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# **ENVIRONMENT AND SECURITY IN THE SOUTH CHINA SEA REGION:**

**THE ROLE OF EXPERTS, NON-GOVERNMENTAL ACTORS AND  
GOVERNMENTS IN REGIME BUILDING PROCESSES**



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## **1.0 Introduction**

The semi-enclosed South China Sea<sup>1</sup> lies between the Pacific and the Indian Ocean and is larger geographically than the Mediterranean. Ten countries surround it – Brunei Darussalam, Cambodia, China and Taiwan, Indonesia, Malaysia, the Philippines, Singapore, Taiwan, Thailand and Vietnam – and it contains some of the world's busiest international sealanes, with two of the busiest ports in the world – Singapore and Hong Kong (Coulter 1996:373).

The South China Sea is the maritime heart of a region binding southern China to Southeast Asia. The sea is of great importance economically, politically and environmentally to surrounding nations: China and Taiwan, the Philippines, Vietnam, Brunei Darussalam, Malaysia, Indonesia, Cambodia, Singapore and Thailand. The sea is known to most policy-analysts as an area where China and Taiwan stand against their Southeast Asian neighbours in an unresolved sovereignty conflict over the Spratly islands. The increased tensions in the South China Sea stem from the provision in the 1982 United Nations Convention on the Law of the Sea III (UNCLOS) that all littoral states can demand an Exclusive Economic Zone (EEZ) of 200 nautical miles measured from the coastline. This provision has caused a number of disputes over maritime delimitation; the Norwegian-Russian dispute in the Barents Sea is a typical example. In the area around the Spratlys six of seven states, depending on whether Taiwan is considered a state, have made overlapping claims to ocean space. And, since the sea also includes four island groups – the Paracels, Pratas, the Macclesfield Bank and Scarborough Reef – the territorial disputes have become extremely complex. Some of the states have even used arms to prevent other nations from occupying islands or reefs. The last time was in 1988 when a Vietnamese attempt to stop the Chinese occupation forces led to the sinking of Vietnamese ships and drowning of more than 70 men.

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<sup>1</sup> Definition of enclosed or semi-enclosed sea: "A gulf, basin or sea surrounded by two or more States and connected to another sea or the ocean by a narrow outlet or consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more coastal States," Article 122 of the 1982 U.N. Convention on the Law of the Sea (UNCLOS).

However, the South China Sea is not just a potential scene of military conflict, it is also a rich maritime environment. The sea produces fish, seagrass and other living and non-living resources for one of the most populous regions in the world. The total population of the entire Asia Pacific region is close to 2 billion people, and embraces seven of the world's 14 largest cities (Dupont 1998:19). In the Southeast Asian region alone more than 70 % of the population live in coastal areas, and their dependency on the sea for resources and a means of transportation is high. Fisheries in the Southeast Asian region represented 23 % of the total catch in Asia, and about 10 % of the total world catch in 1992 (Soegiarto 1994:1-2). At the same time, high economic growth is overshadowing environmental problems like overfishing, destructive fishing methods, habitat devastation and marine pollution.

The environmental security aspect is therefore pertinent.<sup>2</sup> High economic growth, often coupled with depletion of natural resources, intensifies conflicts like the one in the South China Sea. The fact that the area is rich in marine resources, and potentially rich in oil and gas, are some of the reasons why the claimants are aggressive and stubborn in their claims and political rhetoric (Magno 1997).

From the issues at stake in the this complex conflict I have chosen to focus on threats to the environment, and how scientific understanding and involvement may function as a confidence building mechanism through diffusion and exchange of information on marine resources. The interaction of scientists, diplomats and politicians, and the degree to which the claimant states allow science to influence their political choices are the main themes in this thesis. The approach is suggested as an alternative to political realist thinking about the conflict.

The research question that will guide this study is: *To what degree have maritime scientists managed to promote regional environmental co-operation in the South China Sea region?*

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<sup>2</sup> The environmental security concept refers to a field of research where the relationship between security issues and environmental issues is in focus. For a thorough discussion of the environmental security concept see Karin Dokken (1997:69-104).

## 1.1 Science and the environment

The study will look into the extent to which maritime experts and organisations working with maritime environmental issues can facilitate the establishment of an ocean management regime in the South China Sea region. An international convention might improve the relationship between ASEAN and non-ASEAN countries, and it could open for the engagement of international organisations and a build-up of environmental protection and management capacity at both regional and national levels.

The environment in Asia is under great stress due to economic growth and demographic expansion, and environmental challenges are numerous both on land and at sea: deforestation, deteriorating water quality, air and sea pollution, overfishing, depletion of coral reefs and mangroves (Brookfield et al.:1993). Air, land and sea suffer from the resulting side-effects of economic and population growth. However, the entire scope of environmental problems will not be dealt with in detail since the focus here is on the regional, multilateral level, i.e. the South China Sea and the littoral states.

Environmental issues have been discussed at the national political level for a long time in Asia, but interstate co-operation on environmental issues around the South China Sea is rather new. Nevertheless, institutions dealing with the regional maritime situation are flourishing. Some are supported and organised under the Association of SouthEast Asian Nations (ASEAN) umbrella; others are organisations within the United Nations system like the UN Environmental Program (UNEP), the UN Development Program (UNDP), UN Economical and Social Commission for Asia-Pacific. Non-governmental organisations like the International Centre for Living Aquatic Resources Management (ICLARM, Manila) and the Southeast Asian Programme in Ocean Law, Policy and Management (SEAPOL) are also involved (Valencia 1996:158-159). At the *high politics*<sup>3</sup> end of the political spectrum are

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<sup>3</sup> International affairs have traditionally been divided into a hierarchy of *high* and *low* politics. *High politics* is politics that concerns vital national interests, the traditional interpretation is that this includes military security, state power and diplomacy, whereas *low politics* is traditionally defined as

institutions like the ASEAN Regional Forum (ARF) and its Council for Security Cooperation in the Asia Pacific (CSCAP).

My intention is to first describe how scientists interact at the regional level. Then, I will look into regime building processes connected to the management of environmental problems, and, finally I will try to discuss the likelihood that the regional scientific community will obtain political enough influence to make environmental questions take precedence in regional politics. In the final part of the analysis I will describe factors that are preventing scientists from influencing decision-makers, including such that impede regional environmental co-operation. Some of these factors also impede any progress on resolving the central question of who owns the Spratlys.

### **1.2 Regime building in the South China Sea: the Indonesian Sponsored Workshops and the UNEP initiative**

I have chosen to focus on two initiatives related to the South China Sea: first, a set of informal, multilateral meetings that, under the leadership of Ambassador Hasjim Djalal and Prof. Ian Townsend-Gault, have taken up issues relevant to the South China Sea every year since 1990; second, an attempt by the littoral countries of the region, in co-operation with the United Nations Environmental Programme (UNEP), to establish an environmental action plan for the South China Sea.

A multilateral informal political process called "Managing Potential Conflicts in the South China Sea"<sup>4</sup> (hereafter: South China Sea Workshops – SCSW) has involved workshops in different Indonesian provinces, with funding from Canada and the participant countries, since 1990. Workshops were conceived and have been led by

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economic and social affairs. Today, the distinction between the two concepts is much less evident, and the two categories can be understood as ideal types used to differentiate between vital state interests and not vital state interests. (Keohane and Nye 1977; Dokken 1997:82-84).

<sup>4</sup> Information on the workshops is taken from the website of the South China Sea Informal Working Group Project at the Centre for Asian Legal Studies, University of British Columbia, Canada: <http://faculty.law.ubc.ca/scs/>

two experts on law of the sea questions: Ambassador Hasjim Djalal (Jakarta)<sup>5</sup> and Prof. Ian Townsend-Gault (Vancouver)<sup>6</sup>.

Djalal, with the blessing of the Indonesia foreign ministry, took the initiative to host informal discussions with the aim of improving the diplomatic climate in the region after the confrontation mentioned above between China and Vietnam in the Spratly area in 1988. The violent clash between China and Vietnam was one example of how the conflict in the South China Sea was threatening the security environment of the entire region. The situation was regarded as dangerous by all claimants/littoral states, but since formal talks were out of the question, informal talks remained the only way of bringing the parties closer to each other.

The main idea behind the initiative was to gather the parties for discussions on how to manage the sea with reference to the provisions of the United Nations Convention on the Law of the Sea (UNCLOS) of 1982. While carefully avoiding the inflammatory questions of sovereignty and jurisdiction, the workshops concentrated on other subjects where the necessity for co-operation was vital; for example in questions of environmental quality of the sea and the sharing of knowledge.

As a part of the workshop process, technical working groups on legal matters, the environment, research, etc. were established. Two of the four technical working groups – on Marine Scientific Research and Marine Environmental Protection (TWG MSR/MEP) – are of particular interest in our context. These two working groups have given birth to several projects (on biodiversity, sea-level rise monitoring, marine scientific research information and data exchange) that are about to be initiated in

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<sup>5</sup> Dr. Hasjim Djalal is Indonesian ambassador at large, an expert on ocean affairs and was an active participant in the process leading up to the United Nations Convention on the Law of the Sea (UNCLOS). Dr. Djalal also receives support from the non-governmental Centre for Southeast Asian Studies in Jakarta. Dr. Djalal has been called the "Godfather" of the workshop project.

<sup>6</sup> Prof. Ian Townsend-Gault is an expert on petroleum law and the law of the sea. He is Associate Professor and Director of the Centre for Asian Legal Studies and a Regional Director (West Coast Office) of the Oceans Institute of Canada. His current responsibilities include the co-ordination of the CIDA-funded projects "Managing Potential Conflicts in the South China Sea", and the "Viet Nam-Canada Ocean and Coastal Cooperation Programme".

collaboration with the UNEP East Asian Seas Regional Coordinating Unit (EAS/RCU).

The second initiative emerged as a collaborative project between littoral countries of the region and UNEP with initial funding from the Global Environment Facility. A Transboundary Diagnostic Analysis (TDA), a study of issues and problems, and their societal root causes, was formulated by UNEP and senior marine scientists of the region in the period 1996 to 1998. This TDA was later used as a basis for the development of a Strategic Action Programme for the South China Sea. In the preparation of these documents, scientists and governmental agencies from seven littoral states – Thailand, Malaysia, Cambodia, Indonesia, Vietnam, China and the Philippines – have been involved in making country-specific studies that were used as a basis for the transboundary analysis, as well as for the Strategic Action Programme:

*"Important transboundary environmental problems of the South China Sea region have been identified by the UNEP in co-operation with the national committees. The TDA identifies the priorities among water-related problems and concerns, their socio-economic root causes, the sectoral implications of actions needed to mitigate them and the extent to which the problems are transboundary in either origin and effect... The actions proposed in the framework of the Strategic Action Programme are wide ranging in both context and proposed areas for action. Successful implementation of the Programme will depend upon co-ordination of actions by diverse organisations, agencies, non-governmental organisations, private sectors, and stakeholder groups at both the national and regional levels. Recognising the mandate of the United Nations Environment Programme to co-ordinate environmental action across the United Nations System, the widest possible range of appropriate partners at national and regional levels will be encouraged and assisted to participate in the execution of the Programme. It is the intention of the participating countries that all actions be undertaken in a spirit of collaboration and partnership, to enhance the synergy between on-going initiatives at national and regional levels, and eliminate duplicative and conflicting actions." (UNEP 1999:4)*

Whether these two initiatives are examples of a new trend of integrative co-operation in the South China Sea region or not, and whether the maritime scientists of the region have been influential in changing littoral state policies within a South China Sea context or not, will be further discussed below.

### **1.3 The theoretical framework**

The situation will be analysed under a theoretical framework based on international regimes. Two theoretical approaches are introduced to analyse state and non-state

interaction at a regional level within the framework of management and protection of marine resources of the South China Sea: one is cognitive and will be used to assess the relationship between science/scientists and the decision-makers in the region; the other is power-based and acknowledges that systemic constraints are making it difficult to integrate the East Asian states in formal co-operative endeavours. The intention of using this dual theoretical framework is to grasp environmental aspects as well as the *high politics* part of the South China Sea conflict. Theoretically, the aim is to test the theories and their respective theoretical variables in the particular empirical framework of the South China Sea conflict. The following model shows how the basic relationship between the theoretical variables is viewed:



**Figure 1.1: Relationship between theoretical variables.**

Some cold-blooded security analysts say that a state's military capabilities and self-interests decide its actions. Others are more positive and emphasise that co-operation has often been based on international law and concerns for shared interests. It is possible to argue theoretically for both statements. Scientists will emphasise their achievements at national and regional levels, whereas the realistic policy analyst will emphasise territorial conflict and stalemates in terms of a balance of power allowing scientists to have a say, but without achieving significant change.

By testing the empirical relevance of the two theoretical approaches one may assess the regional situation in terms of maritime environmental status, environmental scientific network-building among researchers, international, regional and national efforts at protecting the environment, etc. Such an approach also allows one to view the science/policy interaction at a regional level. Experience from other areas, for example the climate change debate, shows that environmental knowledge can influence political choices made by governments, simply by obligating the decision-

makers to take environmental aspects into account. An important aim of this thesis is to study how Asian nations and local scientists deal with their environmental problems, and how national and regional factors impede effective environmental policies and environmental law formulation and enforcement.

#### **1.4 The empirical framework**

In focus here will be science vs. policy in the region. The South China Sea Workshops and the UNEP initiative will be included in the analysis, as examples of current political processes. Emphasis will be placed on the contribution of scientists to regional political dialogues on the South China Sea. At the regional level of state interaction, different aspects of ocean management are included, such as marine scientific research, marine environmental protection, resource management, etc. Marine scientists participate in multilateral meetings with bureaucrats, diplomats and officials from the South China Sea region. The question is to what extent marine scientists are able to get attention and acknowledgement for the advice and knowledge they bring with them to these meetings, and to what extent governments are integrating scientific knowledge into policies relevant to the South China Sea.

By interviewing senior scientists and other relevant actors, by reading secondary literature, and by analysing the current regime building processes concerning the management and protection of the marine environment of the South China Sea, I have made an attempt to understand the complex political processes related to science/policy interaction in the region.

#### **1.5 The research question**

The research question is:

*To what degree have maritime scientists managed to promote regional environmental co-operation in the South China Sea region?*

The question is based on the fact that scientists from different countries are allowed to meet on a free basis discussing issues important to the South China Sea, its environment and the political situation. When maritime environmental experts are allowed to participate in a process where political as well as economic issues are at

stake this is in itself a sign of the importance attached to the environmental issues. And, when these issues are integrated and co-ordinated with a multilateral political process like the one managed by the South China Sea workshops, the potential impact of scientists and their knowledge could be significant.

Co-ordination of leading national scientists at the international level may also lead to community-building where professional friendship and networking arise from frequent meetings. Experience from other semi-enclosed seas like the Mediterranean, show that the formation of a transnational community of experts can be of significant importance in bringing littoral states together in co-operative arrangements. By integrating knowledge in an interdisciplinary manner with the ecological system in focus one may build organisational entities opposing and changing the traditional behaviour of national governments and agencies (Haas 1989).

The political reactions to the smoke haze from forest fires in Indonesia and East Malaysia in 1997, leading to the ASEAN's Regional Haze Action Plan, suggest that environmental problems in East Asia may gain more political attention in the years to come.<sup>8</sup> There is already a pressure evolving from below. ASEAN countries for example are experiencing increasing pressure from international agencies, environmental NGOs and the scientific community to pursue environmentally sustainable policies (David Rosenberg 1999:9). Political pressure may therefore increase the leverage of scientists possessing relevant knowledge and expertise.

### **1.5.1 The dependent variable: political behaviour and decision-making**

The dependent variable in this study is the behaviour of individual states in terms of marine environmental policy and relations with the regional states, international agencies and NGOs. As each of the claimants has signed UNCLOS (except Taiwan) and all, except Cambodia and Thailand have ratified it, they are obliged to take into

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<sup>8</sup> The air pollution that is referred to as smoke haze came from forest fires in Sumatra, Kalimantan (Indonesia) and East Malaysia. The fires were said to be started by pulp, palm oil and rubber plantation owners to clear natural forests in Indonesia and then spread to at least 2 million hectares of forest and underground peat deposits (Abramovitz 1998).

consideration the terms of the Law of the Sea regime where it is emphasised that states around semi-enclosed seas shall endeavour to co-operate directly or through a regional organisation to manage the sea together, to co-ordinate scientific research policies and to co-ordinate implementation of rights and duties under the convention (Article 123 of the 1982 UNCLOS; Thayer 1994:3).

Earlier studies have pointed to the fact that economic and industrial growth has not been equally matched by environmental institutional build-up on the national and regional level (Haas 1998; Utrikesdepartementet 1998). My suggestion is that the local scientists can play a role in this contest between economic, political and environmental concerns. I am, in other words, investigating the role scientists have been/is playing in the South China Sea conflict compared to political interests.

### **1.5.2 The epistemic community**

It has been shown that an authoritative regional community of scientists has emerged around the Mediterranean and Baltic and this community was influential in establishing ocean governance systems for those seas (Haas 1989, 1992; Hjorth 1994). Authoritative expertise and data are a vital basis for any regime or convention dealing with the environment. Protection of the marine environment demands a multifaceted approach where several governmental agencies work together, since pollution often affects many sectors at the same time. There are a lot of sectors that threaten the maritime environment: agriculture, industries on land, industries offshore, human activities, tourism, fishing, forestry, etc. Therefore, scientists who have the ability to think ecologically and in broad terms can play an important role in the development of ocean governance systems. Peter M. Haas (1992) says that the impact of scientific advice in the political process is more likely when decision-makers are uncertain about environmental problems, their origin and solution, when there is an ecological and interdisciplinary concern for the maritime environment in existing scientific communities, and when these concerns and scientists are institutionalised in national bureaucracies or agencies working with environmental questions and policy-making.

### **1.5.3 Regime building processes: The South China Sea Workshops and the UNEP initiative**

As mentioned in section 1.2 above, I described how semi-official representatives of the South China Sea littoral states have taken part in a workshop process as an exercise in informal political dialogue to improve the relationship between these states and to exchange information and data on various subjects. An analysis of these workshops, and the UNEP initiative, will hopefully shed some light on the question of whether or not the inclusion of maritime experts may lead to more effective policies regarding the maritime environment in the region.

The original aim of the South China Sea Workshops was to establish a regime for the South China Sea in accordance with the UNCLOS agreement.<sup>9</sup> So far no formal agreement has been signed and the projects formulated within the technical working groups have not yet been implemented. But there are tendencies of what may in the future become a formalised regime for managing the sea and its resources.<sup>10</sup>

International organisations like UNEP are now involved in the South China Sea and environmental information is being dispersed throughout the region to everyone's benefit.

### **1.5.4 Factors impeding scientific impact on policies**

However, one should not underestimate the political interests in the South China Sea conflict. Heavy emphasis on vital state interests do not leave much room for independent scientific advice on how to formulate marine policies. So far, formal initiatives aiming at establishing a legal regime or convention for the South China Sea has been avoided of obvious reasons. Scientific influence in terms of facilitating the establishment of formal, legal initiatives through the UNEP initiative and the South

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<sup>9</sup> Background information on the South China Sea Workshops is from the website of the South China Sea Informal Working Group Project at the Centre for Asian Legal Studies, University of British Columbia, Canada: <http://faculty.law.ubc.ca/scs/>

<sup>10</sup> A discussion of the concept "international regimes" will follow in section 2.1. Suffice it here to say that the concept has become familiar to students of ocean management diplomacy. It is much used within the field of political science, where a large debate on international regimes has emerged, on which the theoretical approach developed in this study is based. International regimes are defined by Oran Young (1989: 13) as "specialized arrangements that pertain to well-defined activities, resources, or geographical areas and often involve only some subset of the members of international society..."

China Sea Workshops should therefore not succeed in the current situation. But the South China Sea Workshop process and the UNEP initiative are regime formation processes where a formal, integrative approach is out of the question for the moment. My suggestion therefore is that the regional scientific community may achieve substantial results in terms of establishing co-operative projects on maritime scientific research. The lack of information on the sea and its resources, the effects of different kinds of pollution, etc. may force the states to co-operate at a given moment in time. The dependency on the sea for resources, as a means of transportation and foreign exchange earnings, from fishing, tourism, etc. should imply that co-operation is the most rationalistic way for any state in the region to continue economic growth.

Inter-state rivalry in the region may obstruct co-operation on ocean management in the South China Sea. Major powers may be reluctant to co-operate due to a fear that multilateral agreements can give smaller states the opportunity to block actions by greater powers. There is also the problem of integrating Taiwan and China in binding multilateral agreements when they do not recognise each other as legitimate international actors.

### **1.5.5 Summing up issues in focus**

The main argument, that the environmentally concerned scientists may have a role to play in relation to the actual policy-making regarding the management of the South China Sea, will be discussed. The three following questions are central to the study.

First, can we identify a regional, integrated network of scientists in the South China Sea region? My assumption is that the existing regional scientific network is integrated in the South China Sea Workshops and the UNEP initiative. Through participation in these two initiatives the existing scientific community, this community is enlarged and strengthened influencing governments to co-operate in establishing a maritime regime for the South China Sea.

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Because the members of international society are states, the rules or conventions or regimes apply, in the first instance, to the actions of states."

Second, does this network of experts influence regime formation processes in the South China Sea region? Article 123 in UNCLOS calls on states bordering semi-enclosed seas to co-operate on management, research, etc.. To what extent there is any such co-operation around the South China Sea is an open question; the answer seems to depend on the issue in focus. The UNEP initiative and the South China Sea Workshops are attempts at bringing the littoral states together in building ocean governance regimes. Are scientists influencing the nature and development of these processes? The steps taken to integrate national policies concerning environmental issues, particularly within ASEAN, seem to take a positive direction (Rosenberg 1999, Dupont 1998). Is the involvement of ASEAN scientists in these initiatives leading the processes in a similar positive direction?

Third, which factors impede scientists from being influential regarding South China Sea issues? The evident status quo in the South China Sea on sovereignty questions should suggest that a regional scientific community has not succeeded in influencing governments of the region to follow more environment-friendly policies. Thus, an important question is: Which factors are impeding scientists from being influential? The obvious existence of a climate dominated by *high politics* might hamper the influence of expert advice or otherwise take the focus away from issues where co-operation is more likely to be established.

An analysis of the scientific community, the South China Sea Workshops and the security climate should help us to gauge whether or not effective ocean governance in the South China Sea region can be established, whether or not regulation can be effective and to what extent national conditions limit regional political behaviour.

### **1.6 Methodological considerations**

The method used in this study is qualitative. Through an interpretative case-study of regime building processes in the South China Sea region, where the UNEP initiative and the South China Sea Workshops remain in focus, I try to understand the interaction of scientists and decision-makers. To guide the analysis of data collected in interviews and otherwise through secondary literature, theories of international

relations are used. The study is also theoretically comparative as I use two different theoretical approaches to study scientific influence on policy and regime formation processes, in order to find out which one of them is most fruitful.

To understand the influence of scientists on regime formation processes, I have chosen to conduct interviews with authoritative scientists/experts from the regional countries, and one of the driving forces behind the South China Sea Workshops, Prof. Ian Townsend-Gault. The information gathered through interviews has been compared and analysed with reference to other secondary literature such as articles, newspapers, electronic information, etc. Conference proceedings and reports from various meetings in the region have also contributed to the analysis of the empirical phenomenon in focus. I have tried to make the depth and width of the source base as large as possible in order to strengthen the reliability of the study.

### **1.6.1 The case study**

A much used definition of a case study is the one promulgated by Yin:

*"A case-study is an empirical inquiry that investigates a contemporary phenomenon within a real-life context, especially when the boundaries between phenomenon and context are not clearly evident."* (Yin 1994)

The area of interest is regional co-operation on the environment in the South China Sea region. This is the context of the phenomenon in focus, which is scientific influence on policies with special reference to the management and protection of the South China Sea marine environment. Important aspects of state interaction as experienced through two regime building attempts, the UNEP initiative and the South China Sea Workshops, are discussed with the intention to clarify whether maritime experts are influential in promoting regional environmental co-operation in the South China Sea region.

The positive aspect of the case-study design is the ability to focus on one particular phenomenon within a complex context of state interaction. As scientific influence on policy is conditioned and constrained by a large number of factors of varying importance, to discuss the issue in focus within this complex context is difficult, but important, in order to understand what role marine scientists are playing in regional

political processes. The negative aspect of the case-study design is that the ability to generalise is limited. It is, in other words, not possible to generalise from this study of scientific influence on policy in the South China Sea region, to scientific influence on policy in general. However, this is not an obstacle for making comparative theoretical considerations based on the empirical findings.

### **1.6.2 Sources and collection of data**

One may use both qualitative and quantitative data in a case study design. On the basis of the data available I have chosen to use only qualitative data. The subject in focus is to what extent scientists are promoting intergovernmental policies. One way to find out to what extent the scientific community has changed political behaviour in the region is to conduct interviews with central persons within the community and persons within international organisations and non-governmental organisations who are supposed to have a more "objective" view on these questions than government officials and diplomats.

I use both primary and secondary data in the study. By primary data I refer to data that are collected by the researcher himself. An example is interviews. Another example is reports and material published on the internet by UNEP and the South China Sea Workshops. With secondary sources I refer to data collected by other researchers or students. This normally includes articles, books, newspapers, magazines, reports, etc.

### **1.6.3 Interviews as an information source**

The processes which I am trying to study would have been much more difficult to analyse without interviews. Multilateral environmental co-operation in the Southeast Asian region is in its early stages and has been little written on either the South China Sea Workshop process, the recent UNEP initiative, and on how scientists interact with governmental agencies. I contacted Prof. Ian Townsend-Gault at an early stage to get advice on who to contact in the region. On the basis of Prof. Townsend-Gault's advice, complemented by looking at the participants lists to conferences and meetings on marine environmental issues, I found a few central names of authoritative scientists whom I contacted with the intention of interviewing them. I also got in contact with

representatives of the three most relevant non-state actors involved in South China Sea issues, namely UNEP, the International Centre for Living Aquatic Resources Management (ICLARM) and the Southeast Asian Programme in Ocean Law, Policy and Management (SEAPOL). Most of the experts I met from these institutions had extensive experience of the region.

The interviews were conducted during a three-week stay in Bangkok, Thailand and Manila, Philippines. The interviewees all spoke English fluently, so communication was not a problem. As I chose not to use a tape recorder, I took brief notes by hand. As soon as possible after the interviews were finished I wrote down the entire interview electronically on a lap-top computer, while memories from the interview were still fresh in my mind.

The interviews were loosely constructed around the main research question and the hypotheses developed in chapter 2. I also brought an interview-guide consisting of open questions aimed at exploring the interviewees' knowledge of the issues in focus. During the making of this guide, I conferred with Prof. Stein Tønnesson, my project leader, who has conducted many interviews in the region, on how to structure and conduct interviews. His help was useful in preparing me for the interview situation. As the questions I had prepared varied considerably and brought up a number of issues, there was no use in following the guide rigidly. I found it more fruitful to prepare each interview individually. I chose to conduct the interviews by first presenting my work and the three central questions I had chosen to focus on. After having presented my angle I invited the interviewee to comment on the three questions. Sometimes they were able to comment on all three questions, but dependent on their professional background they responded to the questions they found most comfortable. Thus, the scientists commented on scientific networking and the scientific knowledge and working conditions in their home countries as well as in the region in general. Most of them also commented on the various regional co-operative arrangements, but they became more uncertain when it came to inter-state politics. The experts working closely with the policy community, the policy analysts, commented on policy and

political interaction in the region, but could not comment extensively on science and environment issues, as they did not know much about such issues.

My way of arranging the interview allowed me to follow subjects of interest as they appeared. Since what is in focus here is relatively complex, with a large number of variables and actors involved, the approach proved fruitful. Much of the information gathered during the interviews is not readily available in written material; i.e. information on the nature of political interaction, the nature of scientific interaction, the atmosphere around the negotiating table, the way of thinking about politics and negotiations in Asia, etc. I discovered throughout the interviews that my understanding of what is actually happening grew considerably. The value of the interviews and fieldwork was tremendous both in terms of knowledge and understanding of South China Sea issues, as well as shedding light on the question of whether scientists influence policy in this region or not.

After the interviewees' comments were made, we discussed various issues of interest to my study. Here I followed up on their comments and attempted to go into greater detail on the issues I felt to be important to my study. I felt that this was a productive and informative way of proceeding with the interviews. There are of course possibilities of misunderstandings and incorrect interpretation of statements. This a matter of concern that I had to consider when analysing the data gathered in view of the theoretical considerations. However, the interviews, the well-prepared guide of questions, as well as minimal language problems, should implicate that the material gathered is relatively reliable. I also cross-checked information by asking one interviewee to comment on statements made by other interviewees. Much of the information gathered has also been backed up by secondary literature as well as other fieldwork conducted by fellow students/researchers.<sup>11</sup>

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<sup>11</sup> Project assistant Knut Snildal and project leader Stein Tønnesson of the project "Energy and Security in the South China Sea" based at the Center for Development and the Environment undertook fieldwork in China in August/September 1999. Stein Tønnesson and Leni Stenseth of the project also undertook fieldwork in January 1998.

#### **1.6.4 Selection of informants**

I started out with the process of selecting countries and persons to visit in January 1999 (the interviews were made in June/July). As there are no other studies available of the kind I was making, on science-policy interaction relevant to political processes in the South China Sea region, I had to start from scratch. By use of the Internet I found references to articles and information on environmental issues related to the South China Sea region. Based on a similar study made in the Mediterranean region, I knew UNEP could be an important actor to look for. And through contacts the project has with one of the organisers of the South China Sea Workshops, Prof. Ian Townsend-Gault, I managed to get in contact with senior marine scientists from both Thailand and the Philippines. They also helped me in getting in contact with the UNEP secretariat of the East Asian Seas Action Plan. I also managed to get in contact with experts involved in regional interstate meetings by e-mail and by coincidence through people I met in Bangkok and Manila. Contact with SEAPOL and two research departments of the Philippine Ministry of Foreign Affairs and the Philippine Ministry of Armed Forces were arranged in this way.

What constitutes a major problem is that the selection of informants is limited to two of the ten countries bordering the South China Sea. I chose to focus on these two countries as they are generally acknowledged to be most open to foreigners and to have a high degree of intellectual freedom; policy experts are therefore, hopefully, more open to discuss sensitive issues with a complete stranger, and their statements do not reflect an official line. There is, of course, a risk that the interviewer may get a very subjective and disproportionate review of the current situation, as a selection of informants from other countries as well as from a wider spectrum of scientific expertise might have been the ultimate goal, but time and financial funds available for a dissertation in political science does not allow one to spend much time and money on extensive fieldwork. I have tried to avoid obvious problems here by picking the interviewees on the basis of varying nationality, varying expertise (from security analysts to marine scientists), varying age (young and old) and varying involvement in the political processes in focus (the UNEP initiative and the SCSW).

There is also another problem regarding the selection of informants, that of guided selection. The selection was guided by my contacts through the project, it was guided by my limited knowledge of marine science, and it was guided by time and space. On top of that I asked people with Western backgrounds to make suggestions on whom to contact in the region. A clearly disproportionate selection of participants made on other people's suggestions, as well as based on the limited selection of articles and studies made on South China Sea issues, poses serious questions as to the reliability of this study. Information on issues such as scientific influence on policy is extremely hard to study; these processes are complex, involving a high number of actors and issues. I have tried to balance this by referring to secondary data supporting the statements made in interviews, and informants were in fact selected on the basis of their authoritative knowledge to issues in focus.

Data on the existence of the so-called epistemic community must also be considered carefully. The definition of such communities is rather theoretical, it has complex preconditions, and on top of that the idea of such communities has been highly contested through various studies. My discussion of the existence of such a community in the South China Sea region is based on rather thin data. My conclusion on the existence of a community can therefore at best be tentative. This part of the study is strengthened by secondary material.

#### **1.6.5 The reliability/validity of the data**

According to Yin (1994:33), the quality of a case study research design can be judged according to four criteria. First, the validity must be constructed, or in other words, correct operational measures for the concepts being studied must be established. What I am trying to establish, is the influence of non-state actors, marine scientists, on regime building processes connected to the management of the South China Sea. The analysis of this question is based on interviews, official documents and secondary material. As political influence is extremely difficult to measure, there are of course certain limitations to the *construct validity* of the study. I have tried to increase the *construct validity* by using multiple sources of evidence.

Second, *internal validity* (for explanatory and causal studies only) must be evaluated. As I consider this study to be an interpretative case study aimed at understanding complex processes of political and scientific interaction, *internal validity*, or the causal relationship of variables, will therefore not be discussed.

Third, *external validity*, or the domain to which a study's design findings can be generalised, must be considered. This refers to analytic generalisation, i.e. the possibility of comparing the usefulness of theoretical approaches to the phenomenon in focus. It is not the intention to generalise from this case to other related areas. The intention has rather been to discuss the relevance of the different theoretical approaches applied. Which theoretical approach I found most useful will be discussed at the end of the study.

Fourth, one should aim at demonstrating that if another researcher should investigate independently the same phenomenon, following the same procedures, the researcher should reach the same results as I have. In other words, if the accuracy of the data, as well as the data analysis, is high, the reliability is high (Hellevik 1991:43). I have tried to be as accurate as possible, using correct citations and always referring to my sources when forwarding important statements, and by collecting a wide variety of data which I refer to. I have also tried to be as open as possible about my ways of reasoning throughout the study. My way of reasoning has also been tested on respondents, fellow students and researchers at the Centre for Development and the Environment of the University of Oslo, and on fellow project members from the "Energy and Security in the South China Sea" project. My way of studying the phenomenon in focus has consequently been as open and neutral as possible. However, this is not to say that I see limitations to my approach. As the phenomenon studied is of a complex nature, involving complex political processes and interdisciplinary involvement, my choices and interpretation of data are at best subjective. Others would see the same data from different perspectives, thereby reaching different results. Others might also have asked different questions regarding the same issue area, and thereby might have reached other conclusions; this I am fully aware of. As mentioned above, the phenomenon in

focus is complex, I had limited time and resources available for the study, interviews were conducted on the basis of my subjective understanding of science/policy interaction in the South China Sea region, and on top of that, obvious cultural and epistemological differences between my "Western world" thinking and the "Asian world" may have led to misunderstandings, leading to further reduction of reliability. Regardless, I have tried consciously to do my best at demonstrating my approach, and the premises for my conclusions.

### **1.7 The structure of the study**

I will proceed in chapter 2 with a thorough description and analysis of the particular theories and terms used in this study. The theoretical discussion will end in operational definitions connecting theory to empirical focus. After what might be considered the identification of theoretically applicable tools for disseminating regime building processes of the South China Sea region, I proceed in chapter 3 by giving the reader a general background on the environment and the South China Sea. In other words, why is it important to establish integrative and co-operative endeavours in the South China Sea region? In chapters 4, 5 and 6, the operational definitions are tested out and analysed in view of the empirical findings related to regime building in the South China Sea region. Three main questions, crystallised from chapter 2, will be addressed. First, is there an epistemic community in the South China Sea region? Second, has the epistemic community which has manifested itself in the South China Sea Workshops and through the UNEP initiative achieved any regional co-ordination of environmental policies concerning the South China Sea? Third, are security interests and national prestige preventing the claimant parties from building co-operative environmental regimes in the South China Sea region? Finally, in chapter 7, I summarise findings and make some concluding remarks and suggestions for further research.

## **2.0 International relations and regime theory: a cognitive approach to the South China Sea conflict**

Literature on international relations took a new direction in the beginning of the 1980s as growing concern for the environment manifested itself through numerous works. The growing concern for the environment resulted in new forms of state co-operation. Environmental issues were connected to other traditional issues like peace and war, conflict and co-operation, international institutions, the comparison of foreign policies, and added scope and empirical observations to the debate (Zürn 1998:618). The environmental policy research started with using the traditional policy tools and ended up with its own concepts and questions which have generated a growing literature in the intersection of security, economics and environmental management studies.

Central in this thesis is the relationship between knowledge and power as political premises for decision-making. The theoretical framework is regime theory, or more specifically; a cognitive theoretical approach, dealing with the impact of transnational networks of experts and the diffusion of knowledge and ideas on political processes. Within this approach or paradigm called "transnational networks", I have chosen to use a concept developed by Peter M. Haas (1989, 1992) namely *epistemic communities* which will be used to analyse the regional situation and the influence of professionals on forming a maritime regime in the South China Sea region. The South China Sea, in particular the Spratly area, is known as a potential zone of armed conflict involving one major power, China, and indirectly the United States as a guarantor of open sea-lanes. The application of a cognitive approach seems particularly interesting in this context because it is not earlier used on the conflict. This approach is also interesting because so much of the literature is based on the *high politics* part of the conflict. Few articles or books have been written on the impact of knowledge and experts.

From a realist point of view, the South China Sea conflict seems to fit systemic explanations where state power and interests are decisive. If compared with the situation in other semi-enclosed seas like the Mediterranean and Baltic where co-operation on peaceful terms has been established (Haas 1989, Hjørth 1996), the

situation in the South China Sea resembles a war zone. Thus, the possible influence of a regional community of maritime experts might seem limited from a realist point of view, but will be investigated with the intention of clarifying to what degree the regional network of marine environmentalists is capable of influencing policy makers to agree on forming a maritime regime for the South China Sea region.

In the beginning of this chapter I will present the concept 'regime' and the two main theoretical approaches that will be used; the cognitive and the realist approaches. I will then turn to a more thorough discussion of the concept "epistemic community", followed by some critical comments about this particular approach. I will end this chapter by posing some questions/statements that will be tested on empirical findings.

## **2.1 International regimes**

The theoretical framework for the study is theories of international regimes. These theories include various approaches to the study of international politics seeking to explain why regimes come about, exist or change (Hasenclever 1996:177-178).

Regimes in this context are not conceptualised as independent actors, but institutions, agreements or other types of coexistence between sovereign states.

Keohane (1984) explains international regimes as a result of interdependence and policy co-ordination among states. A regime is a sort of political system guiding states' behaviour in a certain policy area, and most theories of international regimes presuppose that states have an interest in co-operating with each other. Relevant examples can often be found in the context of international environmental diplomacy where manmade damages on the environment have caused transboundary pollution (acid rain, damage on ecosystems, oil tanker spills, etc.), requiring states to co-operate in a wide range of areas.

Scholars are trying to answer central questions like: Why do states co-operate through legal agreements? How do these agreements or institutions affect the behaviour of states? In this debate among scholars on international regime theory three theoretical directions dominate: the interest-based, the power-based and the knowledge-based. As

indicated, each school focuses on different explanatory variables. The central school of thought in this study will be the knowledge-based.

Many have tried to define in theoretical terms what a regime is; one that is often used is Stephen Krasner's (1983):

*implicit or explicit principles, rules, norms and decision-making procedures around which actors' expectations converge in a given area of international relations. Principles are beliefs of fact, causation, and rectitude. Norms are standards of behavior defined in terms of rights and obligations. Rules are specific prescriptions or proscriptions for action. Decision-making procedures are prevailing practices for making and implementing collective choice."*

The definition can be broken down in two parts: a normative part and an operative part. The normative part is made up of principles guiding the actors' behaviour, thinking and expectations around the central part of a given issue area. These standards of behaviour or principles are the basic defining characteristics of a regime. They are the "path" states are trying to stick to when policy is about to be formed in an area.

The operative part is the formal part of a regime. Rules and decision-making procedures are normally defined on the basis of the normative part and include mechanisms or formal contracts that are easier to apply to a concrete situation. An example of a formalised regime is The Kyoto Protocol on climate change.<sup>12</sup>

The regime definition is seen by many to be complex and difficult to adjust to empirical conditions. Two aspects of the definition have been especially problematic: "because they may inhibit the long-run cumulation of knowledge" (Hasenclever et al. 1996:179-180). The first aspect concerns the relationship among the four regime components and the individual meaning of them. What kind of interrelationship is there among the "principles", "norms", "rules" and "procedures"? Almost anything can be defined as a regime according to this definition, and the terms are fairly theoretical and not that easy to apply to real situations. Second, it is presumed that we are facing a regime when "actors' expectations converge in a given area of international relations"

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<sup>12</sup> The Kyoto Protocol is a new and legally binding treaty requiring member-states to reduce the emissions of greenhouse gases in light of the fact that industrialized nations failed to meet voluntary

(ibid.). In what way can we measure the existence of the four components and be sure that we have a regime and not something else?

When students of international relations try to identify regimes, they either look for explicit rules or practices, or for evidence of some sort of pattern of communication among state actors. As regimes are numerous and vary a lot, it is not difficult to find a regime that suits one part of the definition. Some have criticised the definition for being just a fuzzy fad, but others again see the definition as worth a closer look (Wolfe 1999:18). What is interesting is that the two regime building initiatives in focus here are aiming at establishing instrumental regimes, thereby legitimising the use of the operative part of the definition, at the same time there are obvious norms, peculiar to the South China Sea region, guiding state behaviour, thereby legitimising the use of the normative part of the definition. In other words, one may say that there is an existing implicit regime existing, which is equal to the current situation in the South China Sea. The question I am posing is whether the states of the South China Sea region will change their policies towards more binding co-operation through the establishment of more instrumental regimes.

### **2.1.1 Knowledge-based theory of international regimes: the epistemic communities approach**

As an alternative approach to the realist and institutionalist explanations of international regimes, the cognitivists emphasise "the role of prevailing forms of reason by which actors identify their preferences, and the available choices facing them" (Haas 1994). Focusing on the normative and causal beliefs of decision-makers who define states' interests, cognitivists explain preference and interest formation. Thus, in one way the cognitivists are complementary to the interest-based school (Hasenclever et al. 1996:206). Peter Haas (1994:37) argue that "cognitivists treat actors as reflective organisms, rather than as inert matter that obeys universally applicable and unchanging mechanical laws, as neorealists and insitutionalists treat them". The actors' knowledge, ideas and institutional learning are central when

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emissions targets set at the Rio de Janeiro meeting in 1992. *Battling Climate Change Monday* (1999, November 23) [online]. - URL: [http://www.policy.com/issuewk/1998/1123\\_44/detail129.html](http://www.policy.com/issuewk/1998/1123_44/detail129.html)

explaining different aspects of regimes. New information, complex situations and the fact that states are often uncertain about their own interests pave the way for new forms of reasoning, change of interests and consequently: political change.

A central school of thought in the knowledge-based literature on international relations is a group of authors fronted by Peter M. Haas.<sup>13</sup> They focus on the influence of specialists who gain acceptance/admission to policy processes in different areas. These authors stress the importance of *epistemic communities* as "channels through which new ideas circulate from societies to governments as well as from country to country" (Haas 1992:27). An epistemic community is defined by Peter M. Haas (1992:3) as "*a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area*". The epistemic communities approach emphasises the role that networks of knowledge-based experts can play under certain conditions. Under complex circumstances, as after a crisis or when new information on complex issues appears, epistemic communities may help states realise their interests by framing the issue-specific political agenda and forwarding policy recommendations.

The independent variable is knowledge and social learning, whereas for realists it is interests and power, and for institutionalists information and institutional attributes. The epistemic communities approach is not an attempt at formulating a general theory, but offers a "methodologically pluralistic" approach which seeks to provide insightful analysis of "the creation of collective interpretation and choice" (Adler and Haas 1992). It is also an attempt at bridging the gap between theoretical approaches like neorealism, liberal institutionalism, neofunctionalism and cognitive analysis, and it can be applied to all situations where professionals may link their research to the political process (security issues, international political economy, the environment, etc).

According to Adler and Haas (1992):

epistemic communities should not be mistaken for a new hegemonic actor that is the source of political and moral direction in society. Epistemic communities are not in the business of controlling societies; what they control is international problems. Their approach is

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<sup>13</sup> John G. Ruggie (1975), Ernst Haas (1990) and Peter M. Haas (1992).

instrumental, and their life is limited to the time and space defined by the problem and its solutions. Epistemic communities are neither philosophers, nor kings, nor philosopher-kings.

### 2.1.2 Alternative explanation/approach: the influence of structure and realpolitik

As an alternative to the knowledge-based approach; power-based theory is introduced. This is done to integrate the *high-politics* part of the conflict and to give answers to why the situation seems deadlocked and not yet much influenced by an epistemic community. The claimant states make their choices based on self-interests, but to what degree these interests are in conflict with regional environmental concerns, is interesting to investigate further. Then it will be possible to compare the relative fruitfulness of the realist and cognitive approaches. The theoretical difference between knowledge-based theories and other international relation theories is described in the table developed by Peter M. Haas (1992:6).

**Table 2.1: Approaches to the study of policy change**

<i>Approach</i>	<i>Level of analysis and area of study</i>	<i>Factors that influence policy change</i>	<i>Mechanisms and effects of change</i>	<i>Primary actors</i>
Epistemic communities approach	Transnational; state administrators and international institutions.	Knowledge; causal and principled beliefs.	Diffusion of information and learning; shifts in the patterns of decision making.	Epistemic communities; individual states
Neorealist approach	International; states in political and economic systems.	Distribution of capabilities; distribution of costs and benefits from actions.	Technological change and war; shifts in the available power resources of states and in the nature of the game.	States.
Dependency theory-based approaches	International; global system.	Comparative advantage of states in the global division of labour; control over economic resources.	Changes in production; shifts in the location of states in the global division of labour.	States in the core, periphery, and semiperiphery; multinational corporations.
Poststructuralist approaches	International; discourse and language.	Usage and meanings of words.	Discourse; the opening of new political spaces and opportunities.	Unclear.

*Source:* Peter M. Haas (1992:6): Introduction: Epistemic Communities and International Policy Coordination, *International Organisation*, 46, 1.

The power-based approach is based on one of the classical theoretical positions in the literature on international relations: realism. Realists make three basic assumptions

about the international system and its actors (Grieco 1990:3-5).<sup>14</sup> First, nation-states are the main actors on the world stage. Transnational corporations, NGOs and other international organisations are presumed to matter less than nation-states. Second, states are by definition self-help agents. Since no central international authority can guarantee states their survival; self-help is therefore vital. Third, the external preferences and the actions taken by states is conditioned by the international anarchy which is the principal force in the international system.

Relative power capabilities are therefore of great importance. From these assumptions two major propositions on international co-operation have been developed (ibid.):

*First, realists argue that states are preoccupied with their security and power; by consequence, states are predisposed toward conflict and competition, and they often fail to cooperate even when they have common interests. Second, realists claim that international institutions can mitigate the inhibitory effects of anarchy on the willingness of states to cooperate only marginally.*<sup>15</sup>

The realist approach will be used to analyse the role of *high politics* in the conflict.

### **2.1.2.1 Realism on co-operation**

Realist theories of regimes "emphasize relative power capabilities as a central explanatory variable and stress states' sensitivity to distributional aspects of cooperation and regimes" (Hasenclever et al. 1997:84). The theory is also based on rationalist and utilitarian assumptions of actors' behaviour in the anarchical international system. Joseph Grieco (1990) has shown that realism can provide many answers to questions regarding international co-operation. Grieco's work evolves from a critique of the other grand theory in the international regimes' debate: *neoliberalism*. I will not elaborate on this discussion, but the central premises for Grieco's reasoning will be put forward as a basis for forming of rival hypotheses to the ones deduced from the epistemic community approach.

According to Grieco (1990:37-40), all states are *defensive positionalists*. This is the central argument put forward by realists when talking about international co-operation.

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<sup>14</sup> These premises are based on classic works by Hans J. Morgenthau (1973) and Kenneth Waltz (1959; 1979).

<sup>15</sup> Joseph Grieco's (1990:22) definition of *international cooperation* is: "the voluntary adjustment by states of their policies so that they manage their differences and reach some mutually beneficial outcome."

States co-operate because of mutual advantage, but (according to realists) the form these relations take are built on certain premises. Hans J. Morgenthau (1973:180) argues that "no nation will agree to concede political advantages to another nation without the expectation, which may or may not be well founded, of receiving proportionate advantages in return." This is what is meant by defensive positionalism; states will only co-operate when they expect that there will be a balanced or equitable distribution of gains (Grieco 1990:47). The effects on relative power position in the world hierarchy of states are of primary concern.

The most common realist argument, in the debate between neoliberals and (neo)realists, is that international institutions and international co-operation "affect the prospects for cooperation only marginally" (Grieco cited in Hasenclever et al. 1997:124). The realist emphasis on states' concern about their relative capabilities explains decisions to resist co-operation even when absolute gains are achievable.

*...a state concerned about relative gains may decline to co-operate even if it is confident that partners will keep their commitments. Indeed, if a state believed a proposed arrangement would provide all parties absolute gains but would also generate gaps in gains favoring partners, greater certainty that partners would adhere to the terms of the arrangement would only accentuate its concerns about relative gains. (Grieco 1990:44)*

These days, when the European Union is introducing its own currency and financial policies, there seems to be a certain distance between theory and reality within the "realist realm". A realist understanding of integrative interstate projects like the European Union is problematic, and has certain limitations to it that are probably better covered by constructivist approaches. Anyhow, Grieco (1990:227) holds that "realism offers a more complete and compelling understanding of the problem of cooperation than does neoliberal institutionalism". International institutions are important according to Grieco (ibid.:233-234) because they reduce or mitigate cheating and the relative gain problem, and because interaction with help from institutions opens up for side-payments favouring actors that otherwise would have refused to co-operate. But still, these arguments have not been presented theoretically and the realists are still rather sceptical to the notions of international institutions.

## **2.2 The knowledge-based approach: What qualifies as an epistemic community?**

Epistemic communities can briefly be defined as networks of professionals with a common understanding of a policy decisions through their knowledge. There are several central terms in this definition. The first one is network, which I will use interchangeably with community. From what I understand, Haas' (1992:3) interpretation of network is: a linkage of professional actors either on the national or the transnational level in connection to an issue-area. In one particular epistemic community there may be several professional networks. When these networks develop a common understanding of a problem-area and of how to solve certain problems, one may call them an epistemic community. There must be common knowledge and, certain common values or codes of conduct connected to a special issue. The existence of more than one epistemic community in an issue-area is possible if different networks develop different kinds of knowledge and different values. One could for instance imagine that lawyers, marine scientists and naval officers in the South China Sea region, could develop separate transnational communities with different kinds of knowledge and values. The existence of parallel networks with separate knowledge and value systems would, however, imply fragmentation and reduce the chance of political influence.

The members of epistemic communities are professionals. Peter M. Haas (1992) argues that the professionals included in an epistemic community must hold a body of knowledge that is estimated important politically by a given society and which produces integrative political answers. The group of professionals may include both natural and social scientists. Professionals can be divided in two groups; those forming the particular epistemic community and those who do not share the common knowledge, goals or values of the epistemic community. This is particularly important when we are to discuss if an epistemic community has evolved around attempts to manage the South China Sea conflict. Have the scientists and experts who take part in the workshop process formed an epistemic community, or are they simply representatives of their states with no other agenda than the national interest? According to Haas (1989), a network must fulfil several requirements before it

qualifies as a community. Examples from the Mediterranean suggest that professionals have different motives when involving themselves in co-operative efforts regionally; some participate in international fora to gain economic support for their research, some do have knowledge and values based in their own scholarly discipline, but have nothing in common with professionals within their disciplines, and others are restrained by their governments or identify completely with national agendas. A crucial question in this study will be whether it is possible to differentiate among these groups.

What, then, is an epistemic community? There are several indicators one can use for identification (Haas 1992:3). First, we must identify the normative and principled beliefs that form a common value system. The intellectual links between the actual problem understanding, the policy options available and desired outcomes must be shared by all the members. Second, the understanding of cause-effect relations in connection to the specific problem-area must be shared. All members must share the analysis of the situation leading to the problems in focus, and thinking about how problems can be solved. Third, there must be common notions of validity of data and of the applicability of knowledge to a certain problem within the group. If the notions of validity are not common, which is a typical feature among professional groups, it will be difficult to influence politics. The debate on the ozone hole exemplifies this statement. Two groups of experts contest each other's data, and this makes it easier for politicians to refrain from taking costly action. The contest among and within professions is well known and is common in the world of science where different professional groups fight for funding and defend conflicting theories. Network members must share the notions of validity to qualify as an epistemic community. An epistemic community's main power resource is its authoritative claim to knowledge. Fourth, the interests and interpretations of an ultimate goal regarding what should be done politically and practically must be shared. Members of an epistemic community must have a common political enterprise. Haas refers, in his work on the Mediterranean, to an epistemic community which was motivated by an ecological viewpoint (Haas 1990:75). The members of the epistemic community came from

different academic disciplines, but chose to join the epistemic community as they all had a common interest in promoting environmental knowledge concerning the situation in the Mediterranean. The epistemic community was filled with people from different professions who were concerned by environmental pollution and wanted to do something about it.

As in the Mediterranean, the involvement of international organisations of the United Nations system (UNEP, UNDP, etc.) in the South China Sea region may represent an integrative force bringing regional experts together, creating transnational, informal networks where scientists are able to talk openly and discuss marine environmental problems. The knowledge and ideas developed through transnational scientific interaction within such networks may influence state policies and spread through international organisations, national bureaucracies, and finally change the political behaviour of the claimant states.

### **2.2.1 Epistemic communities: conditions for influence**

The central thought in the cognitive literature concerns the influence of science on politics. Peter M. Haas (1992) describes several examples where experts have had political influence. Especially under conditions of uncertainty will decision-makers turn to experts for advice, and information provided by experts can often lead to a redefinition of state interests.<sup>16</sup> The growing complexity of international relations on a wide range of issues also makes the policy makers turn to specialists for advice:

*"The causal logic of epistemic policy coordination is simple. The major dynamics are uncertainty, interpretation, and institutionalization."* (Haas 1992:12-15)

The growing complexity and professionalisation of politics opens up for influence from science. But at the same time influence may go the other way. National governments, transnational companies or international organisations fund much of the research. By consequence, when politicians control the financial incentives, their influence, in terms of leading research in particular directions, may be significant, perhaps mainly in deciding which topics are addressed and which research questions

are asked. Scholars have also seen that the influence of science varies from one level of interaction to another. Young's (1994:98) opinion is that the influence of experts is greater in the regime formation and regime persistence process than in the regime bargaining process. Whether this is true in the South China Sea region will be tested in chapter 5 where I discuss the status of the UNEP initiative and the South China Sea Workshops as regime building attempts.

### **2.2.1.1 Uncertainty, consensual knowledge and institutionalisation**

Conditions of uncertainty are where actors must make choices without "adequate information about the situation at hand".<sup>17</sup> Uncertainty is central in the epistemic community approach. First, because in a situation of crisis or shock, states must often redefine their interests. Second, a situation of uncertainty may create a context where new knowledge and policy recommendations are getting through to decision-makers more easily. It is under such circumstances that epistemic communities can gain influence. Haas (ibid.) names four reasons why uncertainty can lead to influence by scientists on politics:

1. Epistemic communities may provide information on cause-and-effect relationships and give advice on different courses of action.
2. Epistemic communities can provide information on a problem complex and the possible consequences of making different policy choices facing a problem.
3. Epistemic communities can help states to redefine interests.
4. Epistemic communities can help formulate policies.

A recent example on how groups of experts can influence the political agenda following a crisis is the Asian financial and economic crisis. Although one can hardly speak of an epistemic community, but rather of several groups of experts, the influence of professionals is brought onto the political agenda because the uncertainty of policymakers is so evident. In this situation, some say that senior American economists, situated within central institutions like the IMF, the World Bank, the U.S. Treasury, the Federal Reserve, and often with education from the same universities,

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<sup>16</sup> For more information on the debate on epistemology and formation of knowledge and ideas: see Peter M. Haas (1992) and Karen Liftin (1994), on the discourse on epistemology and the origin of the term *epistemic communities*.

<sup>17</sup> Alexander George, *Presidential Decision Making in Foreign Policy: The Effective Use of Information and Advice* (Boulder, Colo.: Westview Press, 1980), pp. 26-27.

are strongly influencing the behaviour of many governments because of their claim to expertise. But as one can see in the media, all experts do not agree on how to deal with the crisis. The dissension of Jeffrey Sachs and Paul Krugman to some extent increases the leverage of governments and reduces the impact of the economist consensus.

*Whether collective behaviour becomes more comprehensive rather than merely ad hoc and incremental will in turn depend on the extent to which the scientists' and the decision-makers' views coincide and the extent to which negotiations reflect the pursuit of politically motivated linkages and the struggle for control among states. In general, governments and organisations may be said to learn through the evolution of consensual knowledge. (Haas 1992:30)*

The epistemic community approach offers thoughts on how experts may provide such a common basis. Seen from the neorealists' side, capabilities and power explain why states co-operate or do not co-operate. The epistemic communities approach suggests that new knowledge provided by a group of experts in a situation of uncertainty can lead to co-operation. There are many examples of how states react differently to "common knowledge", and the difficulties in predicting the effects of knowledge as an independent variable are evident. The channels of dispersion and the organisational structures are therefore equally important (ibid.). An epistemic community can be a channel through which the knowledge is brought forward to decision-makers, such as when members of the community obtain central positions in state or organisational bureaucracies, thereby having the possibility of directly influencing decision-makers.

The relationship between experts and state bureaucracies is central in Haas' work. The institutionalisation of the professional is essential for the political influence of the experts. Think tanks, regulatory agencies and governmental research agencies are typical institutions/channels through which epistemic communities may gain influence. Thoughts developed on the national level may spread internationally through "government officials, international secretariats, non-governmental actors, including communities of professional scientists" (ibid.:33). Whether the knowledge disseminated through such networks is influential is not always easy to find out. Often, when issues are controversial, like human rights in Asia, *high politics* take over and the influence of transgovernmental networks is reduced. But other cases prove that the opposite is possible, such as Haas' (1989) example from the Mediterranean.

### **2.2.1.2 Scientific autonomy and integrity**

The influence of scientific research (or knowledge) on the political process in the South China Sea is not straightforward. Findings and hypotheses based on scientific research rarely speak for themselves, and whether the decision-makers consider scientific advice to be important or not depends on several conditions. In this process, science can also get "contaminated" by political agendas, if political factions or governments use professionals as a means for promoting their political agendas (Andresen et al. 1994):

*"The ideal relationship seems to be one where the research community responds to questions raised by decision-makers, but not to any preferences they might have with regard to the substance of the answers."*

Competence and integrity are two conditions that are important if research is to be taken seriously (ibid.:3). This also refers to Haas' (1992:3) definition of epistemic communities as networks with an authoritative claim to policy-relevant knowledge within a special domain or issue area. The common notion of validity and the scientific norms that professionals try to integrate in their research give them strong positions in particular issue areas. At the same time, the risks are evident. Involvement in the policy process can lead to sacrifices on the part of the experts when the political bargaining begins (Andresen et al. 1994:4).

A vital condition for overall influence is "common knowledge". Without a common ground to build on the impact of scientific advice can be expected to be minor and heterogeneity opens for politicians to manipulate and take different stands according to state interests. Underdal (1989:264) claim that scientists are seldom good at forwarding policy advice and mobilising political support. The influence of scientists on decision-makers "often seems to depend on some kind of mediating agent or amplifier other than the scientists or the ultimate decision-makers themselves." Here, the impact of institutions is clear. The knowledge-based approach says nothing about introducing a third party to "negotiate" between politicians and experts, but institutionalists emphasise the role of a mediating institution.

*"Empirical work seems to suggest - as an ideal situation - a threefold organizational structure: one strictly scientific body providing knowledge and producing evidence, a political body responsible for evaluating options and making policy decisions (determining the distribution of*

*costs and benefits following regulatory measures), and a mixed body - possibly including "management scientists" and administrators - "mediating" between the former two.*" (Andresen et al. 1994:14)

Haas (1992) emphasises that UNEP played a central role in creating co-operation around the Mediterranean. Through the institutional arrangements UNEP has at disposal, the community was able to spread its information and knowledge and expand its network. Whether or not there is an organisation which can do, or is about to do the same thing in the South China Sea will be a central issue.

### **2.2.1.3 Regime building**

According to Haas and Adler (1992:372-385) epistemic communities can have influence at four different stages in the regime-making and maintenance process. First, epistemic communities may influence the framing of issues at the policy innovation stage in the regime formation process. This is true for example when you look at different problem areas; environmental pollution, post-war economic management, etc. Second, the epistemic community can contribute to the diffusion of new ideas and policy innovation through its transnational networks. Third, the epistemic community can influence the policy selection made by decision-makers if "they are able to provide integrative formulas to resolve complex negotiations" (ibid.:383). And finally, an epistemic community can influence the regime persistence by advocating the regime as a problem-solving mechanism dealing efficiently with the problems it was supposed to take care of in the first place.

These four stages resemble the four political processes that Porter and Brown (1991) use to analyse regime building efforts. Regime formation can be measured in terms of four political processes: issue definition, fact-finding, bargaining on regime creation, and regime strengthening. Yet another scholar, Oran Young (1994:83), has developed a set of terms to analyse regime creation and persistence. I will not employ all three approaches, but have chosen to mainly use Porter and Brown (1991) as I find their approach well defined and easy to apply to real situations. Their four political processes will be used to analyse regime building efforts in the South China Sea.

#### **2.2.1.4 The critics of the epistemic communities approach**

Peter M. Haas (1992:6-7) emphasises that policy choices may be influenced by epistemic communities, but that decision-makers' behaviour reflects the common knowledge put forward is not evident. This is "strongly conditioned by the distribution of power internationally" (ibid.). The limitation of the knowledge-based approach is evident and made clear by the scholars supporting it; the intention with Haas' work is to see to what degree structural and systemic conditions limit the opening for reflection and knowledge-based premises. This modesty on behalf of the knowledge-based approach is important to have in mind when analysing the South China Sea conflict.

Several scholars in the international relations literature have questioned the epistemic communities approach. Oran Young (1994:96-97) opens the debate by pointing at important fallacies:

*There are (...) problems with testing both the idea of consensual knowledge and the concept of epistemic communities. It is hard to determine when knowledge becomes consensual and whether an epistemic community is present in some fashion that is independent of the outcome of the process itself. There is thus a constant danger of falling into the trap of post hoc reasoning, finding evidence of consensual knowledge in cases of success in regime formation and failing to locate epistemic communities in cases of failure.*

Young (ibid.) adds that "cognitivists pay scant attention to the politics of knowledge". Manipulation of information, the influence of decision-makers on funding and what scholars study, suggest a two-way relationship between knowledge and politics. The epistemic communities approach lacks the tools which can be used to explain a situation of hard bargaining where ideas can often be exploited as a legitimising cover for cynical political goals. In a situation where pure self-interests are evident, and where new knowledge on the environmental situation points in the same direction as the self-interest, their relative importance is hard to determine. On the other hand when environmental knowledge indicates the desirability of actions that are clearly *not* in a state's self-interest, the epistemic community will not normally get its message through. Thus, the knowledge-based approach is probably more fruitful when dealing with the prenegotiation stage when national interests have not yet been clearly defined and there is scope for establishing a regional agenda (ibid.:98). This is supported by

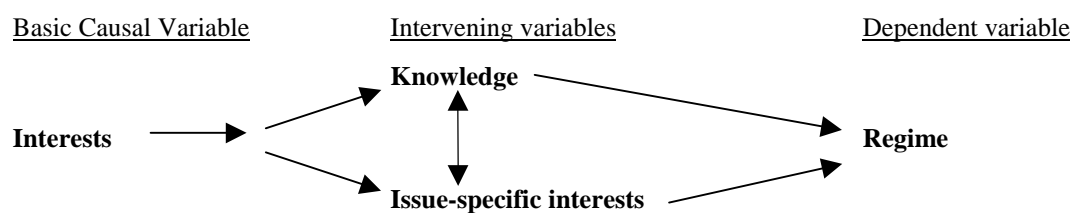
Zürn (1998:646) who says that "there are very good reasons for believing that the impact of transnational networks is most important in the stages of agenda setting, implementation, and evaluation".

When applied to the South China Sea context, the critical concern regarding the interrelationship between politics and knowledge seems relevant. Because the claimant states regard the conflict as affecting vital national interests, the trust given to expert advice can be presumed to be extremely limited when such interests are at stake. If Young is right about his argument, then the regional expert community might gain influence at the present stage by setting the agenda for regional regimes. Another scholar who has contributed to the debate on epistemic communities is Karen Liftin (1994:ch. 2) whose interest is the relationship between knowledge and power in international environmental politics. From her point of view, the epistemic communities literature is naïve when stating that scientific knowledge generates political consensus. The epistemic communities approach also "downplays the content and context of discursive practices, thereby obscuring the primary sources of persuasive competence." The main lesson to draw is that the impact of knowledge on politics is not a straightforward matter, the complexity is evident.

According to Hasenclever et al. (1996:219), rationalism and the cognitive approach may together produce a fruitful synthesis based on division of labour. The knowledge-based approach can supplement rationalism in two ways. First, by introducing the study of complex learning and normative change, cognitivists shed light on the formation of states' interests where rationalists treat interests as exogenously given. Second, the traditional exercise done by rationalists is to analyse different actors' preferences and perceived options, and then spell out possible outcomes. The knowledge-based approach introduces the variable knowledge, which intervenes between preferences and outcomes.

### **2.3 A preliminary working model**

According to the debate on the relationship between power/interests on one side and knowledge on the other, I have tried to exemplify how this can be pictured in a model.



**Figure 2.1: Variables affecting regime building**

Figure 2.1 shows that states may follow two paths when deciding to adjust policies or not. They may base their decisions on available knowledge, or they may choose to reconcile their national interests with specific interests connected to the issue area and seek expert advice. For example in the domain of biodiversity one can estimate that at an early stage the experts will have the potential to influence agendas and frame discussions. Consequently the policy options are changed according to the knowledge provided by experts. The result could be a regional regime reflecting the knowledge and values held by experts. But if we look at the delimitation and sovereignty disputes the South China Sea, issue-specific interests will probably be more decisive as a basis for policy choices. As a working model I do not claim that this represents a real situation, it is rather that the model expresses something about the variables in play and the relationship among them.

The reason why I have drawn the model above is to clarify the relationship between variables. As we have seen, the relationship between interests/politics on one side and so-called "value-free and scientific" knowledge is much debated in the literature on international relations (Lifitin 1994; Young 1994). And there are many examples of states making their own research on subjects they do not trust international bodies to perform accurately. It is also difficult to draw a clear line between science and politics.

## **2.4 Preliminary hypotheses**

On the basis of the theoretical discussion presented above, I hope that this thesis may give tentative answers to the question of whether a regional scientific community, operating within the UNEP initiative and the South China Sea Workshops, has any significance in relation to actual policy-making regarding the South China Sea maritime environment.

The growing concern for environmental questions in the region is evident when looking at the number of organisations involved in regional maritime scientific affairs (Valencia 1996:158-159). In this situation there may be political space or legitimacy for a regional scientific community to access the political agenda and influence policies. To what extent academics and a community of scientists have gained political influence has not been investigated thoroughly as far as I know. The application of the theory of epistemic communities to a context highly different from that of the Mediterranean, the empirical foundation of this particular theoretical approach, will also be an interesting test.

Following the argumentation above, three main questions arise. First, again, can we identify an epistemic community in the South China Sea region? Second, is the involvement of an epistemic community in the South China Sea Workshops and through the UNEP initiative leading to regional co-ordination of environmental policies concerning the South China Sea? Third, if it is not possible to identify an epistemic community, can any explanations be found for why a epistemic community has not been formed or gained political influence? The existence of a climate dominated by *high politics* may have prevented expert knowledge and policy advice from having any real impact.

#### **2.4.1 An epistemic community in the South China Sea region?**

My hypothesis is that we may speak of an epistemic community in the South China Sea region with its main basis in a shared concern for marine environmental degradation risks.

*H1: Is there an epistemic community of environmentally concerned experts in the South China Sea region?*

On the basis of this assumption I suggest that leading experts on maritime affairs from the littoral countries around the South China Sea are being brought together in various regime building processes connected to the South China Sea.

There *is* a regional scientific community<sup>18</sup> of oceanic and environmentally minded experts, the question is whether this group of experts is an epistemic community or not, and consequently; able to gain political influence. Most states in the region have signed and ratified the UNCLOS, and article 123<sup>19</sup> in this convention calls on littoral states surrounding semi-enclosed or enclosed seas to co-operate either directly or through the establishment of a regional organisation/institution to co-ordinate and undertake joint programmes of scientific research policies (Valencia 1996:141-142). Littoral states should also invite international organisations and/or interested states to co-operate with them. The normative political guidance laid down in this particular article in UNCLOS is obvious, and forms a strong legal basis for a regional epistemic community to emerge. The question is to what extent the national governments follow guidelines laid down in the agreement and allow a regional scientific community with basis in article 123, to be involved in environmental policies.

#### **2.4.1.1 Uncertainty, scientific authority and integrity of the epistemic community**

From the model introduced in 2.3, one can expect that an epistemic community consisting of maritime experts might gain influence *first* in matters close to their scientific disciplines. The South Chin Sea Workshops and the UNEP initiative deal with issues of a specialised character, and one may presume that scientists have authority when they discuss issues like biodiversity, maritime scientific research, marine pollution. Here, issues concerning the maritime and environmental status of the South China Sea are in focus. Uncertainty as to the nature of questions related to the sea and its environmental status may force politicians to ask scientists for advice, and this may allow experts influence political processes.

*H1a: Uncertainty in technical issues opens for an epistemic community to provide policy premises and options regarding maritime environmental policies.*

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<sup>18</sup> David Rosenberg (1999:139) and Mark Valencia (1996:159) support this statement.

<sup>19</sup> Part IX, Enclosed or Semi-enclosed Seas, Article 123: Co-operation of states bordering enclosed or semi-enclosed seas. States Bordering an enclosed or semi-enclosed sea should co-operate with each other (a) to coordinate the management, conservation, exploration and exploitation of the living resources of the sea; (b) to coordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment; (c) to coordinate their scientific research policies and undertake where appropriate joint programmes of scientific research in the area; (d) to invite, as appropriate, other interested States or international organizations to cooperate with them in furtherance of the provisions of this article (UNCLOS 1999).

If we take the above for granted, can we trust the scientific community to be free from political influence? This is where we touch upon the crucial question if experts operate on a free basis or on political premises laid by central decision-makers. We remember from the theoretical discussion that one of the premises for the epistemic community approach is that the network of experts is operating on a "free" basis. In other words, the concern for the ecological system must overshadow the egoistic interests of any particular professional group or any particular national government. The commitment to the sustainability of the ecosystem must be more important than "sectorial interests".

Other questions which will not be particularly emphasised or investigated in this thesis are those which touch upon the integrity and authority of the scientific community. Selection, appointment and funding are central factors. Whether these factors are directing the community in specific policy directions wanted by the authorities or not, and to what degree there are political limitations to the scientific activities are interesting questions. Operational autonomy without interference from national authorities is a condition for the development of an authoritative regional scientific community which can be used as a body entitled to comment and give advice in certain areas.

#### **2.4.1.2 Institutionalisation of the epistemic community**

By institutionalisation I mean the positioning of professionals in national or international bureaucracies/bodies dealing with the environment or maritime scientific research, and thereby institutionalising of the scientific influence of the professionals. The study of institutionalisation in this context follows from the following hypothesis:

*H1b: Members of the epistemic community and their common knowledge are absorbed/reflected in national and international environmental agencies and their policies regarding the maritime environment.*

The implication of institutionalisation is that governments integrate the advice given by the epistemic community in their national plans for maritime policy.

UNEP is likely to become a central player in the South China Sea. This suggestion is based on the work of Peter M. Haas on the Mediterranean (1989). UNEP has a

regional programme in East Asia, and one expect UNEP to bring environmentally concerned scientists, and civil servants together here as well. The fact that UNEP officials participated in the technical working groups of the South China Sea Workshops in December 1998, with the intention of co-ordinating the work done there with UNEP's own agenda underpin this anticipation. As a consequence, UNEP's involvement must be looked into.

#### **2.4.2 Regime building in the South China Sea: the workshop process and the UNEP initiative**

The South China Sea Workshops are based on UNCLOS, article 123, which says that "states bordering an enclosed or semi-enclosed sea should co-operate with each other in the exercise of their rights and in the performance of their duties under this Convention". As the South China Sea Workshops are based on UNCLOS, to what extent the South China Sea littorals have achieved success in taking action to co-operate with reference to UNCLOS is an interesting question. Or in other words, after nearly ten years with yearly workshops and an expanding range of issues covered; has this initiative affected regional environmental politics? The contribution of the regional scientists in promoting the South China Sea Workshops as well as the UNEP initiative will be analysed as regime formation processes.

*H2: To what extent are the Managing Potential Conflicts in the South China Sea Workshops and the UNEP initiative promoting regional marine environmental policies?*

A preliminary answer could be that the initiatives have not improved the standing of either UNCLOS, or the UNEP Regional Seas Programme. The lack of regional binding arrangements and governance systems strengthens this suggestion.

Rivalries between large states within and outside the region may obviously contribute to limit the impact of the workshops. The legacy from the cold war has created a political vacuum after the superpowers in the region which is now being filled up with political institutions. The South China Sea is one of these empty political spaces which ought to be regulated by some sort of political regime. But when the political climate in this region is dominated by rivalry among the states surrounding it, notably between

China and Taiwan, and between China/Taiwan and ASEAN, institutional build-up is difficult to accomplish.

### **2.4.3 The South China Sea conflict: A realist explanation**

The South China Sea conflict concerns vital interests of the littoral states surrounding the sea. Involving China, the repeated military confrontations and occupations, and the potential economic and strategic importance of natural resources and open sea-lanes for international communication and transport: it is not difficult to see that the conflict implies central security questions which engage the whole region (Odgaard 1997:1). The expectations which can be derived from the realist approach dealt with in 2.1.2 and 2.1.2.1 is that the littorals will participate in multilateral negotiations when they expect to achieve relative or absolute gains. The view on this question will of course differ from one state to another. Seen from the Chinese side, taking into consideration what international law predicts about the outcome/their negotiating position, taking part in multilateral formal talks on judicial rights and other central issues will imply a relative loss of gains.<sup>20</sup> Thus, my hypothesis is as follows:

*Rival hypothesis 1: The claimant states are not willing to discuss issues where they may risk to loose, or where accords will produce gaps in benefits to the favour of competing parties.*

China is not willing to discuss such issues as judicial rights, joint development of potential mineral resources, etc. According to Mark Valencia et al. (1997:77) China follows a "three 'nos'" policy in the South China Sea: no specification of claims, no multilateral negotiations and no "internationalisation" of the issue (involving other, non-regional states). The Chinese fear of getting involved in formal multilateral negotiations where the outcome is uncertain, and with a danger of involvement by other great powers such as the US, Japan and EU, is probably based on concern for its national security.

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<sup>20</sup> The UNCLOS and contemporary international law is not exactly giving China a strong bargaining position (Valencia et al. 1997:24-28).

## **2.6 Concluding remarks**

The intention of this chapter has been to sharpen the analytical tools and focus on the factors that I find important in this context. These factors are: the epistemic community, the regime building processes, and the security aspects that may seem to prevent regional integration of environmental policies.

I will return to these three factors in the following analysis of empirical findings. To sum up, three questions will guide the discussion:

1. Can we speak of an epistemic community in the South China Sea?
2. Is the involvement of an epistemic community in the South China Sea Workshops and through the UNEP initiative leading to regional co-ordination of environmental policies concerning the South China Sea?
3. Are security interests and national prestige hindering the claimant parties from building co-operative regimes in the South China Sea region?

### **3.0 The South China Sea maritime environment**

This chapter will present some of the critical knowledge that may form the basis for an environmentally conscious epistemic community of maritime scientists around the South China Sea. The South China Sea is an integrated ecosystem. It is one of the richest seas in the world in terms of marine flora and fauna; coral reefs, mangroves, seagrass beds, fish and plants (Bateman 1999:1). For the littorals, and especially for archipelagic states like Indonesia and the Philippines, fishing and marine-based tourism provide valuable foreign exchange earnings and job opportunities (Coulter 1996:375). The South China Sea itself "has become an inter-state highway in the world economy", through which 10 000 ships pass each year (Rosenberg 1999:2). But, at the same time, population pressure and rapid economic and industrial growth threaten the coastal and marine habitats that the populations of this region are heavily dependent upon. In fact, fisheries alone contribute approximately 65 % of the animal protein consumed in the Philippines, Malaysia and Indonesia, with the highest dependency being found among the poorest coastal people. The result of economic growth on one side and socio-economic problems on the other is a number of threats to the marine environment. Overfishing, sedimentation, sewage, industrial waste, oil spills, habitat destruction, and depletion of mangroves and coral reefs due to particular fishing techniques are a few of the problems one has to deal with if the South China Sea is not going to be a dumping place for regional pollution and industrial waste (Soegiarto 1994; Brookfield et al. 1993).

Internationally, a growing concern for the degradation of the marine environment has led the United Nations to formulate and undertake a large number of initiatives, beginning with the 1972 United Nations Conference on the Human Environment (UNCHE) (officially known as the 1972 Stockholm Conference) and the establishment of the United Nations Environmental Programme in the same year. Another formative event, relevant for this study, happened in the 1970s and 1980s through negotiations and agreement on the formulation of the United Nations Convention on the Law of the Sea (UNCLOS). Later, environmental questions were addressed at the 1992 United Nations Conference on Environment and Development in Rio de Janeiro, Brazil,

which addressed problems of marine pollution, and sustainable approaches to ocean and coastal governance, and through numerous conventions and protocols dealing with various aspects of the environment. In addition to the international initiatives, national programmes, and bilateral and regional co-operation take place all over the world. In the South China Sea region most initiatives are linked to either ASEAN and its member countries, or to the individual coastal nation. A further discussion of regional initiatives will follow in sections 3.4 and 4.1.1.

Although individual nations, regional entities such as ASEAN, and international initiatives relevant to the South China Sea region have been established, much work remains to be done in the region. This chapter will serve as an empirical introduction to issues of importance to the management and protection of marine resources in the South China Sea.

### **3.1 Environmental Pollution and Protection**

The South China Sea region is unique because of its abundance of coral reefs, mangroves, seagrass and fruitful estuaries, creating a biodiversity that is of great importance regionally as well as being what one might call a heritage of mankind, thus a sea important from a global perspective too. The environmental threats to these rare natural resources have been well documented in various reports (Gomez 1988; Soegiarto 1989; Coulter 1996; UNEP 1999). The degraded quality of the water in the world famous Ha Long Bay off the Hai Phong province in Vietnam is a case in print. Pollution and man-made changes to the environment threaten coral reefs, marine life and the livelihood of fishermen and hoteliers. An extract from an article published in the South China Morning Post, on 28 April 1999, is indicative:

*The director of Haiphong's Oceanology Institute, said Halong Bay had 'been invaded by sediments, heavy metals and waste water'. In 10 years, 900 million tonnes of polluted earth has been carried into the sea by rivers which traverse nearby coal-mining zones. Underwater 'hills of mud' up to 30 metres high have been created. Adding to the damage is the discharge every year of close to nine million cubic metres of waste water contaminated by lead and petrol. The coral reefs are also victims of dynamite fishing by Cat Ba Island fishermen, and untreated waste water from Haiphong, Vietnam's third-largest city with two million inhabitants, pollutes the bay. The institute also estimates that hundreds of visitor boats spill about two tonnes of oil each day.*

As we can see, environmental problems in the Ha Long [Descending Dragon] Bay are complex. This bay, which because of its thousands of volcanic islands has been called one of the world's great wonders, now suffers from problems that will lead to a further degradation of the marine environment. In the following paragraph I will describe more closely some of the challenges to the maritime environment that also can be found elsewhere in the region, near heavily populated areas.

Erosion is a major problem. Logging and "slash and burn" agriculture create millions of tons of sediments that are transported through the rivers to coastal areas and river deltas. Sedimentation is a problem because the sediments smother coral reef- /mangrove- and coastal ecosystems, and consequently destroy the productive breeding grounds for fish. A second source of pollution is solid waste generated by large cities situated along the coast. Cities situated at the banks of rivers, like Mekong, cannot manage their waste. The rivers are therefore used as deposits for solid waste and garbage. As the Mekong leaps into the South China Sea, coastal areas outside Ho Chi Minh City in Vietnam come under stress. Thirdly, sewage, just as solid waste, is often discharged directly into the sea creating red-tide phenomena and quite often bacterial contamination of entire bays. Fourth, industrial waste, a result of economic activity along the coast also, goes straight into the ocean without treatment. Regulations and laws concerning the sources of pollution have not been sufficiently developed or followed up by local and national governments as economic growth and industrial development are more highly valued than protection and management of the marine environment.

### **3.2 Resource Management: Fisheries**

Fish is an important source of food and income to Southeast and East Asians. The Southeast Asian region alone produces over 8.0 million metric tons live weight of marine fish annually, about 10 % of the total world catch and 23 % of the total catch in Asia. The South China Sea, which is in focus here, ranks fourth among the world's 19 fishing zones in terms of total annual marine production. Because economic activities and productive ecosystems – coral reefs, mangroves and estuaries – are situated in

coastal areas, some 70 % of the Southeast Asian population live along the coast (Soegiarto 1994).

The development of efficient fishing fleets and industries is seen as an important task by most governments in the region. But, increased fishing also threatens the environment. The pressure on coastal fish stocks is growing due to the introduction of modern fishing techniques like trawling. Trawls are often dragged along the sea bottom destroying corals; and through their efficiency diminish coastal fish stocks. Little remains to be caught by smaller fishing boats. At the same time, primitive destructive fishing methods are still used in Indonesia, Vietnam, China and the Philippines, and also to a limited extent in Thailand and Malaysia. The use of explosives and chemicals destroys coral reefs and habitats of species as well as their breeding grounds. Recent surveys conducted in Indonesia, which is the world's centre of coral reef diversity with some 75 000 km<sup>2</sup> of coral, show that only 29 % of coral reefs are in a good condition (i.e. with more than 50 % live coral cover), 46 % in a poor condition and 14 % in a critical condition (Cesar et al. 1997:345; Soegiarto 1994:5). Overfishing, destructive fishing methods, habitat devastation, endangered marine species and marine pollution are some of the issues that one will have to deal with in some way or another to uphold the maritime sustainability in the region.

The littorals, mostly developing countries, recognise that fish is a resource that may be threatened if the current trend continues, but they also need the fish to feed their populations and to uphold industries based on fishery products. East Asia has not only been the fastest growing economic region in the world in the 1980s and 1990s, it is also one of the most heavily populated regions. The governments have to provide food for hungry masses, and seafood is the main animal protein source for most Asians; two-thirds of the animal protein consumed in Asia comes from fish and crustaceans (Coulter 1996:372). Thus, a constant competition between socio-economic and environmental concerns exists, where the socio-economic concerns often win as food and economic income are more important to the individual than sustainable use of coastal resources.

### **3.3 Resource Management: Coral reefs, Mangroves, Seagrass, Estuaries and Wetlands**

Roughly thirty percent of the world's coral reefs are found in Southeast Asia. The diversity is very high and the coral reefs are important because they are nursery and breeding grounds for 12 % of the world's total fish catch; it has been estimated that coral reefs contribute 30 % of East Malaysia's total catch, 25 % in the Philippines (Gomez 1988; Brookfield et al.:1993; Low et al. 1996). Coral reefs are in many ways similar to tropical rainforests. Biodiversity is high, reefs fix nitrogen and sequester carbon, and they provide a visual display of colour and life unmatched anywhere on earth, thereby constituting a tourist magnet that has been exploited for many years, especially in Thailand, Malaysia, Indonesia and the Philippines. Future income from tourism and fisheries are important factors in the further development of coastal nations.

Thirty percent of the world's mangrove forest, covering 50 000 km<sup>2</sup> of coastal areas, is to be found in the South China Sea region. Mangroves have important economic and environmental value. Mangrove trees are harvested for use as fuel, building materials, etc.; they are also important because they support productive fisheries (as nursery grounds) and prawn production, and protect coastal areas against the impact of storms (Low et al.:1996). Products and ecological services provided by the mangrove systems of the South China Sea are estimated to be worth about 15.984 million USD a year (UNEP 1999).

Seagrass is a basis for many complex marine ecosystems and provides a valuable nursery for commercially important fish and other living resources (shrimp, crab, etc.). Seagrass binds sediment to the bottom, thereby preventing erosion of the sea floor.

Estuaries and wetlands are normally associated with river deltas and coastal areas where land and sea meet. These areas may include mangrove forests, swamps and fens. Wetlands and estuaries are seasonal homes to migratory birds, they have their own animal and plant diversity, and serve as nursing ground for fish and crabs. They

also trap nutrients and prevent erosion, as well as being used for aquaculture and agricultural purposes. The estimated value of these areas in the South China Sea region is 190.726 million USD a year (ibid.).

Thus and epistemic community of experts can point to rich and diverse ecosystems in the area when trying to build political support for creating a regional regime of environmental protection and resource management. They also point out how, during the last couple of decades, problems have begun to appear due to rapid industrialisation and burgeoning populations of the littoral countries (Low et al. 1996). As shown in the Ha Long example above, environmental problems are serious and visible enough to arouse public concerns. Experts also see worry for the future. The loss of coral reefs, mangroves, estuaries and seagrass beds can have serious long-term consequences because of the time these ecosystems need to recover after damage. All countries in the South China Sea region have degraded reefs. Ninety-five percent of the coral reefs around Hainan are damaged, an unknown amount along the coast of Vietnam. The original area of mangroves has decreased by 70 % during the last 70 years. With a continuation of the current trend all mangroves will have been lost by the year 2030 (UNEP 1999:14). UNEP argues that action is urgently needed to halt the destruction of the marine environment. An analysis of the efforts aimed at addressing these issues at the regional level will follow in chapters 4, 5 and 6.

### **3.4 Organisations dealing with the environmental problems at the regional level**

The United Nations Environment Programme - UNEP, established in 1972, aims at promoting international co-operation in the field of the environment and policies that live up to the sustainable development concept. Most important in this context are its Regional Seas Programmes covering 140 countries, one of the major successes of the organisation. The regional headquarters in Asia are in Bangkok, Thailand, and the first East Asian Action Plan was adopted in 1981. Indonesia, Malaysia, Singapore and Thailand signed the plan with the intention of promoting development and protection of the environment and coastal areas. COBSEA - the Coordinating Body for the Seas of East Asia - is the name of the secretariat for the programme. With technical assistance from UNEP and the member countries, various projects have been

implemented that aim to support the management of the coastal and marine environment (Bleakley et al. 1999). If we look at what we may call the South China Sea region, most activities have been directed at ASEAN countries, and three consecutive ASEAN Environment Programmes have been implemented since 1977. The UNEP partnership with ASEAN has resulted in the foundation of the ASEAN Expert Group on Environment (AEGE) and ASEAN Senior Officials on Environment (ASOEN), who have both been central players in the development of the first ASEAN Strategic Plan of Action on the Environment for the period 1994–1998.

If we take a look at the efforts by the South China Sea littorals to establish co-operation through the South China Sea Workshops, UNEP has recently been involved in co-ordinating a project, proposed by the two technical working groups (TWG and MSR/MEP), on biodiversity, with UNEP's own Strategic Action Programme for the South China Sea.<sup>21</sup> Thus there is clearly co-ordination and cross-fertilisation of the South China Sea Workshops, managed by Hasjim Djalal and Ian Townsend-Gault, and the UNEP initiative. Experience drawn from other regional seas shows that UNEP is a critical factor in the development of Action Plans to protect the environment. UNEP facilitates build-up of regional interdisciplinary expertise, with access to important policy making units in the littoral countries, engagement of NGOs, and significant public concern (Haas 1998).

The Association of SouthEast Asian Nations (ASEAN) also has various expert groups and committees with a focus on the environment. I have already mentioned two of these expert groups, the ASEAN Expert Group on Environment (AEGE) and ASEAN Senior Officials on Environment (ASOEN), but these are only two of many bodies. To mention a few others: The ASEAN Committee on Science and Technology (COST), the ASEAN Council on Petroleum (ASCOPE), the ASCOPE Experts Group on Marine pollution, the ASEAN Subcommittee on Marine Sciences (Valencia 1996:158). The integration of experts under the ASEAN umbrella is not only leading to diffusion of

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<sup>21</sup> I here refer to the meeting of technical experts on marine scientific research and marine environmental protection, of the South China Sea Workshops, in Manila, 25–28 November 1998.

knowledge of maritime environmental affairs, but also to joint efforts at marine environmental protection and research. However, the environmental policies of the ASEAN countries are much less integrated than the in European Union: "marine affairs and maritime security issues [in this region] are generally kept separate from proposals to deal with the question of regional maritime security in its broadest sense" (Carlyle A. Thayer 1994:13).

The Southeast Asian Programme in Ocean Law, Policy and Management (SEAPOL) is another non-governmental network of scholars, government officials, private sector representatives and people with an interest in the Southeast Asian maritime region, meeting on a regular basis since 1981. The network consists of more than 250 government and academic specialists from the region, and 50 associates from outside the region. Canada mainly provides the funding, just as for the South China Sea Workshops. The Canadian International Development Agency (CIDA) is the main contributor.

As a capacity building institution on Southeast Asian legal maritime affairs, SEAPOL is trying to increase "the ability of states to comply with international maritime obligations through a series of workshops" (SEAPOL 1999). SEAPOL started out by discussing the implementation of UNCLOS in the South China Sea region, but the agenda today embraces a growing number of problems and issues in coastal management and other critical sectors of ocean governance. The participants seem principally to have their background in the field of law, but as the UNCLOS also encompasses ocean development and management, maritime experts now take part in the workshops. SEAPOL is also assisting national programmes and institutes like the Maritime Institute of Malaysia (MIMA), the Philippine Institute of Marine Affairs (PHILMA) and the Thailand Institute for Marine Affairs (TIMA).

The question now is: should all these initiatives be seen as parts of a joint effort by a regional epistemic community?

#### **4.0 The regional scientific community**

Maritime environmental regime building at the regional level is often linked to UNEP's Regional Seas Programme<sup>22</sup>, which today includes 13 regions and nearly 140 states (Vanderzwaag and Johnston 1998:81). States participating in regional seas programmes co-operate either juridically or by non-binding instruments like framework conventions, protocols or action plans. The South China Sea, which is part of the East Asian Seas Regional Seas Programme, and the littoral states surrounding it, do not have any regional instrument (convention, protocol or action plan) to manage and protect common marine resources. Recently, they agreed to change this by working out a detailed report on the status of marine resources and common environmental problems, which will be discussed later under point 4.1.1.1. In this process of creating regional environmental instruments, technical expertise and knowledge have to be integrated into all aspects of the regime building process. Governments can not figure out what to do on their own without knowledge on the nature of environmental problems and how they can be dealt with effectively. Environmental diplomacy, aiming at creating effective maritime regimes at a regional level, such as in the South China Sea region, "depends on the interaction of the relevant *technical elites*" (Johnston 1988:205). The scientific community's role in establishing a Strategic Action Plan for the South China Sea is therefore potentially of great importance.

A traditional understanding of international relations implies that states and governments interact through foreign ministers, officials or diplomats. But, throughout the last decades media, intergovernmental organisations, international businesses, NGOs, etc. have gained ground on the interstate arena (Harris 1994:381). Of concern in this study is to see whether or not marine scientists are influencing state policy regarding the maritime environment and the South China Sea. As the sources of

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<sup>22</sup> UNEP was created at the Stockholm Conference in 1972 as the official mechanism for promoting and co-ordinating environmental initiatives within the UN framework. One of its first initiatives was to establish protective systems for regional seas in the developing world. Since the beginning of the 1970s more than 13 regional seas around the world have been drawn into regional seas programmes (VanderZwaag et al. 1998: 81).

marine pollution and degradation are numerous, the dependency on expertise and research institutions is high (Nurmi 1988:222). A requisite for a South China Sea maritime regime is therefore that technical elites in the region co-operate and develop the necessary skills to do the research and mapping needed to implement an efficient maritime regime. UNEP's efforts at establishing governance regimes for other regional seas have made valuable information on the regime creation process available. Their experiences confirm what was mentioned above, that transnational networks of scientists could be the elements that may help regional, environmental management systems to come about and be effective (Haas 1998). The network is important because it provides a pool of expertise and authoritative knowledge, which is a necessary basis for collective action in the South China Sea region.

Marine scientists in the South China Sea region are involved in regional issues, they go to conferences and they take part in interstate environmental projects. The meetings can be formal or informal, scientifically or politically motivated. As scientists are allowed to meet on a regular basis discussing common environmental problems in the region, they represent a body of knowledge and experience that makes them a natural part of any discussion, political or scientific, touching upon the questions of management and protection of marine resources in the South China Sea. At the same time, their efforts may contribute to long term confidence-building. As focus shifts from tendentious issues, such as sovereignty to islands, to a general concern for the South China Sea environment, a different political climate may emerge. Experience from the Mediterranean shows that scientists can be influential when they join forces across disciplinary frontiers in an effort to make politicians and decision-makers change their policies in a more environment-friendly direction. Integrating knowledge in an interdisciplinary manner where the ecological system is in focus may form a new political climate that can challenge the traditional behaviour of national governments (Haas 1989).

This chapter aims to establish whether scientific networks in this region are influential in the interstate discussion on how to manage the South China Sea. First, a broad

overview of environment related co-operation at the regional level will be presented ending with a presentation of the UNEP East Asian Seas Regional Co-ordinating Unit's work on the South China Sea Strategic Action Programme. Second, the regional scientific community will be discussed. What is particular to the scientific network in this region, what are the main characteristics, and can they be defined as an epistemic community according to Haas' definition (Haas 1992)? As examples of networks in the region, the Association of Southeast Asian Marine Scientists (ASEAMS) and the ASEAN-Australia Living Coastal Resources Project (LCR) will be briefly described.<sup>23</sup> Third, scientific participation in regional institutions and meetings will be discussed. Fourth, I will sum up the chapter by discussing the initial hypothesis: whether or not there is an epistemic community in this region.

#### **4.1 Regional environmental co-operation**

Before turning to the discussion of the existence of a regional epistemic community, I must comment on the number of projects and networks within the region. As scientists often are initiators of these projects, as they interact across borders in these projects, and as they share knowledge and information through them: a brief overview is needed to give the reader an impression of the multitude and importance of some of these networks.

Bilateral and regional co-operation, as well as national programmes, on marine science and the environment co-exist in the South China Sea region. But, to this date there are no formal multilateral agreements in the region on environmental co-operation (UNEP 1999:55-56). However, there is a UNEP Regional Seas Programme operating under the aegis of the Coordinating Body on the Seas of East Asia (COBSEA).<sup>24</sup> This entity is "owned" by the states participating in the programme: Singapore, Thailand, Indonesia, Malaysia, Vietnam, Cambodia, the Philippines, China and Indonesia.

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<sup>23</sup> I have mentioned before that the South China Sea Workshops will gain a central part in this study. The discussion of the workshops will not be included in this chapter. The South China Sea Workshops will be dealt with in chapter 5.

<sup>24</sup> COBSEA's role in the implementation of the East Asian Seas Action Plan is to set policies and the general direction for type and level of activities and projects. Most projects are delegated to a participating institution, which is given responsibility for the project (Chou Loke Ming et al. 1993:175-176).

Although an Action Plan<sup>25</sup> for the East Asian Seas was agreed upon as early as 1981, this plan has had minor effects on the South China Sea region, because of a lack of commitment by the signatory states to fund and undertake activities in accordance with the initial idea of the plan (VanderZwaag et al. 1998:81). Initially, only the five original ASEAN members joined the COBSEA, Thus the scope of the East Asian Seas Action Plan was limited. This is not to say that nothing has been done regarding environmental problems, it is rather that the management of common resources depends on the individual state, or a sub-regional group of states. Numerous sub-regional projects have been established without help from the COBSEA. I will just mention a few here: *the Mekong River Basin project*, which includes Vietnam, Cambodia, Laos, Thailand; *the Asian Development Bank's Coastal and Marine Environmental Management in the South China Sea project*, involving Cambodia, Vietnam and China; and *the Malacca Strait Co-operative Programme*, established by Singapore, Malaysia and Indonesia. In addition to these three, a *sub-regional programme on the Gulf of Thailand*, including Malaysia, Thailand, Cambodia and Vietnam, seems to be on its way with help from the Southeast Asian Programme in Ocean Law, Policy and Management (SEAPOL) (Johnson 1998).

Although there is a lack of a binding environmental agreement among South China Sea littorals, ASEAN has achieved a lot in terms of bringing the ASEAN member states together in maritime environmental projects. The ASEAN Subcommittee on Marine Science (ASCMS) and the ASEAN Senior Officials on Environment (ASOEN) have been responsible for co-operative projects with Australia (the ASEAN-Australia Marine Science Programme), Canada (ASEAN-Canadian Marine Pollution Programme), the U.S.A. (ASEAN-US AID Coastal Resources Management Programme), Japan, the Republic of Korea and the European Community (UNEP

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<sup>25</sup> An Action Plan is normally the first plan made by littoral countries surrounding a semi-enclosed sea in co-operation with UNEP. According to the East Asian Seas Action Plan of 1981, ch. 5: "The principal objective of the action plan is the protection and sustainable development of the marine environment and the coastal areas for the promotion of the health and well-being of present and future generations. The action plan is intended to provide a framework for an environmentally-sound and comprehensive approach to coastal area development particularly appropriate to the needs of the region."

1997:16). Most of these projects have come about as a result of co-operation among marine scientists, decision-makers and foreign aid agencies.

Other projects have been established with help from NGOs, IGOs or international aid agencies. Various UN organisations have sponsored marine scientific research projects like the UN-ESCAP Regional Mineral Resources Development Centre and UNESCO's major Inter-Regional Project on Research and Training on Integrated Management of Coastal Systems (COMAR) in Asia-Pacific (Valencia 1996:158-159). An influential NGO is the International Centre for Living Aquatic Resources Management (ICLARM), which has sponsored a range of activities, from conferences and workshops on waste management and marine pollution management, to the establishment of important databases like FISHBASE, REEFBASE, etc. (UNEP 1994). There is a long list of projects and programmes, too long to be mentioned in full in this study.

The number of scientific projects and programmes suggests that scientists are active in promoting inter-state projects and that they are influential in making their governments co-operate in marine scientific research. The numerous activities have mostly been framed by ASEAN, which in this way have contributed to the integration of scientists and diffusion of maritime knowledge within the Southeast Asian region. It seems like the founding members of ASEAN – Indonesia, Thailand, Singapore, Malaysia and the Philippines – have been at the front of this process of scientific integration. As Vietnam joined ASEAN in 1995, they are also participating with their scientists. The recent ASEAN members Laos, Burma and Cambodia<sup>26</sup>, do not seem to have the expertise or the economic capabilities to participate and interact at the level of competence of the other ASEAN states, but they are receiving help to upgrade and educate scientific personnel from aid agencies and ASEAN marine scientists (Kirkman 1999; Sudara 1999 [interviews]).

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<sup>26</sup> Cambodia became a full member of ASEAN on 30<sup>th</sup> April 1999 (EIU 1999: 14). Burma and Laos were admitted as full members on 23 July 1997 (EIU 1997: 20).

#### **4.1.1 Regional co-operation in the South China Sea**

If we shift focus from all relevant environmental initiatives in the region, to the ones relevant to the South China Sea only, we will see that programmes and projects are not numerous. The Asian Development Bank (ADB), with assistance from the Swedish International Development Cooperation (SIDA), has been managing a project since 1993 called Coastal and Marine Environmental Management in the South China Sea. The project aims at improving Vietnamese, South Chinese and Cambodian capabilities in coastal environmental management, and has succeeded in bringing the two ASEAN countries and China together (ADB 1996). Another initiative is the GEF funded UNDP/GEF/IMO Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas. Headed by one of the senior scientists in the region, Chua Thia-Eng, it focuses on four activities: demonstration sites, promotion of ratification of international conventions, development of sustainable financing mechanisms and capacity building. This regional programme has been successful in bringing national and local governments, industry, donor agencies, NGOs and organisations in the international community together in environmental management projects in three selected sites. Ten countries are members of the programme, established in 1994. According to Chua (1999 [interview]), this programme is doing the work that the COBSEA were supposed to do. Although the framework of this programme is rather limited, as its pilot projects involve only three countries and only a limited number of issues (12<sup>th</sup> meeting of COBSEA 1998:18), it is an important initiative that brings scientists of the region together in projects and conferences.

The ethnic, cultural and political differences among the South China Sea littorals, and especially between China and the ASEAN countries, seem not to have been easily overcome, even in the technical areas of marine scientific research. Although China is participating in the UNDP/GEF/IMO project, as well as the ADB funded project, China has been reluctant to take part formally in any multilateral endeavour that has to do with the South China Sea. As the overlapping claims to central parts of the sea have caused repeated political skirmishes between China and various ASEAN members, and still does, the political climate does not seem ripe for establishing formal legal

agreements. But, as the South China Sea littorals started to meet at the beginning of the 1990s through the South China Sea Workshops, *high politics* interaction also became more frequent within several fora (notably the ASEAN Regional Forum, Council for Security Cooperation in the Asia-Pacific and APEC). Spill-over effects to the field of marine scientific research co-operation can be seen in both the South China Sea Workshops and in UNEP's South China Sea Strategic Action Programme. A slow, but steady, change of policy seems to be coming about, with occasional steps backwards from time to time. The current maritime regime is informal and made up of ASEAN statements and informal diplomacy through various institutions like the CSCAP and the South China Sea Workshops. Formal negotiations will probably not appear before China decides to make a move in that direction.

#### **4.1.1.1 The UNEP EAS/RCU South China Sea Strategic Action Programme**

Indonesia, Malaysia, the Philippines, Singapore and Thailand adopted the East Asian Seas Action Plan in 1981 for development and protection of the marine environment and coastal areas in the region. The Coordinating Body for the Seas of East Asia (COBSEA) is the decision-making body whereas the UNEP East Asian Sea Regional Coordinating Unit (EAS/RCU) is the secretariat responsible for implementation of scientific programmes and integration of national activities. The Coordinating Body for the Seas of East Asia (COBSEA) was established at the beginning of the 1980s to co-ordinate the implementation of the UNEP East Asian Action Plan. COBSEA started out by arranging annual meetings, but soon realised that it needed scientific expertise and data as a basis for its work. COBSEA, consisting of selected government representatives, therefore decided to organise meetings of experts from the region in order to obtain scientific advice on the environmental problems of the East Asian Seas region (Goh et al. 1996:1). COBSEA undertakes a wide range of projects that aim to support management of the coastal marine environment and marine protected areas.<sup>27</sup> According to Edgardo Gomez, participating countries have evolved fairly efficient mechanisms for programme management and project implementation with technical

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<sup>27</sup> The COBSEA was established by governments of the Southeast Asian region with the mandate of co-ordinating, initiating, reviewing and approving activities related to the Action Plan.

assistance from UNEP. They have also established a trust fund that provides partial support to the programme activities (Gomez 1988).

The UNEP EAS/RCU has been working for the establishment of a South China Sea Strategic Action Programme since 1994 when Australia, Cambodia, South-Korea, China and Vietnam joined the COBSEA. COBSEA decided to revise its East Asian Sea Action Plan to encompass the new participants, and in 1996 the COBSEA finally decided to act when they "sought the assistance of UNEP and GEF in preparing a Transboundary Diagnostic Analysis of the issues and problems and their societal root causes as the basis for development of ... a Strategic Action Programme" (UNEP 1999:4) for the South China Sea. The Twelfth intergovernmental meeting of the COBSEA in December 1996 endorsed UNEP EAS/RCU's proposal for a South China Sea project and the two-year preparation phase could therefore start. Seven countries participated: Thailand, Vietnam, Cambodia, the Philippines, Indonesia, China and Malaysia. For two years, the South China Sea littorals worked on national interagency reports on the marine environment. These reports were used as a basis for the Transboundary Diagnostic Analysis (TDA), which is the first step to take in order to obtain funding from the Global Environment Facility (GEF). GEF only funds projects that are of a transboundary nature, or in other words, projects that are aimed at managing shared environmental problems in the region (Talaue-McManus 1999 [interview]).

The work laid down in first the Transboundary Diagnostic Analysis, and then secondly in the South China Sea SAP when the funding was secured from GEF, was a major effort by national governments as well as the marine scientific experts who took part in the preparation stages. Such a project has in fact never been done before in the region. According to Liana Talaue-McManus (*ibid.*), the UNEP Task Manager responsible for formulating the Transboundary Diagnostic Analysis, this work was not easy. It is no problem to prove that each nation in the South China Sea region is suffering from marine environmental problems. The difficulty lies in proving that the problems are transboundary, she claims. The lack of data, and the fact that reports on transboundary

environmental problems in the South China Sea have not been made before, made the task even more difficult. But, it turned out, that when the Transboundary Diagnostic Analysis and the first draft of the South China Sea Strategic Action Programme had been finished, the funding agency, the Global Environment Facility (GEF), said it was the best international waters project ever (Talaue-McManus 1999; Kirkman 1999 [interviews]).

#### **4.1.1.2 China refuses to sign**

When the Strategic Action Programme was finally ready and the seven countries who took part in the preparation stages were about to sign and adopt the proposals laid down in it, political problems prevented the South China Sea Strategic Action Programme from being implemented. Thailand, Cambodia, Vietnam, the Philippines, Indonesia and Malaysia all signed the Strategic Action Programme, but China refused to. According to Hugh Kirkman (1999 [interview]), Chinese government agencies involved in the preparation stages, the Ministries of Harbour, Fisheries, Forestry, Finance, the State Environmental Protection Agency and the State Oceanic Administration, could not agree on whether to sign the plan or not. The Ministry of Foreign Affairs has so far, in November 1999, blocked the decision to sign the plan, although the other parties have discussed implementation of the Programme without Chinese participation (Talaue-McManus 1999 [interview]). Hugh Kirkman (1999 [interview]), UNEP's Coordinator of the EAS/RCU, could not understand why the Chinese would refuse to take part in something they had been working on for two years. There were absolutely no signs of Chinese withdrawal from the project until the last minute. The disappointment was therefore huge, on the part of the UNEP staff and for the people who had been working on this plan for many years.

The UNEP initiative, which was aimed at improving management and protection of the marine environment of the South China Sea, ran into difficulties because China has unresolved sovereignty conflicts with its Southeast Asian neighbours. There can be no other answer. This behaviour has been experienced by the ASEAN countries before. ASEAN has made efforts at engaging China in peaceful and confidence-building talks both through the ASEAN Regional Forum and through the South China Sea

Workshops, but China "often douses cold water on the various ASEAN initiatives to resolve the South China Sea dispute within a multilateral framework".<sup>28</sup>

#### 4.2 A regional network of scientists

In my initial hypothesis I posed a question regarding the potential existence of an epistemic community in the South China Sea region. Haas' (1992:3) definition of a scientific community is "*a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area*". According to Hugh Kirkman (1999 [interview]), director of the UNEP EAS/RCU in Bangkok, there are some 20 senior scientists in the region.<sup>29</sup>

Name	Profession	Position	Nationality
John William McManus	Marine Ecologist	ReefBase Project Leader/ Aquatic Environments Program Leader, ICLARM	American
Aprilani Soegiarto	Marine Scientist	Vice Chairman, for Natural Sciences, Indonesian Institute for Natural Sciences	Indonesia
Chua Thia-Eng	Marine Zoologist	Regional Programme Manager, UNDP/GEF/IMO project	Malaysia
Miguel D. Fortes	Ph.D Botany	Researcher, Marine Science Institute, Univ. of Philippines	Philippines
Liana Talaue-McManus	Oceanographer	Researcher, Marine Science Institute, Univ. of Philippines/Task Manager UNEP TDA and SAP	Philippines
Porfirio Alino	Chemical Ecologist	Researcher, Marine Science Institute, Univ. of Philippines	Philippines
Gil Jacinto	Earth Sciences	Researcher, Marine Science Institute, Univ. of Philippines	Philippines
Edgardo Gomez	Marine Biologist	Director, Marine Science Institute, Univ. of Philippines	Philippines
Maria Helena T. Yap	Doctor rerum naturalium	Researcher, Marine Science Institute, Univ. of Philippines	Philippines
Chou Loke Ming	Marine Biologist	Professor, Dep. of Biological Sciences, National University of Singapore	Singapore
Jeffrey K. Y. Low	Marine Biologist	Researcher, Dep. of Biological Sciences, National University of Singapore	Singapore
Anond Snidvongs	Marine Scientist	Director Southeast START Regional Centre, Environmental Research Institute, Chulalongkorn University	Thailand
Suraphol Sudara	Marine Biologist	Director Department of Marine Science, Chulalongkorn University	Thailand

**Figure 4.1: Central scientists in the regional scientific community.**

<sup>28</sup> Samuel Kim (1994): "Mainland China in a Changing Asia-Pacific Regional Order," *Issues and Studies* 30, no. 10: pp. 36-38 cited in Castro, Renato Cruz De (1998): "The Controversy in the Spratlys: Exploring the Limits to ASEAN's Engagement Policy," *Issues and Studies* 34, no. 9, pp. 95-123.

<sup>29</sup> There are of course hundreds, if not thousands, of marine scientists in this region. When Kirkman mentions the number 20, he refers to the senior scientists that are participating at the highest level of interaction among marine scientists. These scientists are often directors or managers of marine science institutions and have been involved in marine scientific interaction at the international level since the beginning of the 1980s, and even before that. They are also closely linked to decision-making bodies in their home countries (Chua 1999 [interview]).

I must emphasize that the list is made on the basis of my personal views, these views are again based on interviews, conference proceedings and secondary literature as referred to elsewhere in this chapter.

These scientists are the ones that started the meetings on marine environment within ASEAN. Since the 1980s they have met frequently at conferences, workshops, and project meetings. Vietnam, Cambodia, China and Taiwan were excluded from participation in the beginning, for different reasons, and, as a consequence, scientific networking was confined to the initial ASEAN countries. This can be seen from the participant lists of conference proceedings from the 1980s.<sup>30</sup> Participation in conferences was limited to Indonesia, the Philippines, Singapore, Thailand, Malaysia and Brunei Darussalam. ASEAN has thus been able to integrate policies and expertise across borders, leaving Indochina, China and Taiwan out until these countries were invited to the South China Sea Workshops in 1991. Since 1991 all South China Sea littorals have approached each other first through the South China Sea Workshops, then later through the expansion of COBSEA to include China, Vietnam and Cambodia in 1996. And later as ASEAN has expanded in 1995 (Vietnam), 1997 (Laos) and 1999 (Cambodia), participants from Indochina are invited to take part in all activities within the association. China has also become more integrated in the ASEAN political dialogue during the last decade through the ASEAN Regional Forum and the ASEAN Post-Ministerial Conferences.

Scientists from China and Taiwan have been excluded from the ASEAN meetings and networking for different reasons. First of all, because China and Taiwan are not considered Southeast Asian countries. Second, the political cleavage between Southeast and Northeast Asia *has* been rather large, and continues to be so in many fields. The Southeast Asian countries have been sceptical of China's ambitions in

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<sup>30</sup> Three conference proceedings from the 1980s: Chua, T.-E. and D. Pauly (eds) (1989): Coastal area management in Southeast Asia: policies, management strategies and case studies, ICLARM Conference Proceedings, No. 19; Christy, F. T., Jr., (ed)(1980): Law of the sea: Problems of conflict and management of fisheries in Southeast Asia. Proceedings of the ICLARM/ISEAS Workshop on the Law of the Sea. ICLARM Conference Proceedings, No. 2; and Piyakarnchana, Vitit Muntarborn and

Southeast Asia since the Communists gained power in 1949. As China was sponsoring communist movements in Southeast Asia, her role in the region created some concern among ASEAN countries. Indonesia, as the last ASEAN member state, first opened diplomatic relations with China in 1990 (Castro 1998:97-102). The relationship can also be viewed the other way around; China with its communist legacy and its position in the South China Sea does not want to join formal agreements that may encroach on its sovereignty or implicate internationalisation of the South China Sea conflict.

Sovereignty is a very sensitive issue as emotions, based on memories of national humiliation from the period of western influence and colonialisation, remain strong in Chinese nationalist thinking (Gurtov et al. 1998:264; Shee 1998; Stenseth 1999).

Taiwan with her weak international status must be very cautious in her interactions with ASEAN, in order to be able to participate in meetings where PRC representatives are also present. Scientific networking was for a long time limited to ASEAN countries, and was only expanded to include the Indochinese countries, China and Taiwan after the Cold War.

However, although scientific networking has been limited to ASEAN countries, Chinese scientists have expressed a general willingness to co-operate. In the First Working Group Meeting of the Technical Working Group Marine Scientific Research, a Chinese scientist presented a paper where one part addressed regional co-operation and Chinese scientists' contribution:

*It has become a historic task for scientists of this region to actively conduct marine scientific research, ... so as to maintain the steady societal/economic development in this region. To fulfill this task the best way is to conduct regional cooperation ... However I would suggest that scientific exchange among scientists should be carried out before a regional cooperative mechanism is established. (Mao 1993:140-141)*

Regular scientific networking among all the South China Sea littorals started in 1993 when the first Technical Working Group on Marine Scientific Research was arranged. There had been little signs of interaction at the scientific level before that first meeting, except for a series of "Conferences on the Marine Biology of the South China Sea"

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Douglas M. Johnston (eds.)(1990): Land-Based Marine Pollution Problems in the Asia-Pacific Region: Status and Legal Developments. Proceedings of workshop held on May 7-10, 1989, SEAPOL.

first held in 1990.<sup>31</sup> Scientists met at international conferences and meetings confined to special issues or professions, but there had been no specific forums for scientists from the South China Sea littoral countries. The political context has limited scientific networking to the ASEAN countries, thereby leaving the numerous Taiwanese and Chinese marine scientists, who are supposed to be some of the best in the region, out of the networks (Chua 1999, Townsend-Gault 1999 [interviews]). According to Chinese authorities there are some 109 research institutes and 13 000 research personnel involved in various oceanographic research projects and programmes in China today (White Papers of the Government: The Development of China's Marine Programs 1999).

#### **4.2.1 An epistemic community?**

Haas' (1992) broad definition of epistemic communities (described in chapter 2.2) is quite theoretical, and demands a vast amount of data on scientific networking and on the scientists themselves. Scientists belonging to an epistemic community must share normative and principled beliefs, cause and effect understanding, they must have common notions of validity of data, and they must share a common political enterprise to fulfil the definition. To find out whether the scientific network within the ASEAN region fulfils Haas' definition of an epistemic community or not, is difficult. But, from the information and data I have been able to gather, the ASEAN network seems to score rather high on all four variables. As they all know what damage is being made to the coastal environment in the ASEAN countries, as they all know in which direction one has to proceed if improvements of the current situation are to be made, and as they have met regularly over the last two decades, the diffusion of knowledge and experience across borders has no doubt created a network of well informed marine scientists. The great variety of activities organised within the ASEAN framework and in co-operation with countries external to the region, show that these marine scientists are capable of working together and conduct joint projects for the advancement of

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<sup>31</sup> A fourth conference was organised this year by the Marine Science Institute, University of Philippines. The first Conference on the Marine Biology of the South China Sea was held at the University of Hong Kong in 1990, the second in Guangzhou, China in 1993, and the third at the University of Hongkong in 1996 (The Fourth International Conference on the Marine Biology of the South China Sea 1999).

better management and protection of marine resources in the ASEAN region. As one of the senior marine scientists says (Koh et al. 1995:201-202):

*"Through internationally funded projects, many opportunities are opening for regional cooperation... A new mechanism for cooperation is thus being forged quietly within the region..."*

At the same time, one can see in conference proceedings and relevant articles that there is a general concern for the environmental situation in this region among members of the policy community.<sup>32</sup> Even the Thai Premier, Chuan Leekpai, acknowledged the environmental challenges in his speech to a conference on ASEAN coastal resources in 1990 (Chua 1991a:15-19):

*In the past, we have generally attempted to regulate coastal areas from the viewpoint of a particular ministry or agency or a single interest group. Now, however, we are beginning to realize that we must coordinate with various interest groups to reverse the increasingly negative socioeconomic effects of coastal resources exploitation. We must also adopt a longer-term perspective, and consider how our children and their children and their children will continue to benefit from these natural resources.*

Scientists have been successful in gaining access to the inter-state level, scientists have been somewhat successful in gaining the attention of decision-makers, scientists have been successful in initiating and executing multilateral environmental programmes, and scientists, in general, have been successful at establishing environmental issues as a matter of concern in the region.<sup>33</sup> Focus on the environment and the establishment of environmental projects and work throughout the region would probably not have happened without the contribution of the scientists themselves as it is the scientists who inform governments about the environmental situation and who normally manage to see the use and exploitation of marine resources from an ecologic perspective, and not from an economic development perspective, as governments of this region have had a tendency to do in their quest for welfare and prosperity (Coulter 1996).

#### **4.2.2 "Authoritative claim to policy relevant knowledge"**

The other part of the definition raises the issue of "authoritative claim to policy relevant knowledge". Policy relevant knowledge is knowledge that is estimated to be

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<sup>32</sup> Chua 1989, 1991a, 1991b, 1992, 1998; Gomez 1988; Koh et al. 1995; Coulter 1996; Magno 1996; Johnston 1998.

<sup>33</sup> Whether their efforts have been efficient or not will not be discussed here but in chapter 6.

important by a given policy community in a situation of crisis or uncertainty (Haas 1989; 1992). In such situations, decision-makers often turn to a group of scientists or experts that are recognised as authoritative within the particular field of concern. When countries face economic crisis they turn to economic advisers they trust. When an ecological crisis occurs, decision-makers turn to authoritative scientists. With the current environmental situation in the coastal waters of the South China Sea, where degradation of coral reefs, mangroves, seagrass and fisheries threatens the livelihood of coastal populations, tourism, etc., decision-makers turn to the scientists for advice. The scientists have documented the environmental situation in various reports.<sup>34</sup> The effects of the environmental degradation problems are spelled out and regulatory and managing practices are recommended. China has unilaterally decided to ban fishing in the South China Sea for two months every summer since 1995 as the rapid depletion of fish stocks in coastal waters became apparent through assessments made by scientists.<sup>35</sup> Likewise, the ASEAN countries recognise that their marine environment is under great stress and emphasise major problems like shipbuilding in Singapore, oil exploration and extraction in Brunei, fishing in the Philippines, Indonesia and Thailand (ASEAN 1994:21). There is also a general acknowledgement of the fact that the region's mangroves could be extinguished by the year 2030, and with 80 % of the coral reefs damaged, the future is not looking bright. The marine scientists are all aware of the situation and they try to do something about it through the diffusion of knowledge, establishment of marine protected areas, marine scientific research projects, etc. They meet in conferences and they take part in initiatives launched by ADB, ASEAN, UNEP, etc. Through the contribution of international organisations and regional scientists, ASEAN has established its own "Action Plan for the protection and development of the marine environment and coastal areas", it has a Subcommittee on Marine Sciences (established in 1978) under the ASEAN Ministerial Meeting on

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<sup>34</sup> Gomez, E.D. (1980): Status Report on research and degradation problems of the coral reefs of the East Asian seas. UNEP/WG 41/INF. 15. South China Sea Fisheries Development and Coordinating Programme, Unpublished Report, 54 pp. ; Gomez, E.D., M. Hungspreugs, A.A. Jokhy, K.J. Kuan, R.S.S. Wu, A. Soegiarto and Deocadiz (1988): Report on the state of Marine Pollution in East Asian Seas Region. Unpublished Report, 81 pp.

<sup>35</sup> South China Morning Post, Thursday June 3 1999: "Vietnam rejects Beijing fishing ban"; Lateline News (China), Internet, March 24 1999: "China extends fishing ban to South China Sea".

the Environment, and it has helped national governments and national scientists to evolve projects on regional, national and local levels in the entire region (Chua 1991a:2-3). Chua Thia-Eng (*ibid.*:34) states, regarding one of the many ASEAN marine environmental programmes, that:

*"Through the collective efforts of national scientists, resource managers, administrators and the support of national political leadership, the ASEAN/US Coastal Resources Management Project has made significant advances towards managing the region's coastal resources."*

It is seems that ASEAN political leaders acknowledge the importance of their coastal ecosystems and that they trust their marine scientists when they say that the environment is under great stress. Although there has been a gradual change towards more emphasis and focus on the marine environment, as shown in the Chinese and ASEAN examples, this has not yet led to the establishment of binding legal or formal interstate agreements in the region. The scientists have managed to get attention and support from their governments through conferences, projects and programmes. They have also managed to establish scientific networks, where scientists from the South China Sea littorals participate. Behind these activities is in fact an integrated network of marine scientists. This statement is supported by Valencia (1996) and Rosenberg (1999:9) who claim that there *is* actually a regional community of scientists. According to Hugh Kirkman (1999 [interview]) at the UNEP East Asian Seas Coordinating Unit office in Bangkok, there is a small group of about 20 to 30 senior scientists in the region that form an informal network. These scientists have participated in regional conferences within ASEAN, and they are still participating in conferences on South China Sea environment issues. They have been influential in bringing the coastal and maritime environment onto the political agenda, which can be seen through the gradual growth of projects, initiatives and meetings/conferences at the regional level. One of these senior scientists, Suraphol Sudara (1999 [interview]), director of the Marine Science Institute, Chulalongkorn University, Thailand, said that "senior researchers from the region have met since the middle of the eighties." He also mentioned that there is a promising new generation of scientists. This new generation is more integrated than the older generation. Chua Thia-Eng (1999 [interview]) pointed to the fact that most governments in the region now have their own integrated coastal management projects, as well as established marine protected areas. The

establishment of these projects and areas are very often the result of scientific influence on policy.

#### **4.2.3 Two networks/projects**

There are two examples of scientific initiatives in the region: ASEAMS and the ASEAN-Australian Living Coastal Resources Project. Although both of them are limited to the Southeast Asian region, thereby excluding China and Taiwan, and financed by external sources (AUS AID and UNEP), I think they are illustrative and good examples. They prove that scientists are able to initiate and implement environmental projects. The two examples are illustrative because they are part of a long process within ASEAN where scientists, national governments, foreign aid agencies, UN organisations and NGOs co-operate in bringing the marine environment onto the political agenda, in diffusing scientific knowledge not only among scientists but also among decision-makers, officials and generally within the ASEAN community, in creating scientific networks, and in establishing projects and programmes that help the governments of the Southeast Asian region to establish sound and effective marine related policies and regulations.

##### **4.2.3.1 Association of Southeast Asian Marine Scientists (ASEAMS)**

The Association of Southeast Asian Marine Scientists (ASEAMS) was established by UNEP and COBSEA to provide independent, expert scientific advice regarding programmes implemented in the East Asian Seas region. ASEAMS is also aimed at integrating the region's marine scientists with various national, regional and international organisations (Chou Loke Ming et al. 1993). The first meeting was held in 1986, and after that a number of meetings took place before the network was dissolved in 1996. Participants at meetings were mainly from the five signatory states of COBSEA, but other interested parties were invited, mostly NGOs and IGOs. Participants included among others Chou Loke Ming (Chairman), Edgardo Gomez (Chairman), Anond Snidvongs, Suraphol Sudara and Helen T. Yap.

What is particular in this case is that the governments, through interaction in the COBSEA meetings, discovered the need for scientific data and knowledge. UNEP and

the COBSEA needed a group of experts who could advise them in their work on the East Asian Action plan. ASEAMS also helped COBSEA in arranging meetings and co-ordinating the many projects and activities. The framework for the ASEAMS and COBSEA activities included as many as 500 scientists and several dozen national institutions in the implementation of the East Asian Sea Action Plan in the middle of the 1980s (Gomez 1988:13).

Unfortunately the funding was cut off by UNEP after a few years and the ASEAMS network was dissolved. The UNEP idea was to provide funding in an initial phase, and then the governments were to provide further funding for the continuation of the network. According to Hugh Kirkman (1999 [interview]), the director of the UNEP EAS/RCU in Bangkok, such networks should not be dependent on UNEP funding. Governments of the region must show that they are willing to contribute as well, he claims. UNEP's aim is to help littoral countries develop effective political and scientific frameworks for protecting and managing their own marine resources. Kirkman would like to see ASEAMS again re-established, but then the network would have to be ensured funding beyond the initial funding phase. The willingness of scientists to co-operate is not a problem, but funding and political good-will are hard to come by. The ASEAMS was supposed to be an advisory body for COBSEA, which any decision-making body needs when dealing with technical issues like marine environmental pollution and management, but due to lack of political will to fund the advisory body, it was dissolved.

#### **4.2.3.2 The ASEAN-Australia Living Coastal Resources (LCR) Project**

The ASEAN-Australia Living Coastal Resources (LCR) Project was started in the early 1980s when scientists from the ASEAN Working Group on Marine Sciences (a sub-committee of the ASEAN Committee on Science and Technology) approached the Australian government. The ASEAN scientists saw the need for a closer examination of their (the ASEAN members') coastal resources, and the LCR project was established with funding and expertise from the Australian Aid Agency, AUS AID. Most of the work done in the project was carried out by the ASEAN scientists with assistance from the Australian Institute of Marine Science. The reasons for success,

according to a report by Clive R. Wilkinson and Suraphol Sudara (1996:91-105), were that "this was predominantly a scientific project devised and managed by ASEAN scientists with solid funding and expertise from Australia." (The reader should notice that emphasise is put on the fact that (solid) funding came from outside the region.) The project also established a closely interacting network of marine scientists with senior members of the regional scientific community in front: Suraphol Sudara, Chou Loke Ming, Jeffrey K. Y. Low, Perry Alino, Miguel D. Fortes, Helen T. Yap and Aprilani Soegiarto. Through workshops and joint scientific work these scientists from the ASEAN countries have come closer to each other through the many years the project has existed. The diffusion of knowledge and experience through the project has been possible through the assessment of regional trends and through the creation of the world's largest database on coastal resources. The data collected were necessary for analysing countries and sub-regions comparatively (Wilkinson and Sudara:1996). The time factor (from beg. of 1980s and still ongoing) was also important as both senior and younger scientists had been involved in these projects since the early 1980s. Knowledge was shared through conferences and workshops. The authoritative role the Asians themselves played in this project also contributed to the successful results. These can be summarised as: a strong network, many trained young scientists, and diffusion and integration of environmental knowledge and attention within ASEAN. As George Creswell (1996:106) says:

*The trusts and real friendships necessary for such projects are established through a progressive escalation of cooperation. These, as it were, 'came out of the wash' in the ASEAN-Australia expeditions through all parties being fully briefed and therefore pulling in the same direction. The legacy of the expeditions is substantial. Young scientists from different ASEAN nations now have the shared history with which to discuss very freely the projects and problems that their nations share. Universities in ASEAN have access to modern data sets from their seas that can be used for research and teaching.*

These two projects, the ASEAMS and ASEAN-Australia Living Coastal Resources (LCR) Project, seem to have obvious, positive outcomes. Co-operative projects on marine science are definitively contributing to the build-up of scientific networks in the region. One can probably conclude that the networks are bringing the ASEAN countries closer together, but what effect these networks have on South China Sea issues is more difficult to assess as China and Taiwan are not participating.

To sum up, there is a regional network of scientists that have authoritative knowledge and that have definitively contributed to political change within the region. The many projects and endeavours in the region, sponsored by various aid agencies, agencies of the UN system, and by the national governments themselves, are a sign of what direction the future might take.

### **4.3 Institutionalisation**

Although there is still a clear lack of institutional capacity for national and regional enforcement of environmental legislation in the Southeast and East Asian region (Haas 1998; Utrikesdepartementet 1998:81-82), a gradual change has been evident since the beginning of the 1980s. Environmental ministries and environmental laws have been established and adopted in most countries, international organisations are present, the number of environmentally oriented NGOs has increased, although it differs from one country to another. NGOs have become an important factor in promoting environmental concern and putting pressure on politicians throughout the region.

There has been a gradual institutionalisation of efforts within ASEAN. The first ASEAN Environment Programme appeared in 1977. As COBSEA was established in 1981, UNEP became more involved in ASEAN's environmental efforts, and this has helped ASEAN to establish its environment programmes. ASEAN later established the ASEAN Experts Group on Environment (AEGE), upgraded to the ASEAN Senior Officials on Environment around 1990. In 1988, UNEP, COBSEA and AEGE formulated the ASEAN Environment Programme III (ASEP III). ASEP III was to be implemented in the period 1988 to 1992, and was a continuation of ASEP I (1978-1982) and ASEP II (1983-1987). ASEP III finally culminated in the formulation of a new ASEAN Strategic Action Plan on the Environment that was adopted by the Sixth ASEAN Ministerial Meeting on the Environment in April 1994. This gradual integration and upgrading of environmental issues within ASEAN is in large part due to the involvement of UNEP and due to the growing international focus on the environment after the establishment of Agenda 21 from the UN Conference on Human Environment (UNCED) and the UN Law of the Sea Convention, which both emphasised the need for regional and sub-regional co-operative environmental

programmes. The ASEAN Strategic Action Plan was more or less a direct response to the outcome of the UNCED process (ASEAN 1995:15).

An example of how closely integrated different actors have co-operated with ASEAN is illustrated through the ASEAN/US Coastal Resources Management Programme. The programme was successful in bringing all relevant parties together: media, policy makers, scientists, donors and local communities. The initiative came from ASEAN, the funding from US AID, and the administration of the projects was done by the NGO, International Centre for Living Aquatic Resources Management based in Manila. Through several conferences, where representatives of all relevant parties participated, knowledge and experience were diffused. More than 200 scientists and resource managers were involved, representing 47 national institutions. Through the programme 6 pilot sites were established in each of the ASEAN countries. Research covered different areas, not only marine science, but also socio-economic, legal and institutional aspects were dealt with (Chua 1991b:21-34). Through such large projects knowledge was diffused and policy makers made aware of, thus having to consider, coastal environmental problems. The result of such projects is that governments are made aware of the future impacts of a negligence of environmental policy. They are made aware of the contribution that tourism and other marine related sectors are making to the national GDPs, and they are made aware of the possible future costs of oil-spills, marine pollution, overfishing, etc.

There has been a gradual institutionalisation of marine related environmental problems. The UNEP East Asian Seas Action Plan of 1981 was the first step in a process towards integration and diffusion of marine environmental knowledge and policy in the Southeast Asian region. As stated by Edgardo Gomez (1988:13) in 1988:

*In the implementation of the action plan several dozen national institutions have been involved and nearly five hundred national experts have benefitted from training activities. Consequently, there has been an improvement in government awareness of environmental concerns in the marine realm which is slowly being translated into policies and measures in conformance with the objectives of the action plan.*

The ADB projects, the UNDP/GEF/IMO regional programmes, ICLARM, SEAPOL, etc. reflect the diversity of initiatives and projects aimed at improving management

and protection of marine resources, but at the same time they reflect lack of co-ordination and lack of clout which will be further discussed in the next chapters.

#### **4.4 Concluding remarks**

Through this chapter I have tried to find out if there is an epistemic community with shared common knowledge and values, and with a certain degree of political influence in the South China Sea region. I think I have reasonable basis for suggesting that there is an epistemic community in this region and that it has had some influence in bringing environmental issues onto the political agenda. The numerous projects and programmes focusing on the marine environment suggests that scientists are influential in attracting funds and attention both from within and outside the region. The numerous meetings and conferences referred to can also be taken as a sign of integration of scientists within ASEAN. Chou Loke Ming, senior marine scientist from Singapore, sums up the situation:

*Information has resulted from a growing number of national, bilateral and regional research programmes designed to increase understanding of the periphery of the South China Sea. Various mechanisms for information exchange exist in the region and these are usually associated with established networking programmes, some of which are initiated by regional or international intergovernmental agencies. The number of newsletters, technical reports, and scientific data generated from these programmes shows that much information is available. Numerous conferences in all fields of marine science held in the region demonstrate the interest of scientists and policy makers. Training opportunities in marine science are also expanding within the region. In order to strengthen the region's management of the South China Sea, what may be needed is an effective mechanism to coordinate and integrate all aspects of marine science training, networking and information exchange. (Chou et al. 1993:174)*

My preliminary conclusion at this point is that the regional scientific community may be classified as an epistemic community, but so far it has little political influence. An official participating in the annual consultations between ASEAN states and China said, in 1997 (referring to a discussion on implementation of the Law of the Sea): "The tone and the mood have improved. What we need to do now is to mobilize the political will to make real progress and the technical side will follow."<sup>36</sup> The number of activities going on with support from the ASEAN governments suggests that scientists have influenced governments to promote marine environmental policy, the question is: are governmental efforts making a difference? There is still a lack of co-ordination of the numerous initiatives, projects and programmes, China continues to be sceptical

about letting her scientists participating in ASEAN related activities, and there is still a lack of actual political change following from the knowledge forwarded by the scientists. And although UNEP and local scientists have made a great effort in preparing the establishment of a marine environmental regime for the South China Sea, after three years of work, there is still no regime operating. The next chapter will look further into regime building processes where scientists, diplomats and decision-makers are gathered discussing issues relevant to the South China Sea.

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<sup>36</sup> South China Morning Post, 18 April 1997.

### ***5.0 Regime building efforts in the South China Sea region***

The South China Sea is common to the states surrounding it. It contains living and non-living resources, and, representing the main maritime infrastructure of the region, it is extremely valuable to the nations bordering it. If we compare the South China Sea to other semi-enclosed seas – the Mediterranean, Baltic, Caribbean and South Pacific regions – one soon recognises that the South China Sea is different in that it lacks formalised co-operative instruments that integrate and co-ordinate efforts by littorals at managing and protecting the marine life, as well as regulating marine economic activities of the region. The nations of the South China Sea region have not established effective conventions or legal frameworks for common governance of the marine environment. Fisheries, ecosystems, shipping, pollution, etc. are discussed in meetings among scientists and at various levels of government, but the attempts at addressing these important questions multilaterally, including all 10 states surrounding the sea, remain at what one might call an "elementary stage". My general impression of what is going on is that the few attempts at bringing the littorals together in creating regional regimes by UNEP, and also by individual ASEAN member states, seem to run into difficulties as proposals for co-operation are often blocked by one or several states; often because of economic or other selfish state interests.

This chapter will look into regime building processes in the South China Sea region, attempt to establish regimes for managing marine resources. Weight will be placed on the contribution made by the regional scientific community at establishing co-operation on environmental issues. Scientific participation in informal meetings between the littorals, and in the UNEP initiative, is of special interest.

I will first describe the efforts and nature of a particular process initiated by ASEAN: the South China Sea Workshops. A description of the subjects raised and discussed, as well as some suggestions on the nature of the workshops and how they can be placed within regional politics.

Second, I will analyse the workshops, and the UNEP initiative, as regime building processes. The steps taken to integrate national policies concerning environmental issues, particularly within ASEAN, seem lately to have taken a positive direction (Dupont 1998; Rosenberg 1999). The question is to what extent these efforts may induce the states to co-operate on South China Sea issues, and, whether marine scientists can be influential in changing the political atmosphere by getting priority for environmental issues.

Third, I will discuss the question: to what extent the regional scientific community is promoting regional environmental co-operation through participation in the South China Sea Workshops and the UNEP initiative. Some suggestions on the strengths/weaknesses of the use of cognitive vs. rationalistic theoretical approaches to analyse regime building processes will be discussed as well.

### **5.1 The background for the South China Sea Workshops**

To understand the origin of the South China Sea Workshops, one ought to understand why the South China Sea is so important to the littoral countries bordering it. First, and maybe most important, is that there is a conflict among the countries of the region on sovereignty to the islets in the Spratly area, and also the Paracels, and no agreement as to how one should proceed in delimiting maritime zones. The multilateral character of the conflict and the repeated skirmishes between the various countries who occupy islands and reefs (China, Taiwan, Vietnam, the Philippines and Malaysia) have turned the sea into a veritable political and military hot-spot. The conflict does not only concern the states directly involved, but also outside powers like the United States, Japan, Australia and the EU.<sup>37</sup> The geographical context of the South China Sea, situated in the middle of the Southeast Asian region as well as including the East Asian countries of China and Taiwan, gives it a central position in the new security structure in the Asia-Pacific; ASEAN on one side, China and Taiwan on the other. Security concerns thus tend to overrule concern for the environment.

Second, the states around the South China Sea have not clarified their claims to maritime zones in accordance with the provisions the UNCLOS exist regardless of the political situation. The use or abuse of international law will have important effects on all claimants, and how the LOS is interpreted and implemented in the South China Sea has and will have important implications. Almost everything remains to be done in terms of implementing UNCLOS.

Third, the environment, hereunder both living and non-living resources, needs protection and monitoring. In order to protect and monitor ecosystems of the South China Sea, on which the coastal populations are highly dependent, marine scientific research and regional marine co-operation are of critical importance.

Fourth, the resources of the South China Sea, both living or non-living, must be managed. The coastal fisheries have already experienced a dramatic down-turn. Thai, Malay, Vietnamese, Chinese and Indonesian fishermen have to go further and further out to sea to catch fish, causing a growing number of fishing disputes and incidents, particularly in the fish-rich Spratly area. Common management of the resources is highly needed if fish stocks are not to be depleted.

Fifth, shipping, navigation, transportation, etc. depend on stable international relations and states with a will and capacity to repress piracy. As the littorals are dependent on the sea to export and import goods, for fishing, for tourism, etc., there is a need for regional co-operation on these issues; not only for economical reasons, but also for the sake of the environment. Worries in Malaysia, Singapore and Indonesia for the environmental security in the highly congested Malacca Strait needed to be taken seriously.<sup>38</sup>

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<sup>37</sup> As the South China Sea is one of the world's throughfares for shipping it is important for out-side powers to uphold peace, safety and stability so as not to disturb the economies dependent on the sealanes passing through. 80-90 % of Japan's oil import comes through the South China Sea.

<sup>38</sup> Through the establishment of the February 1981 Memorandum of Understanding between Indonesia, Malaysia, Singapore and the Japanese Malacca Strait Council, a Revolving Fund was set up to combat oil pollution from vessels in the Straits of Malacca and Singapore.

The basis of this initiative was, as mentioned above, the new directions for interstate co-operation in the UNCLOS and experience from the Malacca Strait agreement between Singapore, Indonesia and Malaysia. It was with these issues in mind that six ASEAN members began a series of meetings in January 1990 (Townsend-Gault 1999 [interviews]). The ASEAN members, particularly Hasjim Djalal and other law of the sea experts of the region, thought that the model of co-operation established in the Malacca Strait between Singapore, Malaysia and Indonesia would be possible to use in the South China Sea context. The idea of turning a potential point of conflict into a model of co-operation and common management was very strong among the ASEAN participants (Djalal 1990). This idea was at the origin of the South China Sea Workshops, or "The Managing Potential Conflicts in the South China Sea Project" as they are officially called. The objectives can be summed up as including "confidence building measures to lay the basis for the construction of a regime for management of a semi-enclosed sea as set out in UNCLOS" (Catley et al. 1997:153).

The problems were therefore defined and addressed not only in an UNCLOS context, but also in an Asian diplomatic context.<sup>39</sup> Experience had proved that confidence among parties was a precondition for effective negotiations. Thus, the ASEAN participants decided to keep the meetings at an informal level where government officials and diplomats met in only a private capacity. Through informal meetings they were to build the trust needed to turn the South China Sea into a "Malacca Strait" kind of co-operative arrangement (ibid.).

### **5.1.1 The main workshops**

"Managing Potential Conflicts in the South China Sea" workshops<sup>40</sup> have been held in different Indonesian provinces, with funding from Canada and participant countries, since 1990. The workshops were conceived by two experts on law of the sea questions,

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<sup>39</sup> The Asian diplomatic context will be discussed in chapter 5.2.1.3.

<sup>40</sup> Information on the background of this project is from the website of the South China Sea Informal Working Group Project at the Centre for Asian Legal Studies, University of British Columbia, Canada: <http://faculty.law.ubc.ca/scs/> as well as interviews with Prof. Townsend-Gault (1999).

Dr. Hasjim Djalal<sup>41</sup> and Prof. Ian Townsend-Gault<sup>42</sup>, with the intention of preventing armed conflict, build confidence and protect the environment in the South China Sea. The workshops have been the only venue where Taiwan and China have engaged in discussions with security implications (Valencia et al. 1997:115).

The South China Sea Workshops started out in 1990 as a gathering for experts only from the ASEAN member states. However, at the second workshop in 1991, China, Taiwan, Laos and Vietnam were invited to attend. The annual workshops, which have been held in Indonesia, have not included outside powers since China would object to internationalisation. Since the first meeting in 1990, ten workshops have been held, all with the purpose of considering how to best advance co-operation on a range of ocean activities. According to Ian Townsend-Gault it was "not the purpose of the workshop process to resolve questions of sovereignty over the Spratly islands or jurisdiction over the sea itself" (Townsend-Gault 1998:182). The aim was rather to build confidence and trust among the littorals through annual meetings where various aspects of ocean management in the South China Sea were discussed. Although efforts to formalise and institutionalise the issues raised within the workshops were generally rejected, some practical progress was made in the technical working groups (expert meetings held annually on different issue areas). Thus, the main contribution of the workshops was simply to generate multilateral, informal talks on at all South China Sea issues. The apparent success in bringing the states of the South China Sea together has not yet, however, been translated into action. There is a lack of progress both in terms of conflict management and establishment of co-operative regimes. There has clearly been a lack of political will to move forward (Lee 1999:167). The only area where some practical progress has been made is in some of the technical working groups.

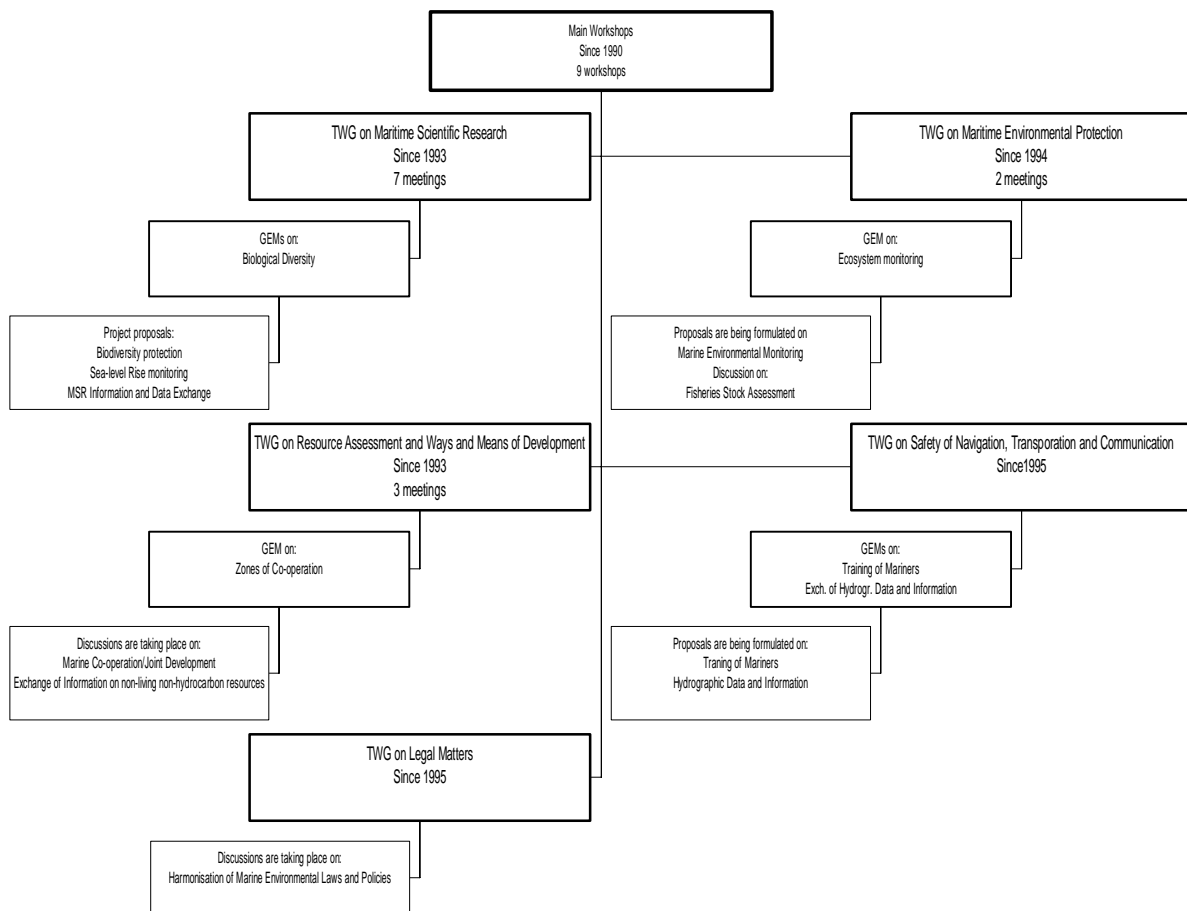
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<sup>41</sup> Dr. Hasjim Djalal had been ambassador at large, an expert on ocean affairs and had been an active participant in the process leading up to the Third United Nations Conference on the Law of the Sea (UNCLOS).

<sup>42</sup> Prof. Ian Townsend-Gault is an expert on petroleum law and the LOS. He is Associate Professor and Director of the Centre for Asian Legal Studies at University of British Columbia, Canada and a Regional Director (West Coast Office) of the Oceans Institute of Canada. His current responsibilities include the co-ordination of the CIDA-funded projects, Managing Potential Conflicts in the South China Sea, and the Vietnam-Canada Ocean and Coastal Cooperation Programme.

### 5.1.2 The Technical Working Groups<sup>43</sup>

At the third main workshop in Yogyakarta in 1992, it was agreed that Technical Working Groups would have to be organised around some of the specific subjects being discussed (Djalal 1995:398). Two expert meetings were held in 1993: one on Resources Assessments and Ways of Development and one on Marine Scientific Research. Additional groups were organised later on Marine Environmental Protection, Safety of Navigation, Transportation and Communication and Legal Matters. The Technical Working Group on Marine Scientific Research (TWG MSR) is of special interest in this context.



**Figure 5.1: Workshops on Managing Potential Conflicts in the South China Sea (based on Townsend-Gault 1998).**

<sup>43</sup> Technical Working Groups are defined here as: "A group of experts in a specific ocean sector established by the Workshop and mandated to define areas of cooperative activities, and to develop proposals accordingly. The TWG also provides policy direction for project proposal implementation." (Fifth Meeting of the TWG MSR, Cebu, Philippines, 14-17 July 1996)

I will not elaborate in detail on the nature of the different working groups or the issues dealt with, or not dealt with (oil/gas and sovereignty), but will concentrate on the Technical Working Group on Marine Scientific Research (TWG MSR), as I consider that working group the most relevant to my study. The TWG MSR was the first working group to be established and has been the most effective. The development of the Technical Working Group on Marine Scientific Research is more or less equal to the development of the entire workshop process.

#### **5.1.2.1 The Technical Working Group on Marine Scientific Research (TWG MSR)**

The idea to arrange expert meetings on marine scientific research originally came from the First Workshop held in 1990 where one session was devoted to the marine environment, ecology and scientific research.<sup>44</sup> However, it was not until the Third Workshop in Yogyakarta that participants agreed to arrange the First TWG MSR. The TWG met in Manila, Philippines, from 30 May to 3 June 1993. The seventh, and latest, TWG MSR was also held in Manila in October 1999.

Through the years when these meetings have taken place, the TWG MSR has forwarded three project proposals that the participating countries have agreed to cooperate in implementing: proposals on biodiversity monitoring, sea-level rise monitoring and marine scientific research information and data exchange. According to Gil Jacinto, the TWG MSR is the most advanced of the Technical Working Groups (TWGs) (Chien 1997:30), and it has broken new ground for the entire workshop process.<sup>45</sup> As a result of informal consultations in the TWG MSR, scientists from the Philippines and Vietnam have conducted a joint research expedition from Manila through the Spratly area to Ho Chi Minh City and back. This was done in 1996, and another expedition was planned for 1997, but due to the regional economic downturn, it was cancelled (Talaue-McManus 1999 [interview]). Even the Philippines and China have planned joint research efforts. The relationship between the Philippines and

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<sup>44</sup> First Session: Environment, Ecology, Science and the South China Sea, Workshop on Managing Potential Conflicts in the South China Sea, Denpasar, Indonesia, 22-24 January, 1990.

<sup>45</sup> Gil Jacinto in Welcome Remarks to the Fifth Technical Working Group on Marine Scientific Research, Cebu, Philippines.

China was restrained, however, due to the construction work undertaken by China on Mischief reef in 1994, 1995, and further construction in 1998, both leading to strong Philippine protests. China and the Philippines have still agreed to carry out three cooperative projects on the South China Sea, all of them on marine environment: red tides, ocean pollution and storm surge. The projects emerged from talks between the two governments in 1996, and were to be implemented in 1998.<sup>46</sup> The informal networking and knowledge diffused through these meetings, as well as the fact that UNEP is getting involved in the biodiversity project, are signs of how important this TWG is to the entire workshop process (Talaue-McManus 1999 [interview]).

The biodiversity proposal was submitted with a request for funding to all participating countries in the workshops as well as non-regional countries like Canada, the United States, Germany, the Netherlands, the United Kingdom, Australia, France, Japan, Norway; and organisations such as the Economic and Social Commission for the Asia-Pacific (ESCAP - co-ordinating all UN activities in Asia-Pacific), the European Union (EU) and UNDP. The greatest interest for funding the proposal came from the United States, Japan, Australia and UNDP. In 1998, the biodiversity proposal also drew the attention of UNEP and GEF in their preparation of the new Strategic Action Programme for the South China Sea.

At the fifth meeting of the TWG MSR in Cebu, Philippines 14 to 17 July 1996, a proposal emerged to have Group of Experts Meetings (GEMs) to examine the biodiversity proposal and its future. The GEM was supposed to include only one senior expert from each participating country, with responsibility for discussing technical issues more efficiently than within the TWG MSR. Later, the idea of having GEMs spread to the other TWGs.

## **5.2 Regime building in the South China Sea region**

The project managers Dr. Hasjim Djalal and Prof. Ian Townsend-Gault, say the South China Sea Workshops have aimed at:

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<sup>46</sup> BBC Monitoring Service: Asia Pacific, 6 December 1997: "China: Spokesman reports on South China Sea environment talks." Translation of an article in the Chinese news agency *Xinhua*, Hong Kong, 4 December 1997.

encouraging confidence building between the states of the South China Sea region, thus easing tensions arising from sovereignty and jurisdictional disputes over the Spratly and Paracel island groups, and ocean space adjacent to the littoral states. Cooperation will be encouraged in such a way as to *implement a regime* for the South China Sea compatible with the regime for semi-enclosed seas as set forth in the United Nations Convention on the Law of the Sea 1982, which serves a model for project purposes<sup>47</sup> (my italics)

The two convenors of the workshops refer here to the future establishment of (according to Krasner's (1983) definition of a regime [discussed in ch. 2.1]), a cluster of commitments to a given issue-area (management and protection of natural resources in the South China Sea) where a negotiated combination of norms, rules, principles or decision-making procedures creates a formal and regional multilateral agreement, or gives premises for state action in the South China Sea. In the South China Sea, so far, there has been no integrated, formal approach to management of resources. The lack of a formal agreement means that there is no regulation of fisheries, no regional regulation or co-operation in combating pollution. Overlapping claims to maritime zones make it impossible to decide which state is responsible for environmental protection and management, and there is no sense of any temporary shared responsibility although many speak of joint development or joint management. This sounds very much like a situation that Garrett Hardin (1968) named the "Tragedy of the Commons".<sup>48</sup> As the South China Sea is not partitioned according to the UNCLOS in Exclusive Economic Zones (EEZ), where the individual state has the jurisdiction to the resources that exist within the zone, large areas of sea, and especially the living resources in these areas, are left to the ones who manage to catch them. This means that one littoral state has the opportunity to exploit and deplete the living resources that actually belong to all the littoral states in the area. According to Oran Young (1994:20), there are roughly three ways to regulate this problem. One is to solve the sovereignty question with reference to ideas developed in UNCLOS. Normally, this would lead to a delimitation agreement between all claimants on how to define the limits of EEZs and solve the question of sovereignty to islands. This is not very likely to happen in the near future. A second solution is to establish a joint development zone

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<sup>47</sup> Op.cit.; see note 41.

<sup>48</sup> The situation described as the "Tragedy of the Commons" was first presented in an article by H. Scott Gordon (1954): "The Economic Theory of a Common Property Resource: The Fishery," *Journal*

in the disputed area, share the cost and responsibility for development and divide the benefits of resource exploitation between themselves. This is what China and Taiwan have suggested in principle since 1993 (Sun 1996:204), without, however, presenting any concrete proposals. No joint development zone is likely to be established in the near future. China's understanding of joint development also seems to imply that the other participants must negotiate bilaterally with China, not multilaterally. The third option is to create a regime or formalised agreement where all states in the region join forces to set up a joint management regime (fisheries regulation, environmental protection and marine scientific research) while abstaining from drilling oil and gas. This may be what the convenors of the South China Sea Workshops aim at: a regime to carry out the obligations of UNCLOS 123 (about semi-enclosed seas). The normative and principled contents of such a regime are sketched in the UNCLOS paragraph, and the workshops are based on the suggested fields of co-operation in the convention.<sup>49</sup>

But we must also remember that these workshops, as well as the UNEP initiative, take place within an Asian setting. The countries of East and Southeast Asia are less experienced in multilateralism than European and North American countries are.<sup>50</sup> In other words, the effort to implement international regimes in the regional context of the South China Sea has important aspects to it that make this region stand out from other regions. The "Asian way" of diplomacy is important in this respect. Another aspect, which is central to this study, is the contribution of scientists to establish co-operative regimes. What role are scientists playing in influencing governments to co-

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*of Political Economy*, No. 62, 124-142. Hardin's (1968) definition of the "Tragedy of the Commons" situation is built on that article according to Young (1994:6).

<sup>49</sup> Part IX, Enclosed or Semi-enclosed Seas, Article 123: Co-operation of states bordering enclosed or semi-enclosed seas. States Bordering an enclosed or semi-enclosed sea should co-operate with each other (a) to coordinate the management, conservation, exploration and exploitation of the living resources of the sea; (b) to coordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment; (c) to coordinate their scientific research policies and undertake where appropriate joint programmes of scientific research in the area; (d) to invite, as appropriate, other interested States or international organizations to cooperate with them in furtherance of the provisions of this article (UNCLOS 1999).

<sup>50</sup> John Ruggie (1992) defines multilateralism as "an institutional form which coordinates relations among three or more states on the basis of 'generalized' principles of conduct - that is, principles that

operate? Could environmental co-operation lead to co-operation also in other areas? The outcome of the UNEP initiative is interesting in this respect.

### **5.2.1 Regime building and the regional scientific community**

As we have seen above, regional scientists have actively participated in the South China Sea Workshops as well as contributing to the formulation of the Strategic Action Programme for the South China Sea. The UNEP initiative and the Workshops should probably be seen as parts of the same regime building efforts. This chapter will offer an analysis of efforts to build a co-operative regime. What characterises it and which role have scientists from various disciplines played in the process?

Regional environmental regime formation has been analysed by Porter and Brown in terms of four consecutive, but overlapping stages (1991:69): issue definition, fact-finding, bargaining on regime creation and regime strengthening. Between the fact-finding and bargaining stages one might add Young's (1994:83) *prenegotiation* stage, which he defines as being "the process through which an issue initially finds its way onto the international agenda, gets defined or framed as a topic for international consideration, and reaches the sufficiently prominent place on the agenda to justify expending the time and effort involved in explicit negotiations." According to the epistemic communities approach, an important factor influencing the evolution of regimes is international learning based on scientific research (Haas 1989). Scientific evidence and scientific knowledge advanced by communities of marine scientists will, according to the epistemic communities approach, eventually attract the attention of decision makers who change their policies accordingly. The extent to which the regional scientific community in the South China Sea region has been successful in getting attention from the governments and making them co-operate on environmental issues in the South China Sea will be discussed below.

#### **5.2.1.1 Issue definition**

Issue definition is here understood as efforts at bringing the issue to the attention of the international community and identifying the scope and magnitude of environmental

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specify appropriate conduct for a class of actions without regard to the particularistic interests of the

threats, as well as the action required to address the issue (Porter et al. 1991:69). In the South China Sea there are a wide range of environmental issues that need to be acted upon. Through the TWG MSR and the work on the UNEP Strategic Action Programme for the South China Sea, the regional scientific community has documented and informed the governments of the environmental challenges they are facing. The TWG MSR has provided for the regional scientific community a forum to discuss various aspects of marine scientific research.

In 1998, the TWG MSR drew the attention of UNEP and discussions emerged on how to integrate the TWG MSR and other Technical Working Groups with the Strategic Action Programme for the South China Sea.<sup>51</sup> Although the biodiversity proposal has been discussed for a number of years within the TWG MSR, the proposal is still not implemented. The biodiversity proposal seemed to be the factor that might pave the way for co-operation on other issues, but lack of funding has prevented the proposal from being implemented. This was the reason why UNEP was invited to the Group of Experts Meeting on Biological Biodiversity in November 1998. UNEP wanted to integrate the biodiversity proposal into its Strategic Action Programme for the South China Sea, which was just about to be finished in this period. John Pernetta, from UNEP headquarters in Nairobi, and Liana Talaue-McManus, responsible for the formulation of the SAP for the South China Sea, participated in the meeting.

My suggestion is that UNEP and the regional scientific community have succeeded in bringing environmental issues of concern to the attention of the governments in the region, they have succeeded in pin-pointing the important issues, and they have prescribed the steps to be taken. In the TWG MSR the scientists discussed important issues such as fisheries research, biological diversity, non-conventional energy, environmental phenomena, marine circulation, training, networking and information, and mechanisms for co-operation and joint research. From these six areas, three project proposals were selected: database and information networking, sea-level and

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parties or the strategic exigencies that may exist in any specific occurrence".

<sup>51</sup> The Sixth Technical Working Group Meeting on Marine Scientific Research, Manila, Philippines, 25 - 28 November 1998.

tide monitoring, and biodiversity.<sup>52</sup> The first project in the entire workshop process that is about to be implemented, the biodiversity proposal, is funded partly by Brunei Darussalam, Singapore and Indonesia (Townsend-Gault 1998:186). The project proposals worked out within the TWG MSR appear to be the most successful ones, suggesting that the marine scientists and their understanding of the current situation in terms of marine environmental status, have influenced the participating governments in approving, funding and adopting projects. In other words, marine scientists are influential within the workshops.

In the Strategic Action Programme for the South China Sea, priorities for action are spelled out as being: endorsing a legal framework for regional co-operation, preparing maps and inventories to achieve the aims of the Programme, developing a network of databases throughout the region to facilitate Programme goals, developing criteria for management plans for ecosystems and fisheries, enhancing capacity building in terms of education technology exchange, and knowledge diffusion on all levels (UNEP 1999:78). Through the work on the Transboundary Diagnostic Analysis and through the formulation of the draft Strategic Action Programme for the South China Sea, marine scientists of the region have been allowed to put their finger on the major environment-related transboundary problems that governments of the region are facing.

Although the project proposals of the TWG MSR as well as the ones of the SAP are stalled for the moment by the apparent lack of political will of some parties, the will to implement the biodiversity proposal within the South China Sea Workshops, and the will to sign the draft SAP by Malaysia, Vietnam, the Philippines, Thailand, Cambodia and Indonesia may be taken as a proof that the countries of the region are serious about combating environmental problems. It may also prove that the regional scientific community has achieved success in getting attention, framing issues, and in prescribing the necessary medicine. In other words, the regional scientific community

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<sup>52</sup> Fifth Meeting of the Technical Working Group on Marine Scientific Research, Cebu, Philippines, 14 - 17 July 1996.

has been successful in influencing the governments of the region to include the marine environment as an important issue in the environmental regime building process. This is not to say that the scientific community has influenced the governments to co-operate on environmental issues, but in the issue definition process scientists have been influential in bringing marine environment related issues to the attention of decision makers. The COBSEA's decision to initiate the work on a South China Sea Strategic Action Programme, and the decision to add discussions on marine scientific research and marine environmental protection to the main South China Sea Workshops, support the idea that scientists are gaining attention on the regional level.

#### **5.2.1.2 The fact-finding process**

The fact-finding process consists in collecting information to assess the scope and nature of the problem, and present policy options (Porter et al. 1991:70). The Managing Potential Conflicts in the South China Sea Project has, through its workshops and technical working group, established a framework for discussion of how to manage the South China Sea with reference to the UNCLOS and its provisions for regional co-operation. The participating states have discussed and exchanged views on the different subjects. Within the TWG MSR, the regional scientific community has established project proposals based on the identification of common denominators on which to base co-operation. The littoral states around the sea have also shown a common concern for the marine environment by seeking the assistance of UNEP and the Global Environment Facility for the initiation of the Strategic Action Programme for the South China Sea at the Twelfth COBSEA Meeting in 1996.

The decision to establish at least two co-operative projects and initiatives within the field of marine scientific research have succeeded, although some analysts still state that the situation in the South China Sea is "stalemated" by the delimitation and sovereignty questions (Leifer 1999; Townsend-Gault 1998:172).

However, although there seems to be agreement on the initiatives (the South China Sea Strategic Action Programme and the biodiversity proposal), they are still not implemented because the states do not agree on how to proceed with environmental

co-operation. When the signatory states of the East Asian Action Plan attended the Thirteenth Meeting of the COBSEA in November 1998, a discussion emerged on the wording of the Strategic Action Programme. Discussing a section on regional co-operation, Indonesia objected to the use of the terms Convention, Protocol and legal framework since the Indonesian government "was not in favour of making legal/formal commitments". On the other side, Vietnam expressed support for the word legal framework, while China indicated that the area covered should be enlarged to all East Asian Seas, including the Philippine Sea, the East China Sea and the Sea of Japan. But, although disagreements occur, the littorals seem to agree on central aspects of both the biodiversity proposal and the Strategic Action Programme. The problem is that a lack of political will and funding prevent the initiatives from making practical progress. The scientists have not been successful in persuading governments to spend time and resources on co-operative arrangements to protect and manage common resources.

#### **5.2.1.3 Bargaining on regime creation**

Bargaining on regime creation is recognised by the advancement of proposals for international action through consensus building by one or more parties (Porter et al. 1991:70). In this context, initiatives have come from both ASEAN and UNEP. Apparently, China has blocked both initiatives. Still the lack of progress cannot be blamed uniquely on China. Generally speaking, there seems to be a lack of political will to implement suggested projects emerging from the various TWGs, not only from China but also from countries within ASEAN. This has slowed down the progress of discussions within the workshops as well as the implementation of project proposals worked out under the TWGs.

The Chinese are generally not eager to enter regional co-operative arrangements. Some say that this is due to the nature of the workshop process itself. The form of confidence-building diplomacy conducted in the workshops is said by two interviewees to not be the right way to engage China. It is too "pushy" (Lai 1999 [interview]; Chua 1999 [interview]). The workshop process resembles too much formal diplomacy with the ASEAN countries trying repeatedly to lift the process to a

formal level.<sup>53</sup> The Indonesian minister of foreign affairs, Ali Alatas, has on several occasions encouraged the participants to make concessions and agreements on the South China Sea. As Lee Lai To (1999:167) says:

*"The multilateral process is both difficult and fragile: the interest of many participants must be taken into consideration, and workshop recommendations could be easily ignored by the governments concerned. Efforts to formalize and institutionalize discussions have been rejected, so the workshop remains a talk-shop about such peripheral issues."*

China has been even stronger opposed to all attempts to internationalise the issue. This was probably the reason why China at first refused to take part in the UNEP initiative. They feared that the involvement of UNEP, a UN agency, could entail internationalisation of the whole South China Sea dispute (Talaue-McManus 1999 [interview]). Chinese participating at the workshops have had a limited mandate; the Chinese government has only been ready to discuss joint development projects that would not have implications for its sovereignty claims (Lee 1999).

Several interviewees have also mentioned a difference between Western and Asian ways of interacting through diplomacy (Lai 1999; Sarne 1999; Chua 1999 [interviews]). "The Asian way" is presumably not dissimilar from what has been called "the ASEAN way". What is for some known as the "ASEAN way" of diplomacy has important bearings on the workshops as well as the UNEP initiative. The ASEAN way of diplomacy refers to a distinctive approach to dispute settlement and regional co-operation developed by members of ASEAN. This framework for interstate co-operation has a history that goes back to the establishment of ASEAN in 1967. Since 1967, the ASEAN countries have faced a number of challenges; the end of the Konfrontasi between Indonesia and Malaysia, later the communist victory in Vietnam, Laos and Cambodia, the Vietnamese occupation of Cambodia, Vietnam's alliance with the Soviet Union, the weakening of the US military presence in the end of the 1990s, the surge of Chinese power, and the inclusion of four new members: Vietnam, Laos, Burma and Cambodia. In the handling of these challenges, ASEAN developed a framework for interaction based on non-interference in the domestic affairs of others,

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<sup>53</sup> I refer here to the Indonesian Foreign Minister Ali Alatas' address to the workshop in 1995, where he called on all participating countries to consider moving from informal to formal diplomacy on certain subjects. The move from track two to track one has never been made.

non-use of force, pacific settlement of disputes, and respect for the sovereignty and territorial integrity of member states. This is not very different from other regional security arrangements around the world, but what is peculiar is the nature of interaction in the region. Interaction has been characterised by discreteness, informality, pragmatism, expediency, consensus-building and non-confrontational bargaining styles, totally different from Western ways of diplomacy (Acharya 1997:328-329). One observer of economic co-operation within APEC says the Asian way is "to agree on principles first, and then let things evolve and grow gradually" (Soesastro cited in Acharya 1997:334).

*The ASEAN countries tried to follow their procedural norms when drafting the institutional designs of the various new forums. They saw the 'ASEAN way' as a suitable blueprint for a future Asia-Pacific security architecture and wanted to maintain an atmosphere of informality and non-confrontation. The best example is the Indonesian Spratly Workshops. Although well into its seventh year now this conference series is still informal, with government officials only attending 'in their private capacities'. The whole enterprise proceeds in the manner of an academic seminar; there are even scientists and other scholars participating. Since 'sensible' and 'confrontational' matters have been bracketed from the outset, the workshops spend more time talking about biodiversity and marine life than about conflicting claims and military activities in the islands. But this is part of the 'ASEAN way': from this point of view, one should try to find common ground first and deal with contentious issues later. (Nicholas Busse 1999:52-53)*

This is seen as different from the "American approach", where one "start[s] with legally binding commitments covering a wide range of issues, something that scares many people in Asia" (Mankusuwondo cited in Acharya 1997:334).

According to some interviewees, the South China Sea Workshops have too much of the "Western way of diplomacy" in them. They turn Busse's argument upside down. In their view the workshops have been too "pushy" in trying to force the participating countries into formal negotiations or co-operative arrangements. The two interviewees seem to blame the Indonesians for these efforts. According to statements made at a workshop in Oslo in April 1998 (Leifer 1998a), Hasjim Djalal, the workshop founder, has been tired of repeatedly having to see workshop participants trying to stall efforts at moving forward with issues raised. Thus, the Indonesians, as ASEAN's leading country, is here the agent of a "Western Way" whereas China seems to represent "the ASEAN Way". The Indonesians, as the leading power within ASEAN and the initiator of the workshops, and the Canadian International Development Agency, which is

funding the process, also need some sort of progression to legitimise the spending of millions of dollars and nine years on this process. A discussion of the workshops has emerged, where the sceptics and the workshop convenors are debating the contents and prospects of the process.<sup>54</sup> Sceptic analysts say that the workshops are merely a talking club, and designate the workshops as "the failure of Indonesian mediation" (Catley et al. 1997:165-168). The workshop convenors, Djalal and Townsend-Gault, say that sceptics are overly occupied with the Spratly islands question; the delimitation question that seems inextricable. One should rather keep in mind that the countries are talking to each other on a regular basis, they have found some areas on which they are prepared to co-operate, especially on marine scientific research, and meetings continue to promote co-operation and understanding among the littoral states of the region (Hearns et al. 1996; Townsend-Gault 1998).

#### **5.2.1.4 Regime strengthening**

Regime strengthening refers to further bargaining on an established regime that reflects shifts in the understanding of the environmental problem as well as in the domestic politics of some parties (Porter et al. 1991:69). According to Porter et al. (ibid.), the regime strengthening may proceed in three ways: 1. Through the establishment of a protocol after earlier negotiations had failed to establish binding commitments, as in the Helsinki Protocol. 2. By amendment of former established agreements through bans or other specific actions, as in the whaling moratorium where fishing of whales was banned on a global scale. 3. Through a separate agreement committing some of the parties to go further than the existing agreement, as in the acid rain regimes.

In the South China Sea, the closest we can get to the process of regime strengthening is actually through the two initiatives that have been discussed above. The South China Sea Workshops were originally an attempt by the ASEAN states to prepare the

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<sup>54</sup> Refers to a debate that emerged in *Contemporary Southeast Asia* after an article published in the magazine by Ian Townsend-Gault (1998). The author suggests that there is a difference between the view of security analysts (proponents of *realpolitik*) and the view of law of the sea experts (adherents of international law) that has a certain resemblance to the debate between realists and liberalists/institutionalists within the International Relations camp.

implementation of UNCLOS in the region. This was largely due to the influence of the long process of negotiations on the Law of the Sea throughout the 1970s where the four ASEAN states, Indonesia, Thailand, Singapore and Malaysia, were actively participating. To prevent conflict and to improve the standing of international maritime law in the region Ian Townsend-Gault and Hasjim Djalal started the set of workshops where different aspects of the UNCLOS were discussed. Later, as we know from above, other states of the region were included. To what extent the South China Sea Workshops have improved the standing of the UNCLOS in the region is rather difficult to say as there are contradictory trends working here. In one respect, all littorals in the region have agreed in principle to solve maritime conflicts in accordance with the UNCLOS, but at the same time they are making decisions to occupy reefs and refrain from co-operation.

The UNEP initiative, can be seen as an attempt at amending an existing agreement, namely the East Asian Seas Action Plan. The member countries of the Coordinating Body of the Seas of East Asia (COBSEA) have run the institution with very moderate results since the beginning of the 1980s. But, as the COBSEA was enlarged to integrate all South China Sea littorals, it began to focus its work on that sea. As the East Asian Seas Action Plan was seen as being too general and theoretical in its approach to maritime environmental problems, a separate action plan for the South China Sea would mean a heavier contribution to ocean management. At the Twelfth COBSEA Meeting in 1996, there were clear signs of a willingness by most parties to the East Asian Seas Action Plan to redirect activities from scientific based activities to a more comprehensive, holistic management and action-oriented approach.<sup>55</sup>

Has the regional scientific community been influential in the regime strengthening processes, in the establishment of the South China Sea Workshops and in the decision to change the nature of activities within the East Asian Action Plan? The South China Sea Workshops must be said to be a result of a global trend within maritime

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<sup>55</sup> Opening address by Ms. Terttu Melvasalo, Director of the Water Branch of UNEP, on behalf of the Executive Director of UNEP, to the Twelfth Meeting of the COBSEA in Manila, 3-4 December 1996.

international law. UNCLOS brought a number of issues to the attention of governments, and one result was that the governments of ASEAN chose to move away from academic discussions on different aspects of the UNCLOS to policy-oriented action. Hasjim Djalal and other law of the sea experts within ASEAN saw that UNCLOS provided them with certain mechanisms that could guide the littoral states of the South China Sea into peaceful co-operation, as had been experienced in the Malacca Strait agreement. But, the workshops were not only a result of the UNCLOS process, they were also a result of effective entrepreneurial leadership on the part of individuals. According to Oran Young (1994:114-115) entrepreneurial leaders are:

*... neither representatives of hegemony who can impose their will on others nor ethically motivated actors who seek to fashion workable institutional arrangements as contributors to the common good or the supply of public goods in international society. Rather, international entrepreneurs are participants who are skilled in inventing new institutional arrangements and brokering the overlapping interests of parties concerned with a particular issue area.*

Hasjim Djalal and his Canadian counterpart, the much younger Ian Townsend-Gault, began to discuss the situation in the South China Sea in the beginning of 1989 after the violent clashes between China and Vietnam in 1988.<sup>56</sup> They then agreed to seek money for covering a workshop with informal talks on avenues for co-operation based on the new directions in the law of the sea. Whether or not one should credit these two individuals, Djalal and Townsend-Gault, or Indonesia, or Canada for that sake, the accomplishment of starting the workshops can be discussed. There are those who suggest that Indonesia, as the major power within ASEAN, had its own reasons for hosting meetings on the South China Sea. Geographical considerations, the desire to secure natural resources around the Natuna island, the initial success in mediating the Cambodia conflict, and the need to constrain China, were facts that may have been taken into consideration when Suharto and his foreign minister Ali Alatas gave a green light to Hasjim Djalal (Catley et al. 1997).

Regarding the UNEP initiative, one can say with more certainty that scientists have influenced governments to follow their advice on marine environment related issues.

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<sup>56</sup> Information on the background of this project is from the website of the South China Sea Informal Working Group Project at the Centre for Asian Legal Studies, University of British Columbia, Canada: <http://faculty.law.ubc.ca/scs/> as well as interviews with Prof. Townsend-Gault (1999).

COBSEA has been dominated by scientific projects and discussions, and the inclusion of ASEAMS and senior scientists as national focal points of the COBSEA, has reserved an important role to marine scientists. When COBSEA, in 1996, expressed an aspiration to move from science to more action-oriented projects, this must be largely due to the influence of environmentalists. The formulation of Transboundary Diagnostic Analysis and the Strategic Action Programme for the South China Sea was largely fulfilled due to the contribution of senior scientists from the region.

### **5.2.2 Regime building in the South China Sea**

I differentiate between explicit and implicit regimes. Explicit regimes are based on formal rules and institutional mechanisms. Implicit regimes are loose, consultative arrangements with informal decision-making based on broad principles. Implicit regimes are normally built on a desire to co-operate and find common solutions to shared problems (Sebastian 1998). The two regime types correlate with the distinction made above between 'operative' (explicit) and 'normative' (implicit) regimes.

In the South China Sea region, an implicit maritime regime has emerged based on various agreements and arrangements between two or more ASEAN states, such as in the Malacca Strait and the Gulf of Thailand. Through consensus building, consultation, self restraint, sensitivity and respect for neighbouring countries, the ASEAN member states have succeeded in establishing a sort of "Asian multilateralism", quite different from "Western multilateralism", which is based more on the explicit regime type of arrangement. The history of co-operation within ASEAN has, since 1990, been tried out within the context of the South China Sea, also involving powers outside of ASEAN (China and Taiwan). In some respects this regime building process has been successful in that agreement has been reached on common areas of interest where project proposals have been forwarded for implementation and talks are held annually under peaceful circumstances. Of the prioritised areas, the working group on marine scientific research is the most promising one and is closest to seeing its project proposals implemented. And, other projects will probably appear in the years to come if the workshops continue.

Based on these facts, one can say that the "ASEAN way" of regime building has succeeded in gathering former enemies and claimants in peaceful talks on common areas of interest. As Amitav Acharya (1997:342) states in the following paragraph, the "ASEAN way" has its obvious shortcomings:

*Thus, whether the ASEAN model of subregionalism can perform successfully in the wider Asia-Pacific context is questionable. While ASEAN has developed a strong tradition of multilateralism in Southeast Asia, many Northeast Asian countries, notably China, lack any significant historical experience in multilateral security cooperation. ASEAN's relative unity and longevity owes much to specific historical circumstances, particularly to its members' common fear of communism and their shared security concerns arising from the decade-long Cambodia conflict. It is sustained by close inter-personal ties among ASEAN elites. Such commonalities and linkages are not present within the larger Asia-Pacific setting and are highly unlikely to develop in the future.*

As both the UNEP initiative and the workshops show, China has been able to block virtually all attempts at moving forward on important areas, simply because consensus is needed before any action can be taken.

### **5.3 Has the regional scientific community been influential in changing marine environmental policies?**

The immediate answer to this question must be that the regional scientific network has not been able to induce the regional governments to implement UNCLOS (or the UNEP Regional Seas Programme through the East Asian Action Plan or the SAP for the South China Sea). The littoral countries of the South China Sea have not even discussed any regional, legally binding agreements, of the kind established in other regions (the Mediterranean Action Plan; The Helsinki Convention).

Second, contradictions in UNCLOS itself, and diverging interpretations of it in the region, may impede regional co-operation. On the one side, jurisdiction for coastal areas is given to the coastal state (Article 56), while on the other side (Article 123) states surrounding semi-enclosed seas should endeavour to co-operate on marine scientific research. Individual nations can consequently take steps to implement and enforce the agreement unilaterally, at the same time refraining from considering the consequences of unilateral action upon neighbours (Payoyo 1996:67). National and unilateral interpretation of the agreement has already caused problems; especially with reference to the drawing of baselines and determination of EEZs.

Third, there are obvious institutional weaknesses in the region. At the national level, the multiplicity of agencies dealing with the maritime environment, and the lack of interest on the highest political level, make efficient and integrative ocean policy almost impossible. This problem is accumulated on the regional level, where no agency exists that can co-ordinate efforts at improving the maritime environment. The ASEAN institutions and non-ASEAN institutions that operate in the region are not co-ordinated at the regional level (Papoyo 1996:63). UNEP may be, in the future, the integrative force that can integrate national and regional policies more effectively.

On the other side, there are signs of an implicit maritime regime emerging. The ASEAN countries have already agreed, in 1991 at the workshop in Indonesia, to settle South China Sea issues peacefully. The basic principles in this agreement were precursors to ASEAN's Manila Declaration on the South China Sea in 1992 (Hasjim Djalal 1998:1). The integration of ASEAN's policy on the South China Sea conflict, as well as ASEAN's pledge that the conflict should be handled with reference to international law (UNCLOS), must be said to be important steps in a positive direction in terms of ocean governance in the region (Payoyo 1997:62). As China and the other ASEAN states have agreed to resolve maritime conflicts peacefully and negotiate disputes in the South China Sea in accordance with UNCLOS, something resembling an implicit regime has emerged since 1990 when the South China Sea Workshops started.

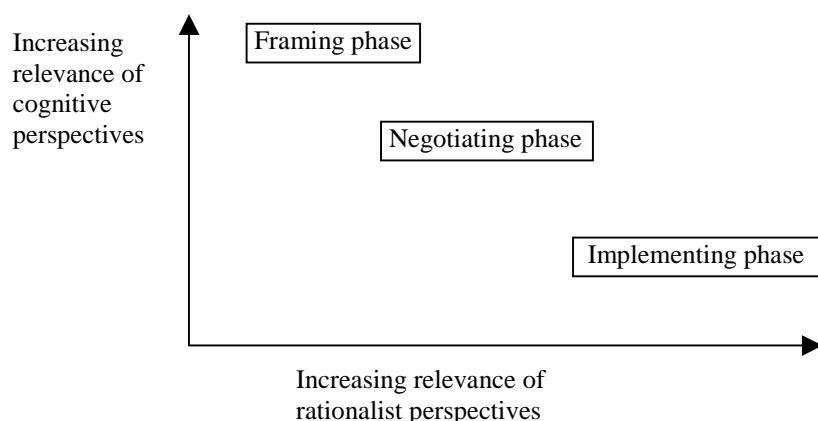
Arranging the South China Sea Workshops is a positive effort attempting at building confidence in the region. Even though a solution to the sovereignty conflict is not within reach, measured by the lack of progress, informal talks between the claimants, also including Taiwan, are a major contribution to confidence building and political dialogue in this region.

#### **5.4 Concluding remarks**

In this chapter I have emphasised the role of scientists and their knowledge in regime building processes. I have shown that scientists have been brought together for joint

research and discussions. Networks created through these discussions may at some point lead to the establishment of a regional implicit or explicit regime for environmental management. The UNEP initiative, if successful, will be a significant step in that direction. So far, however, there is no such regime, and UNCLOS, although it has been ratified by the important states around the South China Sea, is not being implemented. (Thailand's argument that it will not ratify UNCLOS before it is able to implement it has some virtue.)

Let me suggest that the following figure may be fruitful in evaluating the use of a knowledge based approach vs. the interest or rationalist approaches. The epistemic community approach has been useful in studying the growth of environmental concerns around a semi-enclosed sea such as the South China Sea, precisely because the process remains at an initial stage.



**Figure 5.2: Relevance of theoretical perspectives in regime building processes (Larsen 1995:24).**

The South China Sea region remains at a stage where a main task is to create and consolidate an epistemic community of experts (including experts from China and Taiwan) who can frame an agenda, build knowledge and rise awareness which may later be framed into agreements and action.

There are clear signs of scientific influence in what we may call the framing phase – the phase of putting issues on the agenda. In the South China Sea Workshops, scientists chose to focus on issues they found important in the TWG MSR, and

scientists participating in this working group have achieved a relative success compared to the progress of other TWGs. Marine scientists have also been influential within ASEAN and through UNEP in attracting the interest and attention of governments and decision makers. The joint expeditions of Vietnam and the Philippines in the Spratly area have also proved that scientists can co-operate. This may seem modest, but the building of a scientific community with an ability to co-operate may be a necessary step towards the confidence needed to resolve the larger disputes.

Scientists have also been influential in formulating the UNEP initiative, but when the region moves to the negotiation and implementation phases, politicians and highly placed officials will take over. As has been shown in the UNEP case, single countries can block any attempt at establishing regional environmental instruments, agreements or institutions. The "ASEAN way" of interacting has certain shortcomings. As it builds on the consensus principle, only one party needs to disagree for an initiative to be blocked. This has also been the experience within the SCSW. Attempts at formalising the process have been turned down a number of times, and attempts at implementing project proposals have been blocked because of funding problems.

From this I will conclude that while the epistemic community approach is highly relevant to analyse the stage that regional co-operation has been on during the 1990s, it will need to be complemented with a realist approach once negotiations and implementation phases start. A realist approach is also needed (as will be seen in the next chapter) to understand why there has not been more progress in establishing an epistemic community and an environmental regime. The epistemic community approach is fruitful in addressing important environmental issues, in analysing the influence of non-state actors, and in understanding the complex web of interaction between international organisations, non-governmental organisations, scientists and research institutes, governments and communities. But when it comes to making political decisions, the politicians will decide. Although governments and political leaders may have been made aware of the environmental challenges facing them, they

have had to consider whether to prioritise environmental protection campaigns vs. spending money on economic and social sectors; in developing countries the growth of the economy and the welfare of the people are normally seen as more important than protecting the environment. This seems to be the case in this region as well. In addition there has been a fear that environmental co-operation could, in some way infringe or impede actions to defend national security and sustain claims to sovereignty and maritime zones.

## **6.0 Systemic constraints: power politics and traditional security: impediments to regional co-operation**

The epistemic community approach assumes that states sometimes lack information about complex problems and effective policy choices, and consequently turn to scientists and experts for advice. Decision makers may learn from such situations and thereby change their policies according to knowledge forwarded by the epistemic community. My initial assumption was that increased knowledge about the environment and problems in the South China Sea, and the emergence of an epistemic community of experts would clearly have changed the political behaviour of governments, making them co-operate and start dealing with the many challenges. I found that this assumption was too optimistic. This obliges me to ask why the states have not adopted policies reflecting new knowledge about the huge environmental dangers. Karl Deutsch (cited in Hasenclever et al:1997:149) once observed that power "in a sense (...) is the ability to afford not to learn." In other words, that states change behaviour according to new knowledge is not evident, in the South China Sea, it is reasonable to believe that other variables decide state interests. This chapter aims at addressing some of the variables impeding co-operation based on premises forwarded by the regional scientific community.

I will first analyse the South China Sea conflict within the context of the Asia-Pacific multilateral security dialogue. The current trend of state interaction in the region has important implications for the South China Sea conflict. Second, I will describe such factors impeding regime building in the South China Sea that have not been mentioned in previous chapters. There are obvious domestic conditions in most ASEAN countries that deserve consideration when one is talking about regime building. Third, I will return to my discussion of the use of cognitive vs. rationalist approaches to the study of South China Sea issues. Or in other words the use of the epistemic communities approach for analysing environmental co-operation in the South China Sea, versus more realist inspired theoretical approaches.

## **6.1 Asia-Pacific security and the South China Sea stalemate**

From the late 1940s the Asia-Pacific region has been characterised by ideological and Cold War conflict. The contest between communism and liberalism, from the late 70s supplemented by a tripolar struggle between China, the Soviet Union and the United States dominated the regional security structure. As the concepts of multilateralism and 'common security' gained significance with the end of the Cold War, emphasis was for the first time put on regional security co-operation (Kerr 1994).

The 1990s have seen a number of proposals for co-operative security arrangements. Australia, the ASEAN states, Canada, Japan and South Korea have been actively involved in developing a security dialogue in the Asia-Pacific region. The most important initiative is the ASEAN Regional Forum (ARF), which was established in 1993. For this study the most relevant initiatives are the Council for Security Cooperation in Asia-Pacific (CSCAP), and the South China Sea Workshops (SCSW) who both involve non-governmental participation. In other words, a new trend of multilateralism is emerging where non-governmental actors are invited to participate in international dialogues. With the evolution of civil society and with the growth of the middle class in the newly industrialised economies of the Asia-Pacific region, these activities at an unofficial level seem to flourish (*ibid.*). Some analysts have talked of a new security structure for the Asia-Pacific (Kerr 1994; Dosch 1997; Acharya 1997).

The ASEAN initiatives ARF and CSCAP (founded in 1993 as an "academic extension" of ARF) aim at reducing tension and threats to the security environment of the Asia Pacific region.<sup>57</sup> ARF encompasses 21 countries and must be said to be the main forum for political security talks in the region (Leifer 1998b). The CSCAP organises unofficial seminars which somewhat resemble the South China Sea Workshops and their technical working groups. CSCAP now involves more than twenty strategic studies centres in 16 countries, and is organised in working groups where officials and scholars from different professions (in a private capacity) discuss

security issues and other challenges facing the region. The aim of the process is to provide governments and their policy formulating bodies with recommendations and advice on such issues.

The CSCAP Maritime Cooperation Working Group has adopted a broad view of security which encompasses the marine environment aspect as well as the marine science aspect; activities within this group are therefore of relevance to the South China Sea. But even though members of "my epistemic community" have presented papers at meetings organised by CSCAP, I do not consider the CSCAP equally important as the UNEP initiative and the SCSW. First, because issues raised in meetings cover such a broad spectre, both geographically (including the entire Asia-Pacific region) and thematically. The discussion is not based on the South China Sea, but is a web of issues important to the entire Asia-Pacific region. Second, the discussion led by experts in this group is not aiming at regime building in the same way as in the other two initiatives. Thus, I will not discuss the CSCAP experience in detail as I did with the UNEP initiative and the SCSW. This is not to say that it would not have been interesting to do that.

The establishment of both the ARF and CSCAP owe greatly to the end of the Cold War with a situation where governments of the Asia-Pacific region were trying to fill the empty space left by the United States and the Soviet Union.

I mention the establishment of these institutions because I see them as signs of a new pattern where non-governmental actors participate in security-oriented debates. The intention is not to discuss CSCAP and the ARF as regime building efforts, or as potential venues for an epistemic community, as I did with the UNEP initiative and the SCSW. The intention is rather to introduce them as other, perhaps vital, bodies with relevance to the South China Sea conflict. By referring to their establishment,

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<sup>57</sup> Information on the two institutions are mainly built on their respective websites: ARF: <http://www.dfat.gov.au/arf/arfhome.html> - CSCAP: <http://coombs.anu.edu.au/Depts/RSPAS/AUSCSCAP/cscap.htm>

existence and experience, I will try to say something about the nature of state interaction in the larger East Asian region.

### **6.1.1 China vs. ASEAN**

The ARF and CSCAP must be understood with reference to the emergence of ASEAN as a political actor in the larger East Asian region after the Cold War. From the beginning in 1967, ASEAN evolved around principles of confidentiality, and confidence-building through non-binding interaction and consensus-making. Most of the multilateral initiatives in the region are based on these norms, which some refer to as the "ASEAN way". According to Renato Cruz de Castro (1998:112-113), ASEAN attempted through the ARF to find a way to contain China from growing into a regional superpower which could use enforce its claims in the South China Sea. The ASEAN countries hoped through evolution of the various multilateral security arrangements, ARF, CSCAP and SCSW, to "tie China into a web of interdependence. The immediate aim is to involve the PRC in a multiplicity of regional and functional groups so as to forge norms of restraint, transparency, and dialogue." (ibid.). But China's historical experience has made her very suspicious towards such initiatives. China has therefore refused to discuss the South China Sea within a multilateral setting. Although the South China Sea conflict has been on the multilateral diplomatic agenda since the second ARF meeting in 1995, "ARF has not succeeded in its primary goal of effecting CBMs in the South China Sea" (ibid.).

There was considerable international pressure on China in the period 1995–1997 with when the Mischief Reef incidents and a growing international attention to the South China Sea conflict forced the Spratly issue onto the agenda of the ARF. It is probably reasonable to say that China decided to let ASEAN bring the South China Sea up in the ARF on the background of security and economic considerations. But although China allows its ASEAN counterparts to discuss the South China Sea in this multilateral forum, the Chinese position has not changed. Beijing still insists on solving the disputes bilaterally, remaining unenthusiastic about multilateral dialogues on the South China Sea, is not prepared to give up sovereignty claims, and resists discussing the South China Sea in the presence of outside powers (Lee 1999).

It seems that the South China Sea conflict and China's behaviour can be well understood in realist terms. China's behaviour in the regional multilateral security dialogue has been characterised by:

*...(1) a heavy emphasis on bilateral rather than multilateral approach in conflict management; (2) conditional acceptance of regional mechanisms in conflict management while at the same time viewing national interest as the primary value in the international system; (3) the assumption that special responsibilities and privileges of the big powers take precedence in dealing with the smaller powers; (4) a great reluctance in entrusting its national security to any multilateral arrangement as this might dilute China's influence and expose its internal weakness to international scrutiny; (5) the pragmatic acceptance of regional and global cooperation as long as they promote the national interest. ... The PRC's realist response to ASEAN's policy of engagement is not incidental but is rather an indication of the PRC's exercise of "primacy" in regional affairs. (Cruz De Castro 1999:117)*

Although China participates in the regional political dialogue through ARF, CSCAP and the SCSW, and interacts with ASEAN multilaterally, the Chinese will to cooperate is limited by clear guidelines. In the South China Sea, there seems to be no doubt that China is best understood in realist terms, eg. in focusing on her own national interests and trying to avoid getting enmeshed in the ASEAN web of multilateralism. My hypothesis formulated in chapter 2 was that claimant states would not be willing to discuss issues where they were likely to lose relative to the competing parties. This prediction implies that China will not engage herself in a multilateral dialogue if the gains expected are less than the gains which can be expected from waiting the other out, or from insisting on bilateral negotiations. There seems to be a reasonable basis for suggesting that this is the Chinese view. China does not engage in multilateral talks as long as she thinks she can get a better deal later.

However, Chinese participation in the various meetings taking place within the ARF, CSCAP and SCSW must be considered a sign of Chinese willingness to participate in regional politics, and that Beijing might change tactic. Actually, China is now seen by some Southeast Asians as a new and benevolent brother, particularly since China did not devalue the renminbi during the Asian financial crisis (Sarne 1999 [interview]). Seen from the side of ASEAN countries sceptical of the IMF and the West, China has behaved like an ally. Bilaterally there has been a rapprochement between China and Vietnam, China and Thailand, and China and Malaysia. China supported Thailand and

Malaysia economically under the Asian economic crisis, and China has made efforts to improve economic and political linkages with ASEAN member states (Cruz de Castro 1998; Busse 1999). In my view, whether China fits in realist or other terms depends on what factors we emphasise. In most cases, and especially when it comes to sovereignty and Chinese interests in the South China Sea, the realist explanation seems to be the most credible one. But otherwise if one focuses on environmental affairs, bilateral and multilateral economic relations, etc. the explanatory power of realism is not so clear.

**6.1.2 ASEAN vs. China**

ASEAN experienced through the Indochina wars that intervention from external powers created much instability. To prevent such interventions from being a regular feature of Southeast Asian politics, undermining the potential political role of ASEAN itself, the organisation took a range of measures in order to engage neighbouring states in political dialogue. The security structure built around ASEAN in the 1990s can be illustrated by Jörn Dosch's model of multilateral security co-operation in the Asia-Pacific:

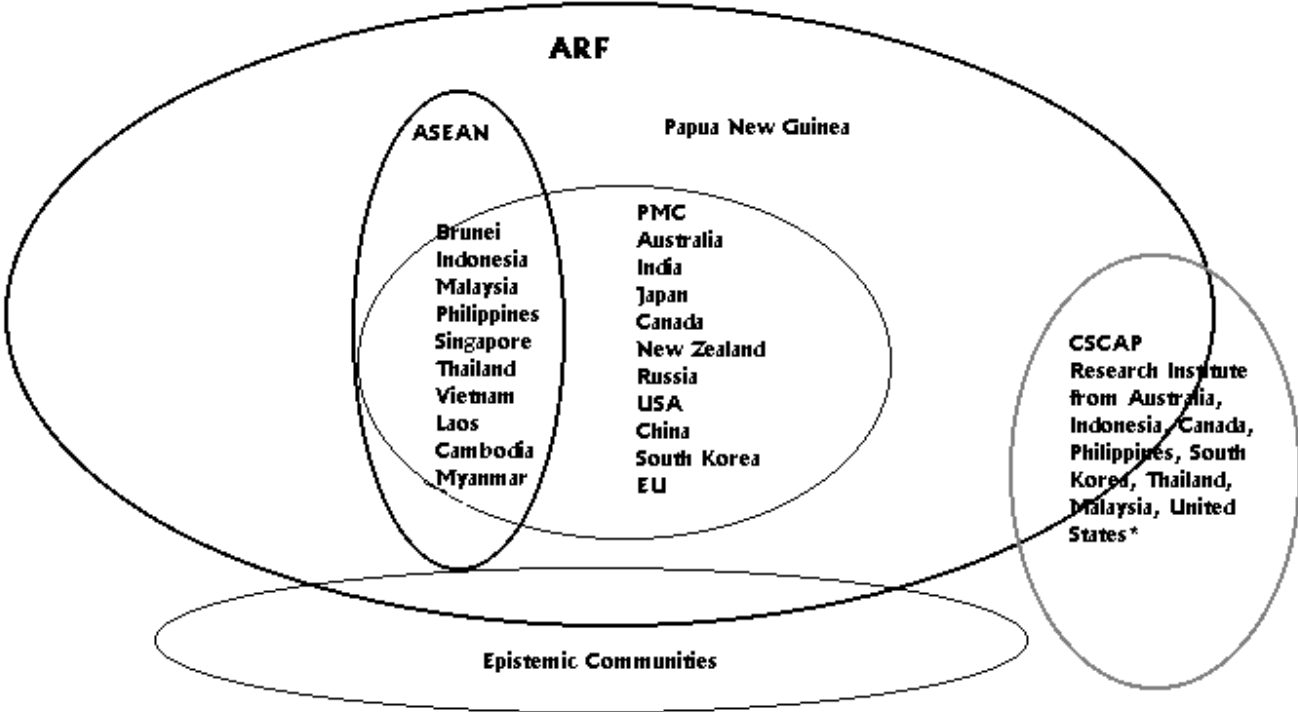


Figure 6.1: A New Security Structure for the Asia Pacific? (Dosch 1997)

This structure is built on three pillars: ARF, ASEAN Post Ministerial Conferences, and CSCAP.<sup>58</sup> Through formal and informal dialogue, including non-governmental actors and through national think-tanks and academic bodies, the countries of the region have established a way of communicating that is more or less a geographic extension of ASEAN's model of regional security (Leifer 1998b:15) described above as the "ASEAN way". The model of Asian multilateralism is unique in two respects.

*First, contrary to transatlantic experiences and maybe for the first time in modern history, in the Asia Pacific a multilateral system of interstate relations has been initiated and is significantly influenced by weak actors and not by the dominant regional powers. (Dosch 1998:9)*

*Second, so far the Asia Pacific has developed soft institutions (or a non-legalistic form based on convention rather than formal contracts or treaties) which could, but will nor necessarily, advance to hard institutions (or a set of binding principles, rules and decision-making procedures, including at least a partial transfer of sovereignty to supra-national actors) as for instance, in the case of Europe. (Dosch 1998:13)*

If we minimise the geographical scope to only include the South China Sea region, what are the implications of this new security structure? First, a number of factors suggest that ASEAN has failed with its engagement policy towards China. ASEAN's problem seems to stem from a lack of integration within ASEAN that makes the organisation easily divisible when confronting a regional major power like China. At the same time, most ASEAN states can be classified as weak states<sup>59</sup> which in the South China Sea are up against a growing international and regional power. It is understandable that these weak states try to integrate China in multilateral institutions in order to avoid being marginalised. China, on the other side, is aware of her military and political significance compared to her smaller counterparts in Southeast Asia. By getting involved in institution building she may risk to lose her position as a major regional power. If we analyse this within a realist framework, we may say that the ASEAN countries and China are defensive positionalists, but they are so with opposite starting points. China as the big power of the region is aware of her strengths and weaknesses. She thereby tries to avoid being enmeshed in ASEAN's strategy of

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<sup>58</sup> CSCAP: Council for Security Cooperation in the Asia Pacific, ARF: ASEAN Regional Forum, PMC: ASEAN Post-Ministerial Conferences.

<sup>59</sup> Weak states in this context is defined by Dosch (1998: 9) as being states not having "the military means to carry out power projection or a state which obtains military resources principally to do so but is hindered by self-restraint and/or outside pressure." Examples of the first category are Indonesia, the Philippines, Thailand, etc.), and of the second, Japan, South Korea.

forcing China into multilateral institutions. ASEAN, on its side, is occupied with gaining political ground in the wake of the Cold War, aiming at filling the political and military space left by the United States and the Soviet Union. Here, it is clear that China has decisive power, and in the South China Sea, China has expressed repeatedly, openly and not so openly, that she will only discuss and negotiate South China Sea issues as long as Chinese interests are not threatened. This is the lesson which can be learned from the UNEP initiative and from the footdragging of the Chinese in the SCSW.

A second factor that also stems from the way of interaction in the region, is that the "ASEAN way" has the potential of legitimising the pursuance of self-interest instead of pushing towards collective goals (Acharya 1997:342). One area that is suffering from this is the environment.

*Ecological pressures will be increasingly important in shaping the economic and political environment in Pacific Asia and, by extension, its security environment. War is unlikely to result from purely - or even primarily - for environmental reasons, but Pacific Asia suffers from many tensions that have environmental sources. Understanding security in Pacific Asia therefore requires an understanding of environmental issues. (Dupont 1998:75)*

Increasing transboundary environmental problems generated by economic growth and a lack of commitment to protect and manage marine resources need integrated political action between the countries of the region. Fisheries make a good example. Their high economic value and the fact that seafood is the main source of animal protein for a rapidly growing coastal population, have made countries around the South China Sea publicly exhort their fishermen to venture into disputed waters to catch fish. This has resulted in a number of incidents, notably within the disputed Spratly area (Coulter 1996:382). Illegal fishing, overfishing, and poaching of rare species are not an exception, but the norm.

In this case, the "ASEAN way" represents an impediment to establishing regional regulatory instruments. While fish stocks are being depleted, and the ASEAN member states recognise the need for conservationist programmes, they continue to implement production-oriented policies and encourage their fishermen to catch more and more living resources (ibid.).

## 6.2 Impediments to regime building in the South China Sea region

*The coastal zones of most nations in the Association of Southeast Asian Nations (ASEAN) are subjected to increasing population and economic pressures manifested by a variety of coastal activities, notably, fishing, coastal aquaculture, waste disposal, salt-making, tin mining, oil drilling, tanker traffic, construction and industrialization. This situation is aggravated by the expanding economic activities attempting to uplift the standard of living of coastal people, the majority of whom live below the official poverty line. Some ASEAN nations have formulated regulatory measures for their coastal resources management (CRM) such as the issuance of permits for fishing, logging, mangrove harvesting, etc. However, most of these measures have not proven effective due partly to enforcement failure and largely to lack of support for the communities concerned. (Chua et al. 1991b:vii-viii)*

*'Everyone for himself' has been the motto in marine affairs for so long. Cooperation is fleeting, touching on barely a few aspects of ocean use, and is intermittent in nature. What is needed for the Southeast Asian semi-enclosed seas regime building is a practical systematic strategy coupled with the awareness of all the States concerned that their marine interests can only be maximized through cooperation. (Kittichaisaree 1990:528)*

Apart from the problems caused by *realpolitik*, there are also other factors impeding effective regime building in this area. Seen from the scientist's side, the problem is that he/she alone cannot improve the current situation. Scientists are dependent on the political will and funds available. One must remember that many of the countries of the region are poor and that the number one job for most of them is to achieve sufficient economic growth to feed, employ and give shelter to their growing populations. Scientists can be influential in bringing the environment onto the political agenda and provide reliable information on what the current environmental situation is, as well as providing decision-makers with advice on what to do. But lawmaking and enforcement, project funding and political action will always depend on the entities taking decisions: the governments. Co-operation between decision-makers and the scientific community is therefore vital. As long as the political will to fund and support regional as well as national scientific and environmental activities in the South China Sea region remain limited in most countries, building maritime regimes is difficult and needs international support.

*It is obvious that non-ASEAN States in the region have shown apathy towards, or lack of political will in, the participation of the ASEAN-initiated Action Plan. One has to be cautious of the fact that specific alignments or standardization of national anti-pollution laws may be merely for the sake of convenience. States may succumb to the temptation to retain national autonomy over their national priorities and interests, unless these are satisfactorily reconciled in such a Plan. (Kittichaisaree 1990:518)*

First, although the countries in the region have signed and ratified a number of conventions and treaties, many nations are unable to implement regulations effectively. There is seldom one ministry or department that co-ordinates the implementation and enforcement of anti-pollution laws. Second, policy makers generally view environmental projects and programmes as irrecoverable and unproductive investments. Consequently, the environment has a very low rating when government funds are allocated to various sectors. Third, a general lack of expertise and experience of implementing and conducting integrated and sustainable management of marine related environmental problems is a serious obstacle to the effectiveness of environmental efforts in the region. Fourth, data management and methodologies vary from country to country making it difficult to compare and synthesise data (Low et al. 1996:80).

The UNEP initiative aimed at improving the current situation by mobilising forces throughout the region to build capacity, integrating government agencies and encouraging joint research. UNEP has in fact, since the beginning of the 1980s when five of the ASEAN countries requested that it develop an Action Plan for the East Asian Seas, aimed at improving capabilities, government actions and the marine environment in general. But as Kriangsak Kittichaisaree (1990:518) stated at a conference in 1990, the governments of the ASEAN community have not been very successful at promoting UNEP's environmental programmes.

*UNEP has been facing funding problems. The States in the region fail to realize that UNEP was conceived to assist them only at the initial stage of environmental programmes, such as through technical assistance, identification of problem areas, and baseline studies. UNEP is not an implementator itself. The States must assume the role of implementators by taking action with the financial support from their own national budget. Instead, the Southeast Asian States continue to expect from UNEP what it cannot give because it has already exhausted its funds. This false expectation should be rectified.*

### **6.2.1 The “Malignancy” of the South China Sea conflict**

The purpose of establishing a maritime regime for the South China Sea has been described in earlier chapters. In short, I think it is reasonable to describe the efforts as aiming at co-ordinating the behaviour of littoral states to avoid a situation where “..the pursuit of self-interest by each leads to a poor outcome for all.” (Axelrod cited in Arild

Underdal subm.:17). This problem of *incongruity*<sup>60</sup> is classified as a 'malign' problem in the debate on international regimes (Skodvin 1999:118). The political malignancy of a policy problem is conceived by Arild Underdal (subm.:15) as being "primarily a function of the configuration of actor interests and preferences which it generates. According to this conceptualization, a perfectly 'benign' problem would be one characterized by identical preferences. The further we get from that state of harmony, the more malign the problem becomes." In the South China Sea, the fisheries situation resembles such a malignant and incongruent problem. Fishing fleets of individual countries of the South China Sea region are depleting the common resources of the sea, thereby causing long-term costs (loss of future fishing opportunities) to all, and reaping short-term benefits at the cost of others (example inspired from ibid.:17).

*The Southeast Asian Seas annually yield approximately 7 million tons of fishery resources. The annual value of this catch exceeds USD 6.5 billion. The ASEAN nations export nearly USD 1 billion worth of fish products annually. More significantly, fisheries contribute approximately 65 % of the animal protein consumed in countries such as the Philippines, Malaysia, and Indonesia, with the highest dependencies being found among the poorest coastal people. Areas adjacent to the Spratly Islands are particularly productive, such that the annual catch from the reef-studded waters of the Sabah-Palawan area is about 10 000 tons, valued at approximately USD 15 million. (..) The local fish stocks in most of these areas are heavily fished. Adult fish are very difficult to find on some reefs in the region. (McManus1994:182)*

Although there are unilateral attempts at improving the current situation (e.g. China's fishing ban), regulation of fisheries is dependent on a regional approach to the problem where all littorals have to commit themselves to agree upon a limit to annual catches. The long-term effect of this development might lead to the break down of the ecosystem. Scientists of the region have published widely on the current situation of important ecosystems and of fisheries, they have attended numerous regional conferences, and they participate in government funded projects, but as the political will to pursue environmental policies, based on this knowledge, remains limited, as experienced in the UNEP case as well as in the SCSW, protection and management of South China Sea ecosystems is left to the individual state. Consequently, no political space is left for non-state actors, such as marine scientists, to influence in practice the development of the marine environment of the region.

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<sup>60</sup> The defining characteristics of the *incongruity* problem is "that the cost-benefit calculus of an individual actor is systematically "biased" in favor of either the costs or the benefits of a particular

I am not an expert, but to me it seems that the current environmental situation, in terms of mangrove forest loss, coral reef degradation and forest fires, can be described accurately by the following words: *environmental catastrophe*. The obvious question is then: what are the governments of the region doing to limit the scope and gravity of these growing problems? The Indonesian forest fires is an interesting case which can serve as an example of a lack of governmental control and initiative to manage and protect the environment. The example also shows how limited the influence of scientists and experts in such cases can be.

### **6.2.2 The Haze – is a new understanding leading to political change?**

One of the main premises for the "epistemic community idea" is that regimes are most likely to emerge after a crisis or an environmental catastrophe which mobilises public opinion and suddenly gives environmental experts a say. When negotiating environmental agreements under such circumstances non-state actors can play an important role. Media, NGOs, IGOs, national and transnational experts are all consulted and drawn into the process of problem solving.

If we transfer this idea to the South China Sea region and look for an environmental crisis, the forest fires in Indonesia and Malaysia in 1997 come to mind. The fires re-emerged in the media in the summer of 1999.<sup>61</sup> The forest fires have an impact on all aspects of the environment. They also have consequences for the maritime environment through increased erosion (see Ha Long example above in ch. 3) and collisions at sea caused by reduced visibility. If we were to follow Haas, governments of the region should have started to think and act seriously on environmental questions as a consequence of the crisis. A change of environmental policies in the affected countries, Malaysia, Singapore, Brunei and Indonesia would be the first obvious result.

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course of action. (...) Transfrontier pollution and common pool resources are prominent examples of situations where the former mechanism is at work." (Underdal subm.: 17).

<sup>61</sup> "South-east Asia faces new smog crisis", *The Guardian*, 2 August 1999; "Haze puts Riau in state of emergency", *Jakarta Post*, 5 August 1999; "Tackling the haze menace", *Business Times* [Singapore], 16 August 1999; "Indonesia's Habibie calls for action to stop fires", *Reuters*, 9 August 1999.

### 6.2.2 The Haze and the ASEAN response

The haze caused by forest fires in Sumatra, Kalimantan and East Malaysia created big titles in the world media in 1997. The effects on tourism and the economy were momentous. My suggestion, based on the works of Alan Dupont (1998) and David Rosenberg (1999), is that the forest fires and the resulting smoke haze awakened policy-makers in the region.

ASEAN's environmental policies are interesting in this context. Until the forest fires in 1997, ASEAN left environmental policies to each member state and did not advocate any binding multilateral co-operation. The ASEAN Regional Haze Action Plan was therefore something new: "it appears that a genuine regional effort is emerging to deal with a problem that transcends national boundaries" (Rosenberg 1999:11).

As I have already mentioned, the use of expert groups and committees is increasing within ASEAN. The ASOEN (ASEAN Senior Officials on Environment) Haze Technical Task Force had its ninth meeting in July 1998, and is one of the groups that help the ASEAN countries to prevent the sort of forest fires experienced by Indonesia. The complex nature of pollution and its impact on ecosystems in Southeast and East Asia acquire an environmentally aware community of scientists who can provide the necessary information on the man-made transboundary pollution, and give reliable information on how to fight environmental problems.

The establishment of the ASEAN Haze Action Plan in 1997 was a positive move, but as soon as the haze had disappeared, the momentum was lost. An article in *The Economist* (August 14-20) is illustrative:

*Another contagion is threatening the economies of Asia, but this time foreign investors cannot be blamed. The return of heavy air pollution, caused by the perennial burning of forests in Indonesia, is once again threatening to blanket the neighbouring countries of Malaysia, Singapore and Brunei. (...) Since Indonesia and its neighbours all belong to the Association of South-East Asian Nations, it might be expected that a co-ordinated solution to the problem could be found. But ASEAN is unwilling to be too critical of a member, in this context Indonesia, the source of the smoke.*

The recurrence of forest fires must be said to be a proof of the failure of ASEAN deal efficiently with transboundary environmental problems. The "Asian Way" of

interaction is not the right formula for solving problems of this scale and has obviously not made the organisation more fit to tackle transboundary environmental problems. What looked like a positive move towards a more integrative and binding commitment to fight complex, environmental problems within the ASEAN region in 1997 has definitively failed. The forest fires keep recurring, the governments seem just as paralysed as in 1997. Furthermore, the countries are trying to hush down the fires since they are afraid that tourists will choose other destinations. Although Indonesia says it needs more help from the international community to deal with her problems, and as the economic crisis is still lingering in Indonesia and elsewhere in the region, the regional response to these problems does not suggest that there has been any dramatic political change in terms of environmental policy. On the basis of the haze incident there seems to be no basis for suggesting that major environmental catastrophes entail political change. The socio-economic aspects, where economic interests on local and company levels have an interest in putting fire to the forests, combined with the difficulties in enforcing environmental law in rural areas of Indonesia, and corruption on top of that, are preventing political change.<sup>62</sup>

### 6.3 The rationalistic vs. the cognitive approach

I have tried through this study to assess the political influence of one group of non-state actors; marine scientists, within the context of a contemporary phenomenon; the environmental situation of the South China Sea. I started out with a model of analysis exemplified here:



**Figure 6.2: Model of analysis**

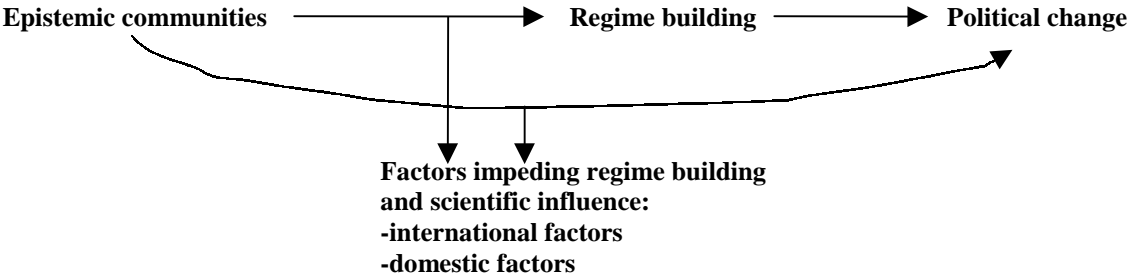
Knowledge about environmental problems in the South China Sea region is transformed into political action with help from certain factors: An integrated

<sup>62</sup> Why is ASEAN not able to tackle these problems? This is an interesting question and I think I have mentioned a few important explanatory factors ("the Asian Way", domestic factors, etc.), but the

scientific network, government uncertainty about environmental challenges, the intrusion of instrumental knowledge of how to solve environmental problems through scientific influence on policies, and the institutionalisation of knowledge and scientists. I found proof that to a certain extent marine scientists have been able to transfer environmental knowledge to governments in the region, but that their influence on South China Sea issues remains limited due to the prevailing *realpolitik*. Although decision makers are aware of the environmental risks and have the instrumental knowledge available they refrain from prioritising the environment in order to concentrate resources on achieving economic growth and because of fear that environmental action could damage national security.

*...while the form of specific policy choices is influenced by transnational knowledge-based networks, the extent to which state behaviour reflects the preferences of these networks remains strongly conditioned by the distribution of power internationally. Thus, the range of impact that we might expect of epistemic and epistemic-like communities remains conditioned and bounded by international and national structural realities. (Haas 1992:7)*

The multilateral security dialogue in this region functions as an impediment to regional environmental co-operation, and thus also blocks attempts by non-state actors to influence regional political processes. But it is not only the multilateral security environment that prevents non-governmental actors from being influential, there are also important domestic impediments as shown in the case of the Indonesian forest fires. The situation can be simplified accordingly.



**Figure 6.3: Impediments to scientific influence on policy**

The influence of non-state actors depends on the strength of the factors impeding their influence, this will vary from one issue-area to another. In some fields the influence of non-state actors can be strong, in others insignificant. What is typical for the South China Sea is that all fields are related to the overall dispute about sovereignty and

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question is much too complex to be dealt with in depth here.

maritime delimitation, at least by the Chinese, who fear internationalisation of the dispute, and thus tend to oppose any change of status quo.

#### **6.4 Concluding remarks**

The scholarly debate on East Asian security has taken several directions. The most prominent and well-developed is the realist inspired analysis (Huxley 1996; Leifer 1998b; Simon 1995). This is based on "the continuing existence of intra-regional disputes, competitive military modernization programmes, and the weakness of institutions such as the ARF" (Busse 1999:40). The second, inspired by neoliberal institutionalism, focuses on the wider Asia-Pacific region which according to writers such as Acharya (1997), Higgott (1994), and Kerr (1994) has seen an emerging security structure built on co-operative endeavours within APEC and the ARF. Their emphasis is on 'Asian multilateralism' as described above. In other words, a classical debate between realists and liberals has emerged in the debate on new (or old) forms of interaction in the Asia-Pacific region. Recently, yet another theoretical direction was introduced; that of constructivism (Busse 1999). It is argued that inter-state interaction over time within ASEAN has led to the emergence of a collective identity among the members of the organisation in opposing external pressure. My intention is not to elaborate on this discussion, suffice it here to mention the variety of theoretical approaches used. My point is that Asian multilateralism is a complex phenomenon, and dependent on the research angle or field in focus, theoretical models developed in the Western world are employed on an Asian context with various success, and with variable results.

I suggested in chapter 2 that division of labour might be needed between rationalist and cognitive approaches to produce a fruitful synthesis (see Hasenclever et al. 1997:216). By combining these two theoretical approaches, one is able to get a more complete picture of multilateral political interaction in the South China Sea than if only one theoretical approach is used. When studying marine environmental co-operation, it is important to be informed not only about what is being discussed within the scientific community and what kind of environmental problems we are talking about, but also understand the nature of government interaction. Concepts such as

"confidence building" and "regime building" are not understood exactly in the same way in Asia and Europe.

*... institution-building in the Asia-Pacific region, rather than following the pattern established in Europe and North America, is instead 'emerging from unique historical circumstances and will likely evolve in its own particular way'. The origin of what is increasingly being referred to as the 'ASEAN way', 'Asian way' or 'Asia-Pacific way' of multilateralism is to be found in the conscious rejection by Asian leaders and policy elites (now echoed by many of the Western participants as well) of 'imported models' of multilateralism and in their call for multilateralism to conform to local realities and practices. (Evans cited in Acharya 1997:327)*

*The effective intellectual development of the current processes of regional economic cooperation, including APEC, started in the mid-1960s. In reacting to these intellectual arguments, the emergence from colonialism, the problems of nation building under the pressures of internal subversion and their freedom from great power influence, dominated the thinking of the leaders of these countries then and for many years after, and these political and social environmental factors need to be reflected in assessing questions of regime building in the region. (Harris 1994:384)*

Although my study has shown that realist assumptions retain strong explanatory power in describing the lack of co-operation in the South China Sea, there is no reason why other theoretical approaches should not be used to analyse the emerging Asian multilateralism. My suggestion has been that through ASEAN, and multilateral meetings such as the South China Sea Workshops, knowledge attained by *environmental scientists* and also by governments officials is brought to the attention of politicians in the region. Although government interaction in the South China Sea region is obviously less integrated than in the European case, thereby favouring realist assumptions, there are clear signs, in my opinion, of political space emerging for non-governmental actors. In a special 1994 edition of *The Pacific Review* Richard Higgott (1994: 367) states as an implicit assumption "that the growing networks of Asia-Pacific organizations represent an important laboratory for enhancing our conceptual and theoretical understanding of the importance of ideas in identity formation and policy learning in international relations." This has been, and remains, my assumption as well, although in my case it is explicit.

## **7. Conclusions**

The research question guiding this study was: *To what degree have maritime scientists managed to promote regional environmental co-operation in the South China Sea region?* My concluding answer to that question is that the regional scientific community of maritime experts has succeeded in initiating, suggesting and formulating policy choices in the UNEP-case as well as the South China Sea Workshop case. Unfortunately, governments of the region have prevented the attempts from leading to action. In other words, there is no doubt that marine scientists have gained some influence in the South China Sea region, but on the other side there is also no doubt that their influence is rather limited, especially in terms of environmental regime building.

To the question of the existence of an epistemic community, I would like to emphasize how difficult it is to give a clear answer. The epistemic community term is developed within the context of ocean governance in the Mediterranean region. To sort out whether the scientific community of the South China Sea region fits Haas' definition or not, has been a difficult task due to the limited framework of this study. Findings suggest that there is a regional scientific community consisting of marine scientists from the ASEAN member states. This community has been influential within the framework of ASEAN, but seems to have failed so far in influencing regional co-operation on the environment including all South China Sea littorals.

Environmental knowledge seems to have reached most countries of the region, with some obvious exemptions, such as Cambodia. Environmental ministries are in place, environmental laws and regulations are implemented, environmental NGOs and IGOs undertake numerous projects, and environmental experts are allowed to meet on a free basis across borders, particularly within ASEAN. However, even though governments talk and act environment-friendly, marine environmental problems are still not dealt with efficiently. Fishermen catch less fish along the coasts, coral reefs and mangroves are destroyed throughout the region, pollution from traffic at sea, from land based industries and from the growing cities of the region keep flowing untreated into coastal

waters, etc. The list of environmental challenges is long, and demands a huge amount of economic and human investments to be addressed. And maybe most important, these challenges demand the attention and willingness of politicians to choose and prioritise the environment. This is only likely to happen when and if there is a major catastrophe or if the environmental situation becomes an impediment to economic growth and the feeding of the coastal populations. The environmental experts try to inform their governments about risks and challenges, but so far the governments of the region have not been prepared to prioritise management and protection of the marine environment.

So why is it that no strong, influential epistemic community has been found with a greater role in promoting governmental action? First, with the end of the Cold War, the South China Sea was left in a power vacuum by the superpowers. During the last decade a situation has emerged where China is facing its Southeast Asian counterparts in a contest for natural resources and sovereignty to islands. Latent conflicts have been brought to the surface, and threaten to destabilise the region. Thus, *high politics*, vital state interests, are at stake. In such a situation it seems that any issue brought to the table gets contaminated by the overriding question of sovereignty to the Spratly Islands. Even though initiatives for managing and protecting the South China Sea environment do not seem to have much relevance, to the tendentious sovereignty question, these initiatives are being blocked, seemingly, because they might have an impact on the sovereignty issues.

*"Despite the conduct of Sino-ASEAN dialogues on the South China Sea, it is obvious that the tangled web of overlapping claims, especially in the Spratlys, would defy any attempt at disentanglement."* (Lee 1999:146)

My conclusion is that approaches emphasising narrow state interests and power politics score rather high in describing state interaction in this region, whereas explanations emphasising co-operation and the influence of non-governmental actors make a rather low score in comparison. To me, it seems that *high politics* determines the outcome of any South China Sea initiative, and as long as environmental experts fail to show states the security implications of today's policies, environmental co-

operation will not be prioritised. Environmental experts just have to keep on struggling while waiting for the states themselves to realise the need for co-operative endeavours. There have been signs of a change of behaviour in response to the UNEP and the South China Sea Workshop initiatives, but so far there has been a lot of talk and no real progress.

This is not to say that environmental experts have no influence at all, it is rather that their influence is limited to agenda setting and the framing of issues raised for discussion. As experienced in both initiatives discussed above, the UNEP initiative and the South China Sea Workshops, marine scientists have been influential in attracting the interest and attention of governments and decision makers. The following statement underpins this finding:

*Despite the criticism that the South China Sea Workshop process has reached a plateau or has become a mere 'talking club,' concrete cooperative projects in the South China Sea in the areas such as marine scientific research, marine environmental protection, and safety of navigation, shipping, and communications indeed had been developed and are moving toward an implementing stage. It must be admitted that obstacles to the implementation of the agreed projects abound. However, if the countries of the region could develop a sense of community through the experience they obtained in the SCS Workshops, an important learning process in the region, the needed political willingness of cooperation could further be enhanced. (Yann-Huei 1999: 49)*

In other words, so far environmental scientists have been influential in promoting knowledge about the environmental situation, but still this knowledge is not reflected in state policies of various reasons as discussed in chapter 6. Governments declare that the environment is important in numerous ways, but, in real life, policies do not reflect this. More emphasis on environmental security in the future will hopefully change the current situation in favour of the environment.

Second, domestic conditions also prevent governments from taking part in regional environmental initiatives. These domestic factors are closely related to the level of economic development. As experienced in relation to the "Indonesian haze", economic and administrative inadequacies prevent government policies from being effective. Indonesia's neighbours also remain reluctant to express "enough is enough". The 'Asian Way' of interacting within the ASEAN community implies that all members

have to refrain from commenting on internal affairs in a neighbouring country. The 'Asian Way' allows the ASEAN countries, as well as other Asian nations clinging to the 'Asian Way', to give priority to short-sighted national interests even though it may harm the interests of neighbouring countries. Some say that the 'Asian Way' of co-operation is ineffective and just another reason for the leaders to play golf and avoid regional criticism (Swanström 1999:94). But, one should be careful of being too pessimistic. Most countries of the region are poor and heavily populated, and these countries cannot be expected to spend large parts of their national budgets on the environment, while the better part of the population live under poor circumstances.

My main conclusion is therefore that scientific networks are developing in the region, albeit unevenly, but influence of scientists and science is curtailed by lack of political will, by lack of funding for environmental projects, and by political tension related to the Spratly dispute. Regional co-operation will depend not only on future political developments, but also on economic developments. As foreign aid can only play a limited role, the countries have to rely on their national economies for environmental projects. As the contest between economic and environmental concerns seldom go in favour of the environment, depletion of natural resources and ecosystems will continue. John McManus (1999 [interview]) commented: "It is as bad as it can get!" referring to the current environmental situation, and especially fisheries. It is tempting to say he is wrong: fish stocks may be completely depleted before there is any action.

The South China Sea region, as well as the entire Asia-Pacific, is facing a rise of severe transnational problems related to the environment. Transboundary environmental problems have for the first time been documented, published and brought to the attention of governments by UNEP. It is documented that due to rapid economic development and population growth, the South China Sea region is facing large-scale environmental degradation. At the same time globalisation causes new pressure on states to conform to international standards of governance, economic interdependence, and a rise of new actors challenging

state authority. In my view, all these factors are important in understanding the South China Sea conflict. One way of assessing the impact of these factors on state interaction in the South China Sea is to use interdisciplinary approaches in assessing environmental security. More focus on human security and environmental security is demanded. There has already been too much talk about national security. What is needed is more focus on the environment. As knowledge about environmental resources at stake in the region makes it to the desks of top decision makers, governments will understand why they should start focusing on something more important than sovereignty to small insignificant islets in the Spratly area. What will happen if the nursing grounds for fish, coral reefs and mangroves, are wiped out within the next 50 years? What about the economic costs of destroying marine ecosystems? What about the loss of tourism and entire industries based on these ecosystems?

Recently there have been attempts at integrating the UNEP South China Sea Strategic Action Programme and the South China Sea Workshops. According to Ian Townsend-Gault (1999 [interview]), China might decide to sign the UNEP Programme as the six other countries (Malaysia, Thailand, Cambodia, Vietnam, Indonesia and the Philippines) have discussed implementation of the Programme without Chinese participation. So far these statements are more or less rumours which are not confirmed formally neither by China nor UNEP. But if these rumours prove to be right, there is no doubt that movement in such a direction proves that coastal nations of the South China Sea region are serious in focusing on the environment, and it also proves that UNEP and senior marine scientists of the region have played an influential role in bringing about inter-state co-operation on South China Sea matters.

## Abbreviations

ADB	Asian Development Bank
AEGE	ASEAN Expert Group on Environment
ASCMS	ASEAN Subcommittee on Marine Science
ASEAN	Association of Southeast Asian Nations
ASEAN PMC	ASEAN Post-Ministerial Conferences
ASEAMS	Association of Southeast Asian Marine Scientists
ASEP	ASEAN Environment Programme
ASOEN	ASEAN Senior Officials on Environment
APEC	Asia-Pacific Economic Cooperation
ARF	ASEAN's Regional Forum
ASCOPE	ASEAN Council on Petroleum
CIDA	Canadian International Development Agency
COBSEA	Coordinating Body on the Seas of East Asia
COMAR	UNESCO's Inter-Regional Project on Research and Training on Integrated Management of Coastal Systems
COST	ASEAN Committee on Science and Technology
CSCAP	Council for Security Cooperation in the Asia-Pacific
EAS/RCU	East Asian Sea Regional Co-ordinating Unit
EEZ	Exclusive Economic Zone
ESCAP	Economic and Social Commission for the Asia-Pacific
GEF	Global Environment Facility
ICLARM	International Centre for Living Aquatic Resources Management
IMO	International Maritime Organisation
MIMA	Maritime Institute of Malaysia
PHILMA	Philippine Institute of Marine Affairs
PRC	People's Republic of China
SCSW	South China Sea Workshop
SEAPOL	Southeast Asian Programme in Ocean Law, Policy and Management
SIDA	Swedish International Development Cooperation
TDA	Transboundary Diagnostic Analysis
TIMA	Thailand Institute of Marine Affairs
TWG MSR	Technical Working Group on Marine Scientific Research
TWG MEP	Technical Working Group on Marine Environmental Protection
UNCED	United Nations Conference on Human Environment
UNCLOS	United Nations Convention on the Law of the Sea
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

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