is unclear to what extent piracy affects fishing vessels and their crews.

HIV/AIDS Among Migrant Fishers

The prevalence of HIV/AIDS among fishers might also be a fisheries development and management concern (FAO, 2006). There are no studies that focus specifically on HIV/AIDS among migrant fishers in the Bay of Bengal. However, there are some studies on HIV prevalence among Myanmar migrant fishers in Thailand and a study on HIV risk of fishers in general including some countries in the Bay of Bengal. First, there are several factors that make fishers a group that is vulnerable to HIV/AIDS: 1) the mobility of the work, fishers spend considerable time away from home; 2) the culture of the work, working conditions are rough, high risk and low-status; and, 3) the demographic of the fishers, most are young and sexually active, increasing the possibility of involvement in commercial sex at the fishing port (FAO, 2006).

A review on ‘HIV among fisherfolk’ shows the prevalence of HIV on fishers in Asia. The estimated percentages of HIV positive members in groups of fishers in four countries of the Bay of Bengal are: Indonesia (1.4%), Malaysia (4.0%), Myanmar (16.1%) and Thailand (1.5%). The study conclusion shows that HIV prevalence among fishers and their communities are four to 14 times higher the national average for adults of 15 – 49 years old (Kissling et al., 2005).

A study on ‘Mobility and HIV/AIDS in the Greater Makong Subregion’ shows a high risk of exposure to HIV for Myanmar migrant fishers in Thailand. Most migrant fishers are young or middle-aged men, known to be heavy drinkers, and it is common practice for migrant fishers to visit entertainment places. Sometimes these visits are orchestrated by the ships’ owner. In general, the condom usage is very low among migrant fishers. Four provinces of Samut Sakorn, Ranong, Songkla and Trat have been surveyed, and the migrant fishers had HIV positive rate of 16.1% (Entz et al., 2000 cited in Chantavanich et al., 2007). The issue of HIV among seafarers also appears regularly in the news. In the late 1990s, fishing boat crews from Thailand had an HIV positive rate of up to 20% (BBC, 2005 – news item #157).

Trafficking of Migrant Fishers

“One should not look at labour migration as being a problem, instead one should look at trafficking as being a problem” (interview, John Mcgeoghan, Jan. 19, 2012).

In recent years, there have been a significant number of documents (see ITWF, 2006; MMC, 2011; EJF, 2010; IOM, 2011; Mirror Foundation, 2011; UNIAP, 2011) and news items (see news items #2, 17, 22, 41, 54, 66, 69, 75, 77, 79, 82, 85, 88, 90, 92, 97, 98, 116, 120, 123, 124) produced that focus on the issue of trafficking of migrant fishers. Both Malaysia and
Thailand may be involved in the trafficking of migrant workers from Cambodia, Laos and Myanmar (Bates, 2011 – news item #70). The situation may be particularly bad in Thailand. The following excerpt from a document from the Environmental Justice Foundation (2010) is typical of the types of descriptions and stories contained in the documents:

Every year thousands of men, women and children are trafficked into Thailand from Cambodia and Burma; many are fleeing persecution or simply looking to support their families with a job abroad…some of the most unfortunate are the men and boys who end up working on the Thai fishing vessels…Sold by unscrupulous brokers to Thai fishing boat captains, these individuals are treated as virtual slaves. Workers are subjected to constant beatings and forced to work in inhumane conditions, often for days, without sleep or meals. Wages and travel documents can be withheld for years; even if they are paid when crew members try to send money to relatives…in many cases the money is stolen, never reaching the crewman’s family. (p. 11)

A horrendous case was reported in the newspaper in 2006. Thirty nine fishing workers died after left alone on a boat in Indonesia water. The owner of the Phraphasnavee fishing fleet did not want to pay their workers, 77 workers, both Thai and migrant fishers were forced to another boat without food, petrol or water. After three months in the water, 39 men died and 38 survived and made it to the shore (Mirror Foundation, 2011).

The International Organization for Migration provides a thorough look at the life of migrant fishers in their 2011 report titled “Trafficking of Fishermen in Thailand”. According to this report, trafficked fishers may not know that they have been deceived by brokers or the boat owner until they get on the boat. The treatment on board may be brutal and working conditions may be dangerous for fishers with lack of experience. Migrant fishers reported working between 18-20 hours a day at all hours. The work on board is a routine - fishers have to bring in the nets, remove the fish, and put the net back out again. The fishing boats provide very poor, if any, medical treatment for sick and injured individuals. In an interview with Phil Robertson, author of the report, he explained that on the fishing boats there is no health care and only basic drugs, like paracetamol. If the crew is sick or injured, the boat does not go back to land. One of the major health hazards, beyond being injured while operating equipment, is being beaten or abused by the head of the crew or the captain (interview, Phil Robertson, Jan. 20, 2012). A UNIAP survey shows that as many as 59 percent of the Myanmar workers who are

Box 3 - Cambodia trafficking victims returned home

In 2011, six Cambodians jumped ship and were rescued in Malaysia, before being repatriated. One of the trafficking victims sent a strong warning for people contemplating the promises of labour brokers in Thailand. He said ‘…don’t believe them, you’ll end up in hell. It just put tears in my eyes to see them (other victims), to live in hellish situation. There are a lot of Cambodians, not just 100, maybe 1,000 on the boats”. Many Cambodian men have been trafficked onto Thai and Malaysian fishing boats as slave fishing labours and subject to abuse (David & Boyle, 2011)
exploited on the fishing boats have witnessed their Thai boat captains murdering one of their colleagues (UNIAP, 2009; United States Department of State, 2011 – news item #90).

The means by which migrant fishers are trafficked into the fishing sectors is through deception and fraud. The high demand for labour in the Thai fishing industry combined with the undesirability of the work and ready sources of migrant labour creates a scenario where ongoing recruitment is necessary. Though many recruitment processes are likely legitimate, fraudulent recruitment processes are the key to attracting migrant workers into the illegal fishing business (interviews, John McGeoghan, Phil Robertson, and Andy Hall). In many cases, migrants from Myanmar and Cambodia become forced labour on Thai commercial vessels without realizing where they are going. The recruitment of migrant fishers involves different types of brokers throughout the process (see IOM, 2011). “Travel now, pay later” is common practice for many cases of trafficking. Most of the migrant fishers do not have money to pay their travel cost, so the broker will cover the cost of smuggling the workers into the country like Thailand. Brokers may promise to take the migrant workers to work in other sectors. With no language skills and illegal status, migrant workers have no way to escape once they have arrived at the pier. The high demand for labour on fishing boats has driven the price for migrant fishers up to as high as 10,000 to 30,000 baht per person (IOM, 2011). Once victims are on the boats they are forced to work and threatened with penalties should they try to leave (UNIAP, 2011).

These so-called “modern slaves” may also remain at sea for extended periods of time of up to several years. This is facilitated by the use of mother ships where boats can reload with fuel and supplies and ofload their catches without returning to shore (Robertson, 2011). Thai fishing boats in Indonesia also try to escape ofloading catch and loading fuel and supplies on the pier to eliminate a chance of trafficked crew to escape. Therefore, sometime fishing vessels remain at sea for a long period of time (United States Department of State, 2011 – news item #90).

Many stories of trafficked migrant workers emerge when they seek help by calling their relatives in their origin countries from abroad. Similar stories have been heard over and over on how they have been deceived to come and work on fishing boats without getting paid. Yet the full extent of the problem is unclear. ILO research has approximated that the number of trafficked Myanmar migrant fisher could be as high as 20% of the total number of migrant workers (Boyle & Narin, 2010 – news item #97). Every year, large numbers of trafficked fishermen are captured in various locations and some of them are sent home. For example, the Phnom Penh Post claimed that, since last December, more than 100 Cambodians have been rescued from Indonesia, Malaysia and Thailand after being trafficked onto fishing boats in Thailand (Titthara, 2012 – news item #2). In addition, there are several locations where there are large communities of escapees. See, for example, the story of the thousands of escaped trafficked fishermen from Myanmar who are now residing illegally on Tual island in Indonesia (Box 4).
Obstacles to Moving Forward on Trafficking Issues

Governments are challenged to address the issue of trafficking of migrant fishers. Thailand, for example, is challenged to move the fishing industry to a tier-3 ranking in the US State Department's 2011 “Trafficking in Persons” report as the government is not effectively responding to the trafficking problems. Several obstacles to the problem are lack of efficient and effective legal actions and the conditions of shelters for those reporting being trafficked. According to the latest US State Department report on global trafficking trends, between 2009 and May 2011, there were only five confirmed convictions for trafficking-related offences in Thailand and only eight convictions were reported. The numbers of convictions are minute compared with the scale of the problem (news item #82). According to Phil Robertson, there are reports of around 80 cases of human trafficking in Thailand in total. Most victims do not want to admit that they are victims as they are afraid of being prosecuted themselves. In addition, the court cases are slow and may favour wealthy perpetrators and Thai nationals and victims are required to stay in shelters during the proceedings. “These shelters are like detention centres and people cannot make enough money to send home to their families.” According to Phil Robertson who also commented that “Malaysia is a human trafficking nightmare in terms of their response” with “shelters that operate like prisons. Their shelter system is appalling. The effectiveness of their response is very poor” (interview, Phil Robertson, Jan. 20, 2012).

Overview and Lessons Learned on Migrant Fishers

This chapter starts by offering a definition of migrant fishers as “people who migrate to work on fishing vessels in other regions or countries”. Flows of migrants are shown to be of two types: internal migration within the nation and migration between nations. In the Bay of Bengal, countries such as India or Bangladesh may experience more internal migration for

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Box 4 - Runaway migrant fishers on Tual Island, Indonesia

The story of a large group of escaped Myanmar migrant fishers on Tual Island, Indonesia, was brought forward by the media several years ago. David Browne reported on this issue in 2009 stating that the International Transport Worker’s Federation (ITF) have approximated the number of undocumented Myanmar seafarers at between 700-1,200 fishers. They were on the island after escaping from the hardship and abuse on Thai fishing vessels and then hiding away in the middle of the island. Many were victims of trafficking (Browne, 2009). This type of situation is still happening - some Myanmar escapees can be found as far away as Indonesian Papua. Currently, several groups including the Seafarers Movement of Burma and IOM are working on these issues and trying to bring the Myanmar migrant workers back home (interview, Phil Robertson, Jan. 20, 2012). In May 2005, Burmese Fishery Seafarers’ Union together with the Seafarer Union of Burma (SUB) and ITF brought some of the Myanmar workers back home (SUB, 2007, cited in ACILS, 2007).
the purposes of fishing while Thailand and Malaysia may experience more migration from other countries. Fishers migrate for a variety of different reasons including socio-economic, environmental, political and historical factors but the most important drivers in the Bay of Bengal are poverty and opportunity. Migration is facilitated by a variety of means including social networks and trafficking or illegal recruitment. Migrant fishers make important contributions to the fisheries economies of destination countries, especially Thailand, however they may also have a negative impact on the environmental outcomes of fisheries. Families of migrant fishers may suffer hardship as a result of their absence although this is an issue that is poorly studied. The mostly young migrant fishers working on Thai fishing vessels who tend to come from Myanmar, Cambodia, and Laos are met with a routine and challenging life with long and irregular hours, low pay, simple food, few breaks, and little medication. Social or health security is not provided and few migrants carry proper documentation. Registration of fishers is weak and government labour policies do not cover migrants. Three additional concerns for migrant fishers are safety at sea, piracy, and HIV/AIDS. A significant number of migrants are deceived by brokers and become the victims of trafficking and are forced to labour on Thai and Malaysian fishing vessels. They can be physically and verbally abused, forced to work exceptionally long hours, fed little, and denied breaks and medical treatment all while living in inhumane conditions. Some witness their colleagues being murdered. Trafficked fishers can remain on boats for months or even years as their vessels offload their catch and pick up supplies from mother ships. Many victims of trafficking have escaped or been arrested; however, there are significant barriers to either repatriation or to bringing the perpetrators to justice including slow court proceedings and uninhabitable shelters for victims. As a result, the level of prosecution on the trafficking issue is small compared to the number of cases that have been reported.
Introduction to Transboundary Fishing Issues

As Visser & Adhuri (2010) indicate, the concept of ‘transboundary’ fishing has developed through history. Historically, the ocean and fisheries resources were open-access – boundaries were not delineated and if you could access an area you could harvest its resources. Although the ocean still appears to be an unbounded geographic space, fisheries management is increasingly subject to local, regional, provincial, territorial, national, and international boundaries and the regulations that govern the enclosed areas. Transboundary fishing refers to “small-scale or commercial fishing that occurs across regional, territorial, and national maritime boundaries or borders”. In this review, we are particularly interested in the crossing of fishing vessels into the Exclusive Economic Zones (EEZ) – as defined by the United Nations Convention on the Law of the Sea (1982) - of various nations within the BoB. As defined by UNCLOS (see Box 5), the EEZ gives nation states economic rights to and management responsibilities for living and non-living resources in the sea and the seabed in an area that “shall not extend beyond 200 nautical miles” (Section V, Article 55). Where the EEZ of nation states overlaps, this has led to complicated and protracted negotiations and even conflict.

There are a number of reasons that transboundary fishing occurs, including legal benefit sharing agreements and contracts, historical precedence, higher environmental quality, and the unintentional crossing of borders. Fisheries resources also do not prescribe to political boundaries and fishing vessels may simply be following the movements of particular species. Whatever the rationale, the issue of transboundary fishing can be contentious and problematic for many reasons – including issues related to national security, conflict over resources, and environmental and social justice - and can result in the arrest of fishers who are transgressing boundaries or who cross into the EEZ of another country.

This chapter will explore ongoing issues related to transboundary fishing in the Bay of Bengal. To provide some background on the issue, we will first examine available information on 1) flows of transboundary fishers and areas of contention, 2) rationales for transboundary fishing, and 3) impacts and outcomes of transboundary fishing. Subsequently, we will look at 4) the problem of arrests and detention of transboundary fishers and the processes of repatriation.

Box 5 - UNCLOS, 1982

The United Nations Convention on the Law of the Sea (UNCLOS) is an international agreement that defines the rights and responsibilities of nations regarding the world’s oceans. It was finalized in 1982 and came into force in 1994. UNCLOS represents a global accomplishment of international law and diplomacy, as it implicates the development and management of the ocean in every region of the world. With the law, the new regime of the EEZ brought the living and non-living resources within 200 nautical miles into the jurisdiction of nation states (Johnston, 1988)
Transboundary Fishing Flows

As discussed before, flow refers to patterns of movement from one place to another at any given time. The flows of transboundary fishing vessels can be placed into three categories: the crossing of vessels over regional or jurisdictional boundaries within a nation’s EEZ, the crossing of vessels from one nation into the EEZ of other nations within the BoB, and the crossing of vessels from the BoB countries to outside the region and vice versa. However, there are significant challenges to coming up with definitive numbers of vessels that fish in a given area or that cross either regional boundaries or national borders to fish. First, the completeness and accuracy of vessel registration systems in different countries varies widely (Awwaluddin et al., 2011). Second, some countries do not register small-scale or artisanal boats as it is considered an informal sector. For example, Table 2 shows the number of registered fishing boats for different vessel sizes in Indonesia, Malaysia, and Thailand (SEAFDEC Statistics, n.d.). Third, there is a significant amount of Illegal, Unregistered, and Unreported fishing in the BoB (Agnew et al., 2009; see Box 6) and in many cases fishing vessels are simply registered under a “flag of convenience” or have multiple registrations in different countries (Rigg et al., 2003). In the following sections, we will briefly examine the three types of transboundary flows of fishing vessels in the BoB.

Table 2 - Number of Fishing Boats by Type and Tonnage by year 2007 (Adapted from SEAFDEC Statistics, n.d.)

<table>
<thead>
<tr>
<th>Country, Sub-area</th>
<th>Non-powered boat</th>
<th>Out-board powered boat</th>
<th>In-board powered boat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Less than 5 tons</td>
</tr>
<tr>
<td>Indonesia</td>
<td>241,889</td>
<td>185,509</td>
<td>114,273</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2,645</td>
<td>18,458</td>
<td>2,889</td>
</tr>
<tr>
<td>Thailand</td>
<td>0</td>
<td>0</td>
<td>2,739</td>
</tr>
</tbody>
</table>

Transboundary Fishing Within the Nation

There are three ways that vessels traverse boundaries within their own country to fish. First, commercial vessels travel to inshore waters that are reserved for traditional or small-scale fishermen (see Appendix D for overview of definitions and zonation in various countries of BOBLME). Second, small-scale fishers are increasingly moving into areas that historically have been used by commercial fishers. Third, small-scale fishers often travel to other coastal areas within their own country to fish particular resources. The following examples illustrate these points.

In India, there are many examples of both legal and illegal fishing between the states and across jurisdictions. For example, Integrated Coastal Management (ICM) and South Indian Federation of Fishermen Societies (SIFFS) conducted field research on migration of fishermen from Srikakulam District in Andhra Pradesh. The study shows an example of how vessels from the northern districts of Andhra Pradesh travel to fish in the central Orissa routinely for around six months of the year (Salagrama, 2004). According to an interview
with one of the head of the artisanal association at the pier in Chennai, India, the head of the association explained that the small-scale fishers often go to fish in northern coastal states like Orissa without any problem. Approximately one time in a year – during the local festival period - fishers from Chennai would pay a fee to the local communities where they fish (interview, fishermen in Chennai, India, Jan. 15, 2012). However, evidence from 1997 to 2009 also shows that in Orissa’s territorial water alone there were more than 415 cases of illegal fishing by both small-scale fishers and trawlers from neighbouring states. Most of the illegal fishing targeted shrimps and finfishes (Pramod, 2011). In Tamil Nadu, trawlers often fish within the 5 nautical mile limit that is reserved for small-scale boats (interview, Anto Asirvatham, Jan. 25, 2012).

Some interviewees and sources suggest that the movement of small-scale fishers has changed significantly in the Bay of Bengal area. Artisanal and small-scale boats are moving out to fish into the fishing ground that were historically reserved for large-scale industrial fishing vessels or into the EEZ of neighbouring countries. The use and adaptation of motors on small-scale vessels allows the small-scales vessels to expand the total area that is accessible for fishing (Willmann, 2001).

Finally, small-scale fishermen will often travel to different areas of their coasts to fish for particular resources sometimes traversing established boundaries. For example, in the Anchovy fisheries of Kabui Bay in Raja Ampat, Indonesia, fishers migrate both internally from Komodo and Sulawesi as well as from the Phillipines (Bailey et al., 2008). On the coast of Thailand, many small scale fishermen migrate to regional ports for up to 2 months to capitalize on the lucrative jellyfish season (Bennett, n.d., unpublished data). However, in this case the territorial sea is open access to small-scale fishers so no contentious boundaries are being crossed.

Transboundary Fishing Between Nations

A significant number of vessels travel into the EEZ of other countries within the BoB to fish. At a macro-scale, commercial vessels from many countries travel to neighbouring countries and further afield countries to fish through legal arrangements – licensing or joint ventures - or illegally (see Box 6 later in this section which focuses on the issue of IUU fishing). At a smaller scale, significant numbers of traditional and small-scale vessels from communities near neighbouring countries also travel across borders to fish. The following section will look at several ways in which and areas where transboundary fishing occurs between nations.

A significant number of Thai registered vessels travel to fish in the EEZ of neighbouring countries both legally and illegally. For example, Thailand has created cooperative arrangements and joint ventures with other countries, such as Bangladesh, Malaysia, Indonesia, Myanmar, since the 1980s. The number of joint venture registered vessels has been increasing exponentially, for example the rate of growth between 1997 – 2001 was 7.5% annually (Torell et al., 2010). In 2001, the total number of vessels registered in Thailand were 18,182 – of these 75% fished in Thai waters and 25% operated outside of the Thai EEZ. (Torell et al., 2010). In 2007, FAO’s data showed that 40% of Thailand’s total catch was caught outside of Thailand’s EEZ.
In 2010, there were approximately 149 bi-nationality medium to large sized vessels fishing across the border of Malaysia and Thailand (TOFA, 2010). These boats fished in Trang, Pattane and Narathiwat provinces of Thailand and Malay waters and offloaded their catch in both Thai and Malay ports. There are also ongoing joint ventures and arrangements between the Myanmar government and Thai fishing companies. A TOFA report from 2010 talks about a 5 year contract between a Thai company and Myanmar authorities that allowed for up to 450 vessels to fish across the border in Myanmar. The Thai vessels were able to offload their catch in Thai ports or through Koh Song in Myanmar (TOFA, 2010). At the same time, around 400 Thai vessels were part of joint ventures in Indonesian waters (TOFA, 2010). More recently, IOM has reported that more than 700 Thai boats that fish in Indonesia are not registered with the Indonesian government (news item #90). Furthermore, these vessels may not follow the 2006 agreement between the two countries requiring a percentage of fish catches in Indonesian water should be offloaded and processed in Indonesia and they violate Indonesian law on lack of adequate crew documentation. An average of 75% of Thai fishers in Songkla province of Southern Thailand and Samutsakhon province have been fishing outside Thai waters, to Indonesia, Malaysia, and Cambodia respectively. Thai fishers from Samutsakhon – who spend an average of 33 months in Indonesia - travel more often outside of Thailand’s EEZ than fishers in Songkla (Rojnkureesatien & Jampaklay, 2006).

Malacca Strait is another area where there is significant transboundary fishing involving Malaysian and Indonesian vessels. It is also an area where the boundary of the EEZ has not been clarified, where there are no formal agreements regarding transboundary fishing, and where ongoing conflicts and arrests have occurred (see Herriman & Mohamed, 2000; news item #87).

Palk Bay is an area with a significant amount of transboundary fishing traffic between Sri Lanka and India. According to Vivekanandan of SIFFS and ARIF, the approximate number of mechanized boats involved in transboundary fishing in Palk Bay is around 2,000 – 2,500 vessels – each with a crew of five people. However, he added that “the number of people who cross on artisanal boats there is unknown. It may be at least equal to mechanized boats. The approximate number of fisher who are involved in Palk Bay cross border fishing could be up to 25,000 – 30,000 fishers” (interview, V. Vivekanandan, Jan. 23, 2012).

Examples of small-scale fishers crossing borders to fish can be found in many locations. For example, fishers from the fishing communities in West Bengal travel from Bangladesh to fish and fishers from Bangladesh cross to fish in India for a few months of the year (Salagrama, 2004). Some small-scale vessels may travel from as far away as Aceh province in Indonesia to the Nicobar Islands (Vivekanandan, 2008). Research conducted by the second author of this report also suggests that a fair number of Thai small-scale fishers in the Ronong province of Thailand cross the border into Myanmar to fish. Moreover, it is likely that there is significant transboundary fishing involving small scale vessels occurring across many of the borders between the various countries of the BoB - many of the news items contained in Appendix B suggest that this is the case – however, the extent to which it is occurring in most locations is hard to gauge. This position is supported by many of the people whom we interviewed.
Transboundary Fishing Between Bay of Bengal and Outside Regions

Available documents also suggest that a significant amount of transboundary fishing occurs between member countries in the Bay of Bengal and countries outside of the region, particularly in Pakistan, Philippines, and Australia. For example, many small-scale fishers from both sides are continually getting arrested after crossing the border between India and Pakistan (Vivekanandan, 2008). In January of 2012, 180 Indian fishers were released from a Pakistan jail after being arrested for transboundary fishing; however, many remain imprisoned (news item #25). Hundreds of Filipino fishermen have been arrested for fishing in Indonesia (news item #44). Beyond the BoB, Thailand has cooperative arrangements with Madagascar and Somalia and Thai registered boats have been caught fishing as far away as Australia. In India, vessels flying foreign flags can fish legally in Indian waters through registering a joint venture with Indian companies. In 2008, around 110 vessels - most originating from Taiwan - were registered under joint ventures to fish in India’s EEZ (Pramod, 2010).

The issue of Indonesian fishing vessels crossing the border to fish in Australia’s EEZ has become serious in recent years. Driven by high demand and prices for shark fins, many small scale fishing vessels from Indonesia are involved in transboundary shark fishing, especially in the Arafura Sea. In 2005, there were an estimated 750 – 950 transboundary vessels (Fox, Adhuri, Therik and Carniege, 2006 cited in Adhuri & Visser, 2007). The total number of Indonesian fishers involved in fishing in Australia’s EEZ between May 2004 to May 2005 was 3,900 (Adhuri & Visser, 2007, p. 136). In 2008, the Maluka Police operation found evidence of a large transnational crime ring, involved in illegal fishing, operating in the area between Indonesia, Australia, East Timor and Papua New Guinea. The media contains many stories about conflicts between Australian authorities and Indonesia fishers (See news items #127, 128, 132, 133, 137, 138, 139, 143, 144, 150). Many Indonesian fishermen have been arrested and jailed in Northern Australia.
Box 6 - The Problem of Illegal, Unreported, and Unregulated Fishing in the Bay of Bengal: Resource Degradation, Conflict, and Mistreatment of Workers

According to FAO (2001), illegal fishing refers to fishing activity that is conducted by national or foreign vessels without permission of that state and in violation of national and/or international laws. Illegal fishing also includes vessels flying the flags of states that are parties of the relevant regional fisheries management organizations but that operate against the management and conservation measures adopted by the organizations or by the states. Unreported fishing means that the fishing operation does not report their catch to the relevant national authority or goes against the reporting procedures of relevant regional fisheries management organization. Unregulated fishing generally refers to fishing by vessels that are without nationality or that are not party to regional fisheries governance organizations.

Illegal, Unreported, and Unregulated (IUU) fishing and vessels are related to both migrant fishers and transboundary fishing issues. IUU vessels tend to have poor working conditions for migrant fishers on unsafe vessels and are often associated with the trafficking of fishers (EJF, 2010). Reports from Greenpeace, ILO and ITWF show that the living conditions of IUU ships are poor, borderline, and dangerous. Mostly, the workers on these boats come from developing countries. Owners may register their vessels under ‘flags of convenience’ to avoid taxes, environmental regulations, and responsibility for working conditions (Schmidt, 2004). In many cases, IUU vessels often operate in the areas that lack effective monitoring, control and surveillance (MCS), such as on the high sea or in developing countries. IUU has become a serious problem for many developing countries where IUU vessels transgress the boundaries of the EEZ, overexploit fish stocks, and lead to conflict with local authorities and fishers. Fisheries governance and management literatures on the issues of transboundary fishing often focus on actions to take on IUU fishing, such as licensing and administration, MCS or penalties.

There are significant incentives for vessels to engage in IUU fishing activities. One study of IUU in Raja Ampat Regency, Eastern Indonesia, shows that there was a high level of illegal and unreported catches in six major fisheries in the area. The unreported amount was estimated to exceed the reported catch by 40 thousand tonnes and was worth as much as 40 million USD (Varkey et al, 2010). There is a ‘genuine link’ between the flag state and the vessels or operators following UNCLOS requirements—which may lead to vessels taking on ‘flags of convenience’ (FoC). Due to the high benefits associated with pursuing IUU fishing, vessel owners may try to collaborate with a shell company in the flag state to enable them to fish legally in the flag states’ EEZ. The shell companies have complex systems to hide who owns the vessels and so that the flag state cannot exercise jurisdiction over vessel owners (Rigg et al., 2003). IUU vessels may also flag hop to avoid catch-reporting requirements. For example, Taiwan registered vessels may use an Indian flag while fishing in Indian water and then switch to a Taiwanese flag in international waters, where they will offload the tuna caught in the Indian EEZ (Pramod, 2010).

The loss of fisheries resources to IUU vessels is considered as a direct loss to the coastal states, including loss to GNP, landing fees, and taxes. An MRAG report suggests IUU fishing has a direct impact on the economies of many coastal states, including lost of income and employment, from both primary and secondary industries such as seafood processing (MRAG, 2005). In addition, IUU is a direct threat to the food security of communities whose livelihoods rely on marine resources and also to the security of seafood consumption more broadly. IUU could be a significant challenge to the effective planning of fisheries management by governments and inter-governmental bodies in the Bay.
Causes of Transboundary Fishing

Both small-scale and commercial fishing vessels often cross borders to fish both legally and illegally. In the Bay of Bengal, there are different reasons for vessels to cross the borders to fish – historical usage of fishing grounds, better environmental conditions, and unintentional crossings - but the main goal of transboundary fishing is to maximize the level of catch and the benefit from catches per trip. However, the act of transboundary fishing illegally may lead to the arrest and detention of the perpetrators – a topic which will be explored later in the chapter.

Historical Usage of Fishing Grounds

In many border areas, small-scale vessels used to fish in transboundary waters before the declaration of EEZ in 1982. Traditional fishing communities have long shared their fishing grounds with their communities in neighbouring countries. There are many areas within the Bay of Bengal where fishers on two sides of a border share common fishing areas. For example, the borders between Bangladesh and India, Tamil Nadu and Northern Sri Lanka, Southern Thailand and Malaysia, and Indonesia and Malaysia. Palk Bay area, for example, has been defined as ‘Historical Waters’. As U. Arulanandam, Tamil Nadu President of Alliance for Release of Innocent Fishermen, is quoted as saying “Indo - Lankan fishermen are involved in fishing in that narrow sea strip for several hundred years and we were in such practice historically.” (Rajashingham, 2011). At the border between Thailand and Myanmar, there are a number of traditional fishing communities on islands that historically belonged to Thailand but that now belong to Myanmar. To this day communities on both sides of the border continue to share fishing grounds with their relatives (N. Bennett, 2012, unpublished data).

Environmental Conditions

Resource declines or degradation of the marine environment in one area can result in the movement of fishing pressure and vessels to other areas. Over-exploitation, mismanagement, and depletion of marine resources in one country may result in the need to find new places to fish and could lead to transboundary fishing.

For example, many Indian small-scaled fishers risk crossing the border to go fishing in Pakistan since Pakistan’s territorial waters are richer in marine resources (Vivekanandan, 2008; see also Box 7). In Thailand, vessel surveys show a decreasing trend of fish catch per
Scoping Study on Migrant Fishers and Transboundary Fishing in the Bay of Bengal

hour. In 1966, the catch rate was 172.9 kg/hr, dropped to 75.1 kg/hr in 1976, then to 51.15 kg/hr in 1986 to 22.31 kg/hr in 1996. In 2005, the catch rate was 24.20 kg/hr (FAO, 2009a). Conflict in Sri Lanka may have resulted in decreased fishing pressure coming from within the country and thus better environmental conditions, making it an attractive place for fishermen from India (interview, V. Vivekanandan, Jan. 25, 2012). This declining trend can likely be correlated with the movement of fishing boats to other locations. Declines in inshore resources may also pressure small-scale fishers to move into deeper waters to fish. Pressure from commercial boats in Indonesian waters caused small-scale fishers to fish elsewhere – which ended up being across the border in Australian waters (Adhuri & Visser, 2007).

Of course, fisheries resources (i.e., fish) cross political boundaries and fishing vessels may follow schools of fish across borders or move across borders to areas where annual migrations or life events occur (e.g., Bailey et al., 2008).

Unintentional Crossing of Borders

Fishing vessels, especially small-scale vessels, have often strayed accidently into transboundary waters without intention. Lack of positioning technology, adverse weather conditions, following the fish (see above), or unclear boundaries may all cause fishing vessels to end up in water belonging to neighbouring countries. During a conversation with an artisanal fisher at the Chennai pier, he recounted that after being hit by a cyclone and blown across the border he had been arrested by authorities in Bangladesh. He was in jail for three months before he was released (interview, fisherman in Chennai, India, Jan. 25, 2012). The majority of small-scale vessels in the Bay of Bengal likely have no GPS on board, which could also lead to unintentional crossing of borders (Vivekanandan, 2008). Between Indonesia and Malaysia, the maritime border has been established but the boundaries of the EEZ remain unclear. This “gray area” has led to an ongoing conflict between the two nations and the accidental crossing of fishing vessels into the neighbouring waters which leads to arrests (see Herriman & Mohamed, 2000; news item #87).

Other Pressures

There are other reasons why fisheries activities have to move from one area to another which were not as prevalent during this review. This can include political situations, environmental conservation regimes (e.g., creation of MPAs), and even tourism development. For example, fishing in the Maldives has declined and been forced to move elsewhere as a result of the expansion of the tourism industry (Adam, 2004).

Impacts and Outcomes of Transboundary Fishing

Transboundary fishing has obvious benefits for people from the countries or regions where vessels originate. Host countries might also benefit through benefit sharing agreements or business arrangements – such as in the previously mentioned cases of Malaysian fish taxes or contracts between Thai companies and Myanmar authorities. However, transboundary fishing
also has the potential to be disruptive for host counties. In this section, three issues resulting from transboundary fishing in the Bay of Bengal will be examined. These issues include negative environmental impacts, increasing conflicts over resources, and the arrests of fishers.

**Environmental Impacts**

Transboundary fishing brings economic benefits to the countries of the origin at the same time the host countries are sharing or losing marine resources to foreign vessels. The nature of fishery as an open-access resource traditionally allowed people access the resources; however, marine resources have been overexploited in many parts of the Bay of Bengal and transboundary fishing can have a significant impact on fish stocks (ICSF Secretariat, 2001). Commercial boats with legal arrangements to fish can be managed to a greater extent than illegal, unreported, and unregulated vessels. IUU fisheries can have significant ecological and economic impact (e.g., Varkey et al., 2008). For example, the Malaysian Maritime Enforcement Agency estimates that the arrests of 514 fishermen and chasing of 4644 foreign fishing vessels out of Malaysian waters has resulted in a net savings of 3 billion Malaysian Ringit over 5 years (news item #19). The estimated trend of IUU fishing in the Eastern Indian Ocean is from 24% in 1980 to 32% in 2003 (Agnew et al., 2009). Globally, Agnew et al. estimate that in 2003 the value of illegal and unreported catches was US$ 5-11 billion. There is likely a similar trend in the BoB. In India, research shows that illegal fishing from trawlers from neighbouring states during the ban period causes declines in fish stocks in many states. This is because the fish stocks are not allowed to recover during the spawning period (Pramod, 2010).

Many of the issues related to transboundary fishing bring up serious concerns about social, environmental, and economic rights and justice (ICSF Secretariat, 2001). Small-scale fishing communities who rely on fisheries resources for subsistence and food security can be impacted quite negatively by commercial vessels fishing in waters reserved for small-scale fishers. In Tamil Nadu, for example, trawlers often enter into inshore waters. Small-scale boats need this space to fish and the over-use of the marine resources can be linked to poverty of local resource users. Trawlers remove everything from the shore area that leads to conflict between trawlers and small-scale boats (interview, Anto Asirvatham, Jan. 25, 2012).

**Conflict Over Resources**

The act of transboundary fishing can lead to conflict or can be an extension of pre-existing conflicts. Before proceeding, it can be useful to understand the nature and types of conflict that can occur in fisheries. Conflict within fisheries can be understood as being intersectoral (e.g., commercial versus artisanal fisheries) or intrasectoral (e.g., among groups of artisanal fishers, gear conflicts, or between municipalities) (Garces et al., 2003). Bavinck (2005) suggests that conflicts are of three types: 1) conflicts over high value species, 2) conflicts over disparate sea tenure systems (e.g., small scale vs commercial – see Table 8 and Table 9 in Appendix D for overview of zoning for small-scale and commercial fishers in the countries of the BoB), and 3) disagreements over what, why, and to whom the resources belong (legal plurality). Conflicts can also be related to sovereignty or national security issues. Some
authors argue that fisheries conflict (aka – “fish wars”) can result in a negative feedback loop of poverty and environmental degradation thus increasing regional instability (Pomeroy et al., 2007).

Transboundary conflicts in the Bay of Bengal can be divided into conflicts within the nation and conflicts between nations and often related to flows of traffic. Conflict within nations has expanded in scale and scope and can involve artisanal and small-scale boats moving out to fish into the fishing ground that are normally utilized by large-scale industrial fishing vessels or vice-versa (ICSF Secretariat, 2001). This type of conflict occurs throughout the BoB. Conflict hotspots between nations tend to be associated with 1) areas where there are significant flows of transboundary fishers - such as Palk Bay between India and Sri Lanka, 2) areas where there are unclear boundaries - such as in the Straight of Malacca between Indonesia and Malaysia, or 3) areas where there are significant issues with IUU vessels – such as illegal Thai fishing vessels entering into Malaysian waters or Indonesian vessels in Australian waters. All of these cases have been previously mentioned in the report.

It is important to note that not all areas where there is significant cross-border traffic are associated with conflict as is demonstrated by the following quote:

“As long as all the people involved are comfortable with each other, nobody bothers. So there is one class of border crossing where individuals turn a blind eye. It doesn’t exist officially. It goes on informally. The peculiarity is that Bangladesh fishermen come to India to sell fish. Prices are better here. Another sensitivity is not related to fishing, but because it’s the same group, same language, culture, there’ll be continuous inflow of people into India.” (interview, V. Vivekanandan, Jan. 25, 2012)

**Arrests and Repatriation of Transboundary Fishers**

An additional outcome of transboundary fishing in the EEZ of other states is that fishing boats are captured and their crews are arrested. Since this is a focal point of this report, the following section is dedicated to a more extensive look at the arrests that can result from both small-scale and commercial vessels crossing into the EEZ of other countries within the BoB for the purposes of fishing and the processes associated with repatriating these fishers. It is important to note here that the arrest and detainment of fishermen violate the core of Article 73 of UNCLOS, that no fisherman may be punished with imprisonment for fishing in the EEZ of another country. Vivekanandan (2008) illustrates in his article the four points of UNCLOS Article 73 that relate to arrest and detention issues. First, the coastal state may take measures, such as boarding, inspection, arrests, and judicial proceedings to protect their sovereignty and EEZ resources. The state should ensure compliance with the law and regulations adopted by the convention. Second, the crews and arrested boats should be promptly released upon the deposition of a reasonable bond or other security. Third, the coastal state may not use imprisonment or any other form of corporal punishment for the violation of fisheries law unless there are specific agreements between the states involved. Fourth, the coastal state should notify the flag state, on the action taken and any associated penalties, as soon as the perpetrators have been arrested or detained.
Arrests of Fishers

Both small-scale and commercial vessels cross into the EEZs of neighbouring countries. As discussed previously, the numbers of fishing vessels that are crossing either legally or illegally into the various states of the Bay of Bengal are largely unknown or undocumented. Similarly, we were unable to uncover documents containing the numbers of fishers and vessels that are being arrested in different locations within the Bay of Bengal. However, there are a significant number of news items that contain information on the subject (See Appendix B). In addition, there is some documentation of the ongoing arrests that occur between Sri Lanka and India in Palk Bay. Otherwise, there is a significant amount of anecdotal evidence that many small-scale fishermen travel across national borders to fish and that many get arrested or have money or supplies extorted by officials in the act (See Box 7 & Box 8). In this section we will briefly review information on Palk Bay and then review the available news items on the subject.

Box 8 – Blown into a Bangladesh Jail for Three Months

A small-scale Indian artisanal fisher at the Chennai pier told me how he was jailed in Bangladesh for three months after accidentally crossing into Bangladesh waters due to a cyclone. According to him, he and a few friends went out fishing and got hit by a cyclone a few years ago. The boat went ashore in Bangladesh. The Bangladesh Forest Department caught him and his friends and sent them to jail. The jail was in a very bad condition. He said that his health was very poor when he was released – however, he did not get beaten in jail. His family knew about him through a group of Indian fishers who were in jail and got released earlier. After three months in jail, he and his friends were proved innocent and sent back home. He claimed that Bangladesh government officers sent him off at the border with a stamp on his shirt as a mark that he had been released. He took four days to travel back to Chennai without money or any support from the Indian Government (interview, anonymous fisherman in Chennai, India, Jan 25, 2012).

Palk Bay is an area with a high number of arrests and detention cases, both of Sri Lanka and India small-scale fisher and trawlers. According to Vivekanandan (interview, Jan. 23, 2012), arrests and detention cases have decreased in the past years. The period of 1983 to 2001 contained the worst incidents of the Palk Bay crisis. The Sri Lankan civil war, which started in 1983, caused serious tension on the border. During this period, 105 fishers were killed by the Sri Lankan Navy and 286 were injured. Many fishing vessels were detained, mostly 32-42 foot small mechanised trawlers (Vivekanandan, 2001). Many Sri Lankan fishers were also captured by the Indian Coast Guard or Navy in the past decade. The statistics show that in the period between 1996 and 2000, an average of 36 Sri Lankan boats were detained per year and that approximately 170 Sri Lankan fishers were repatriated per year. Both small-scale and trawl types of vessel were affected by this ongoing conflict (Kumara, 2001; see also news items #1, 11, 12).
The news items contained in Appendix B contains a significant number of references to arrests of fishers and detainment of vessels within various countries of the Bay of Bengal. We have also listed news items that relate to fishers from the Bay of Bengal region being arrested in countries outside of the area. The locations are summarized in Table 3 and we have provided a point form overview of the details – e.g., origin country, number of arrests, and boats detained - of each article below. General trends that can be noted from the table include that there are no news items that mention arrests or detainment of vessels in Maldives or Bangladesh and only one in Thailand. In India and Sri Lanka, as already noted, there has been an ongoing conflict in Palk Bay. There are also several news items that mention arrests between Pakistan and India. Several news items mention arrests and detainment of vessels in Myanmar. Finally, a significant number of news items discuss arrests and detainment in Indonesian and Malaysian waters.

Table 3 - Evidence of arrests and boats being detained in the EEZ of various countries within the Bay of Bengal

<table>
<thead>
<tr>
<th>Type of Boat or Crew</th>
<th>Bangladesh</th>
<th>India</th>
<th>Indonesia</th>
<th>Malaysia</th>
<th>Maldives</th>
<th>Myanmar</th>
<th>Sri Lanka</th>
<th>Thailand</th>
<th>Outside Of the BOB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Boats Detained</td>
<td>-</td>
<td></td>
<td>(56)(89)</td>
<td>(95)(114)</td>
<td>(26)(119)</td>
<td>(147)(154)</td>
<td>-</td>
<td>(111)(112)</td>
<td>(121)</td>
</tr>
</tbody>
</table>

- News Item #1 – Seeking of protection for Indian fisher in Sri Lankan court
- News Item#5 – Indian fishers received humane treatment by Sri Lanka Navy after boat broke down in Sri Lanka
- News Item #10 – Fourteen Indian fishing boats and 31 crews arrested in Pakistan water
- News Item #11 - Nine Indian fishermen arrested in Sri Lanka water
- News Item #12 – Discussion of Joint Working Group between Sri Lanka and India on patrolling in the International Maritime Boundary
- News Item #19 - Record of 516 fishers arrest in Malaysia water between 2006 – 2011 according to Malaysian Maritime Enforcement Agency
- News Item #24 - Long conflict between India and Sri Lanka – discussion of illegal fishers and arrests
- News Item #25 – Pakistan released 180 Indian fishers from prison
- News Item #26 – Forty-six Vietnamese fisher and boats arrested in Malaysia
- New Item #29 & #31 – No agreement on negotiation on poaching of fishing boats between Sri Lanka and India
- News Item #44 – Repatriation of Filipino Fishers from Indonesia
Apart from the simple act of being arrested, fishermen may be subjected to undesirable conditions and extended stays in foreign jails while court cases drag on and their families back in their home countries can suffer hardship in their absence. Several Myanmar fishermen spent over a year in jail in India after they accidentally drifted into Indian waters and were arrested (news item #131). An article by Gunawan (2011 – news item #86) in the Jakarta Post suggests that Malaysian authorities may physically abuse fishers and seize captured fish when they arrest Indonesian fishers. In both India and Pakistan, fishermen may
not be released even after their jail time has ended (news item #107). As the following excerpt from an article in DAWN suggests, the families of fishermen are exceptionally vulnerable and poor:

“It would not be incorrect to state that fishermen communities generally suffer from ‘hand-to-mouth syndrome’. Keeping this problem in consideration, the predicaments faced by the families of arrested fishermen are momentous. When Motani was arrested, he left behind a wife and four children, who were all under the age of 12. “I lived in a joint family system and even then it was very difficult for my family to make ends meet. Moreover, my wife now suffers from paranoia and is afraid to let me or our sons go fishing.” (Mirza, 2012 – news item #27)

According to Kumara, in 2001, the government of Sri Lanka provided six months of ration subsidies for the families of arrested fishers. The only problem here is that there is often a lack of information about the arrests or detainment of fishers from boats owners and government to the effected family (Kumara, 2001).

**Repatriation Processes and Agreements**

Repatriation processes tend to be long and complicated and are different in each context and each country. For example, the four Myanmar fishermen mentioned in the previous paragraph spent more than a year in an Indian jail before charges were dropped against them and the Madras High Court ordered that they be repatriated to their country as early as possible (news item #132; news item #131). It seems that, more often than not, large numbers of fishermen are repatriated en masse as part of releases that are politically motivated – for example, see news items 25, 27, 102, 118, 130, & 148. The following discussion will focus on the complications associated with the repatriation of transboundary fishers in the case of India-Sri Lanka.

As discussed earlier, in India, there are a high number of fishers being arrest in Palk Bay area from Sri Lanka. According to an interview (V. Vivekanandan, Jan. 23, 2012), if the Sri Lankan fishers are caught in India, they are violating the Maritime Zones of India Act. With this act, there are clear procedures outlined for the case, and what the punishments are and what sort of evidence is required. Under this Act, the fishers need first to fill out the First Information Report. The fishers cannot be detained for more than 24 hours, instead the fishers need to be taken to court immediately. There is a designated court to handle these cases under this Act. The coast guard has to hand them to the nearest police station. Usually, the coast guards have their own bases; they are trained to handle such cases. The magistrate can then decide whether further investigation is needed and so they are put in temporary jail time. At this period, the fishers are not convicted, but then every 15 days they have to go in front of the court to prepare a charge sheet with all the details. Then the court will admit the case and then the case will start. If the fishermen can bring their own advocate, that advocate will assist them. If not, the court will appoint a free advocate, which can take time. Before the case starts, it can take at least 2 months. Once the case begins, normally it is a slow process, the witnesses and their log books have to be verified. In India, advocates are not available all the time so cases are postponed. Sometimes, it can take about a year or more for a case to be over.” In addition, in India, both state and central governments also have to respond to release the victims. There are three ministries involved at the central government, including the Ministry of Home Affairs, the Ministry of External Affairs and the Ministry of Agriculture.
The three bodies have to agree on giving a release order in order for the court of the state to proceed with the releasing process (Kumara, 2001).

Also for India, if it goes to court “then the fishers need to prove that they are innocent of poaching in Indian waters. So the investigation will go back to the logbook from when the coast guard arrested the fishers to see what was on the boat. And if the fishers’ net is properly rolled and stored, there is no problem. However, if the net was loose and there were fishers present, it is presumed that the fishers were fishing in Indian water. In this case, the fishermen cannot prove innocence. In India, the system is very rigid. The judge will not use his discretion. However, the matter of arrests and investigation processes are quite different in Sri Lanka. In Sri Lankan courts, the judges have more freedom to decide. Therefore, sometimes the Indian fishers can face a long process and sometimes they get released after a short detention (interview, Vivekanandan, Jan. 23, 2012). Vivekanandan is also convener of Alliance for Release of Innocent Fishermen (ARIF), so he has experience on helping many Indian fishers to get released from Sri Lanka. The actual court case and litigation processes vary from case to case. The Immigration Department and the Attorney General are the two bodies that respond to the Indian fisher arrest cases. In the last few years, with the help from local NGOs and support from ARIF, they have helped to expedite the release of many fishermen in many cases (Vivekanandan, 2001).

In Sri Lanka, once the case is withdrawn or settled, the Indian fishers are taken to the Mirihana Camp in Colombo. Then the India government and Indian High Commission is responsible for repatriation. They support the Indian fishers to fly back to the nearest airport and the Indian fishers are then responsible for paying the loan back to the government. Then the Indian fishers need to find a way to bring back their vessels (Vivekanandan, 2001).

In both Sri Lanka and India, NGOs play an important role in supporting the repatriation processes. The South Indian Federation of Fishermen Society (SIFFS), the Trivandrum District Fishermen Federation (TDFF), the Association for Release of Innocent Fishermen (ARIF), the World Forum of Fisher People (WFFP), and the National Fisheries Solidarity Organization (NAFSO) are the main NGOs that support arrested fishers and their family in these neighbouring countries.

Overview and Lessons Learned on Transboundary Fishing and Arrests

Transboundary fishing refers to small-scale or commercial fishing that occurs across regional, territorial, and national maritime boundaries and borders. Moreover, transboundary fishing is an issue because it can lead to degradation of marine resources, conflict, and the arrests of fishers. The issue of IUU fishing is also linked closely to the concept of transboundary fishing as these vessels may avoid following environmental regulations and international agreements resulting in significant losses for national economies. Overall, the picture of vessel flows within the region is somewhat unclear since vessel registration and MCS tends to be weak throughout the Bay of Bengal. Transboundary fishing can occur either legally – facilitated by licensing or joint ventures - or illegally – driven by historical context, environmental conditions, or unintentional scenarios. The illegal act can be contentious for many reasons particularly when national borders are crossed or when vessels transgress established fisheries zonation schemes within states. In the case of crossing state borders, UNCLOS (1982) created the concept of the EEZ that gave nations sovereign rights over and
responsibility for the resources within 200 nm of their shorelines. UNCLOS does not allow for the arresting of individuals who are caught fishing within the zone. Yet there are several hotspots within the Bay of Bengal where ongoing conflicts exist and many arrests have been and continue to be made, including in Palk Bay between India and Sri Lanka and in the Strait of Malacca between Indonesia and Malaysia. Between Bay of Bengal countries and neighbouring countries there are also ongoing conflicts and arrests between India and Pakistan as well as Indonesia and Australia. The processes associated with repatriating arrested fishers are complex, often politically charged, and involve different scenarios in each case and area. NGOs tend to play a central role in advocating for the release of arrested fishers and supporting their families in their absence. Within states, the most significant problem is associated with the crossing of commercial vessels into the zones reserved for small-scale fishermen, which is an issue for the food security of coastal fishing communities. This problem occurs throughout the Bay of Bengal to varying degrees.
Governance and Management of Migrant Fishers and Transboundary Fishing Issues

Introduction to Governance and Management

Governance and management refers to the organizations, the institutions (i.e., legislation and policies), the instruments and agreements, and the actions taken. Comprehensive studies of governance issues, policy gaps, and actions taken on these issues have not been done in the BoB region. A previous study in Africa (Crona & Rosendo, 2011) identifies gaps in policies in addressing issues related to the migration of fishers in East Africa. The following section will focus on the governance and management of migrant fishers and transboundary fishing. It will include introductory discussions of the organizations that work on these issues, the institutions and instruments that deal with these issues, and the agreements made and actions taken on these issues. This chapter is not intended to be comprehensive but rather to provide a starting place for further exploration on governance and management related topics.

Organizations Working on Migrant Fishing and Transboundary Fishing Issues

Many organizations work on the types of issues examined in this report. These organizations include the following: International Governmental Organizations (IGOs), International Non-Governmental Organization (INGOs), Research Institutes (RIs) and Non-Governmental Organizations (NGOs). In addition, there are government agencies that are responsible for these issues within each country of the BoB; however, an exploration of the mandate and purview of these agencies is beyond the scope of the current document. Below we will briefly review the focus of the various organizations as it relates to migrant fishers and transboundary fishing issues. The organizations reviewed include the following:

IGOs
1. Bay of Bengal Programme – Inter-Governmental Organisation
2. Asia-Pacific Fishery Commission
3. International Organization for Migration
4. International Collective in Support of Fish-workers (ICSF)
5. South East Asia Fisheries Development Center
6. Marine Stewardship Council
7. International Labour Organization
8. International Maritime Organization

NGOs
1. The Thai Overseas Fisheries Association (TOFA) – Thailand
2. Labor Rights Promotion Network – Thailand
3. Seafarer Union of Burma – Myanmar
4. South Indian Federation of Fishermen Societies – India
5. Fisheries and fishing community in India – India
6. Alliance for the Release of Innocent Fishermen - India
7. Malaysian Fisheries Society – Malaysia
8. Myanmar Fisheries Federation - Myanmar
The following table (Table 4) will provide brief overviews of the particular mandates of the most relevant organizations and how their mandates relate to the topics of this study and comment on any noteworthy projects that these organizations are doing.

**Table 4 – Overview of Organizations - Mandates and Projects**

<table>
<thead>
<tr>
<th>Organization</th>
<th>Mandate and Projects</th>
</tr>
</thead>
</table>
| Bay of Bengal Large Marine Ecosystem (BOBLME) | • To advocate and give policy guidance on migrant fishers and transboundary fishing  
• Analysis of issues related to migrant fishers and transboundary fishing |
| Asia-Pacific Fishery Commission (APFIC) | • To provide fishery and aquaculture information for the Asia-Pacific region, including the status and trends of production and resources  
• Conduct research on topics related to the IUU fishing and management of fishing capacity within the Asia-Pacific |
| International Organization for Migration (IOM) | • Implement projects to assist migrant workers  
• Research on ‘Trafficking of migrant fisher in Thailand’  
• Implementing a counter-trafficking project |
| International Collective in Support of Fish-workers (ICSF) | • To campaign and implement projects to improve living conditions of fish workers  
• To do research and review guidelines for fishers working conditions, safety at sea, wages and health  
• To do research and implement programmes to improve gender equity in the fishing sector |
| International Labour Organization (ILO) | • To promote and support fishing workers  
• Tripartite Action to Protect Migrant Workers from Labour Exploitation (TRIANGLE Project) |
| International Maritime Organization (IMO) | • To respond to and support work on the scourge of modern-day piracy  
• To maintain the safety of life at sea |
| Food and Agriculture Organization (FAO) | • To promote sustainable development and responsible fisheries  
• To collect research and maintain a database on fisheries related issues  
• To work in collaboration with IOM and ILO on fisheries issues |
| Asian Research Centre for Migration (ARCM) | • To publish research, collect statistics and data, consult, and make policy recommendations related to cross-border migration in the Southeast Asian Region. |
| Mahidol Migration Center (MMC) | • To compile research and advocate on migration related issues |
### Governance and Management of Migrant Fishers

The following section will provide a brief introduction to the institutions, instruments, agreements, and actions that relate to migrant fishers.

#### Institutions and Instruments

**National policies on migrant fishers**

National policies on migrant fishers vary from country to country. In Thailand, migrant workers are an important part of the local economy and the government’s Alien Work Act (2008) represents migrant workers in the different industries in Thailand, including the fishing industry. The **Alien Work Act** covers areas related to the issuing of work permits for migrant workers in Thailand, the deportation of illegal migrant workers from Thailand, penalties and fees related to work permits and law violations, and the administration of the act. Migrant fishers with work permits are then protected by the **Labour Protection Act** of 1998 which covers all aspects of work, including work in informal sectors like the fishing sector. Another Act related to migrant fishers in Thailand is **The Act Governing the Right to Fish in Thai Fishery Waters** (1939). This act regulates fishing activities in Thai waters. This Act prohibits the issuance of licences to aliens/migrants and also prohibits Thai vessels...
whose crew are migrants from fishing in Thai waters. This latter Act is outdated and does not adequately represent the current context.

In India, *The Fishermen Bill (2000)* covers aspects related to protection and welfare of Indian fishermen. This act makes provisions for a welfare fund which focuses on extending adequate life insurance cover, medical care, financial assistance for fishing nets, boats and other necessities, unemployment allowance during lean periods, free education including vocational education to children and for other aspects related to working in the fishing sector.

In Myanmar, the *Marine Fisheries Law (1990)* stipulates the duties and fees along with licensing procedures for those who wish to fish in the country’s inshore and offshore fisheries. Registration of fishing vessels by license holders is also covered under this law. The *Indonesian Fishery Law (2004)* makes provisions for migrant fishers fishing in Indonesian waters with regards to licensing to fish in Indonesian waters, and registration procedures for those who wish to fish in Indonesian waters.

**Guidelines on migrant fishers in the Bay of Bengal**

Guidelines and guiding principles related to the management of migrant fishers usually stem from international organizations like the Food and Agricultural Organization, the International Labour Organization, and the International Maritime Organization. The original *Code of Safety for Fishermen and Fishing Vessels* was amended in 2005 by FAO, ILO, and IOM. This code covers all aspects of safety of fishing vessels and crews and highlights the principles of cooperation among all parties and the areas of mutual interest and responsibility in relation to fishing vessels and crew members on fishing vessels. Stakeholders in this agreement include FAO, fisheries in general, ILO, labour in the fishing industries, and IMO. Safety and health standards on board, guiding practices for owners and crew members, education and training, health and medical care, and safety standards and procedures covering the entire fishing process from catching to processing are covered in this Code of Conduct. The code also covers the handling of machinery, emergency situations, and navigational safety.

Another set of guiding practices introduced by FAO and ILO that is worth taking note of is the *Good Practice Guide for Addressing Child Labour in Fisheries and Aquaculture* (FAO & ILO, 2011). This latest guide presents policies and practices with special focus on child labour in the fisheries sector. The guide calls for adequate policy, legal and institutional frameworks which include national, international and regional legislation and collaboration along with implementation steps. The guide also details hazardous work lists and criteria relevant to fisheries and aquaculture in relation to child labour. An action framework is also provided to highlight steps that need to be taken in preventing child labour, in withdrawing trafficked children and abolishing the worst forms of child labour, and in protecting children.

FAO also introduced a set of best practices to support and improve the livelihood of small-scale fisheries and aquaculture households. This guide highlights the impact of sectoral and non-sectoral policies on fisheries and aquaculture dependent livelihoods in Asia, which include looking at livelihood outcomes in the fisheries sector and what outcomes policies should support. Guidelines and best practices are also offered to facilitate access to rural
finance/microfinance services for small-scale fisheries, something that is crucial to small-scale migrant fishers whose incomes are often small and insufficient to survive on. Special focus is also given to women and how to strengthen and support the role of women in small-scale fisheries and what policies are needed to facilitate this (FAO, 2010a).

**Agreements and Actions**

*International agreements on migrant fishers*

The ASEAN Civil Society proposal for the *ASEAN Framework Instrument on the Promotion and Protection of the Rights of Migrant Workers* is a regional framework that covers migrant workers in the fisheries sector. The framework aims at strengthening regional cooperation in protecting the rights of migrant workers on top of the national policies that already exist within ASEAN countries. The framework is guided by four basic principles which include encompassing all migrant workers in ASEAN; recognizing the protection of rights as a shared obligation of sending and receiving countries, non-discrimination, and ensuring gender-sensitive policies and practices. Principles for both sending and receiving countries are outlined along with joint obligations in protecting the rights of migrant workers. For receiving countries, guiding principles cover wages and conditions of work and national treatment of migrant workers, use of standard contracts, agreements to change employers and other recruitment processes, migrant worker health along with accommodation and living conditions, access to health services, systems to protect undocumented migrant workers. Arrests, detention, and deportation processes policies and practices are also outlined. For sending countries, policies covered include ensuring the right to decent employment, pre-departure training and vocational training, monitoring and regulating labour recruitment agencies and brokers, role of embassies of sending countries, an effective reintegration of migrants returning to their home countries. The joint obligations highlighted in the framework that aim to strengthen cooperation in ASEAN include effective regulation of the private recruitment industry, establishing government to government systems, effective grievance and complaint mechanisms and systems for migrant workers, effective prevention and suppression of human trafficking, bilateral and regional cooperation systems, remittances, and the harmonization of national labour laws with ILO core labour standards. Migrant workers in skilled and unskilled sectors, including the fisheries sector are covered under this framework through specific provisions for each sector are not provided (ASEAN Civil Society, 2009).

The ASEAN Maritime Forum continued to be discussed in ASEAN Foreign Affairs Ministers’ Retreat Session in Siem Reap. Not only the illegal issues among ASEAN member countries that will benefit from the maritime cooperation, but the border clash between ASEAN countries and China in Southern China may get resolved (news item #36). In the Bali Summit, Labour Ministers meeting is tasked with continuing to implement the ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers and development of an ASEAN instrument on the issue within the region (ASEAN, 2011).

Other international conventions and legally binding agreements worth taking note of include the UN Convention on the Law of the Sea (UNCLOS); the UN Fish Stocks Agreement
(UNFSA); the 1995 Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (FAO Compliance Agreement); the 1995 Kyoto Declaration from the International Conference on the Sustainable

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<th>Conventions /Countries</th>
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Contribution of Fisheries to Food Security; the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); the 1992 UN Conference on Environment and Development; the Convention on Biological Diversity (CBD); the 1995 Jakarta Convention; International Convention for the Prevention of Pollution from Ships (MARPOL); the Agreement on Port State Measures (FAO 2008), and seven other instruments from the ILO that relate to migrant fishers (FAO, 2010b).

**Bi-lateral and multi-lateral agreements on human trafficking**

The United Nations Inter-Agency Project on Human Trafficking is an international and intergovernmental organization focusing on human trafficking issues globally. The project introduced a Convention against Transnational Organized Crime in 2000, called the *Palermo Convention*. This convention also covers and addresses trafficking in women and children, and also illegal trafficking in and transportation of migrants. Under this convention, a “Protocol against the Smuggling of Migrants” by land, sea, and air was also put into place.

Bilateral laws and agreements also exist in Asia. These take the form of MOUs between Cambodia and Thailand and Myanmar and Thailand on “Cooperation in the Employment of Workers”. Cambodia and Malaysia also recently signed a memorandum of understanding on combating trafficking (news item #120). Multilateral agreements and initiatives also exist in the region. Some notable ones include the Asian Regional Initiative Against Trafficking (ARIAT) Plan of Action (ARIAT Meeting) - March 2000; South Asian Association for Regional Cooperation (SAARC) Convention on Preventing and Combating Trafficking in Women and Children for Prostitution - 5 January 2002; Bangkok Declaration on Irregular/Undocumented Migration (International Symposium on Migration: Towards Regional Cooperation on Irregular/Undocumented Migration) - 23 April 1999; ASEAN Declaration Against Trafficking in Persons Particularly Women and Children - 29 November 2004, and 'Illegal Labour Movements: the Case of Trafficking in Women and Children” (Mekong Region Law Centre) - 2002.
Table 5 - Ratification of conventions pertaining to migrant fishers and trafficking of fishers

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<th>Convention</th>
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<td>Work in Fishing Convention, 2007 (ILOLEX, 2012)</td>
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<td>Maritime Labour Convention, 2006 (ILO, 2012)</td>
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<tr>
<td>The UNODC legal framework on trafficking in persons (or ‘human trafficking’) under Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, 29 September 2003 (UN, 2012)</td>
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<td>Hours of Work and the Manning of Ships Convention, 1996 (No. 180) (ILO, 2004, p.64)</td>
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<td>Minimum Age Convention, (No. 138), 1973, (ILO, 2004, p.19)</td>
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<td>ILO’s Convention No.29 on Forced Labour (1969) (ILOLEX, 2012)</td>
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<td>The Fishermen’s Competency Certificates Convention, 1966 (No. 125) (above 25 grt) (ILO, 2004, p.19)*</td>
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<td>Vocational Training (Fishermen) Recommendation, 1966 (No. 126) (ILO, 2004, p.19)*</td>
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<td>Accommodation of Crews (Fishermen) Convention, 1966 (No. 126) (ILO, 2004, p.19)*</td>
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<td>Minimum Age (Fishermen) Convention, 1959 (No. 112) (ILO, 2004, p.19)***</td>
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<td>The Medical Examination (Fishermen) Convention (No. 113), 1959 (ILO, 2004, p.19)*</td>
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<td>Fishermen’s Articles of Agreement Convention, 1959 (No. 114) (ILO, 2004, p.23)*</td>
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<tr>
<td>Hours of Work (Fishing) Recommendation, 1920 (No. 7) (ILO, 2004, p.19)**</td>
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Table 5 - Ratification of conventions pertaining to migrant fishers and trafficking of fishers

Notes: R = Ratification, S = Signatory, * Instruments to be revised, ** No longer fully up to date but remain relevant in certain aspects, *** Outdated instruments (ILO, 2004)

However, labour trafficking is still a major challenge for policy makers and law enforcers in the region. As noted previously, in Thailand there is no effective system in place to assist and support trafficked fishermen or to repatriate them home. However, Thailand does offer shelters to provide protection and services for adult men. Nevertheless, these shelters can pose a problem in that trafficked victims would rather be outside earning than living in a shelter. This leads to the victims leaving the shelter and continuing to reside in Thailand illegally (Robertson, 2009). No formal agreements exist to assist trafficked fishermen from Malaysia and Indonesia.

*Actions taken on working conditions for migrant fishers*

The International Labour Organization is the primary international organization dealing with labour rights and standards in the fishing industry and sectors around the globe. In managing such an informal industry, they have not only created guiding labour standards and practices but have also encouraged participating states to ratify specific conventions related to improving the working conditions of migrant fishers and migrant workers in the fishing industry. These include the Work in Fishing Convention, 2007; Work in Fishing Recommendation, 2007; Vocational Training Recommendation, 1966; Minimum Age (Fishermen) Convention, 1959; Guidelines for Flag State inspections under the Maritime
Labour Convention, 2006; Hours of Work (Fishing) Recommendation, 1920; Medical Examination (Fishermen) Convention, 1959; Fishermen’s Articles of Agreement Convention, 1959; and Accommodation of Crews (Fishermen) Convention, 1966. As is shown in Table 5, few of the conventions have been ratified by BOBLME member countries. Many of the interviewees felt that the level of implementation of the laws and conventions in the various countries of the Bay of Bengal is weak.

Fortunately, aside from setting a comprehensive standard on work in the fishing sector, in 2011, ILO also introduced their Work in Fishing Convention and Recommendation, 2007 Action Plan for 2011 – 2016. From the year 2007 to 2010, ILO has taken various action steps ranging from development of promotional materials, working on their Article 22 report form submitted by member states, comparative analyses of Convention No. 188 and national laws and regulations, development of guidelines on port state control, development of handbooks and training materials, organizing regional seminars, providing assistance to the European Union, fostering technical cooperation projects aimed at specific countries, working on minimum age/child labour issues through their joint FAO-ILO-IMO work related to safety and health of fishers, and implementing their decent work country programmes. Their action plan for the next six years will focus on strengthening decent work on board fishing vessels through various initiatives including the development of a model legislation, further ratifications, and more capacity building.

Safety at sea is also an important concern for countries in the Bay of Bengal region. It can be seen that there has been some efforts at the national level to improve safety at sea. In Indonesia, the government has adopted FAO’s basic guiding principles on safety practices on small fishing vessels and translated this publication into Bahasa and disseminated it nationwide as an awareness raising material. In Malaysia, efforts have been made to register all boats and fishers. In Myanmar, a data recording system for accidents related to fishing operations has been put into place. In Thailand efforts have also been made with vessel registration and licensing, enforcement of closed areas and closed seasons, promotion of offshore fisheries and joint ventures, and employment of foreign labour and crew (Chokesanguan, Rajruchithong, & Wanchana, 2010).

Finally, the governments of both Thailand and Malaysia have tried to improve the situation for victims of trafficking. In Thailand, a step towards improvement of the fishing industry was taken by creating a National Sub-Committee on Fishing Labour, and upgrading the existing legislation to recognize that men and boys are also victims of trafficking. Malaysia is also working towards better practices, by recognizing that the victims of trafficking, who have been subjected to exploitation, should not be prosecuted for their illegal status (Gulzar, 2011: news item #67). The Malaysian government has created a new procedure to allow the trafficked workers to continue to work in the country. Previously, exploited migrant workers would have been deported back to their countries as soon as they were released from the protection centre. After this change, foreign workers can stay and continue to work in the country, which is an incentive to encourage exploited workers to make reports against their employers (Chang, 2012: news item #32).
Governance and Management of Transboundary Fishing

The governance and management of transboundary fishing is complex and involves different laws and policies, instruments, and agreements at international, regional, bi-lateral and national levels. The following section will provide an introduction to some of these and explore some actions that have been taken to counter problems concerning transboundary fishing and IUU.

Institutions and Instruments

International institutions on transboundary fishing

The United Nations Law of the Sea Convention (1982): The main purposes of UNCLOS are to establish legal order for the seas and oceans and to promote the peaceful use of the seas and oceans through research, efficient utilization of resources, and protection and preservation of the marine environment (Rigg et al., 2003). UNCLOS is comprised of 320 articles. Listed below are key features of the convention that relate to transboundary fishing (see Willman, 2001).

- Coastal States exercise sovereignty over 12 nm or their territorial sea, with exception of the innocent passage of foreign vessels.
- Coastal States have sovereignty rights in 200 nm of EEZ with respect to natural resources, certain economic activities, and exercise jurisdiction over marine science research and environmental protection.
- Any part of the continental shelf beyond 200 nm, the coastal state will share the revenue from exploiting the resources with the international community.
- Coastal States have sovereignty rights over the continental shelf, which can extend further than 200 nm from shore under specific circumstances.
- Ship and aircraft of all countries are allowed ‘transit passage’ through straits used for international navigation. Bordering states of the strait are also allowed to regulate the navigation of the passage.

UNCLOS has been ratified by all 8 member countries of the BOBLME project.

FAO Code of Conduct for Responsible Fisheries: Codes of conduct are considered as voluntary or ‘soft laws’, as they are neither legally binding nor enforceable. Code of conduct that relate to IUU include the International Plans of Actions on IUU (IPOA-IUU, 2001), which aims to prevent, deter and eliminate IUU fishing. The IPOA provides measures to incorporate into Regional Fisheries Management Organizations (RFMOs) and - at the state level - into National Plan of Actions (NPOAs) (Schmidt, 2004). More details and examples on RFMOs and NPOAs in the Bay of Bengal will be explained in the IUU section below.

Listed below are several additional FAO codes of conduct, best practice documents, policy guidelines, and action oriented documents that relate to transboundary fishing and IUU

- 2009 – FAO Agreement on Port State Measures to Prevent, Deter and Eliminate IUU Fishing. This agreement was approved by the FAO Conference at its Thirty-sixth
Session on 22 November 2009. The only country participating in the BOBLME project that has signed this agreement is Indonesia.
- 2004 – FAO on National Plans of Action to Prevent, Deter and Eliminate IUU Fishing
- 2002 – FAO on Building Awareness on Aspects of Fishery Statistics, Stock Assessment and Management
- 2001 – International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated Fishing

The 1995 Fishing Stock Agreement: According to this agreement, nation states must take fisheries conservation measures into account. This agreement also addresses overfishing and excess fishing capacity and monitoring, control, and enforcement issues. With this agreement, under certain circumstances representatives of the state are allowed to board and inspect vessels in the high seas or in the port state, to inspect landings and catches that are transferred at sea (Rigg et al., 2003).

The Indian Ocean Rim Association for Regional Cooperation (IOR-ARC), was formed in 1997 by 14 countries as regional initiative. The cooperation aims to ‘promote sustained growth, balanced development, liberalized trade, and to foster closer co-operation in global economic issues and human resources development’ (ICSF Secretariat, 2001). The work of this association focuses on investment in fisheries through creating joint ventures on fish and fisheries products. The association is simultaneously trying to increase fisheries production and improve the quality of fish products to compete in the world market in order to improve fishers well-being in the region. (Dusoroth, 2001).

Chennai Declaration: The declaration is supported by BOBP-IGO to promote sea safety in the member countries. The declaration promotes the integration of sea safety issues in fishery policy and management. The declaration encourages the development of a culture of sea safety through providing education, training, and awareness building to small-scale or artisanal fishers (Yadava, 2005).

National laws and regulations for transboundary vessels

Listed below are the national laws and regulations that relate to transboundary fishing within the various countries of the Bay of Bengal (Table 6).

<table>
<thead>
<tr>
<th>Country</th>
<th>National laws and regulations on transboundary fishing vessel</th>
<th>Sources</th>
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<tr>
<td>Maldives</td>
<td>The Ocean Territories Act (Act No. 6/96) and the Environment and Preservation Act (Act No. 4/93) are the regulations that are related to the use of EEZ, concerning fisheries, environmental management, business, foreign investment. Any vessels fishing in Maldives EEZ zone require a license. Fishery Law of Maldives (Law no. 5/87) defined EEZ from 75-200 nm. Commercial fishing, both local and foreign vessels, need to receive their fishing license yearly from the Ministry of Trade and Industries. The area within 75 nm is limited for local fishers only and this area is called ‘Coastal Fishery Zone’. Ministry of Defence and National Security is responsible for enforcement of the</td>
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<td>(FAO, 2009b)</td>
<td>(Adam, 2004)</td>
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<tr>
<th>Country</th>
<th>National laws and regulations on transboundary fishing vessel</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sri Lanka</td>
<td>The Fisheries and Aquatic Resources Act No. 2 of 1996 provides management, regulation, conservation and development of fisheries and aquatic resources. The Act has provisions for banning the use of destructive fishing gear, declaration of fisheries reserves and licensing system for all fishing operations. Foreign Fishing Boat Regulations 1981 provides rules relating to the stowing of gears, permits, fees, validity of permits, approval of joint venture agreements, and conditions of permits.</td>
<td>(Joseph, 2003)</td>
</tr>
<tr>
<td>India</td>
<td>Maritine Zones of India Act 1981 is the main act to regulate fishing of foreign vessels in EEZ. The guidelines for fishing operations in Indian EEZ zone in 2002 also have rules for operation of foreign vessels in the EEZ of India. The Maritime Fishing Regulation Acts of the maritime States of India manages the fisheries within 12 nm, and has provisions for fishers operating unpowered fishing vessels to protect the interests of traditional fishers.</td>
<td>(ICSF, n.d.)</td>
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<tr>
<td>Bangladesh</td>
<td>The main laws that focus on marine fisheries management are The Marine Fisher Ordinance 1983 and Marine Fisheries Rules 1983. Marine Fisher Ordinance 1983 determines the zones in which vessels of varying sizes may engage in fishing operations. Fishing conducted by foreign fishing vessels is subject to prior authorization. The Marine Fisheries Rules 1983 regulate the fishing licences for national and foreign fishing vessels, by determining licences conditions and allowable fishing gears.</td>
<td>(FAO, 2007)</td>
</tr>
<tr>
<td>Myanmar</td>
<td>The Law Relating to the Fishing Rights of Foreign Fishing Vessels (SLORC Law No. 11/89) was put into force on 2 April 1989. This law grants fishing rights and concessions within Myanmar territorial waters and special economic zones to foreign fishing companies.</td>
<td>(FAO, 2009a)</td>
</tr>
<tr>
<td>Thailand</td>
<td>The Department of Fisheries of Thailand is responsible for licensing of fishing gears and registering vessels under 14 m. The Ship Registration Division (SRD) of Marine Department registers Thai vessel to trade in Thai water under the Thai Vessel Act (BE2481-1938) and registers fishing licenses for Thai vessels under the Thai Water Act (BE2450-1907). Under the Act Governing the Right to Fish in Thai Fishery Waters (BE2482-1939), only Thai nationals are allowed to fish in the nations’ territorial waters (12 miles off-shore). Beyond that fishing rights can be issued under limited partnerships in which partners have unlimited liabilities and in which at least 70% of the capital is owned by a Thai partner. Foreigners or foreign partners who are not Thai nationals or companies cannot obtain fishing rights.</td>
<td>(SEAFDEC, 2008a)</td>
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<tr>
<td>Malaysia</td>
<td>The Fishery Act 1985 covers administration of fisheries in Malaysia, licensing and management of local and estuarine fishing operations, control of fishing by foreign fishing vessels in Malaysian fishing waters, offences, prohibitions and control of certain methods of fishing, establishment of marine parks and marine reserves, and offences and legal procedures relating to the implementation of the Act. Under the Fisheries Act 1985 and the related regulations, fishing gears that are destructive to the environment and fisheries resources are banned. Banned gear includes fishing pair trawling, electric fishing, fishing using poisons and explosives, and push nets and gill nets of more than 10 inches mesh size. Other</td>
<td>(SEAFDEC, 2008a)</td>
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<tr>
<td>Country</td>
<td>National laws and regulations on transboundary fishing vessel</td>
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<td>Indonesia</td>
<td>conditions set by the Department of Fisheries to control fishing by foreign vessels relate to ownership and employment of foreigners include: fishing vessels which are less than 40 GRT must be owner operated and all crew must be local; Zone C fishing vessels are allowed to employ 80% foreign crew; Zone C2 and C3 fishing vessel are allowed to employ 100% foreign crew (See Zoning in Appendix D)</td>
<td>(Poernomo, 2011) &amp; (Agoes, 2005)</td>
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<tr>
<td>Indonesia</td>
<td>Law No. 45/2009 (amending No. 31/2004) mentions the obligation of different levels of authority for the licensing of fishing vessels. The Indonesian central Government issues fisheries business licenses (SIUP), fishing licenses (SIPI), and fish carrier licences (SIKPI) to Indonesian vessels and foreign fishing vessels under bilateral agreements with the size of 30 GRT or more. Indonesia Fisheries law restricts foreign-flagged vessels and fish carrier vessels are obligated to bring the original licenses (SIPI/SIKPI) during fishing operation. The provincial and district Government can issue licenses for fishing vessels 10-30 GRT and less than 10 GRT respectively, without foreign workers and without foreign capital or investment. Law No. 45/2009 – Article 94A, this law allows for enforcement of vessels that use falsified licenses and provides for up to seven years of imprisonment and fines up to 342,000 US$.</td>
<td>(Poernomo, 2011)</td>
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**Agreements and Actions**

**Bilateral, Multilateral, and Regional Agreements and International Laws**

There are approximately 60 maritime boundaries within Southeast Asia, many of which remain contested. It is estimated that less than 20% of the maritime boundaries in Southeast Asia have a settled agreement (Bateman et al., 2009). This can lead to many conflicts over resource use with neighbouring states. Bilateral and regional agreements are presented here to demonstrate potential conflict-solving instruments for transboundary fishing issues.

The Chair’s Statement of the 19th ASEAN Summit in Bali was announced and signed by leaders of ASEAN countries in November 2011. The main topics of discussion included ASEAN community building, ASEAN political security community, ASEAN economic community, and ASEAN socio-cultural community. In the political security community section, maritime cooperation was mentioned in the Summit, with the objective of reaffirming the commitment of member countries to work on the ASEAN Maritime Forum and improve existing mechanisms to benefit the region. The ASEAN members will continue to cooperate to combat illegal activities related to the marine environment, sea piracy and armed robbery at sea, and to eliminate people smuggling and trafficking of migrants at sea (ASEAN, 2011).

Agreements between India and Sri Lanka: Geographically, the maritime borders between Sri Lanka and India are very close, which has led to considerable conflict between small-scale fishermen and trawls between the two countries. The main areas of conflict are Palk Bay and...
the Gulf of Mannar, where the minimum distance between the shore lines of each country is less than 45 km. The governments of the two countries have tried to solve the problem through bilateral agreements and several NGOs have been active on the issue. The first agreement between the two countries was signed in 1974, which allowed Indian fishermen the right to fish in Palk Bay. A second agreement dealing with Palk Bay and Gulf of Mannar was signed in 1976. According to Vivekanandan (2006), both of the agreements have not led to any significant changes for fishers who continue to do cross-border fishing between the two countries. Currently, India and Sri Lanka are in the process of trying to convene the India–Sri Lanka Joint Working Group on Fisheries (ISJWGF) and to establish a shared patrolling system to solve problems in the Palk Bay area (Jen, 2012: news item #45).

Agreements between Thailand and Myanmar: Fishery concessions granted by the military junta to Thai companies in 1989 and 1993 have led to severe over-fishing by modern trawler fleets in wide areas of the Andaman Sea on Myanmar’s south-eastern coast. The 1993 SLORC Law No. 11/89 (amended in SLORC Law No. 11/93) regards license fees, offences, and penalties. In addition, the SLORC passed an emergency act (the Act Covering Foreign Trawlers) in 1993 (Gutter, 2001). Fishing agreements given to Thai companies have not been stable, depending on political, environmental, and conflict situations between the two countries. There are two types of fishing businesses between Thailand and Myanmar. First, under the joint venture system Thai companies need to get approval from Myanmar Investment Commission to fish in Myanmar waters (MIC). In 2001, there were 3 joint venture companies established. Secondly, foreign vessels can also apply for fishing licenses in Myanmar (TOFA, 2001).

Agreements between Australia and Indonesia: Australia and Indonesia signed a Memorandum of Understanding (MoU) in 1974, later revised in 1986, that outlined the restrictions of Indonesian fishing vessels in all Australian Fishing Zones except the following five areas: Ashmore Reef, Cartier Islet, Scoot Reef, Seringapatan Reef, and Browse Islet. The MoU allows only Indonesian ‘traditional fishers’ to collect particular sea resources (Adhuri & Visser, 2007).

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**Box 9 - Malaysia: Advanced vessel registration & Monitoring, Control and Surveillance**

According to a number of sources, Malaysia has one of the most advanced systems for registering fishing vessels and effective system of monitoring and enforcement. Not only does Malaysia require clear boat painting and marks to identify the types of vessels, the system for registration of fishing vessels is under one unit, Department of Fisheries Malaysia. Between 2006 - 2011, the Malaysian Maritime Enforcement Agency arrested 516 people and chased away 4,644 foreign fishing vessels, saving millions of Malaysian Ringgit of the country’s marine resources (news item #19).

*Repatriation agreements and arrangements*
The problem of repatriation of fishers often arises when fishers have been arrested while illegally fishing from their own vessels or from commercial vessels in the EEZ of other countries. According to interviews with Vivekanandan and John McGeoghan, financial support for repatriation is a main constraint. ILO, IMO and FAO have attempted to set international standards for repatriation. The Repatriation of Seafarers Convention, 1987 (No. 166) applies to both commercial and small-scale fishers and sets guidelines for maximum duration of detainment and clarifies the vessel owners responsibility and Flag States responsibility (ILO, 2004, p. 74). The FAO Code of Conduct for Responsible Fisheries advocates that Flag States will ensure the repatriation of crews arrested according to the rules of the Repatriation of Seafarers Convention (ILO, 2004, p. 75). IMO and ILO have been working to ensure that financial support for seafarers, in the case of abandonment, will be the responsibility of ship owners (ILO, 2004).

In the BoB, the majority of repatriation arrangements are done through bi-national or bi-lateral agreements and negotiations. In the case of India – Sri Lanka, a significant number of government bodies and NGOs are involved in repatriation process. NGOs play an important role in advocating for arrested fishers, advocating for their families, and bringing them home. In one example of repatriation of Filipino fishers from Indonesia, the repatriation was arranged by the Ronnel C. Rivera Foundation Inc. and officials of the Philippine Consulate - both organizations are located in the Filipino fishers’ hometown (news item #60).

For the arrest and detainment of vessels, the International Convention Relating to the Arrest of Sea-Going Ships (1952) highlights guiding principles for arresting and detaining ships. Yet in the Bay of Bengal region, it is evident that an effective regional framework and multilateral agreements for maritime control and management are lacking. One reason for this could be that involved states/parties believe that the costs of having these systems in place actually outweigh the benefits (Valencia, 2000).

Actions to prevent, deter, and eliminate IUU fishing

There are several measures that could be improved to prevent, deter, and eliminate IUU fishing, including Monitoring, Control and Surveillance (MCS), national and regional agreements (see above), vessel licensing and registration systems, port monitoring, and market measures and government subsidies. This section will briefly explore different measures developed by BoB countries to combat IUU.

National and Regional Monitoring, Control and Surveillance (MCS): There are several examples of creative mechanisms for effective MCS at national and regional levels in the BoB. The use of vessel monitoring systems (VMS) shows some process for supporting MCS. In Indonesia, the Ministerial Decree of Marine Affairs and Fisheries No. 05/2007 requires the installation of transmitters into the vessels. The state will provide transmitters for fishing vessel with the size between 30-60 GT. Medium sized Indonesian vessels and foreign flagged vessels (>60 GRT) are required to install transmitters and register with the Directorate General of Surveillance and Control for Marine and Fisheries Resources. For larger vessels (>100 GRT), the vessel need to activate transmitters 200 nautical miles before entering the Indonesian EEZ (Poernomo & Ahmadi, 2011, p. 81). In Malaysia, a Vessel Monitoring
System (VMS) has also been implemented. However, the VMS in Malaysia is not effective because there is a lack of budget for surveillance (Shaupi et al., 2011).

Each country in the BoB has their own agencies to enforce the law and conduct MCS and these can often be complex arrangements with unclear jurisdiction or responsibility. For example, Malaysia enforcement processes include the marine police, the Malaysian Maritime Enforcement Agency, and inshore fishermen in the state to handle issues related to illegal fishing or the invasion of foreign vessels. In India, monitoring of chartered vessels operating under joint ventures is the responsibility of the Indian Coast Guard as specified by the Maritime Zones of India Act 1981 (Pramod, 2010, p.8). The streamlining of MCS processes could make them more effective.

Collaborative mechanisms and joint patrols may be an effective way to deter IUU fishing. For example, Indonesia and Philippines have a Memorandum of Understanding on MCS to combat IUU fishing in transboundary water. Also Indonesia, Malaysia and Singapore have developed a collaborative patrol system and an “Eye in the Sky’ air patrol to monitor IUU fishing in Malacca Strait (Poernomo & Ahmadi, 2011, p. 79). There is also a regional initiative between Indonesia, Malaysia, and the Philippines in the Sulawesi Sea on the management of fishing capacity and combating IUU fishing, through joint patrols and cooperation of local business enterprises (Poernomo & Ahmadi, 2011, p. 79).

In general, MCS in many of the ASEAN countries is too weak to stop IUU fishing and enforce the regulations (Torell et al., 2010, p. 16). However, there have been several initiatives at the regional level to strengthen the MCS system. For example, the development of good MCS practice and collaborative networks was explicated during RPOA Workshop in Bali Indonesia in 2008 (Awwaluddin, 2011, p. 44). MCS improvement is an urgent issue for the BoB region.

Licensing and Administration of Vessels: Member countries in the region have vastly different vessel registration processes, licensing systems, and institutional responsibilities (Awwaluddin, 2011, p. 41). Malaysia has a fairly streamlined process for vessel registration and a licencing limitation programme that deserves some attention. The license limitation programme has the goal of solving conflict between trawlers and artisanal fishers. The policy controls the number of vessels and spatially distributes fishing capacity in terms of gears, vessel sizes, and the type of ownership. Furthermore, it restricts the number of trawlers effectively reducing conflict with artisanal fishers and decreasing IUU fishing (Alam et al., 2002). There have been a number of attempts to improve the processes for licensing vessels in Southeast Asia. For example, a regional expert meeting on Fishing Vessels Registration was held in July 2008 in Phuket. The meeting recognized the differences between fishing fleets operating in different countries and the need to create criteria and processes for regional vessels registration (Torell et al., 2010, p. 18).

Combating Flag of Convenience (FoC): The main problem for FoC is the lack of linkages between flag states and fishing vessels, which allows them to avoid environmental regulations and participate in trafficking and mistreatment of workers without recourse. EJF (2010, p.21-22) advocates for an outright end to FoC. EJF suggests that international bodies
should create new binding agreements under the UN Law of the Sea that will assign responsibility for vessels to the flag state under UNCLOS. The agreement should create a link between vessels and flag state to prevent states from flagging foreign vessels. At a regional level, RFMOs should introduce trade sanctions against vessels that engage in IUU fishing. For example, the vessels that are registered as FoC should be banned from fishing unless a genuine link between flag state and vessel can be established.

Port Monitoring: Concerns about port monitoring have been expressed in several meetings between Southeast Asia countries. Improving port monitoring is a measure that can be taken by port states to combat IUU fishing through prioritising monitoring and recording systems for all catch landed at national ports or landing sites. The recording and monitoring processes should document landing information by neighbouring countries’ vessels and the location where fisheries resources were sourced (Awwaluddin, 2011). The most important measure for effective port monitoring measure is the inspection, validation, and certification of documents by the relevant authority at the landing place. Inspecting the catch at the ports or landing sites is done to ensure that the fish has not been caught illegally (Awwaluddin, 2011, p. 44).

Using trade measures against IUU fishing: Trade measures are also an alternative solution in the fight against IUU fishing. Gallic (2008) argues that MCS faces some challenges, such as the cost of implementation, institutional constraints, and lack of political will. Therefore, using global trade measures may provide a more effective solution for combatting IUU fishing problems. Trade measures can include import restrictions (e.g. embargos and tariff), Regional Fisheries Management Organization-based embargoes, prohibition of trade in particular endangered species (e.g., through CITES), and catch documents and eco-labelling.

Implementing co-management as alternative institution: Co-management might provide an effective means for reducing conflicts over fishing grounds between artisanal fishers and commercial fishing vessels. Fisheries co-management is an arrangement where responsibility for resource management is shared between the government and user groups (Nielsen, 1996 cited in Wilson et al., 2006). Many successful cases of co-management have been shown in the article ‘Conditions affecting the success of fisheries co-management: lessons from Asia’. The article reviews many case studies on co-management in Indonesia, Thailand, Bangladesh and many countries in Asia and in other parts of the world. The conclusions show that effective planning and implementation of co-management can be done at several different levels and include individuals, stakeholder groups, communities, the government, and external agencies (Pomeroy et al., 2007). In Satun, Thailand there is an example of fisheries and coastal management at the community level. In this case, there were a number of different stakeholder groups that helped to establish fishery and coastal resource management locally, including the small-scale fishers association, a mangrove conservation group, the community-based fishing port, and several local NGOs (Yusof & Mathew, 2010).
Overview and Lessons Learned on Governance and Management

This chapter reviewed some of the organizations, institutions, instruments, agreements, and actions related to the governance and management of migrant fishers and transboundary fishing. It is not intended to be a comprehensive overview but rather a starting place for further exploration and discussion. A significant number of organization, including IGOs, INGOs, NGOs, and research institutes, work on issues related to these topics. The majority of the organizations reviewed work primarily on policy, research, and advocacy. More concerted efforts could be made to collaborate on these issues between the various organizations involved. The chapter focused on national policies related to migrant fishers, guidelines on migrant fishers in the Bay of Bengal, international agreements on migrant fishers, bi-lateral and multi-lateral agreements on human trafficking, and actions taken on working conditions for migrant fishers. There are a significant number of agreements and codes of conduct that pertain to these issues however both ratification of previous agreements and implementation may be weak throughout the region. Systems to prevent trafficking and provide support for bringing perpetrators to justice and for the repatriation of victims are also lacking. The standardization of processes for registration of workers and monitoring the flow of migrant fishers within the region might be an important first step. The next section of the chapter reviewed international institutions on transboundary fishing, national laws and regulations for transboundary vessels, bilateral, multilateral, and regional agreements and international laws, repatriation agreements and arrangements for arrested fishers, and actions to prevent, deter, and eliminate IUU fishing. Several important lessons emerged. Since UNCLOS was established many EEZs are still disputed. Many documents and guidelines exist to prevent, deter, and eliminate IUU; however, the capacity of local countries to implement the recommendations is limited. A number of the national laws and regulations that exist that deal with fisheries management are outdated and not suited to the current context or consistent with international conventions such as UNCLOS. Bilateral agreements may be an effective means for resolving conflicts on transboundary fishing issues and for repatriation processes; however, these cannot take the place of effective action on the issues. Regional agreements and collaborative action may be more effective for establishing effective monitoring, control, and surveillance (MCS) and creating unified vessel registration, identification, and monitoring systems (VMS). Some actions that are encouraged to address transboundary and IUU fishing include developing national and regional mechanisms for MCS, creating standardized systems for licensing and registration of vessels, combatting flag of convenience, monitoring of ports, using market measures against IUU fishing, and implementing co-management as an alternative institution.
Concluding Recommendations for Action and Research

Some sources suggest migrant fisher and transboundary fishing issues have gotten worse in recent years despite the many reports and documents that have been produced on the subject. The creation of policies and the implementation of recommendations lag far behind our knowledge on the issues. Yet there is still much to be learned. In the concluding section of this report, rather than repeating the overviews and lessons learned from each chapter of the report, we will focus our discussion on recommendations for further action and research. On the basis of the information and lessons that were uncovered during the literature review and from the interviews, we offer the following lists of recommendations for action and topics for further research as a starting place for discussions about future actions and research that might be supported by the BOBLME project. In this document, we have opted to include all recommendations and to not examine or assign importance, feasibility, or responsibility to the actions or research items. Yet as a next step, we would recommend that a workshop of experts be held that focuses specifically on examining feasibility and assigning importance and responsibility to these actions.

Further Actions on Migrant Fishers Issues

1. Working Welfare
   a. Engagement of countries at the regional level in the sharing of best practices in the management of migration in the fishing sector, thereby identifying pioneers, practical solutions, and effective strategies in improving the working conditions of migrant fishers.
   b. Development of improved national systems and/or standardized regional systems for migrant registration and tracking the flow of migrant fishers.
   c. Development and implementation of agreements requiring the possession of legitimate seafarer documents on fishing vessels – for example, through creating a standardized ID card (e.g., within BoB region).
   d. Establishment of sound monitoring and evaluation systems to assess the effectiveness of labour policies and standards protecting migrant fishers and any corrective measures that need to be taken.
   e. Supporting cooperative efforts between local governments and NGOs who work on these issues – for example through developing tools to monitor evidence of exploitation or forced labour at piers.
   f. Development of national labour laws and codes of conduct for the fishing sector that include specific provisions for migrant workers, including mechanisms for enforcing the rules and regulations. These laws should include mandatory worker registration, insurance for accidents, and medical coverage. Fostering of engagement amongst local authorities and agencies to strengthen the implementation of these local policies and laws.
   g. Furthering the development of and integration of international and regional codes of conduct and guidelines - on rights, working conditions, and labour practices (e.g., ASEAN declarations on human rights, rights of migrant workers, FAO
Codes of Conduct on Responsible Fisheries) - into national legislation and policies.

h. Establishment of clear responsibility of port states to monitor fishing vessels for acceptable working conditions, hygiene, and worker health and address the issues that emerge.

i. Integration of safety at sea guidelines from various agencies – ILO, IMO, and FAO – and incorporation of these guidelines into national policies of BoB countries. This might include, for example, implementing annual vessel safety checks, conducting extensive programs of education and capacity building, and developing weather warning systems.

2. Trafficking
   a. Greater research and ongoing monitoring of the processes of recruitment of migrant fishers is needed to guide a concerted effort to break smuggling rings and deal with corruption related to human trafficking of fishers.
   b. Creation of laws that punish those responsible for trafficking rather than victims of trafficking - boat owners and captains rather than the workers who may be there against their will (e.g., impound boat or fine the captain).
   c. Creation of effective mechanisms and/or organizations, or supporting and improving those that already exist, to help victims of trafficking for bringing responsible parties to justice - e.g. central body with regional offices for making complaints, improved shelter conditions, streamlined judicial processes, and incentives for reporting.
   d. Development and implementation of education programs and media campaigns – oriented towards origin locations and countries – to educate about the dangers of trafficking.
   e. Strengthening current systems in place through clarifying roles and responsibilities of agencies and parties involved in the monitoring and management of trafficking cases, and pushing for a more participatory process in the clamping down on trafficking networks in ASEAN and the Southeast Asian region.
   f. Advocating for regional level involvement in the tracking and recording of trafficking cases related to migrant fishers so as to create a shared level of understanding and consensus and better clarity of effective action steps to be taken to combat trafficking of migrant fishers in the region.

3. Both Trafficking and Working Welfare
   a. Encouraging the use of market measures and mechanisms – e.g., international trade regulations, media campaigns, or boycotts – and media campaigns to put pressure on countries whose fishing industries perpetrate trafficking and working welfare offences or break international human rights regulations.
   b. Establishment of clear authority in BoB countries for which agencies are responsible for 1) working conditions and 2) human smuggling and trafficking.
   c. Strengthening the implementation of already existing agreements, codes of conduct, laws, and policies related to migration throughout the BoB countries.
d. Encouraging the collaboration of the various governmental, non-governmental, and international organizations that are working on migrant worker, trafficking, and transboundary issues – for example, through creating regional networks and a central repository for information related to these issues.

**Further Actions on Transboundary Fishing Issues**

1. Transboundary Fishing and IUU
   a. Establishment of effective measures for enforcement of laws that restrict encroachment of commercial vessels into inshore areas reserved for small-scale fishermen. This includes improving policies, building capacity, ensuring funding supports, creating effective sanctions, and addressing corruption.
   b. Improvement of Monitoring, Control and Surveillance (MCS) programs on Illegal, Unreported and Unregulated (IUU) issues (e.g., Flag of Convenience, VMS, reflagging of boats) through regional coordination and bilateral cooperation. Encouraging increased financial support and capacity for MCS.
   c. Expansion of the Vessel Monitoring Systems (VMS) regional and promotion as a requirement for gaining access to EEZ and preventing inshore fishing.
   d. Creation of measures to deter FoC and the reflagging of vessels – e.g., through permanent markings on boats, assigning responsibility for FoC vessels to country of registration, trade sanctions, licensing processes that require a genuine link between flag state and vessel, and regional pressure against FoC vessels.
   e. Regional standardization and simplification of vessel registration and licensing processes for all sizes of vessels and implementation of campaigns to educate small-scale fishers to see the benefit of licensing and registering their vessels. The use of incentives may increase compliance.
   f. Encouraging of port monitoring regionally to monitor and record landing information, including vessels, types of fisheries, and catch data.
   g. Promoting of regional cooperation and systems for information sharing on the records of fishing vessels.

2. Conflict over Transboundary Fishing Grounds
   a. Experiment with co-management at local level to solve conflicts over transboundary fishing grounds. Several studies show that positive outcomes of co-management can include increased resource user engagement and participation, which are linked to conflict mitigation.
   b. Replacement of ‘open access’ regimes with ‘limited access regimes’ in consideration of the rights or local and regional artisanal fishers.
   c. Creation of specific agreements and licensing arrangements for small-scale fishermen situated near borders – particularly if historically areas for fishing were shared.
   d. Participatory establishment of best practices and clear guidelines for dealing with conflicts over transboundary fishing grounds at the local level, regional, and national level. Guidelines could be created through involving all related
stakeholders and the sharing of best practices and knowledge in dealing with such situations.

3. Arrests and Repatriation
   a. Supporting the development of bilateral repatriation agreements between various countries within the BoB that deal specifically with migrant fishers.
   b. Developing cooperative programs at borders to decrease arrests and encourage quicker releases – for example, through establishing joint patrols or joint interrogative systems.
   c. Clarification of the roles and responsibilities of employers, including vessel owners, and governments in repatriation of arrested migrant fishers from vessels used in transboundary fishing.
   d. Promotion of the use of state run systems to warn small-scale vessels to mitigate against unintentional crossing of borders.

Areas for Further Research

Since some details about migrant fishers, trafficking, and transboundary fishing are poorly understood, we also suggest that the following areas require further research.

1. Facilitation of regional workshops of experts to examine feasibility and assign importance and responsibility for the aforementioned action items related to migrant fishers, trafficking, and transboundary fishing.
2. Quantitative in-depth studies of flows and numbers of migrant fishers, trafficking, and transboundary fishing vessels and arrests within the BoB.
3. Broad analysis of national and state legislations, policies, and management documents, including those related to natural resource and fisheries management, for inclusion or exclusion of migrant fishers and transboundary fishing issues in each of BoB member countries.
4. Comprehensive examination of the ratification, or lack thereof, of international agreements relating to migrant fishers, trafficking, and transboundary fishing by various countries within the Bay of Bengal and thorough examinations of the level of implementation by each nation state.
5. Studies on the relationship between the environment and migrant fishers and transboundary fishing pressure are lacking. Below are a few examples of research topics that deserve further attention:
   a. Research on how environmental change, degradation, and global climate change will impact on flows of migrants and fishing pressure within the Bay of Bengal, particularly as it relates to the long-term sustainability of fisheries resources and food security.
   b. Studies on the environmental impacts of the practices of migrant fishers – e.g., how the involvement of often young and inexperienced fishers changes fishing practices and impacts the environment.
   c. Study on the environmental pressure exerted by transboundary fishing in various locations within the BoB.
   d. Study on flows – numbers and directions - of transboundary fishing as it relates to environmental quality – e.g., examinations of whether fishers flow from countries
or areas with low environmental quality and standards towards countries or areas of higher environmental quality. The direction of these flows has implications from a social justice and environmental equity perspective as it might influence access to secure sources of fish for subsistence for small-scale fishers.

e. Research on spatial structure and flows of fisheries resources within the BoB region and how this determines and guides the flow of fishing vessels.

6. Qualitative research on the processes of recruitment of migrant fishers, including examinations of the politics of process, corruption, routes of smuggling, pathways to becoming a migrant, and locations where migrants originate and are destined.

7. Specific research needs to be done on the push and pull factors that lead to the migration of specifically fishers within the BoB.

8. Further research needs to be conducted on the specific processes associated with repatriation of fishers between the various countries of the BoB to search for best practices and lessons learned.

Concluding Remarks

Fishing is a challenging, important, and honourable profession. Migration of labour and movement of fishing vessels across boundaries are natural and inevitable parts of both small-scale and commercial fisheries. However, IUU fishing and trafficking need to be differentiated as unacceptable practices. Both the hiring of migrant labourers into the fishing industry and the flows of transboundary fishing vessels need oversight and management in order to ensure proper treatment of migrant fishers and the long term sustainability of marine resources in the Bay of Bengal. Furthermore, mechanisms need to be created to limit the number of fishers arrested in the EEZs of neighbouring countries and to facilitate efficient repatriation processes. Healthy labour and environmental management practices are essential for the potential contributions of fisheries - both through economic gain and to long-term food security - to countries within the Bay of Bengal Large Marine Ecosystem.
References


FAO (2010b). Best practices to support and improve the livelihoods of small-scale fisheries and aquaculture households. FAO.


MMC (2011). *Snap Shot Stories from Invisible Victims of Trafficking in Thailand.* Mahidol Migration Center (MMC), Nakorn Pathom.


## Appendices

### Appendix A - Additional Resources on Migratory and Transboundary Fishing Issues

#### Websites of Organizations

<table>
<thead>
<tr>
<th>Organization</th>
<th>Website(s)</th>
</tr>
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<tbody>
<tr>
<td>Bay of Bengal Large Marine Ecosystem (BOBLME)</td>
<td><a href="http://www.boblme.org">www.boblme.org</a></td>
</tr>
<tr>
<td>International Collective in Support of Fish-workers (ICSF)</td>
<td></td>
</tr>
<tr>
<td>Asian Research Centre for Migration (ARCM)</td>
<td><a href="http://www.arcthailand.com">www.arcthailand.com</a></td>
</tr>
<tr>
<td>Mahidol Migration Center (MMC)</td>
<td><a href="http://www.migrationcenter.mahidol.ac.th">www.migrationcenter.mahidol.ac.th</a></td>
</tr>
<tr>
<td>World Fish Centre (WFC)</td>
<td><a href="http://www.worldfishcenter.org">www.worldfishcenter.org</a></td>
</tr>
<tr>
<td>Alliance for the Release of Innocent Fishermen – India (ARIF)</td>
<td>(No organization website)</td>
</tr>
<tr>
<td>South East Asia Fisheries Development Centre (SEAFDEC)</td>
<td><a href="http://www.seafdec.org">www.seafdec.org</a></td>
</tr>
<tr>
<td>South Indian Federation of Fishermen Societies (SIFF)</td>
<td><a href="http://www.siffs.org">www.siffs.org</a></td>
</tr>
<tr>
<td>Bay of Bengal Programme (BOBP)</td>
<td><a href="http://www.bobpigo.org">www.bobpigo.org</a></td>
</tr>
<tr>
<td>Seafarer Union of Burma (SUB)</td>
<td>(No organization website)</td>
</tr>
<tr>
<td>The World Forum of Fisher People (WFFP)</td>
<td><a href="http://worldforumoffisherpeoples.blogspot.com/">http://worldforumoffisherpeoples.blogspot.com/</a></td>
</tr>
<tr>
<td>National Fisheries Solidarity Movement (NAFSO)</td>
<td>ttp://nafsoonline.blogspot.com/</td>
</tr>
<tr>
<td>International Transport Workers’ Federation (ITF)</td>
<td><a href="http://www.itfglobal.org">www.itfglobal.org</a></td>
</tr>
</tbody>
</table>

### Additional Resources


APEC. (2008). Case study of illegal, unreported, and unregulated (IUU) fishing off the east coast of Peninsular Malaysia. APEC, Singapore.

APFIC. (Eds.). (2009). Best practices for supporting and improving livelihoods of small scale fisheries and aquaculture households: Country case studies. FAO.


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FAO. (2007). Review of the state of the world marine capture fisheries management - Pacific Ocean. FAO.


FAO. (2010). Support to the immediate rehabilitation of farming, coastal fisheries and aquaculture livelihoods in the Cyclone Nargis-affected areas of Myanmar. FAO.


ICSF. (2001). Forging Unity: Coastal communities and the Indian Ocean's future. ICSF.

ILO. (2005). A global alliance against forced labor: Global report under the follow-up to the ILO Declaration on fundamental principles and rights at work. International Labor Organization.

Scoping Study on Migrant Fishers and Transboundary Fishing in the Bay of Bengal

- Lugten, G. (2010). The role of international fishery organizations and other bodies in the conservation and management of living aquatic resources. FAO, Rome.


UNODC. (2011). Estimating illicit financial flows resulting from drug trafficking and other transnational organized crimes. UNODC.

UNODC. (2011). Transnational organized crime in the fishing industry. UNODC.


Appendix B - News Items on Migratory and Transboundary Fishing Issues

The following news items were collected from open source newspapers, online newspapers, organizational news, and newspapers. Lists of news items are presented in order of publication, with the most recent item first. The news items are classified by the following topics; 1. Human Trafficking/Slavery, 2. Working Conditions of Migrant Fishers, 3. Arrests of Transboundary Fishers in International Waters, 4. Piracy, 5. Instruments and Organizations That Deal With Migrant Fisher and Transboundary Fishing Issues, 6. Causes of Migration, and 7. Impacts of Migration or Transboundary Fishing. The completed news compendium will be included as a separate document to be used as a reference for future work on these topics.

List of News Items


waters (Classification: 2, 3, 6, 7)


Appendix C – Interview Questionnaire Used With Key Informants

Introduction

☐ Self-Introduction
☐ Project Introduction – BOBLME and This Scoping Study
☐ Clarification of definitions – Migrant Fisher and Transboundary
☐ Interview Introduction and Overview

Research questions by topic

Flows of migrant fishers
1. What do you know about how small-scale migrant fishers and/or migrant fishing workers migrate between the countries of the Bay of Bengal?
2. Do you have any idea of what sorts of numbers are involved in the movements of small-scale migrant fishers or migrant fishing workers between countries?

Factors leading to the migration of fishers
3. What do you think are the main factors that cause small-scale migrant fishers and/or migrant fishing workers to migrate between the countries of the Bay of Bengal?

Outcomes of the migration of migrant fishers
4. What are the outcomes or impacts (both positive benefits and negative consequences) of migration for social, economic, or environmental conditions in host countries?

Working conditions of migrant fishers
5. What do you think are the main concerns regarding working conditions for migrant fishing workers?
6. How extensive, in your opinion, is the problem of human trafficking on fishing vessels in the Bay of Bengal?
7. Which countries do you think are the worst perpetrators of human trafficking violations on fishing vessels?

Arrests of trans-boundary vessels and crews
8. As far as you know, how does the treatment of small-scale and commercial vessels differ in terms of transgressions within the Exclusive Economic Zone of different countries in the Bay of Bengal?
9. As far as you know, how do different countries in the Bay of Bengal treat the migrant fishers after they have been captured?
10. What mechanisms are there for the origin country to help support and advocate for the release of arrested migrant fishers?

National and international organizations and instruments pertaining to migrant fishers issues
11. Are there any NGOs, IGOs, or research institutes that I may not know about or that you think are particularly noteworthy in terms of dealing with migrant fisher issues? Why are they noteworthy?
12. How well do you think international laws and regulations – and particularly those that have been ratified - are applied by countries in the Bay of Bengal?
13. Are there any countries that in your opinion have particularly forward thinking or exemplary laws or regulations related to migrant fishing issues? Or are there any specific policies or programs that you think are noteworthy?

Institutional and political issues relating to migrant fishers
14. What do you think are the main challenges for the successful application of bilateral and international agreements and national laws or regulations on trans-boundary fishing or treatment of migrant fishers?

Actions taken on migrant fishing issues
15. What mechanisms do you know of or suggestions do you have for combatting negative treatment of migrant fishing workers or the trafficking of migrant fishing workers?
16. Are you aware of any successful formal or informal arrangements at community or national levels that deal with trans-boundary fishing issues? Tell me about them.

Recommendations on migrant fishing issues
17. In your opinion, what are the most important policy or management recommendations at national or regional levels concerning migrant fishing issues?
18. What research do you think still needs to be done on migrant fishing issues?

Additional Questions and Information
☐ Numbers – One of the major challenges that we are having is tracking down numbers both for flows of migrant fishers between different countries in the Bay of Bengal and for numbers of fishers arrested in the different countries of the Bay of Bengal. Do you have any ideas about numbers? Do you have any useful sources? Where do you think this information could be found by a future research project?
☐ Additional Information – If you have any additional documents or information that you think would be pertinent to this study, please let me know. This can include news items, reports, books, academic articles, policy briefs, or websites.
## Appendix D – Additional Fishing Boundaries Within Nation States

**Table 8 - Zoning areas reserved for small-scale and commercial fisheries with respective classifications within Bay of Bengal countries**

(Source: Regional guideline for responsible fisheries in Southeast Asia - Responsible Fishing Operation, cited in SEAFDEC, 2008b; Adam, 2004; ICSF, 2011; Silverstre et al., 2003; UNOCHA, 2008)

<table>
<thead>
<tr>
<th>Countries</th>
<th>Small-scale/ Coastal Fisheries</th>
<th>Commercial /Industrial Fisheries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maldives</td>
<td>Coastal Fishers Zone, within 75 nm, limit for Maldivian fishers</td>
<td>75 nm – 200 nm</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>By areas: Trincomalee: Coast line to 2 nm can fish only with permission when security situation is stable 2 to 5 nm – traditional boats and fiberglass boats are allowed Jaffna: wind power/ power crafts are allowed to fish from 1.5 to 2 km of coastal belt (during 7 am – 4 pm) Manner: 3 – 5 km of the coast line is allowed to fish except some village areas Other areas: Fishing restriction is announced from time to time, depending on the security situation</td>
<td>By areas: Trincomalee: Multi day fishing trawlers are allowed beyond 12 nm Manner: 3 – 5 km of the coast line is allowed to fish except some village areas</td>
</tr>
<tr>
<td>India</td>
<td>By State: West Bengal: Up to 8 km open for non-mechanized vessels up to 9 m, 8 – 20 km for non-mechanized vessels above 9 m (Close season: 15 April – 31 May) Orissa: Up to 5 km open for traditional fishing (Close season: 15 April – 31 May) Andhra Pradesh: Up to 8 km open for traditional dishing (Close season: 15 April – 31 May)</td>
<td>By State: West Bengal: Mechanized up to 15m fish up to 20 km, Mechanized above 15 m – fish beyond 50 km (Close season: 15 April – 31 May) Orissa: Up to 15 m – beyond 5 km, above 15 m – beyond 10 km (Close season: 15 April – 31 May) Andhra Pradesh: Mechanized boat &lt; 15 m – beyond 8 km, mechanized boat &gt; 15 m or 25 GRT – beyond 23 km</td>
</tr>
<tr>
<td>Country</td>
<td>Regulations</td>
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<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>Puducherry</td>
<td>Up to 3 nm open for traditional fishing (Close season: 15 April – 29 May)</td>
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<tr>
<td>Tamil Nadu</td>
<td>Up to 3 nm open for traditional fishing (Close season: 15 April – 31 May on the East Coast)</td>
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<tr>
<td>Andaman and Nicobar</td>
<td>Up to 6 nm vessels fitted with 30 HP engines including traditional and non-mechanised boats. (Close season: 15 April – 31 May)</td>
<td></td>
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<tr>
<td>Bangladesh</td>
<td>From shore line to 18.5 m depth, reserve for traditional boat</td>
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<tr>
<td></td>
<td>From 18.5 to 40 m depth for industrial boat</td>
<td></td>
</tr>
<tr>
<td>Myanmar</td>
<td>Zone 1: Vessels of less than 30 ft or using less than 12 hp engine</td>
<td></td>
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<tr>
<td></td>
<td>Zone 2: Vessels more than 30 ft or using more than 12 hp engine</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>Zone 1: Vessels of less than 5 GRT</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>Zone 1: Small-scale fisheries using traditional fishing gears (i.e. other than trawls and purse seines) with vessels less than 10 GRT (but can also fish in other zones)</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>Zone 1: Outboard engines less than 10 hp or 5 GRT Trawls, purse seiners and gillnet are not allowed, except for purse seine with a head rope less than 120 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zone 2: Inbound engines less than 50 hp or 35 GRT Trawl and purse seine are not allowed, except purse seines with a head rope less than 300 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zone 3: Inbound engine less than 200 hp or 100 GRT. Purse seine is allowed, except those with a head rope less than 600 m</td>
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<tr>
<td></td>
<td>Zone 4: Open to all fishing vessels and fishing gear</td>
<td></td>
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</tbody>
</table>

*Table 9 - Fishing Zones of Countries in the Bay of Bengal*

(Source: Regional guideline for responsible fisheries in Southeast Asia - Responsible Fishing Operation, cited in SEAFDEC, 2008b)
<table>
<thead>
<tr>
<th>Countries</th>
<th>Fishing Zone 1</th>
<th>Fishing Zone 2</th>
<th>Fishing Zone 3</th>
<th>Fishing Zone 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myanmar</td>
<td>From shore line to 5 nm in the northern area, 10 nm in the southern area</td>
<td>From outer limit of first fishing zone to EEZ limit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>From shore line to 15 km</td>
<td>From 12 nm to EEZ limit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>From shore line to 5 nm</td>
<td>From 5 nm to 12 nm</td>
<td>From 12 nm to 30 nm</td>
<td>From 30 nm to EEZ limit</td>
</tr>
<tr>
<td>Indonesia</td>
<td>From shore line out to 4 nm</td>
<td>From the outer limit of first fishing zone to 12 nm from shore</td>
<td>From the outer limit of second fishing zone to EEZ limit</td>
<td></td>
</tr>
</tbody>
</table>