OIL SPILL IN THE SUNDARBANS

An alarming situation

MAYEN UDDIN TAZIM

N oil tanker carrying around 350,000 liters of furnace oil sank in a river near Mongla in the early morning of December 9. The Mrigmari-Nondabala-Andharmanik dolphin sanctuary is under threat due to oil spill. Fishes and other aquatic animals will die, and the mangrove forest will start dying within a short time. Wildlife experts and environmentalists are concerned as the spill will also cause contamination on the shorelines of canals and rivers, where the animals of the mangrove forest come to drink. The situation is of great concern to the nation as well as world community of environmental ecologists. As per the US Department of Commerce,

National Oceanic and Atmospheric Administration (NOAA), 2010, key points of oil toxicity are:

- Mangroves are highly susceptible to oil exposure; oil spills may kill them within a few weeks to several months;
- Lighter oils are more acutely toxic to mangroves than are heavier oils. Increased weathering generally lowers oil toxicity;
- Oil-impacted mangroves may suffer yellowed leaves, defoliation, and tree death. More subtle responses include branching of pneumatophores, germination failure, decreased canopy cover, increased rate of mutation, and increased sensitivity to other stresses; Response techniques that reduce oil
- contact with mangroves, such as chemical dispersants, reduce the resultant toxicity as well. Tradeoffs include potential increased toxicity in adjacent communities, and increased penetration of dispersed oil to mangrove sediments;
- The amount of oil reaching the mangroves and the length of time spilled oil remains near the mangroves are key variables in determining the severity of the effect;
- Mangrove-associated invertebrates and plants recover more quickly from oiling than do the mangroves themselves, because of the longer time for mangroves to reach maturity.

The reports also indicate the following key points for mangrove recovery and restoration: Mangroves can take more than 30 years

- to recover from severe oil spill impacts; Adequate tidal exchange is critical to restoration success;
- Mangrove seedling and tree density and health are the only widely measured recovery indicators at many spills; Restoration that works with natural recovery processes to reestablish man-

grove habitat is the best course of action over the long term.

Mangrove ecosystems around the world suffer degradation from logging, coastal development, spraying of herbicides, conversion to fish ponds, and from oil spills and other pollutants. The continued loss of mangrove forests worldwide underscores the importance of projects focusing on restoration of forest structure and functions.

Since mangroves take 20-30+ years to recover from severe oil spill impacts, restoration projects are needed to speed up the recovery process. Adequate tidal exchange is most critical to restoration success. Mangrove restoration projects in Florida and the Caribbean often involve reestablishing natural hydrologic and tidal regimes, planting mangrove propagules, and/or planting marsh plants to provide a "nursery" habitat that can be colonised more easily by mangrove trees than bare areas. An oil spill alone rarely changes the basic geophysical appearance and shape of the mangrove ecosystem; this is caused by hurricanes, clear-cutting, and development.

As with other marsh ecosystems adversely impacted by oil spills, we have learned valuable lessons from past mangrove restoration projects, including those that failed. Restoration projects need a clear goal from the outset that is based on understanding the mangrove ecosystem's natural ability to recover. The most effective role for restoration projects is to correct or assist when natural recruitment mechanisms are impeded or no longer functioning.

Going through the report of US Department of Commerce, (NOAA), 2010, it is assumed that restoration after an oil spill might be easier than after an event that substantially changed tidal elevation or hydrology or decimated mangrove trees. Therefore, we should not waste time by creating unnecessary controversy but come up with ways to solve the problem.

The government has already formed an investigation committee which will submit its report within a short time with recommendations and causes behind the incident. Meanwhile, the government can sit with ecologists/environmentalists, wildlife experts, civil society and the international community to find out a way to overcome the devastating situation so that the mangrove forest can be saved. The government also needs to involve internationally reputed oil, gas and energy companies that have the proven capacity for handling and cleaning the spills from rivers.

The writer is Member Transparency International Bangladesh (TIB) and also former Advisor, UNDP.

> OTTO REFUSED THE MEAL YOU MADE FOR HIM

INDIA, CHINA AND THE US A strategic triangle in the Bay of Bengal

ATAUR RAHMAN

HIS paper brings out the evolving complexity of relations among China, India and the United States. It highlights how a number strategic initiatives undertaken by China, like investing in a deep seaport in Bangladesh, an oil-pipeline from Chittagong to Kunming, BCIM Economic Corridor, and Maritime Silk Road are yet to be realised in the contesting and divergent perceptions and interests of the three major maritime powers. The seven littoral countries of the Bay-Bangladesh, India, Myanmar, Sri Lanka, Thailand, Malaysia and Indonesia—have an outlet through this largest bay in the world. It is thus attracting renewed attention catalysed by its strategic links, resource endowments and overall geopolitical significance. Recently, focus has been more on bridging infrastructure and broader connectivity gaps created by rapid development and the increasing volume of

goods, services, people, and capital flows

between economies of the bay region

Security Scenario US interests

Security relations in and around the Bay region are perceived by the US to have significant implications for its new "Asia Pivot" strategy. In the past several years, the US has developed new interests in the Bay of Bengal, and is in competition with India and China driven by a number of geo-strategic, economic and security considerations. The US expects that Bangladesh and other states adjoined by the Bay in the Indian Ocean should be partners in its security and economic cooperation framework. The US hopes that the Bay states or 'community' should not relapse into chaotic unstable conditions, and that the US security assistance programme should aim at supporting them to "better control their borders and coastline and better deal with natural disasters and transnational security threats."

India's ambitions

The rising importance of the Bay of Bengal in recent years is also linked to growing asser-



The Bay of Bengal is no longer a 'backwater' but is increasingly becoming a strategic hub connecting the Indian and Pacific Oceans, Japan and China included

tion of India as a naval power, and its stepped-up activities in trade relations, investment opportunities and establishing increasing connectivity with littoral states. India's ambitious modernisation of its navy with increasing bilateral and multilateral naval ties in the Bay of Bengal are driven partly in response to China and partly as a power rising on the world stage. Indian Maritime Doctrine projects a depletion of world energy resources that will make the prospect of outside military involvement in India's geographic environs even more prominent than now. India's ambitious ventures along the eastern part of the Bay of Bengal are underway. They include construction of a large new terminal beside the old harbour in Sittwe (Akyab) in Myanmar to open its own landlocked and impoverished north-eastern states, reduce costs of freight, and provide

by Mort Walker

SARGE WILL EAT ANYTHING!

easy movement of cargo.

China's goals

China looks at the Bay of Bengal as an important maritime space for its future connectivity, trade and energy link to the Indian Ocean security landscape. China's ambition is also propelled by a constellation of strategic, commercial and security considerations. The paramount concern animating Chinese interests in the Bay and Indian Ocean is energy security, an imperative that has been widely discussed and debated in media and academic studies. China's use of naval power to preserve its vital interests in the Indian Ocean is already being perceived by other powers as causing a security imbalance in the region. It is thus being factored in a major way in the strategic calculi of India, US and others. China's current strategy in the Indian Ocean is to make its presence felt through building a credible naval strength. Submarines that at present give China a 'shortrun relief give it the 'capability' of deploying its naval forces in the Indian Ocean by 2020-2025. Some regional countries are seeking to augment their naval sea denial capabili-

ties either through acquiring new submarines (Bangladesh and Malaysia) or by upgrading

China. The BCIM initiative is important in this context for China's connectivity plan that proposed a corridor that could run from Kunming (China) to Kolkata (India) spanning eastern China and part of India via Mandalay (Myanmar) through Chittagong (Bangladesh).

In September 2014, Chinese President Xi Jinping announced his plan of a New Silk Road comprising a land-based belt and a maritime route, which has been referred to as a Chinese national strategy. The land-based Silk Road starts from the ancient capital city of Xi'an, stretching west through Lanzhou and Urumqi before running southwest across Central Asia, the Middle East and Europe. The sea-based Maritime Silk Road goes through Guangdong and the southernmost Chinese province of Hainan, an island, en route to the Malacca Strait. Once complete, the Silk Roads will bring "new opportunities and a new future for China and every country along the road that it is seeking to develop." In fact, China has been trying to connect its underdeveloped western provinces to the world economy by gaining access to the Bay of Bengal.

Future outlook

The Bay of Bengal is no longer a 'backwater'



the existing capabilities (Pakistan, Indonesia) from China.

China's strategic initiatives

Being the world's second largest economy and having very high dependence on imported oil -- all of which passes through the strategic channels located in the Indian Ocean -- China needs to have close ties with littoral states in the Bay. It is no wonder China is gradually but purposefully expanding its economic and political influence among states in the region. China is thus inevitably drawn into competing with India and the US for its footprint in the Bay and Indian Ocean region.

Infrastructure and connectivity

China's new oil and gas pipelines from a new port-terminal near Sittwe in Myanmar through Mandalay to Ruili on the border and beyond to Kunming, the capital of Yunnan province, contribute to greater connectivity. China has already developed extensive links with Myanmar, and completion of its new pipeline will reduce its need to ship all its oil from Africa and the Middle East through the choke points of Singapore and South China Sea. China has pledged to build an underground tunnel in Chittagong and a deep-sea port at Sonadia Island, off the coast of Cox's Bazar, and expressed interest in establishing a transport link connecting Bangladesh to Kunming in

but is increasingly becoming a strategic hub connecting the Indian and Pacific Oceans, Japan and China included. As China transforms the economic and political geography of the Bay of Bengal, India is yet to respond proactively and positively to match its rhetoric on trans-border connectivity with much needed political will and administrative competence. India's talk on trans-national corridors remains unrealised. India's expansive goals for rail and road connectivity in the Northeast, for example, remain largely on paper. India needs to put in place effective mechanisms for the timely implementation of key infrastructure projects within its frontiers and across them. China's spectacular success in developing trans-border connectivity is only an extension of its effective infrastructure development in its border regions. India dithered, while China deepened trans-frontier economic integration with most states of the BIMSTEC. A cooperative regional mechanism for good order in the Bay is needed at this juncture, which will shape a new architecture of regional maritime cooperation so that littoral states are able pursue their maritime interests and develop energy, infrastructure and resources in a peaceful manner, and in accord with international law and practice.

The writer is President of Bangladesh Political Science Association & Chairman, Initiative for Strategic & Maritime

A leader is one who knows the way, goes the way, and shows the way.

John C. Maxwell

CROSSWORD by Thomas Joseph

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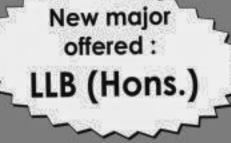
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