

**CONFLICT MANAGEMENT AND ENVIRONMENTAL COOPERATION IN  
THE SOUTH CHINA SEA**

**By**

Vice Admiral John C DeSilva, PVSM, AVSM. (Retd)

**At**

**THE 8th SCIENCE COUNCIL OF ASIA CONFERENCE  
JOINT PROJECT: “SECURITY OF OCEAN IN ASIA”**

29 May 2008

Qingdao, China

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**Introduction**

The South China Sea has some of the largest, rarest and biologically richest marine ecosystems and resources in the world. It has an area of some 3.3 million square km, and depths range from the shallowest coastal fringe to 5377 m in the Manila Trench. It is also studded with numerous islets, atolls and reefs many of which are just awash at low tide. It is mainly confined within the Tropic of Cancer and, largely surrounded by land. Countries that have a major influence on and claims to the sea include China, Malaysia, the Philippines, Vietnam, Thailand, Indonesia, Brunei, Kampuchea, Singapore and Taiwan. The coastal fringes of the South China Sea are home to about 300 million people that have had some of the fastest developing and most vibrant economies on the globe. Consequently, over-exploitation of resources and pollution, are anticipated to be huge.

**Background**

The South China Sea is probably the world's most diverse shallow-water marine area with the richest biodiversity in the world, the largest varieties of mangroves, sea grasses, fish species, reef building corals and the most abundant fishing areas. There are more people involved in fishing in the South China Sea than in any other part of the World. However, this area is also alive to all the problems that can exist. It is home to the heaviest shipping traffic and also to the largest number of piracy incidents. There is plenty of over fishing, destructive dynamite fishing and heavy destruction of coral reefs and mangrove forests. Although below seabed hydrocarbons may not be that high, the on surface amounts being transported only to China, Japan and Republic of Korea amount to about 644 million tons in 2005. An accident in the shipping lanes can cause a major oil spill disaster affecting a number of countries surrounding the enclosed sea area.

With the present unipolar system, the balance and control exercised by the US and the erstwhile USSR, has fizzled out, and countries have emerged as per their economic and military strength to fill up the vacuum in every region. With the new dispensations of UNCLOS III, the responsibilities of coastal states have increased tremendously, especially since UNCLOS III has delegated sovereign right and jurisdiction of 40% of the ocean space to coastal states. This was a sudden jump from the earlier right of just 3 nautical miles of coastal waters. Whereas the aim of UNCLOS III was to ensure better control and care of the oceans, in actual fact, the new responsibility without accountability is probably a greater cause of instability as many states do not have the resources, the money or the trained manpower to ensure compliance or to even man the various billets. .

There are so many aspects and facets of the ocean derived from the resources, uses and benefits. The resources vary from fish, mangroves, coral reefs, sea grasses, hydrocarbons, minerals, chemicals and medicines. The uses include shipping, transportation, energy and cooling systems with the associated ports, harbours and coastal industries. The benefits include leisure, rest and recreation, weather systems and the associated leisure industry. Each of the aspects of the ocean has its own optimal governance organization. However, the ocean and its uses are so vast that every state has separate departments looking after specific aspects and regulatory forces to protect the seas. Typically some of the separate departments would be Fisheries, Shipping, Ports and Harbours, Tourism, Oil and Gas, Minerals and Chemicals, Hydrography, Ocean Development, Marine Police, Coast Guard, Navy , Meteorology, Research And Development, etc. Each department tends to work for the best results in its respective department but in a watertight compartment, with little regard to the requirement of other departments. Moreover, these and other non ocean departments may impinge on the well being of the ocean by polluting, rampant unsustainable development and industrialization.

### **Securing the Oceans**

Securing the Oceans is a concept declared vide the Tokyo Declaration for Securing the Oceans 2004, wherein all aspects of ocean security are considered as a whole and in totality. This concept envisages that all aspects of ocean management and security of the Ocean from military security to transportation, food and environment security, as also safety of life, the peaceful use of the oceans, resource extraction and conservation of the ecology should be addressed in an integrated manner. The long-term vision for our Oceans is to have oceans and coasts, which are safe, clean, thriving and sustainably managed, where Peace prevails and people can fulfil their various desires as human beings. The ocean must continue to contribute to the economy, developing sustainably and preserving a high level of biodiversity and critical natural habitats.

### **Intra-national Conflict**

Environmental factors have been increasingly implicated in analyses of development, peace and conflict situations. There is mounting concern over the extent to which environmental stress is threatening livelihoods, health and the fulfilment of basic needs; and harming the sustainability and resilience of fragile ecosystems. Environmental degradation is intensifying conflict and competition over natural resources, aggravating social tensions, and in certain volatile situations, provoking or escalating violence and conflict

Due to the varying requirements of different agencies, conflicts are bound to arise at the local level. This is likely to be aggravated if the environmental education and training levels are inadequate, and if there is no strong coordination locally. Further poverty and backwardness in development is another source of conflict. Each Agency/Department tries to forward its own goals to achieve progress for its department. However the saying, “One Man’s Food is Another Man’s Poison” is so apt here, because in trying to improve its own department, it may be adversely affecting another department. This clash of requirements is the cause of conflict, which cannot be readily resolved unless all departments understand the entire gamut

of the ocean, how it supports life, and how the deterioration of one part can affect the whole. A good analogy is how one sick organ in the body is capable of affecting the whole body. The antagonistic relation between concepts of “environment” and “development” are manifest in the below mentioned examples of conflict within the internal organization of a state.

### **Examples of Intra-national Conflict**

a) Between Fishers and the Government when fishing is restricted, or when dynamite fishing is banned or when marine parks are declared, or between traditional and mechanised Fishers when fish stocks are depleted.

b) Between the Tourist/Hotel lobby and Fishers when beaches and sea areas are restricted due to tourism requirements or when ethnic people are denied their rights of use of beaches.

c) Between Industry and the Government when development is restricted or when EIA restricts Industry or when the CRZ (Coastal Regulatory Zone) restricts development near beaches /coastline.

d) Between Environmentalists and the Government when Ports, Harbours and Breakwaters are built/developed.

e) Between the Tourism department and the Government when boats and scuba divers, etc are restricted in coral reef areas.

f) Between Aquaculture workers and Environmentalists when mangrove cutting and aquaculture facilities are restricted.

g) Between Oil and Gas developers and Fishers due to restrictions on fishing, and pollution caused during drilling and loading operations, etc.

### **International Conflict**

At the international level, since the environment and living marine resources do not adhere to man made boundaries, they together with pollution freely cross over from one national maritime zone to another, affecting, influencing or ruining the protective/preventive action taken by another state. Examples of causes of international conflict are:-

a) Ships discharging oil, bilges, ballast water, etc causing pollution, affecting marine life and ruining beaches, etc. Similarly, land based pollution, unchecked in one state, flowing freely into the territorial sea/EEZ of another state

b) The large increase in shipping increases the risk of accidents, especially in narrow straits and international waterways, and hence more organization and expense on separation schemes and patrolling, etc.

c) Similarly, large increase in shipping in restricted waters attracts pirates creating a law and order problem.

d) Straddling fish stocks conserved by one state being fished across the boundaries by another state. Also unilateral overfishing in one state attracts stocks across the national maritime zones.

e) The island groups of the South China Sea are all disputed and sovereignty is claimed over them by a number of countries. Conflicts have in recent decades arisen over them because of perceived national rights and the expectation of oil and gas finds.

Some of the non military factors affecting security are the impact of demographic and environmental factors on stability and security, the changing nature

of the energy market, defence economics (including shipping and ocean resources), as well as poverty and discontentment with living conditions. Thus security is threatened by scarce resources caused by over extraction and deterioration of the environment due to pollution, greenhouse gases and global warming, destruction of wetlands and unsustainable development of coastal areas, due to the booming economies of some countries. There has always been a conflict between development and environment protection. Also globalization of the 21<sup>st</sup> century economy inter alia involves largely maritime trade and transportation and its security.

### **Conflict management**

Although all marine resources are important and need to be protected and conserved, fisheries are more visible and touch the everyday lives of more coastal people than other resources. Hence any action by other ocean users and stake holders, which may affect the fishers and fisheries, is a main source of conflict. Coastal zones can best be protected under **integrated coastal area management** schemes which aim at optimizing the sustainable utilization of the highly productive environment. Fisheries and aquaculture, although often considered secondary in economic value compared to other stakeholders, need to receive proper attention. At regional and sub-regional levels, river and lake basin management schemes are needed, giving proper attention to all stakeholders, including fisheries, in the allocation of water resources and ensuring adequate water quality for the different legitimate uses of the systems. It is vital that governments empower fisheries and aquaculture authorities to promote actively the interests of fisheries and aquaculture as well as adequately participate in resource management decision-making.

The concept of Integrated Coastal Area Management has been included in UNCED's Agenda 21, and aims at increasing the compatibility and overall sustainability of competing resources use in coastal areas. FAO developed specific guidelines for Integrated Coastal Fisheries Management (ICFM) to assist the fishery sector in dealing with this growing concern. However, the key corrective actions need to be taken by the coastal and inland industries that are responsible for the coastal pollution and degradation. In that respect, UNEP is implementing a Global Plan of Action for the Protection of the Marine Environment from Land-based Activities. Further actions taken to protect the marine environment include the 1972 London Convention with a purpose to control the disposal of land-based waste in the sea, particularly that which is detrimental to marine resources. IMO Resolution A.672 (16) adopted on 19 October 1989, prescribes that any installations or structures that are abandoned or disused shall be removed to ensure safety of navigation and to prevent any potential effect on the marine environment. .

In 2001 the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) concluded that, at global level, the most serious sources of environmental problems associated with land-based activities are sewage, physical alteration and destruction of habitat, nutrients, and sediment mobilization. Litter, heavy metals, hydrocarbons and radionuclides, although often meriting a high priority at local levels, are not considered as priorities at the global level. Persistent organic pollutants (POPs) such as pesticides, although currently receiving high attention at international level, may well divert attention from the afore mentioned

anthropogenic causes of more serious and widespread damage to the marine environment.

Degradation of aquatic habitats in many areas is on the increase, resulting from expansion of industries, mining, agriculture and from deforestation... Unlike capture fisheries, aquaculture at least offers opportunities to adapt farming systems and management practices to optimize aquatic food production under sometimes sub-optimal environmental conditions.

Dialogue, discussions and inter-departmental interactions are important techniques to avoid conflict. The essential requirement is to have a coordinating agency at the national level to oversee all aspects of the marine environment, to foresee conflict situations and defuse them, and to act as a neutral umpire to sort out difficult situations. At the international level there should be a regional watchdog organization or a "Think Tank" which should monitor the activities of the countries in the region, and take precautionary/preemptive action to advise governments in time to defuse potential hotspots. Here again dialogue and regular interactions between governments is essential. But the most important way to manage conflict is to ensure cooperation both internally within a country, and externally at the regional level at the international level.

### **Cooperation**

Protection and preservation of the marine resources need professionalism, expertise and capability. They also require a high level of commitment and good governance. But as seen in the preceding paragraphs, in order to avoid conflicts cooperation is required at the local level between the various organizations and agencies within a country. At the international level regional approaches in cooperation are recommended. Due to the large variation in sizes of countries, GDPs, political ideologies, suspicions and fears, in the region, cooperation in political and economic matters is poor and consequently environmental cooperation suffers. Sometimes cooperation fails due to lack of resources, awareness and political/social compulsions.

In the first instance cooperation has to be built up at the local level. All personnel involved in the various fields concerning the ocean should preferably train in a common training institution on environmental aspects of the ocean. The initial part of this course should deepen understanding of the relationship between environmental insecurity and conflict, including debate over the linkages between environmental stress, competition for resources and violent conflict. It is most important for all concerned personnel to realize the value of the ocean, how all life depends on it, and the dangers due to its neglect. Sadly, the writing on the wall is not seen until too late, but everyone cooperates once a disaster has taken place as seen in the recent tragic natural disasters of the earthquake here in China and the killer cyclone in Myanmar. There are not enough training institutions in each country. The more developed countries should offer neighbouring countries seats in their institutions, or help set up such institutions in those countries. Of course there is something to be said about training together which itself is a good cooperational gambit tactic.

Regional cooperation is necessary and needs to be strengthened because the environment continues to degrade despite actions taken to date, as also for the legal obligations under the Multilateral Environment Agreements. Regional cooperation is also required to solve transboundary problems, and to prevent waste of scarce financial resources by preventing duplication of actions, and to ensure coordinated and effective approaches.

### **Hurdles to Regional Cooperation**

Although there is an urgent requirement to further inter-governmental regional cooperation, there are some hurdles in the way of strengthening existing mechanisms or in forging new mechanisms for regional cooperation. These hurdles include:-

- a) lack of a regional and global perspective.
- b) lack of understanding of the root causes of marine environmental problems.
- c) lack of consideration of long-term impacts.
- d) financial constraints.
- e) inability to predict the impacts of future threats.
- f) lack of a regional political consensus.
- g) lack of a regional network and mechanism for action.
- h) inability to recognise regional expertise among some high-level decision-makers
- i) lack of understanding of the benefits of regional cooperation

### **Steps to Regional Cooperation**

The first step to Regional Cooperation is to draw up a Framework Agreement which will contain elements of the general principles and policies, of the special programmes and sub-regional and bi-lateral agreements. It should be functional and effective in resolving environmental problems and fostering strong regional cooperation and coordination of appropriate cost effective actions. The framework instrument must include, among others: -

- a) the use of sound science incorporated into policy making processes to foster ecological and economic soundness.
- b) laws, policies and actions that are effective in terms of ecological improvements. Ecological ineffectiveness also results in waste of scarce financial resources. Ecologically effective actions must be based on sound science and not on perceptions or political considerations.
- c) cost effective actions.
- d) economic valuation of environmental goods and services as a tool for sound development planning.
- e) decision-making after gathering all relevant knowledge/information for the purpose. This improves the effectiveness of decisions and it also improves cooperation.
- f) promoting and building a base on consensual knowledge. This is particularly true where progress on regional cooperation is stalled or slowed due to complexities or uncertainty surrounding the issue.
- g) good communication both vertical and horizontal for effective cooperation.
- h) periodic assessment and review and revision of actions as required to ensure they are effective. Where assessments indicate problems, they need to be revised.
- i) flexible approach that allows for the inclusion of new information.

At the international level, ways and means must be found to ensure the success of cooperational initiatives. UNCLOS III along with UNCED's Agenda 21, promulgated in 1994 has laid down a legal framework for ocean governance, cooperation and sustainable development but does not necessarily provide a concrete framework on how states are to coordinate and cooperate in securing a legal order on the oceans, for promoting peaceful use, conservation and protection of the environment. With the enhancement of spatial responsibility to coastal states, the jealous guarding of sovereignty was not foreseen, and is now one of the areas of contention. The greatest lacunae are in the field of environmental governance, which call for sharing expertise, training of officials and setting up of training establishments in marine environment and sustainable development. It must be remembered that the best environment management can only be achieved when all countries work together.

### **Areas for Cooperation**

The main areas of cooperation are data and information management and exchange, along with sharing of experience and activities. These include:-

- a) Establishment and management of a regional database
- b) To identify and collect data and information in the areas of marine and coastal legislation, regulation and institutional arrangements, scientific and technical data and information, including monitoring and economic data. Also on experts and institutions in the region and the experience of each country, including pilot projects that can serve as models.
- c) Exchange of data, information and experience
- d) Regional prioritisation of environmental issues. The coastal States should cooperate on a sub-regional or regional basis to identify and prioritize regional and transboundary environmental issues.
- e) Public Awareness and Education. Public awareness should be raised at the regional, national, and local community levels, especially for those living along the coastlines, on ecological unity of the South China Sea, economic and environmental benefits possibly arising from the proper exploitation, management and conservation of marine resources, and the adverse impacts arising from the degradation of the ecosystems and hence the necessity of regional cooperation.

In order to aid good governance some specific cooperational measures are:-

- a) establishing information exchange mechanisms
- b) enforcing fishing agreements
- c) establishing chains of marine reserves
- d) protection of endangered species
- e) joint patrolling and confidence building measures (CBMs) and
- f) training of manpower on environment/conservation management.

Despite the sovereignty requirements, some countries have done well in cooperation e.g. coordinated patrols in the Straits of Malacca. The UN Environment Programme (UNEP) has successfully initiated a Regional Seas programme encompassing 13 regional seas worldwide including COBSEA in the East Asian region and NOWPAP in the NW Pacific region. But the most successful regional cooperation programme by far has been the PEMSEAS (Partnership in Environment Management for Seas of East Asia) implemented by the UNDP, IMO and GEF with 12 participating countries supporting the prevention, control and management of

marine pollution. It has made good progress on the Integrated Coastal Management approach and SDS-SEA strategy with plans to raise its mission to a regional cooperative organisation. Both these programmes are recommended in a cooperational set up.

### **Conclusion**

The South China Sea has the richest biodiversity and the most thickly populated littoral. With the industrialisation and the booming economies of the surrounding states, degradation of the marine environment and destruction of ocean and coastal ecosystems has increased. Conflict situations between various users and other stakeholders of the ocean locally and between states at the regional level have also increased. The solution is to ensure good cooperation through proper awareness and training of all users, stakeholders and administrators with a coordinating authority to ensure protection and preservation of the environment. Similarly, at the regional level, marine environment cooperation must be ensured through good awareness and training. The guidelines of UNCLOS III, Agenda 21 and WSSD must be followed without overly due stress on sovereignty, but rather on the goals of saving the oceans for posterity, so that humankind can live in peace and harmony with Nature, with the oceans fully secured.

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