

MANAGING CONFLICTS OVER RESOURCES AND VALUES

Continental coasts

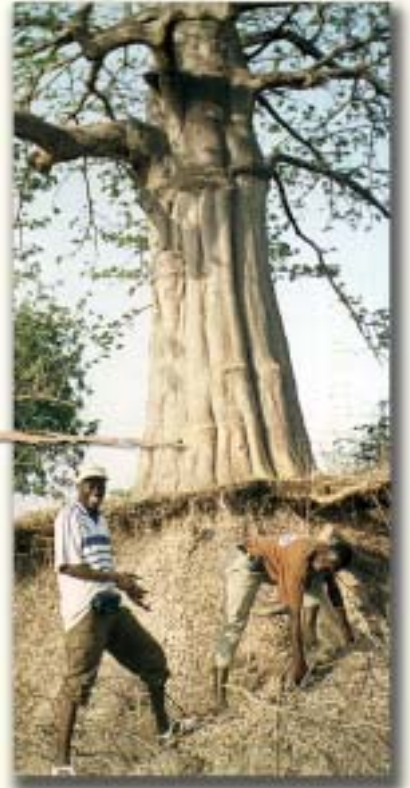




Figure 1 Location of field projects and UNESCO university chairs (➔) in continental coastal regions covered by the workshop. The Seychelles were also represented at the workshop and have therefore been included.



Managing conflicts over resources and values: Continental coasts

Results of a workshop on
'Wise practices for coastal conflict
prevention and resolution'
Maputo, Mozambique, 19–23 November 2001

The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the UNESCO Secretariat concerning the legal status of any country, territory, city or area or of their authorities, or concerning the delimitation of their frontiers or boundaries.

Reproduction is authorized, providing that appropriate mention is made of the source, and copies sent to the UNESCO (Paris) address below. This document should be cited as:

UNESCO, 2002. *Managing conflicts over resources and values: Continental coasts. Results of a workshop on 'Wise practices for coastal conflict prevention and resolution', Maputo, Mozambique, 19-23 November, 2001.* Coastal region and small island papers 12, UNESCO, Paris, 86 pp.

Within the limits of stocks available, extra copies of this document can be obtained, free of charge, from:

UNESCO Abuja
fax: +234-9 52 38 094
email: abuja@unesco.org
anthonymaduekwe@netscape.net

UNESCO Maputo
fax: +258-1 49 34 31/49 45 03
email: maputo@unesco.org
b.santos@unesco.org

UNESCO Nairobi
fax: +254-2 21 59 91
email: nairobi@unesco.org
trevor.sankey@unesco.unon.org

UNESCO Dakar
fax: +221 823 83 93
email: dakar@unesco.org
a.olloy@unesco.org

UNESCO Montevideo
fax: +598-2 413 20 94
email: orcyt@unesco.org.uy
cskarez@unesco.org.uy

UNESCO New Delhi
fax: +91-11 6713001/2
email: newdelhi@unesco.org
r.jayakumar@unesco.org

UNESCO Jakarta
fax: +62-21 315 03 82
email: jakarta@unesco.org
n.wirjoatmodjo@unesco.org

UNESCO Moscow
fax: +7-095 202 05 68
email: moscow@unesco.org
u.grabener@unesco.ru

UNESCO Venice
fax: +39-041 528 99 95
email: venezia@unesco.org
p.pypaert@unesco.org

The digital version of this publication can be viewed at: <http://www.unesco.org/csi/pub/papers2/map.htm>

The associated papers can be viewed at: <http://www.unesco.org/csi/pub/papers2/mapp.htm>

The 'Coastal region and small island papers' series was launched by the Organization in 1997. Information on CSI activities, as well as extra copies of this document, can be obtained at the following address:

Coastal Regions and Small Islands (CSI) platform
UNESCO, 1 rue Miollis
75732 Paris Cedex 15, France
fax: +33 1 45 68 58 08
e-mail: csi@unesco.org
website: <http://www.unesco.org/csi>

Cover photos: background: Roman archaeological site of Fulfinium with a petrochemical plant in the background, Omisalj, Croatia, 2000; *top:* Deterioration of the shell-midden site at Guior Island, Senegal, June 2001; *middle:* Heavily polluted river water and a degraded water drainage system result in serious flooding, Kapuk Muara, Jakarta, Indonesia, 1997; *bottom:* Migrant fishers baiting hooks, Saint Louis, Rio de la Plata, Uruguay, May 2001.

Photos courtesy of: Gillian Cambers, Giovanni Campeol, Chair UNESCO/UCAD, Brigitte Colin, Catherine Doux, Derek Elias, Heinz-Josef Heile, Alioune Kane, Hal Thompson, Dirk Troost, Y. Wibowo.

Design and layout: Eric Loddé and Micheline Turner.

Published in 2002 by the United Nations Educational,
Scientific and Cultural Organization
7, place de Fontenoy, 75352 Paris 07 SP

Printed in UNESCO's workshops
Please recycle

© UNESCO 2002
Printed in France

Foreword

Conflicts are part of everyday life – we see them in families, between neighbours, among workers, and in politics. In some ways they provide points of interest, for without some form of disagreement, life would be very mundane. However, there is a need to manage conflicts so they do not reach crisis proportions and consume everyone's time and energy. Willingness on the part of involved parties to listen and to understand the perspective of others, is essential to the process of negotiation, as is an underlying appreciation that no party gets everything it wants.

Developing wise practices for managing conflicts over coastal resources and values lies at the centre of the United Nations Educational, Scientific and Cultural Organization's (UNESCO) intersectoral platform for Environment and Development in Coastal Regions and in Small Islands (CSI). Through field projects, university chairs and twinning networks, and a global, multi-lingual Internet-based forum, wise practices for sustainable coastal living are being formulated and tested. Following a workshop on coastal conflicts in small islands, held in Dominica in July 2001, it was decided to hold a complementary activity focusing on continental coastal areas. As a result, participants met in Maputo in November 2001, to discuss ways to resolve existing, and prevent future disputes over coastal resources and values.

Case studies were presented from sites as far apart as the White Sea in Russia and the state of Gujarat in India. While each context is to some extent unique, there were similarities in the methods used to resolve the conflicts. Conflict resolution involves identification of the nature of the problem, involvement of all stakeholders in a participatory manner to build consensus, and then implementation of the agreement. While this process is often very time-consuming, it does not always change people's attitudes, and some

people may still harbour feelings that 'they were right all along' even though they did accept a compromise agreement. Thus, the key to prevent conflicts arising over the same issue in the future lies in changing attitudes. As described in the case studies contained in this publication, such changes require education and the involvement of people in specific on-the-ground activities that strike a balance between environment and development. Examples of such actions discussed during the workshop ranged from setting up environmental committees in communities in Jakarta, Indonesia, to involving artisans and their local communities in restoring and rehabilitating old buildings in Mahdia, Tunisia.

Differences in value systems, with their inherent moral and ethical dimensions, lie at the heart of many conflict situations. This is especially so in coastal areas, which often attract large groups of migrants in search of a better life. Hence, social, cultural and economic considerations are particularly important.

Workshops, such as the one that forms the basis of this publication, enrich participants' perspectives and provide a mechanism wherein ideas and actions can be considerably advanced. They also represent important milestones along the path towards far-reaching goals such as the management and prevention of conflicts over coastal resources and values.

Dirk G. Troost,
Chief CSI

Gillian Cambers,
Workshop co-organizer and report editor

Antonio Hoguane,
Eduardo Mondlane University

Avant-propos

Les conflits d'intérêts font partie de la vie quotidienne, témoin ce qui se passe au sein des familles, entre voisins, dans le monde du travail et la vie politique. D'une certaine manière les conflits retiennent l'intérêt car, s'il n'existait aucune sorte de désaccords, la vie serait très monotone. Cela dit, il est absolument indispensable de les gérer si on veut éviter qu'ils dégénèrent en crises qui absorbent le temps et l'énergie des uns et des autres. La bonne volonté mise par chacune des parties pour écouter et comprendre les points de vue des autres est indispensable au processus de négociation, de même qu'il est indispensable que les parties en cause admettent qu'il n'est pas possible qu'elles obtiennent tout ce à quoi elles prétendent.

Élaborer des pratiques éclairées pour gérer les conflits concernant les ressources côtières et les valeurs qui s'y attachent, cette mission est au cœur des travaux de la Plate-forme intersectorielle pour l'environnement et le développement dans les régions côtières et les petites îles (CSI) de l'Organisation des Nations unies pour l'éducation, la science et la culture (UNESCO). De par ses projets de terrain, ses chaires universitaires et ses réseaux de jumelage, ainsi que son forum multilingue sur Internet, des pratiques éclairées pour un mode de vie durable dans les régions côtières sont constamment formulées et mises en chantier. Il a été décidé, à la suite d'un atelier sur les conflits côtiers dans les petites îles, qui s'est tenu en juillet 2001 à la Dominique, de mettre sur pied une activité complémentaire centrée sur les zones côtières des continents. Résultat : ses participants se sont réunis à Maputo en novembre 2001 afin de débattre des moyens de résoudre les différends actuels et de prévenir ceux qui pourraient survenir au sujet des ressources côtières et des valeurs qui s'y rattachent.

Les études de cas présentées durant l'atelier concernaient des lieux aussi distants les uns des autres que la mer Blanche en Russie et l'État du Gujarat en Inde. Si le contexte est, dans une certaine mesure, particulier à chaque site, les méthodes de résolution des conflits présentent des similitudes. Celles-ci font appel à la reconnaissance de la nature du problème, à l'implication, de manière con-

structive, de toutes les parties concernées, animées d'une volonté de collaborer à l'obtention du consensus et enfin, à la mise en vigueur de l'accord. Certes l'opération prend du temps, elle ne modifie pas toujours l'attitude des intéressés, dont certains gardent parfois le sentiment, même après avoir accepté le compromis, qu'"ils avaient pourtant raison". Le meilleur moyen de prévenir la répétition des conflits ayant la même cause consiste donc à modifier les attitudes. Comme le montrent les études de cas décrites dans cette publication, une telle modification passe par l'éducation et l'implication des intéressés dans des actions concrètes et spécifiques, où sont soigneusement dosées les exigences de l'environnement et celles du développement. Les exemples d'actions évoquées pendant l'atelier sont très variés, tel l'établissement de comités de l'environnement dans des communautés de Djakarta en Indonésie, ou la participation d'artisans et de leur entourage à la restauration et à la réhabilitation de bâtiments anciens à Mahdia en Tunisie.

La différence des systèmes de valeurs, avec leurs dimensions morales et éthiques, est la cause première d'un grand nombre de situations de conflit. C'est notamment le cas dans les zones côtières, qui attirent de forts contingents de migrants à la recherche d'une vie meilleure. D'où l'intérêt tout particulier à porter aux considérations sociales, culturelles et économiques.

Les ateliers tels que celui qui fait l'objet de cette publication élargissent l'horizon des participants et constituent un moyen de faire progresser la réflexion et l'action. Ils posent aussi des jalons sur la voie des objectifs à plus long terme que sont la gestion et la prévention des conflits concernant les ressources côtières et les valeurs qui s'y rapportent.

Dirk G. Troost,
Chef de CSI

Gillian Cambers,
Coorganisatrice de l'atelier et rédactrice du rapport

Antonio Hoguane,
Université Eduardo Mondlane

Prólogo

Los conflictos son parte de nuestro cotidiano – los encontramos en las familias, entre vecinos, entre colegas y en la política. En cierta manera suministran puntos de interés, desde que sin alguna forma de desacuerdo, la vida sería harto prosaica. Sin embargo, se hace necesario de gestionar conflictos de tal forma que no alcancen proporciones de crisis y consuman el tiempo y las energías de todo el mundo. La voluntad de parte de las partes involucradas de escuchar y tratar de comprender la perspectiva de otros, se vuelve esencial en el proceso de negociación, con el entendimiento subyacente que ninguna parte obtiene todo lo que pretende obtener.

Desarrollar prácticas sensatas para manejar conflictos en torno de recursos y valores costeros constituye el eje pivotal de la plataforma intersectorial sobre Ambiente y el Desarrollo en Regiones Costeras e Islas Pequeñas (CSI) de la Organización de Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO). Es así que se formulan y ponen a prueba prácticas sensatas para estilos de vida sostenibles en regiones costeras a través de proyectos en el terreno, cátedras universitarias y redes hermanadas, y un foro multilingüe basado en el Internet.

A continuación de un taller sobre conflictos costeros en islas pequeñas que tuvo lugar en Dominica en julio de 2001, se decidió celebrar una actividad complementaria centrando la atención esta vez en zonas costeras continentales. Como resultado de esta intención, se celebró un taller en Maputo, Mozambique, en noviembre de 2001, para tratar formas de resolver conflictos existentes y prevenir futuras disputas sobre recursos y valores costeros.

Se presentaron estudios de caso de sitios tan distantes como el Mar Blanco en Rusia y el Estado de Gujarat en la India. Mientras que cada contexto es en cierta forma único, había similitudes en los métodos utilizados para resolver conflictos. La solución de conflictos involucra la identificación de la naturaleza del problema, el involucramiento de todos los actores y grupos de interés de manera participativa para establecer un consenso, seguido de la implementación de lo acordado. Mientras que

este proceso requiere mucho tiempo, no resulta siempre en un cambio de actitud por parte de la gente, y algunos mantienen todavía que “a la larga tenían razón”, a pesar que habían aceptado un acuerdo mutuo. Es así que la clave para prevenir conflictos sobre los mismos problemas reside en el cambio de actitudes. Como descrito en los estudios de caso presentados en esta publicación, tales cambios requieren educación y el involucramiento de la gente en actividades en el terreno que establecen un equilibrio entre ambiente y desarrollo. Se discutieron ejemplos de tales acciones durante el taller, que cubrieron aspectos diversos, abarcando desde la constitución de comités ambientales comunitarios en Jakarta, Indonesia, a la participación de artesanos y sus comunidades locales en la restauración y rehabilitación de antiguos edificios en Mahdia, Túnez.

Las diferencias en sistemas de valores, con sus dimensiones estéticas y morales inherentes, están en el centro de muchas de las situaciones conflictuales. Esto se hace particularmente cierto en zonas costeras, que a menudo atraen grupos de inmigrantes en búsqueda de mejores condiciones de vida. Esto señala la especial importancia de consideraciones sociales, culturales y económicas en este proceso.

Los talleres, tales como el que forma la base de esta publicación, enriquecen las perspectivas de los participantes y suministran un mecanismo en el cual se puede avanzar considerablemente en las ideas y las acciones. Representan también importantes hitos en el camino hacia metas de largo alcance tales como el manejo y prevención de conflictos sobre recursos y valores costeros.

Dirk G. Troost,
Jefe, CSI

Gillian Cambers,
Co-organizadora del taller y redactora del informe

Antonio Hoguane,
Universidad Eduardo Mondlane

Table of contents

List of acronyms	9
Executive summary	10
1. Introduction	16
Background to the workshop	17
Workshop objectives	19
Workshop programme and participants	19
Workshop report	20
2. Nature of the conflicts	22
Coastal conflicts in urban and industrial areas	23
Coastal conflicts in non-urban areas	28
Coastal conflicts in protected areas	31
Concluding comments	35
3. Resolution and prevention of conflicts	36
Successful conflict resolution case studies	38
Conflict resolution in a protected area: Chumbe Island, Tanzania	38
Resolution of aquaculture conflicts: White Sea, Russia	39
Case studies focusing on participatory processes and consensus building	41
Bringing stakeholders together: ASSBY, India	41
Mechanisms for bringing stakeholders together: wise practice agreements	41
Creating a 'place of encounter': Rio de la Plata, Uruguay	43
Traditional frameworks for conflict resolution: Saloum Delta, Senegal	43
Establishing lines of communication for conflict resolution: Omisalj, Croatia and Kotor, Yugoslavia (Montenegro)	44
Case studies focusing on activities to change attitudes	45
Demonstration houses: Mahdia, Tunisia and Latvia	45
Pilot farms: Maputaland	46
Community environmental committees: Jakarta Metropolitan Area, Indonesia	46
Raising public awareness: Lagos, Nigeria and Latvia	48

Role of the university chairs in conflict resolution	48
Concluding comments	49
4. Wise practice characteristics	50
Wise practice characteristics	51
Wise practice characteristics especially important for conflict resolution	52
Wise practice characteristics as an assessment tool	53
Concluding comments	54
5. Ethical codes of practice	56
An ethical dimension	57
Ethical codes of practice	58
Preliminary concepts for an ethical code of practice for donors	58
Concluding comments	60
6. Conclusions	62
References	66
Annex I: CSI field projects, university chairs and networks	68
Annex II: Workshop programme	71
Annex III: List of workshop participants	75
Annex IV: List of workshop papers	79
Annex V: Project assessment guidelines	81
Annex VI: Subject index	83
Annex VII: Geographical index	85

List of acronyms

ASSBY	Alang Sosiya Ship-Breaking Yard, India
CSI	Environment and Development in Coastal Regions and in Small Islands (UNESCO platform for intersectoral action)
ICM	Integrated coastal management
NGO	Non-governmental organization
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
WiCoP	Wise Coastal Practices for Sustainable Human Development (forum)

Executive summary

The statement 'Competition for limited resources and space makes coastal regions flashpoints for conflict' summarizes the reasons for holding an inter-regional workshop on conflict resolution in Maputo, Mozambique from 19–23 November 2001. Participants from African, Asian, European and South American regions met for five days to discuss ways to manage conflicts over coastal resources and values in continental coastal areas.

A variety of case studies dealing with coastal conflicts in urban and industrial sites, as well as rural and protected areas, were discussed. Recognizing that conflict cannot be fully prevented or resolved, the goal is to reduce conflict to a manageable level. The first step in any resolution process is to describe the nature and cause of the conflict. Despite the wide variety of cases, some common themes emerged. These related to the movement of large numbers of people into and out of coastal areas; the psychological scars left by war and political turmoil; and the role of local communities, particularly those involved in extractive industries, in protected areas.

A discussion of ways in which the various conflicts had been addressed or resolved, demonstrated the importance of identifying all the stakeholders, and bringing them together in a participatory manner so as to try and build consensus and agreement. It was recognized that the nature of any agreement would be a compromise for most of the parties involved. In order to reach agreement there needs to be a 'place of encounter' or a process or mechanism such that the conflicting parties know how to go about addressing and resolving the conflict. A 'wise practice agreement' or voluntary contract was suggested as one potential mechanism.

The importance of having outside parties assist in developing an agreement was demonstrated. Universities and UNESCO (United Nations Educa-

tional, Scientific and Cultural Organization) chairs have participated in many of the case studies where they brought a degree of impartiality, interdisciplinary expertise, and a broad vision of the conflict.

Implementing the agreement is the final stage. Here the need for additional approaches, such as involving stakeholders in specific activities, education and raising awareness, became evident. Assisting a farmer from the White Sea area in Russia to obtain a university diploma in aquaculture helped to ensure that local stakeholders were equipped to deal with situations before they could erupt into conflict. Training fishers as wardens of a protected area on Chumbe Island in Tanzania reduced conflict between local communities and the park. Such measures, which help to change attitudes and prevent future conflicts arising over similar issues, are long term and require all the tools of integrated coastal management.

Wise practices, which have previously been defined as actions, tools, principles or decisions that contribute significantly to the achievement of environmentally sustainable, socially equitable, culturally appropriate, and economically sound development in coastal areas, have been described through 17 generic characteristics. Several of these characteristics of wise practices are particularly relevant to conflict prevention and resolution; these include: a participatory process, consensus building, an effective and efficient communication process, capacity building, and the need to respect traditional and cultural frameworks (locally responsive). The application of these 17 wise practice characteristics to the evaluation of field projects in integrated coastal management is also discussed.

Looking beyond the local situation to a national and international level, ways to ensure that foreign aid is used in an ethical manner for

development purposes were proposed, and some preliminary ideas for an ethical code of practice for donors developed accordingly.

As coastal communities face increasing developmental pressures, both from within and outside, the wish by some to be 'left alone' is unrealistic. Assisting coastal populations 'to manage change' lies at the centre of conflict resolution and prevention.

Résumé analytique

S'il est vrai que "la concurrence pour des ressources et des espaces – forcément limités – fait des régions côtières des foyers tout désignés pour les conflits d'intérêts", cela justifie la décision d'organiser à Maputo, au Mozambique, du 19 au 23 novembre 2001, un atelier interrégional sur la résolution des conflits. Les participants venus d'Afrique, d'Asie, d'Europe et d'Amérique du Sud ont débattu pendant cinq jours des moyens de gérer les conflits qui éclatent sur le littoral des continents, au sujet des ressources côtières et des valeurs qui s'y rattachent.

Des études de cas ont été présentées sur toute une série de conflits d'intérêts observés, à propos des zones côtières, aussi bien dans des sites urbains qu'industriels, en zones rurales ou en zones protégées. Étant donné l'impossibilité de prévenir ou de résoudre totalement ces conflits, l'objectif recherché est de les ramener à un niveau gérable. Dans toute tentative de solution, la première étape consiste à préciser la nature et la cause du conflit. Pour différents qu'étaient les cas étudiés, certains dénominateurs communs ont pu être identifiés, tels qu'un afflux ou un départ massif de population dans la zone côtière, les séquelles psychologiques de guerres ou de bouleversements politiques, ou le rôle que peuvent jouer dans les zones protégées les communautés locales, notamment celles qui sont employées dans l'industrie minière.

Les débats sur la façon dont les différents conflits avaient été traités ou résolus ont mis en relief la nécessité d'identifier tous les acteurs, puis de les unir dans la volonté de coopérer afin d'arriver à un consensus ouvrant la voie à un accord. Il est clairement apparu que pour la plupart des acteurs un tel accord ne peut être, au mieux, qu'une solution de compromis. Pour arriver à s'accorder il faut un "point de rencontre", un processus ou un mécanisme montrant aux parties en cause comment s'y

prendre pour traiter ou résoudre le conflit. Un "accord de pratique éclairée", contrat volontairement assumé, a été proposé comme solution possible.

La preuve a été faite qu'il est indispensable de faire participer à l'élaboration de l'accord des personnes étrangères au conflit. Des universitaires ou des titulaires de chaires de l'UNESCO (Organisation des Nations unies pour l'éducation, la science et la culture) ont collaboré à de nombreuses études de cas, auxquelles elles ont apporté leur impartialité, leur expérience de l'interdisciplinarité et une façon d'appréhender le conflit avec un certain recul.

La mise en œuvre de l'accord constitue la dernière opération. À ce stade, il est apparu évident qu'il fallait faire appel à des moyens complémentaires, comme d'engager les partenaires dans des actions spécifiques, des campagnes d'éducation et de sensibilisation. Aider un éleveur russe de la région de la mer Blanche à obtenir un diplôme universitaire en aquaculture a contribué à ce que les partenaires locaux soient à même de faire face à des situations critiques avant qu'elles ne deviennent conflictuelles. En donnant à des pêcheurs une formation de gardiens d'une zone protégée de l'île de Chumbe en Tanzanie, on a réduit le conflit d'intérêts entre les communautés locales et la protection du parc. Les mesures de cet ordre, qui contribuent à changer les mentalités et à prévenir la répétition de différends autour d'enjeux similaires, sont des mesures à long terme qui font nécessairement appel à tous les instruments de la gestion intégrée des côtes.

Les pratiques éclairées, qui ont déjà été formalisées en tant qu'actions, instruments, principes ou décisions faisant un apport décisif à l'avènement d'un développement des zones côtières garant de la viabilité de l'environnement, de l'équité sociale, de la compatibilité culturelle et de

l'efficacité économique, ont été groupées sous 17 rubriques. Parmi les caractéristiques de ces pratiques éclairées visant particulièrement la prévention et la résolution des conflits, on peut citer : la volonté de participer, la recherche du consensus, la maîtrise de moyens réels et efficaces de communication, le renforcement des capacités et le respect des structures traditionnelles et culturelles (au plan local). Le débat a également traité de l'utilisation de ces 17 caractéristiques de pratiques éclairées pour évaluer les projets de terrain relevant de la gestion intégrée des côtes.

Quittant le niveau des circonstances locales pour passer au plan national et international, l'atelier a proposé des moyens de garantir que l'assistance étrangère soit utilisée en toute transparence aux fins du développement et a rédigé une ébauche de code de procédure éthique à l'intention des donateurs.

À l'heure où les communautés côtières sont soumises aux vives exigences du développement, s'exerçant aussi bien de l'intérieur que de l'extérieur, le désir de certains acteurs d'"être laissés tranquilles" est dénué de réalisme. Aider les populations locales à "gérer le changement", telle est la raison d'être des efforts déployés pour résoudre et prévenir les conflits.

Resumen ejecutivo

La expresión 'La competición por los recursos limitados y por el espacio hace de las regiones costeras puntos de ignición de conflictos', resume las razones que llevaron a la celebración de un seminario interregional sobre la solución de conflictos en Maputo, Mozambique, del 19 al 23 de noviembre de 2001. Allí se reunieron participantes de África, Asia, Europa y América del Sur para tratar sobre maneras de gestionar conflictos sobre recursos y valores costeros en zonas costeras continentales.

Se trataron distintos estudios de caso sobre conflictos costeros en sitios urbanos e industriales, así como en áreas rurales y protegidas. Se reconoció que no se pueden impedir o resolver totalmente los conflictos y por lo tanto, la meta es de reducirlos a un nivel en que se los puede manejar. El primer paso en cualquier proceso de solución es el de describir la naturaleza y la causa del conflicto. A pesar de la amplia variedad de casos, han surgido varios temas comunes; aquellos relacionados con el movimiento de un gran número de personas entrando y saliendo de zonas costeras; las cicatrices psicológicas causadas por la guerra y el desorden político; y el papel que cumplen las comunidades locales, particularmente aquellas que se ocupan de industrias extractivas en sitios protegidos.

Una discusión sobre las diferentes maneras empleadas para enfrentar o resolver conflictos, demostró la importancia que tiene identificar y reunir a todos los involucrados y grupos de interés de manera participativa a fin de tratar de obtener consenso y acuerdo. Se reconoció que la naturaleza de todo acuerdo sería el compromiso entre la mayoría de las partes involucradas. A fin de obtener tal acuerdo hay necesidad de encontrar "un lugar de encuentro" o un proceso o mecanismo que permita a las partes discrepantes saber cómo hacer para identificar y resolver el conflicto.

Se sugirió un "acuerdo de práctica sensata" o contrato voluntario como mecanismo potencial.

Quedó demostrada la importancia que pueden revestir interlocutores externos para ayudar a desarrollar un acuerdo. Las Cátedras UNESCO y universidades han participado en muchos de los casos de estudio en donde han introducido un grado de imparcialidad, de conocimientos interdisciplinarios y una amplia visión del conflicto.

La puesta en marcha de un acuerdo representa la fase final del proceso. Aquí se hizo evidente la necesidad de introducir enfoques adicionales tales como hacer participar a todos los involucrados y grupos de interés en las distintas actividades específicas, en la educación, y en la toma de conciencia. La ayuda prestada a un agricultor de la región del Mar Blanco en Rusia a obtener su diploma en acuicultura contribuyó a asegurar que los involucrados y grupos de interés locales estuvieran preparados a enfrentar las situaciones antes que pudieran estallar en conflictos. La capacitación de pescadores para actuar como guardaparques en un sitio protegido en la Isla de Chumbe en Tanzania, contribuyó a mitigar el conflicto entre pobladores locales y el parque. Tales medidas que contribuyen a un cambio de actitudes y a prevenir conflictos futuros que pudieran surgir de situaciones similares, son a largo plazo, y requieren todos los instrumentos del manejo integrado de costas.

Las prácticas sensatas, que anteriormente han sido definidas como acciones, instrumentos, principios o decisiones que contribuyen significativamente hacia el logro de un desarrollo sostenible ecológicamente sano, socialmente equitativo, culturalmente apropiado y económicamente responsable en zonas costeras, han sido descritas por medio de 17 características genéricas. Algunas de estas características de prácticas sensatas son particularmente pertinentes para la identificación,

prevención y solución de conflictos, e incluyen: proceso de participación, búsqueda de un consenso, proceso de comunicación eficaz y eficiente, capacitación y necesidad de respetar marcos tradicionales y culturales (receptivo localmente). Se ha discutido también la aplicación de estas 17 características de prácticas sensatas en la evaluación de proyectos en el terreno sobre manejo integrado de costas.

Mirando más allá de situaciones locales, a nivel nacional e internacional, fueron propuestas maneras para asegurar que la ayuda financiera del exterior para el desarrollo, sea utilizada de manera ética. Al respecto se avanzaron algunas ideas preliminares para establecer un código de ética de prácticas para donantes.


A medida que las comunidades costeras confrontan crecientemente presiones exógenas y endógenas, el deseo de algunos de que 'se les deje solos y tranquilos', es irrealístico. Por otra parte ayudar a las comunidades costeras a 'manejar el cambio' está en el centro de la solución y prevención del conflicto.

1 Introduction

'Competition for limited resources and space makes coastal regions flashpoints for conflict. This means that much is at stake for the great majority of the world's countries, 80% of which are coastal, located either adjacent to an ocean or to a sea.'

*Dirk Troost
(Workshop opening ceremony,
19 November 2001)*





Coastal regions are special in the sense that so many different sectors of society are involved and claim the right of access and use of the resources therein. They are also special in that all too often, no specific agency or institution is responsible for their management. Coupled with these characteristics is the ever-increasing demand for finite resources and space in coastal regions. Against such a background, conflicts are, all too often, inevitable.

In 1992, at the United Nations Conference on Environment and Development (Earth Summit) in Rio de Janeiro, the world community adopted Agenda 21 (UN, 1992). This represents a global consensus and political commitment at the highest level on development and environment co-operation.

Among the global initiatives set up after this landmark meeting was the platform for Environment and Development in Coastal Regions and in Small Islands (CSI), established in 1996 by the United Nations Educational, Scientific and Cultural Organization (UNESCO). The overall objective of the CSI platform is to contribute to the development of an intersectoral, interdisciplinary and integrated approach to the prevention and resolution of conflicts over resources and values in coastal regions and small islands.

Three complementary and interlinked modalities lie at the core of the CSI approach:

- Field-based projects provide a framework for collaborative action on the ground and represent the building blocks of the endeavour.
- University chairs and twinning networks provide for interdisciplinary training, awareness and

capacity building, and also support the field project activities.

- A multi-lingual, Internet-based discussion forum on Wise Coastal Practices for Sustainable Human Development (WiCoP forum) builds on the experiences of the field projects and the university chairs/twinning arrangements to formulate and discuss wise practice concepts in a global perspective.

Background to the workshop

The building blocks of the CSI initiative are 20 field projects, located around the world. They are listed in Annex I, together with the four UNESCO chairs in sustainable coastal development. (Annex I also contains the web addresses for summaries and assessments of the projects and university chairs.) It is within these field projects that wise practices are formulated, tested and implemented on the ground at the local level before being applied to other areas and sites. Eight of these field projects are located in continental coastal regions, and twelve are in islands. As can be seen from the list of titles in Annex I, the range of environment and development issues covered by these projects is extremely varied.

Within the framework of field-based projects, university chairs and the WiCoP forum, a series of meetings and workshops have been held over the period 1998–2001 in order to advance the wise practices agenda and directly contribute to the management of conflicts over coastal resources and values (Figure 2).

In December 1998, project leaders from islands and continental countries met in Paris to discuss and further their efforts in integrated coastal management at a workshop entitled 'Towards Wise Coastal Development Practices'. It was during this workshop that wise practices were defined as 'actions, tools, principles or decisions that con-



Figure 2. A wise practices agenda for managing conflicts over coastal resources and values

tribute significantly to the achievement of environmentally sustainable, socially equitable, culturally appropriate, and economically sound development in coastal areas' (UNESCO, 2000a). Several characteristics of wise practices were also defined during the workshop. The concept of 'wise practices' builds on previous efforts, which have attempted to define what should be done through 'best practices'. Acknowledging the inequalities and diversities of the real world, the wise practices initiative attempts to provide guidance on what can wisely be done under the prevailing circumstances. Thus the goal is to define

the wisest possible course of action under existing conditions and constraints.

In July 2000, a meeting was held in Bangkok, principally for leaders of the field projects in southeast Asia, during which ideas were explored for advancing, evaluating and linking the various activities (Kuijper, 2000).

In a complementary mode, leaders of the small-island projects met in Samoa in December 2000, to discuss and advance 'Wise coastal practices for sustainable small-island living' (UNESCO, 2001a). This workshop focused on mechanisms to interlink, evaluate and advance the field projects, as well as

discuss ways to move forward on the six problem areas prioritized for special attention by Small Island Developing States at a Special Session of the United Nations General Assembly held in New York in 1999.

To follow up the ideas discussed in Samoa, a second inter-regional small-island workshop was held in Dominica in July 2001, 'Furthering Coastal Stewardship in Small Islands' (UNESCO, 2002). During this workshop, participants focused on conflict prevention and resolution in small islands, in particular as they related to beach resources. A spectrum of tools for conflict prevention and resolution was discussed. This included voluntary contracts or 'wise practice agreements' at a local level and, at a national and international level, ethical codes of practice, whereby moral values can be fully taken into account.

Thus it was appropriate to subsequently discuss ideas for conflict prevention and resolution in the context of continental coastal regions. The results of this workshop are the subject of the present report. Figure 1, inside the front cover, shows the location of the field projects and university chairs covered by this workshop.

Workshop objectives

The objectives of the workshop on Wise Practices for Coastal Conflict Prevention and Resolution held in Maputo, Mozambique, from 19–23 November 2001, were as follows:

- To discuss and define specific wise practices for the resolution of conflicts over coastal resources and values, based on actual case studies.
- To discuss and advance the project assessment procedure particularly for projects in continental regions.
- To promote linkages between CSI projects and university chairs/twinning networks within, and between, different geographical regions.
- To bring together persons working on-the-ground in continental coastal regions, in order to further formal and informal professional interaction within and between regions.



Workshop participants meeting with some of the fishing community at Costa do Sol, Maputo, Mozambique, November 2001.

- To interact with representatives of other coastal management initiatives based in south-east Africa, and to present the CSI platform to that audience.

The choice of Maputo as a venue for the workshop was particularly appropriate for two reasons. Firstly, the Pan-African Conference on Sustainable Integrated Coastal Management was held in Maputo in 1998. This conference included thematic workshops (UNESCO, 1999a), a workshop on cross-cutting issues and interlinkages and a ministerial conference. Secondly, a related event¹ was held in Maputo the week after the workshop, and the juxtaposition of the two events allowed several participants and organizers to attend both.

Workshop programme and participants

The workshop programme is detailed in Annex II. Prior to the workshop, participants were asked to prepare and submit short papers focusing on:

¹ The second event was a Regional Workshop for the Indian Ocean sponsored by the International Coral Reef Initiative, Coral Reef Degradation in the Indian Ocean, International Coral Reef Action Network, and the United Nations Environment Programme – Regional Coordination Unit.

- one or more specific conflicts over coastal resources and values,
- ways in which the conflict might be resolved,
- the lessons learnt, and how they related to the list of wise practice characteristics.

These papers, circulated at the start of the workshop, were presented and discussed during the first two days. On the third day, a field trip was conducted to an abandoned aquaculture plant at Bairro Triunfo, an artisanal fishing village at Costa do Sol, and to a holiday resort in the Macaneta Peninsula. This was followed by a one-day open session with representatives of Mozambique-based national and regional projects and programmes in the field of integrated coastal management. The final day of the workshop included panel and group sessions focusing on:

- the WiCoP forum,
- objectives and procedures for project assessment,
- relating scientific research to resource management in the context of the situations visited during the field trips,
- ethical codes of practice.

Workshop participants are listed in Annex III. People from the following countries were present at the meeting: France, India, Indonesia, Italy, Latvia, Mozambique, Nigeria, Puerto Rico, Russia, Senegal, the Seychelles, South Africa, Tanzania, Tunisia, Uruguay.

Workshop report

The highlights of the presentations and papers, and the key discussion items have been integrated into four main chapters in this report as follows:

Chapter 2: Nature of the conflicts

Chapter 3: Prevention and resolution of conflicts

Chapter 4: Wise practice characteristics

Chapter 5: Ethical codes of practice

The final chapter contains conclusions. Annex IV lists the papers prepared prior to the workshop by author and geographical region; the full papers are available at the following website: www.unesco.org/csi/pub/papers2/mapp.htm. Readers are referred to these papers for more comprehensive coverage of participants' perspectives on issues related to coastal conflict prevention and resolution in their respective projects or countries.

2 Nature of the conflicts

'Coastal conflict resolution requires that coastal management be about people management most of the time'

*Alain De Comarmond
and Rolph Payet, 2001*



This chapter describes and discusses the nature of some of the conflicts that exist within urban and industrial coastal areas, non-urban coastal areas, and in protected coastal areas, such as marine parks. While not a comprehensive coverage, it nevertheless presents a wide-ranging picture based on the CSI field projects and university chairs and the extensive experience of the workshop participants. As noted in the preceding quotation, conflict prevention and resolution focuses on people – their perceptions, wants and needs – in relation to their understanding and interaction with the environment and each other. This chapter is therefore about resource users – people living and working in coastal areas. It is about the tourism developer and the fishers, the urban dweller who requires water for his daily needs and the farmer needing water for irrigation. It is also about the conflicts that exist between people trying to manage these resources, the fisheries administrator and the harbour master; and about the conflicts between researchers and professionals of different disciplines, the marine biologist and the engineer.

Resolution of these conflicts, the subject of Chapter 3, requires a 'meeting of the minds'. This involves people interacting, and through discussion, learning to understand each other's problems and needs. As a result, a more complete picture of the situation evolves. Eventually, through a process of consensus building, agreement can be reached.

While the subject of this workshop is conflict resolution and prevention, it may be impossible to completely prevent or resolve conflict in a general sense.

'Many sociologists believe that conflict can never be fully prevented or resolved. It can only be managed or reduced to a level where its dysfunctions are eliminated. In fact a little conflict or a manageable conflict is functional in many ways. So the goal should be to reduce conflict to a manageable level, not to prevent or resolve it'.

(Mr Vidyut Joshi, Workshop discussion, Maputo 2001)

Furthermore, what is often referred to as conflict may more correctly be described as conflict of interest, which arises from peoples' different value systems, status, educational background and economic circumstances.

Coastal conflicts in urban and industrial areas

This section will discuss some of the points of conflict that exist in coastal cities and urban areas on a case-by-case basis. The discussion includes large tropical coastal megacities such as Lagos in Nigeria and Jakarta in Indonesia, as well as small historic coastal cities such as Mahdia in Tunisia, Kotor in Yugoslavia, and Omisalj in Croatia. Coastal industries are another area presenting special types of conflict, as is seen in a ship-breaking yard in Gujarat, India.

The disposal of solid waste is an enormous global problem, affecting small communities and large cities alike. Improper waste disposal leads to human health problems, contamination of water supplies, environmental degradation, loss of livelihoods, and unsightly surroundings. Two tropical megacities where the disposal of solid waste is causing serious problems and conflicts are described below.

Jakarta Bay, a shallow bay located north of Jakarta, contains an archipelago of 108 islands,

the Seribu Islands. As the Jakarta Metropolitan Area has expanded over the last century, the bay has been increasingly affected by pollution, natural ecosystem transformation, non-sustainable coastal resource exploitation and coastal erosion. For example, three of the 108 Seribu Islands have disappeared in the last 15 years.

Solid waste pollution is one major area of concern. Inadequate collection, transport and disposal of solid waste have significant negative economic and ecological impacts. In 1996/1997, daily garbage production in Jakarta was about 25,578 m³ (UNESCO, 2000b). It is estimated

that 40% of the solid waste generated daily does not reach official disposal sites. Instead it is dumped in waste channels and rivers, causing pollution, clogging of water channels and flooding. A small percentage is disposed of on vacant land and/or burned. The 13 rivers and canals that flow through the Jakarta Metropolitan Area pick up large amounts of solid waste (approximately 1,400 m³ per day). Although 300 m³ of waste is recovered daily from the rivers, 1,100 m³ escapes collection and flows directly into Jakarta Bay. In 1985 and 1995 a survey on the extent of solid waste pollution on 24 islands in the Seribu archipelago showed that total litter on the shore has increased twofold during the ten-year period, and that litter had reached islands located more than 60 km offshore.

The disposal of large quantities of solid waste into the sea has resulted in a covering of plastic on the seafloor in Jakarta Bay, affecting coral reefs, sea-grass beds and fish. This situation has a considerable negative economic impact on the livelihoods of fishers and others in the Seribu Islands. In Jakarta itself, the solid waste problems combined with poor sanitation and increasing poverty result in an increased incidence of common infectious diseases and reduce the availability of safe drinking water.

In Lagos, Nigeria, the disposal of solid waste causes similar problems and is also exacerbating a flooding problem (Awosika *et al.*, 2000). Victoria and Ikoyi Islands, the two main barrier island complexes in Lagos State, are made up of residential, commercial and tourism facilities, and are surrounded by the Lagos Lagoon and the Atlantic Ocean. Even though the islands have a network of ancillary and main drainage channels with



Solid waste collection in Jakarta, Indonesia, 1997.



Solid waste on the shore, Jakarta, Indonesia, 1997.

outfalls to Lagos Lagoon, they experience annual flooding during the rainy season, May to October, especially when the rains coincide with high tides. Large areas of the islands are flooded, causing a disruption of socio-economic activities with concomitant adverse effects on the economy of Lagos State and the entire nation of Nigeria.

'The rains are here. This means that Lagos, the country's most populous state and economic nerve centre is again under floods. Elite areas like Ikoyi, middle class suburbs like Surulere, and heavily populated areas like Mushin and Badia were under water. So heavy the rains that some Lagosians became internally displaced people as the floods sucked them from their homes, while structures and cars were also damaged ... flooding has become a permanent feature of Lagos life. Sometimes lives are also lost.'

(The Vanguard, 26 June 2000)

A study of the major drainage channels revealed that most of the drainage channels were clogged with domestic waste and sediment and in some cases the channels were blocked by buildings. Other factors contributing to the flooding included inadequate channel gradient and sometimes reverse gradients, and collapsed channel walls. A questionnaire survey showed that few people were well prepared to tackle the problems; the drainage channels were ineffective because they were either blocked by sand or refuse; and inadequate garbage containers resulted in residents dumping refuse in the drainage canals.

Population growth and the migration of people from the countryside to the city in search of a better life, are major problems in many tropical megacities.

'In Nigeria, a person's status is related to the number of children they have, and while there have been campaigns to reduce the number of births, it will take a long



Debris and garbage blocking a drainage channel in Ikoyi Island, Lagos, Nigeria, July 2002.



Blocked drainage channels result in frequent flooding during the rainy season, Lagos, Nigeria, July 2002.

time to change this way of thinking'.
(Ms Regina Folorunsho, Workshop discussion, Maputo, 2001)

'There is a need to improve conditions in the countryside so as to reduce the migration to the cities'.
(Mr Antonio Hogueane, Workshop discussion, Maputo, 2001)



Aerial view of Medina, the historical city centre of Mahdia, 1998.

In small historic cities, such as exist around the Mediterranean, the scale and sometimes the nature of the problems and conflicts are different. In Mahdia, a small city in Tunisia with 50,000 inhabitants, the historical city centre, or Medina, has served many functions over the centuries: an industrial centre, a commercial centre, a religious and historical centre. Within the last 20 years, the introduction of tourism has adversely impacted the urban fabric and architectural heritage of the Medina.

Countries emerging from a long-term conflict face different issues. Two of the main ones are isolation and a high dependency on foreign aid. In the case of the former Yugoslavia, some federal states that were once part of the country are now newly independent states, and others are still seeking new political status. In Kotor, Yugoslavia (Montenegro), a paramount issue has been to try and break the isolation factor. One way has been through association with the Small Historical Coastal Cities network (www.unesco.org/csi/act/dure/dure.htm). Another example of post-war conflict lies in the dependency on donor-driven projects. All too often local decision-makers do not properly screen project tenders. They face the dilemma of delaying development and reconstruction activities so as to properly identify their national priorities, or responding rapidly to donors' pressure for specific projects possibly at the cost of long-term planning and devel-

opment. However, this dilemma is not confined to post-war situations.

When large groups of people move into and out of coastal urban areas, conflicts often result. Two examples are described here, one at Omisalj in Croatia and the other near Bhavnagar in the state of Gujarat, India.

The city of Omisalj is located on the small island of Krk in the northern Adriatic and is linked to the mainland by a bridge. Since the 1960s, the island has experienced a twofold process of emigration of locals to the USA and immigration of newcomers associated with the industrial development of the nearby continental area. Emigrants to the USA supplied a significant share of the everyday needs of the local population by sending money home. This resulted in some labour-intensive, low-income generating activities, such as agriculture, being progressively abandoned, which impacted on the landscape and caused an associated loss of identity and belonging. In addition, the highly centralized and collective government policy during 1960–1980 diminished individual decision-making, leaving most of the population in a psychologically dependent state.

With the industrialization of the nearby continental area, and more recently the opening of a market economy, a new population is settling on the island. This immigration process has changed the social fabric of the community and the socio-

economic balance. There is a split in identity between the two populations, which a local councillor explained in the following terms: 'Natives failed to open up a social space for newcomers, and newcomers failed in the way they called for space'. The process of modernization brought about by outsiders has undermined the local ability to manage their own resources. However, as a result of money being sent home by relatives abroad, the local population had already lost contact and interest in their own land and resources. A major issue here is to establish communication between the two groups, so as to determine a common vision and ideas for the common good.

The opening of a new coastal industry at Bhavnagar, Gujarat, India, in the early 1980s generated a large influx of migrant workers, who increasingly came into conflict with the local population. The Alang Sosiya Ship-breaking Yard (ASSBY) is situated near the village of Alang, 55 km from Bhavnagar City. The unique geographical combination of high tidal range and a wide continental shelf allows very heavy ships to be beached easily at high tide. ASSBY is one of the largest ship-breaking yards in the world. There are 182 plots, and during the mid-1990s there were about 35,000 labourers employed directly in ship-breaking. Most labourers are migrants from other Indian states, e.g. Uttar Pradesh, Bihar, Orissa and Punjab, and they send most of their wages home to their families. They are mainly young men, and often illiterate. Their living conditions are poor and their working conditions are hazardous.

There are ten villages within a 12 km radius of ASSBY. Prior to the arrival of the ship-breaking yard, there were few jobs and most people worked in agriculture. Now the villagers work in ancillary jobs, such as tea and provision shops,



Roman archaeological site of Fulfinium with a petrochemical plant in the background, Omisalj, Croatia, 2000.

and shops that sell articles recovered and recycled from the ships, e.g. ropes, engines etc. While recognizing their improved job opportunities as a result of ASSBY, the villagers have also witnessed increased demand for scarce local resources such as water and fuel wood.

The villagers and migrant workers exist side by side; however, they do not mix culturally or socially, speak different languages, and often harbour resentment towards each other. There are two other major groups of stakeholders: the ship owners or industrialists who wish to increase their profits and turn ship-breaking into an organized industry with good infrastructure and a high standard working environment. The fourth main stakeholder group is the Gujarat Maritime Board which is a government authority concerned with planning and infrastructure, worker safety and living conditions, and environmental damage.

The four groups, all involved in the one industry, have different concerns and priorities and, as a result,



Workers at the Alang Sosiya ship-breaking yard, December 2001.

numerous conflicts have occurred. Conflicts have resulted in fighting and police complaints. Often the local villagers feel the migrant workers get the better paid jobs and refuse to rent accommodation to them or have any social interaction. As in Omisalj, there is resentment of the workers who have come in from other areas. The migrant workers, while earning comparatively good wages, are concerned about their living conditions and their work safety. The ship breakers and the Gujarat Maritime Board are also worried about the adverse publicity they have received due to poor environmental and working conditions. There is an underlying feeling of mistrust between the different stakeholder groups.

The cases described above all deal with conflicts between different groups of people living in urban or industrial areas. Often these groups never come face to face or think of each other – as a householder throws waste into a Jakarta river, it does not occur to him/her that their action impacts a fisher's catch several kilometres away. Residents in Lagos who indiscriminately throw their garbage into a drainage channel, may not make the link between this action and the annual flooding events which may be seen instead as an 'act of God'. Groups of workers moving into new industrial areas, such as in Omisalj and ASSBY, do not expect to be shunned by the local residents. Misunderstandings between the different groups and a lack of vision of the broader economic, social and environmental context, beyond an individual's immediate locale, are common factors in these case studies.

Coastal conflicts in non-urban areas

Conflicts in non-urban areas are in many cases similar, although different in scale, to those that exist in urban coastal centres. Conflicts related to

the movement of large groups of people into coastal areas in Uruguay and out of coastal areas in Latvia are discussed. These may be compared with those already discussed at Omisalj and ASSBY, although in each case the specifics of the particular conflict are different. Other case studies focus on conflicts that exist between different groups of resource users: between a local fishing community and developers in Mozambique; between tourists and fishers in the Seychelles; and between different groups involved in aquaculture in Russia. Changes in political regimes in Russia and Latvia influence the nature of the conflict and the way it is resolved, and may be compared to the Kotor case study already discussed.

In Uruguay, 69% of the population lives along the coast of the Rio de la Plata, while most industries and intensive agriculture are also located in this part of the country. The width of the Uruguayan coast of the Rio de la Plata, from its origin on the Uruguay River to the Atlantic outlet at Punta del Este, varies between a few hundred metres to 15 km on the terrestrial side and between 4 and 13 km on the aquatic side.



Fishers at Playa Blancas, Uruguay, Rio de la Plata, May 2001.



Erosion at Neptunia, Rio de la Plata, Uruguay, May 2001.

As in Omisalj and ASSBY, there has been a considerable increase in human pressure on the coastal area as a result of intensive internal migration during the last decade, e.g. in the Rio de la Plata coastal area, some localities tripled their population between 1985 and 1996. This has resulted in several serious problems, including: beach and ravine erosion; sand extraction; urbanization of coastal and river mouth areas causing damage to private property, disrupting natural processes, and endangering human safety; increased solid wastes; poor water quality.

Another conflict situation related to the movement of large groups of people in coastal areas, exists in Latvia. Here, past policies regarding the coastal area have caused a different set of problems. During the 50 years of Soviet occupation, the coast was considered a frontier zone and a restricted area. A large part of the population was moved away from the coast towards Siberia, and commercial and recreational activity was restricted.

Partly as a result of this policy, the coast is now home to many picturesque fishing villages. These villages were originally settled by the Livs, an ancient Finno-Ugric tribe. This region, along the coast of the Baltic Sea and the Gulf of Riga, has a very low population, only about 10,000 inhabitants. The main industries are forestry, fishing and fish processing. As a result of the strained economic situation, many of the historic buildings are in disrepair. Owners, because of their poor financial situation, are unable to carry out the necessary repair and restoration work. New featureless buildings are beginning to appear reducing the historic character of the villages.

As a result of a weak planning and institutional structure, particularly at the local government level, there is a very poorly regulated land market. A small number of prosperous people are exploiting this situation and consolidating large land purchases and developments in the coastal zone. Unfortunately the local administrative bodies are unable to respond and plan effectively for the new development.

At the beginning of the transition period, during the early 1990s, when there was a changeover

from communism to a more democratic form of government, people were very optimistic. However, this attitude has not been maintained; now people are unwilling to accept new ideas, good projects are often blocked, and public relations are poor. The communist style is still evident in institutions and people's thinking. There is a need to change attitudes and develop a more positive approach. This pessimistic way of thinking among inhabitants of the Latvian coast can be compared to the isolation problem already discussed in Kotor, Yugoslavia (Montenegro). The psychological aspects are similar; there is a lack of local initiative and a need for confidence building in both areas.

During the workshop, participants visited a coastal fishing village a few kilometres outside Maputo, in Mozambique, where they discussed with the community problems relating to land ownership and future development. The Costa do Sol village is a traditional fishing community, and the majority of the inhabitants depend on the sea for their livelihood. Some families have been there for at least one hundred years. The villagers have recently formed a fishing association. The village is threatened by coastal erosion, and the nearby coastal highway has had to be protected with a boulder revetment. During the meeting, the community said that their greatest concern was for future tourism development.

The earliest residents only have traditional titles to their land; however, such titles are recognized under the current land law in Mozambique. Some of the more recent residents have proper title deeds. However, all land in Mozambique belongs to the State, so the land title only gives the right to use the land; the State has the right of compulsory purchase.

Most of the residents want to stay in the area and continue their way of life.

'All we want is to be left alone and have the right of access to the sea, other development should be elsewhere'.

(Village Chief, Costa do Sol, Workshop discussion, Maputo, 2001)

However, they fear that in the case of tourism development, this right of access to the sea might be lost. They recognize that while they remain united, their position is strong. However, if developers approach land-owners on an individual basis, offering money for their land titles, their position may well be weakened.

During a visit to the Incomati Estuary in Mozambique, the workshop participants had the opportunity to see a tourism development endangered by erosion. The Incomati River mouth is diverted to the south by a long spit of sand extending about 12 km. On one of the very narrow sections of the spit, Macaneta Beach, a tourism development was built. During the floods of 2000, the river cut through the spit to the sea at Macaneta Beach. Although the break through the spit was filled in after the 2000 floods, the hotel restaurant, which in 1997 was about 70 m from the riverbank, was only 7 m

from the riverbank in 2001. The owners are very concerned about the situation and are considering various soft and hard engineering options to protect the property. These include restoring the mangroves and constructing a gabion mattress to slow down the river flow. However, costs may prove prohibitive, and in view of the size of the river, such measures may be ineffective. In addition, the owners wish to expand their business and build more tourism accommodation close to the riverbank.



Above left: Tourism development, Macaneta Peninsula, Mozambique, 2001.

Above: Traditional fishing boat, Macaneta Peninsula, Mozambique, 2001.

Left: Site where the River Incomati broke through the dunes in the year 2000 floods, Macaneta Peninsula, Mozambique, 2001.

Conflicts between tourists and fishers were described in the Seychelles, an archipelago of 115 islands in the Indian Ocean. At Beau Vallon, one of the most important tourism beaches in Mahé, recreational divers have complained that over-fishing diminishes the diving experience. Incidents of divers cutting fish traps free and releasing sharks caught using long lines, have been recorded. In this case, each user group sees the other as a threat to their survival.

The coastal zone in Russia's Murmansk region (White Sea/Barents Sea) is heavily utilized for ports, a tidal power plant dam, oil and gas production, fishing, aquaculture and forestry. In the post-communist era, it is recognized that while aquaculture is a sustainable business in this coastal area, it also causes a number of problems. The most pervasive issue facing aquaculture is the establishment of clear property rights to land, water and fish used in the culture. Even though the Barents Sea is one of the richest fishing grounds in the world, there is a marketing problem. First there was a private fishery, then a government fishery; but now the fishery is in crisis and aquaculture is seen as a type of holding pattern to try and give something to the small stakeholder.

The problems with aquaculture include theft, damage by boats and oil leakages, attacks by seals and sea birds. Direct conflicts exist between fish-farmers and the owners of the fishing boats, and between fish-farmers and the Kandalaksha State Reserve. Eutrophication was also noted, thereby dispelling the myth of the ecological safety of aquaculture.

The coastal conflicts described in this section cover a wide variety of problems, ranging from coastal erosion to land speculation, and from changes in traditional ways of life to the psychological aspects of new political regimes. Ways in which individuals and communities can begin 'to manage change' is fundamental to all these case studies. Unfortunately the wish of the Chief at the Costa do Sol fishing village in Mozambique, namely for his village to be left alone, is something that many communities might desire, but few will experience.



The shipment and offloading of oil at Belomorskaya (top), conflicts with ecotourism and conservation in the Kandalaksha State Reserve (bottom), White Sea, Russia, 2002.

Coastal conflicts in protected areas

Coastal areas with special protection status due to their physical, biological, cultural and/or historical attributes, experience their own special problems. In many cases this is because local communities are viewed as secondary in importance to the environmental protection ethic. The plight of local farming communities and their future in coastal areas in the northeastern part of Kwa-Zulu-Natal, South Africa, was discussed in the context of the long-term conservation plans for the area. Other conflict situations

involving fishers in protected areas were discussed in Chumbe Island, Tanzania, and in the Saloum Delta Biosphere Reserve, Senegal. The extraction of building materials from archaeological shell-midden sites in the Saloum Delta is another case study.

Maputaland, which straddles the three countries of Mozambique, South Africa and Swaziland, is a world-renowned centre of endemism with high biodiversity. A special protocol, the Lubombo Spatial Development Initiative, has been developed which aims to reduce poverty in the area and promote ecotourism.

Within this area, South Africa plans to develop a coastal reserve stretching from Kosi Bay to Lake St. Lucia. However, many of the communities in this area, with 30–40% of the population employed in agriculture, are among the poorest in South Africa. Many farmers are moving to the cities thereby adding to urbanization problems. Investment potential is inhibited by a lack of coastal roads, little environmental awareness, and conflicts between traditional tribal leadership and new municipal governments.

The most agriculturally productive soils are to the west, not near the coast. However, during the apartheid era, many communities were forced to move towards the coast away from the good soil areas, which then became the domain of commercial farmers. Now with small-scale agriculture being the main means of employment in many of the communities near the coast, there is a conflict between agriculture and conservation.

The excessive use of monoculture, with cash-crops like eucalyptus and sugar cane, which have little money-making potential at present because of international market factors, results in low incomes for the small-scale farmers. Monoculture also results in environmental pollution and degradation. Soils tend to lose their fertility, and large amounts of nitrogen fertilizers are required. The widespread burning of sugar cane before harvest also destabilizes the soil and reduces biodiversity.

One suggestion has been to develop a different type of agriculture in the coastal areas, such as organic farming, and the production of industrial crops such as sunflowers.

'Questions come up with organic farming – it is still very experimental, so why experiment in a protected area or reserve?'
(Ms Sibyllie Riedmiller, Workshop discussion, Maputo, 2001)

In the long term, the Conservation Service wishes to roll back agriculture out of the coastal reserve. However, the local communities, where people are very poor, are dependent on agriculture, and somewhat disillusioned with promises of new eco-tourism development, which has not happened. The conflicts are complicated by the scale implications: the short term versus the long term, the community level versus the larger-scale protected area/park level.

In another protected area in the Seychelles, the conflict is between tourism development and conservation. The government recently approved the construction of a five star hotel on St. Anne Island, which is part of the St. Anne Marine Park, the most popular marine park in the Seychelles. The Seychelles Marine Parks Authority was based on the island and had to be relocated because of the project. St. Anne Island is important historically because it is the site of the first settlement in the Seychelles in 1770. Concern has been expressed whether such a tourism development was appropriate, in a place of environmental, historical and cultural importance.

Turning now to a protected area in Tanzania, a similar conflict has emerged between conservation and fishing. Over the past decades, destructive fishing practices, such as over-fishing and dynamite fishing, together with pollution and sedimentation, have led to the deterioration of coral reefs and declining fish landings along the coast of Tanzania. There is little public awareness about the need for coral reef management, and indeed the national language, Kiswahili, traditionally has no common word for corals.

While several marine parks were designated along the coast in the 1970s, these remain on paper only. Chumbe Island is a small, uninhabited island near Zanzibar. On its western shores there is

a coral reef of exceptional biodiversity that harbours around 90% of the reef-building coral species recorded in the region. The Chumbe Island Coral Park was established in 1991 as a private conservation project, where ecotourism supports conservation and educational excursions for local school children. The island and part of the fringing coral reef were gazetted as a protected area in 1994.

However, with the advent of liberalization in the early 1990s, challenges to the marine protected area increased as the project was implemented. As the tourism industry created a growing market for marine products, fishing became an attractive occupation for urban youths who could afford modern propulsion and fishing gear and had little respect for traditional fishing grounds and the more conservative traditional fishing practices. Infringements of park regulations reached a peak in 1994/95 when groups of up to 15 fishing boats challenged the park rangers by simultaneously dropping anchor and fishing in the protected area, sometimes threatening violence. Management agreements oblige Government to assist the Chumbe Park with enforcement, but government support was weak, and enforcement was left to the park rangers who do not carry arms and have limited powers of enforcement.

Further examples of conflicts involving fishers in a protected area can be seen at the Saloum Delta Biosphere Reserve, located in the western central part of Senegal. The reserve is a wetland area of international status and a Ramsar site (List of Wetlands of International Importance under the Ramsar Convention of 1975). It consists of a wide expanse of coastal ecosystems with high biodiversity. Diversification of human activities in the area has led to competition for the control of space. Several types of conflicts occur: such as those within and between resource-user groups – farmers, breeders, fishers, shell-midden operators; between various State services – Sub-prefecture, National Parks, Forestry Department, Fisheries Department; and between decentralized authorities – Rural Council, Village Chiefdoms, Centre for Rural Development.

Fishing is the main economic activity for the island populations in the Saloum Delta. In many villages, daily conflicts arise due to incompatible fishing gears, the high density of fishers, fishing intensity, and the behaviour of stakeholders.

Different, and often incompatible techniques are used in artisanal fishing and industrial fishing. Artisanal fishers use standing gear (surface and bottom-set gillnets), while industrial fishers use mobile gear (gill nets,



The palm-thatched Visitors' Centre and eco-bungalows on Chumbe Island, 2001, popular with Zanzibari schoolchildren and ecotourists alike.

beach seines, cast nets, lines, shrimp nets). On many islands, fishers using standing nets leave their nets across passes blocking access to those using mobile gear, who may then destroy the standing nets and rob them of their catches. According to those using free gear, the sea belongs to everybody and nobody is allowed to impede others from fishing. Clashes between these fishers may lead to fights taking place at the fishing grounds.

The fishing grounds are zoned so that the Delta area, up to 6 km offshore, is for artisanal fishing only. Beyond this limit, the fishing grounds are open to both industrial and artisanal fishers (provided their boats are suitable). Sometimes industrial fishers, whose boats and catches are much larger, enter the 6 km nearshore restricted zone and destroy artisanal fishing gear. There are also conflicts between different groups of fishers e.g. the Lebous restrict other villagers from fishing in the channels between islands.

Another conflict relates to shell middens, these are archaeological sites dating back to Neolithic and Iron

Age cultures. The middens consist of broken shells, the remains of fish and mammals eaten by the fishers-gatherers, hearths, pottery shards, weapons and human bones. Three groups of operators target these resources: quarry companies (private and government) to extract the building material; local people who use the shells to make bricks; and the State of Senegal which is attempting to preserve these mounds as part of its cultural heritage. Conflicts exist between the different groups. On the one hand, there are those who take over shell quarries, building ovens in the immediate vicinity and setting up exclusion zones. On the other hand, there are those who collect the shells for ornamentation or construction using light equipment, such as sieves, spades and pickaxes. In addition, operators living in villages where shell middens are

located, such as in Beteni, forbid access to competitors from surrounding villages, hence clashes occur between villages.

There are also conflicts related to the economic versus the archaeological value of the shell middens. In Thioupane, for example, shell middens have a very high market value locally.

However, the middens are

also classified as part of the National Cultural Heritage. The government has identified which middens are of most archaeological value.

*'As an archaeologist, I cannot accept that one shell midden can be exploited and another cannot'.
(Mr Ridha Boussoffara, Workshop discussion, Maputo, 2001)*

The debate about permitting extractive industries in conservation areas has been ongoing for many years. There is no simple or universal answer; for each case the middle ground or compromise has to be determined. One of the first steps is to understand the nature and causes of the conflict.



Exploitation of cultural heritage: human skeleton exhumed from shell-midden site, Guior Island, Senegal, June 2001.



Shell-midden site, Guior Island (Saloum Delta Biosphere Reserve), Senegal, July 2002.

Concluding comments

The case studies presented in this chapter present many interesting lessons, and perhaps one of the most important is the linkages that emerge. The movement of large groups of people into coastal areas, as seen in Omisalj (Croatia), Rio de la Plata (Uruguay) and ASSBY (India), creates a range of problems from an identity split between two different populations (Omisalj) to the depletion of basic resources such as drinking water (ASSBY). These contrast with the conflicts that exist when large groups of people move out of coastal areas, as seen in Latvia, leaving a population diminished in numbers and income, and land and property ripe for speculation by outsiders.

The psychological scars left in coastal populations by wars (Kotor, Yugoslavia/Montenegro) and by certain political regimes (Latvia) may result in a loss of initiative on the part of local inhabitants, and a sense of isolation. As was mentioned in the case of Kotor, another result of the post-war situation was the dependency on donor aid and the absence of proper in-country screening of such aid. This matter of donor aid was intensely debated at the workshop and is further discussed in Chapter 5.

The case studies dealing with extractive industries in protected areas also present interesting scenarios, which centre around local communities using the resources of the conservation areas.

Another idea that emerges from the discussion of these case studies is that communities working on their own are not always able to envision the wider implications of certain actions beyond their immediate locale. It is here that scientists, researchers and other professionals can often help, by contributing their view of the larger picture, and an understanding of why there is a conflict situation.



Dune-mining by Richards Bay Minerals, north of Mzingasi Village, Maputaland, South Africa, November 2001.

Perhaps the essence of the whole discussion on conflict prevention and resolution revolves around the Village Chief's comment in Costa do Sol:

'All we want is to be left alone and have the right of access to the sea, other development should be elsewhere'

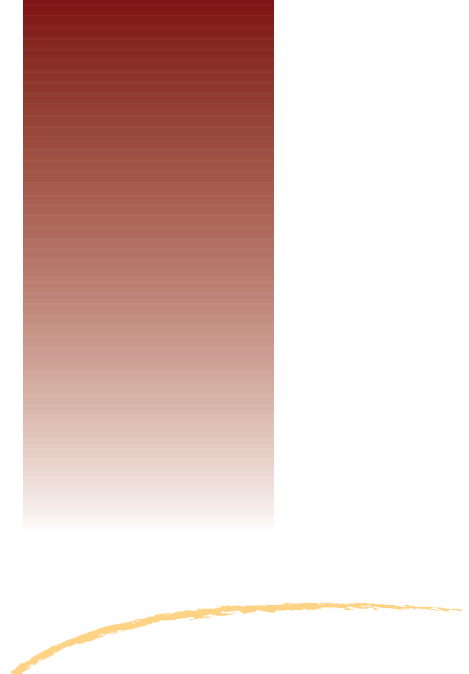
Unfortunately for the villagers, and many others, the reality is that change is inevitable. Accepting this reality, and finding ways 'to manage change effectively' lie at the heart of conflict prevention and resolution.

3 Resolution and prevention of conflicts

In the integrated coastal management process it is necessary to work with the local community, but equally important is to work with state institutions and companies. It is not easy to generate trust and credibility in the population but it is essential. The political history of countries like ours (Uruguay) has an important influence on the relationship between the State institutions and the local population. We start from situations where previous frustrations must be neutralized, this generates expectations on behalf of the population. In the participatory process it is much harder to overcome frustrations than to start all over again. Most of our work was guided by a changeover from 'demanding of the State' to 'proposing to the State'.

*Clara Piriz and
Walter Couto, 2001*





Understanding the nature and causes of a conflict is a fundamental prerequisite before any attempt is made to resolve a particular conflict. Case studies, describing the nature of each conflict situation presented at the workshop, are discussed in the preceding chapter. Several of these case studies are still at an initial stage where stakeholders are trying to understand the nature of the conflict itself. Others have embarked on a process of dialogue and consensus building, and still others have achieved at least some degree of resolution.

Conflict resolution is a well-developed field that has been used successfully in many other situations, e.g. international disputes and differences between landlords and tenants.

'Dealing with conflicts has been called the greatest challenge facing integrated coastal management because of the multi-use setting of coastal systems and because most of these systems are a mosaic of "rights" (property rights, fishing rights, use rights) and usually involve common property resources as well.'
(Rijsberman, 1999)

Most coastal conflicts are related to the fact that resources and space are finite and subject to ever-increasing demand. Scientists can play an important role in understanding the factors governing resource availability and distribution, and determining sustainable ways of using the resources for the maximum benefit of all the users. There is also a need to precisely define the nature of the conflict, e.g. referring to the private sector versus the

community may be misleading, for often the private sector is part of the community, so a more precise description is needed, such as large-scale users versus small-scale users.

Rijsberman (1999) discusses a structured approach to conflict management, which involves first of all an assessment of the scope, nature and stage of the conflict. A basic premise of conflict management is that the stakeholders are fully involved in the conflict resolution process. He further identifies a continuum of conflict management techniques from resolution by the parties in conflict to intervention by a third party. In many of the case studies discussed in this chapter, a third (non-involved) party, such as a village council or a university, has played a mediator's or facilitator's role in the conflict situation.

As will be seen in many of the conflict resolution cases discussed here, assisting the disputing parties to reach agreement is only a first stage. Implementing those agreements usually involves a series of short- and long-term actions. For example, if a sand mining conflict exists at a particular beach, and an agreement is reached to stop mining sand at that site, then certain actions become necessary. These might range from finding an alternative occupation for the sand miner, to conditioning the local communities to buy construction sand from other sources instead of taking it for free from the beach. It is in the implementation of these actions that peoples' attitudes begin to change, so that future potential conflicts over the same issue can at best be prevented, or at worst be more easily managed. Thus there exists a spectrum from conflict resolution to conflict prevention.

Two of the case studies discussed here are further advanced than the others: the Chumbe Island Coral Park and the aquaculture case in Russia. In both cases, participatory processes have been used to build consensus, specific actions have

been implemented to make the agreement work, and education and awareness are part of the long-term action required for changing attitudes and preventing future conflicts.

Successful conflict resolution case studies

Conflict resolution in a protected area: Chumbe Island, Tanzania

(For a description of this case study, see Chapter 2, page 32.)

Established early in the 1990s (Riedmiller, 2000), the Chumbe Island Coral Park met increasing pressure from local fishers who wished to fish in the protected area. The Chumbe Island management team relied on educating² and convincing local fishers about the benefits they could gain from a small, totally protected area, assuming that natural restocking of the adjacent reef areas would take place in a few years.

In 1991, project negotiations started with a round of meetings in several fishing villages in the area, arranged with the support of the Departments of Environment and Fisheries. The objective was to present the project to villagers and win their support. As the Chumbe fringing reef was off-limits for local fishers anyway, because of its proximity to the main shipping channel between Dar-es-Salaam and Zanzibar, few people felt affected by the closure of the Chumbe reef at this stage. However, villagers demanded preference in employment over urban people, and proposed candidates among the local fishers to be employed and trained as park rangers by the Chumbe Coral Park.

From late 1992, after government approval of the project, and even before the conservation area had been gazetted, six local fishers were employed, stationed on the island, and over sev-



The Chumbe Park Rangers, former Zanzibari fishers themselves, patrol the Reef Sanctuary, 1999. Nowadays, infringements of park regulations by local fishers have become rare.

eral years trained on-the-job by volunteer biologists and educationists. This informal training focused on the basics of coral reef ecology, the rationale of a small totally closed marine protected area, the aims of the Chumbe project, and how to communicate this to fishers and villagers. The rangers were also trained to produce daily monitoring reports and to help researchers with baseline surveys. English language skills and training in visitor guidance were added later.

The strategy of recruiting local fishers to become park rangers, trained on-the-job by professionals on a voluntary basis, proved successful and cost-effective. Working in two- to three-weekly shifts on the island, the rangers continue to reside in their villages when off-duty and have thereby kept close bonds with other villagers. Traditional subsistence fishers responded well, particularly after seeing catches increase in adjacent reefs beyond the closed area. In the absence of marine rescue services in the country, they also appreciated the help the Chumbe rangers gave in numerous cases of emergencies, storms, engine failure, loss of boats or lack of drinking water. There is evidence that several lives have been saved by the park rangers. Due to their commitment, there are now no major problems with infringements from fishers or other users, and the

² Education is used here and throughout this publication, not in the traditional top-down sense of instruction, but more in terms of communication and dialogue, so that information and knowledge is exchanged in order to achieve an improved level of understanding.

marine protected area is well accepted by local communities.

Employing local fishers as rangers and enforcement officers has also been tried and found successful in the Portland Bight Protected Area in Jamaica. Each year, about fifty fishers and fish vendors (men and women) are appointed Honorary Game Wardens/Fisheries Inspectors by Jamaica's Head of State. They have powers of arrest and search without warrant and enforce Jamaica's Wildlife Protection Act and Fishing Industry Act. This has been a major factor in motivating the fishers and convincing them that improvements in the fisheries are possible (UNESCO, 2001a).

In 1994, an advisory committee for the Chumbe project was formed, with the help of the Institute of Marine Sciences of the University of Dar-es-Salaam. Thereafter, government support for the project increased significantly. The committee includes representatives of the Departments of Fisheries, Forestry and Environment, the Institute of Marine Sciences, and local fishing communities. Government officials from several departments, including the Board of Trustees of the mainland Tanzania Marine Parks and Reserves Unit, are regularly invited to Chumbe Island to see the project in action and to win their support. A wide variety of stakeholders were involved when the Management Plan 1995–2005 was developed for Chumbe Island in 1995. Political and public support has been enhanced by the enthusiastic feedback from local and international visitors, as well as the several prestigious international awards won by the Chumbe project.

Public support was further boosted when the project started taking schoolchildren for day excursions to the island, where they are guided by the park rangers along forest and inter-tidal nature trails, and learn how to swim and snorkel over the reef. This is a unique opportunity, particularly for girls, who are not normally given that chance in the Islamic culture of Zanzibar.

In this particular example, a participatory process was adopted with all the stakeholders, including the fishers and government. By involving the stakeholders in the management of the park,

on a continual basis, the fishing versus conservation conflict was resolved. The whole process, which took several years, was enhanced by the education and awareness activities.

While this particular conflict has been resolved successfully, the Chumbe project still faces many challenges. Establishing the project took seven years and the ecotourism components of the project did not open until 1998. The occupancy rate is only about 40%, and even with low running costs it is a challenge to keep operational. Tourism in Tanzania, like elsewhere in the world, is very vulnerable to political events. Marketing is a huge challenge, especially as there is so much competition. The conservation awards help to give Chumbe a high profile internationally, which is especially important since its focus is on the upper end of the tourism market. Other events have also had an impact. A coral bleaching event in 1998 affected 50% of the corals, and there has been an 80% survival rate. While the Chumbe management would like to believe this relatively high survival rate is related to the conservation efforts and a healthy environment, further detailed scientific monitoring will be necessary before this can be established.

Resolution of aquaculture conflicts:

White Sea, Russia

(For a description of this case study, see Chapter 2, page 31.)

Aquaculture has been established as a sustainable industry in the White Sea region of Russia. However, particularly with cage-farm aquaculture, numerous conflicts arise, some of which are described in Chapter 2. This case study considered two cage farms, one private and one State-run, both at Palkin Bay, Kandalaksha Gulf, White Sea.

As a first step towards conflict resolution, it was decided to hold round-table discussions with the participation of the local stakeholders, including the aquaculture farmers, the boat owners and the Kandalaksha State Reserve. Aquaculture is a traditional local business in this coastal area, and the different stakeholders hold dissimilar view-

points and values. During efforts to reach consensus, a number of potential solutions were identified to address user conflicts. These included:

- *Policy-level considerations:*
Zoning for aquaculture within coastal planning;
Clearly specifying responsibilities of regulatory agencies;
Involving farmers in the local decision-making process.
- *Scientific-research considerations:*
Environmental problems and new technologies;
New management practices using the principles of integrated coastal management.
- *Educational efforts for:*
Legislators and agency officials;
The general public;
Farmers (especially environmental problems).

Following the round-table discussions, specific actions were proposed and implemented to address the conflicts at the two cage farms. These included reducing the environmental impacts by moving the cages annually on the advice of scientists, and optimizing the feeding regimes and types of food. Anti-seal nets were constructed around the farms to reduce the seal attacks. In order to improve the quality and production of the aquaculture farms, training was arranged for students and future farmers. On the educational front, guided visits to the farms for schoolchildren and tourists were arranged. Educational support for this project was provided by the Russian State Hydrometeorological University, and in 2001, one of the aquaculture farmers from Palkin Bay defended a diploma thesis in sustainable aquaculture at that university.

As in the case of Chumbe Island, several steps can be traced in the resolution of this conflict. In the White

Sea project, the university provided considerable assistance in understanding the nature and the causes of the conflict. A participatory process was then adopted bringing all the stakeholders together in round-table discussions and developing a consensus for a set of general solutions, and more specific actions, which were then implemented by the stakeholders. The educational component was also very important in this project, not only as it relates to schoolchildren and, through them, their parents, but also given that one of the aquaculture farmers defended his diploma on sustainable aquaculture.

It is planned to further develop the wise practices emerging from this case by:

- Organizing a broad and open interdisciplinary discussion about the role of aquaculture in sustainable coastal development in Russia;
- Adapting the local experience in the management of aquaculture to the regional scale in the White Sea/Barents Sea region;
- Transferring the process of 'round-table discussion for conflict resolution' to other fields of human activities in the coastal zone, e.g. new port development in the White Sea/Barents Sea, Baltic Sea and Black Sea;
- Preparing a booklet about Sustainable Polar Aquaculture.



Tour of aquaculture farm at Belomor, White Sea, Russia, July 2002.

Case studies focusing on participatory processes and consensus building

As previously mentioned, participatory processes and consensus building are critical to the conflict resolution process. These activities are discussed together, since when dealing with real-world conflicts, it is too difficult to distinguish between them. There can be no meaningful consensus building unless all the stakeholders have been identified and involved in the participatory process.

Bringing stakeholders together: ASSBY, India

(For a description of this case study, see Chapter 2, page 27.)

At ASSBY in India, there are four stakeholder groups involved in several existing conflicts: migrant workers, local villagers, ship owners and the government (Gujarat Maritime Board). Different issues are important to each stakeholder group. The migrant workers are concerned about poor living, health and work-safety conditions. The local villagers are troubled about shortages of water, competition with the migrant workers, and the social differences (language, style of dress, eating habits) of the migrant workers. The ship owners are worried about profits, working conditions and competition from other international yards. The government is concerned about the industry at state level, as well as at the local level. There was considerable suspicion between the groups, and sometimes, hot debates and fights would break out.

With the assistance of the University of Bhavnagar, each group was approached individually and a stakeholder analysis conducted, to determine their main concerns. This was a lengthy process and often started with a long list of complaints. After some discussion, the individual groups were usually able to begin to consider a wider perspective beyond their own immediate concerns. Finally, in May 2001, a meeting was held involving all four groups (Joshi and Dube, 2001).



Discussing workers' issues at ASSBY, December 2001.

While the conflicts are not yet resolved, some groundwork has been laid, which may well provide a basis for their resolution in the future. However, this will require the establishment of a mechanism such that the groups meet on a regular basis to discuss and reach consensus on particular issues, with or without the university team, whose time is obviously limited. This will be no easy task, especially in view of the mistrust among the stakeholder groups, as well as the social, financial and language differences. The assistance of the university team may be needed for some time to come.

Mechanisms for bringing stakeholders together: wise practice agreements

In many countries, even when coastal policies are in place and incorporated into law, which is the case for instance in South Africa, management is still reactive rather than proactive. Innovative solutions are needed.

During a workshop held in Dominica on coastal stewardship (UNESCO, 2002), inadequate legislation and limited enforcement of existing laws and regulations were recognized as two factors leading to increased coastal conflict. While it is undoubtedly necessary to strive to improve coastal laws and their enforcement, it is timely to simultaneously explore other options. Such alter-

natives might include informal mechanisms whereby stakeholder groups could meet regularly to discuss concerns and address specific conflicts. One of the most promising options discussed during the Dominica workshop was a wise practice agreement. (This may also be termed a social contract or voluntary agreement.) A wise practice agreement was defined as a voluntary accord among multiple users of a resource characterized by mutual recognition of rights to the resource. The steps involved in establishing such a wise practice agreement were defined as follows:

1. To identify and bring together, under equitable arrangements for discussion, all the stakeholders. (The government is of course a major stakeholder.)
2. To reach agreement on the multiple uses of the resource and the boundaries of the area covered by the agreement.
3. To develop decision-making procedures, rules of compliance, and dispute resolution mechanisms.

The agreement should be characterized by:

- Efficiency: a minimum or absence of disputes, with limited effort needed to ensure compliance.
- Stability: an adaptive capacity to cope with progressive changes, such as the arrival of new users or techniques.
- Resilience: a capacity to accommodate surprise or sudden shocks.
- Equitability: a shared perception of fairness among the members with respect to inputs and outcomes (UNESCO, 2002).

The lead agency, or catalyst, to initiate a wise practice agreement will depend on the specific context. It could be a university group, a government agency, a non-governmental or community-based organization, a private developer, or other concerned individual. It will also be necessary to carefully specify the role of the various partners in the agreement, and for those stakeholders to understand and comply with the conditions. It was noted that governments do not always fulfil their obliga-

tions as signatories to international conventions, and care must be taken that similar situations do not occur with wise practice agreements.

Such voluntary agreements have considerable potential for conflict resolution, and especially for conflict prevention. However, as was noted in the Dominica workshop (UNESCO, 2002), such agreements need to be in place before conflicts reach crisis proportions and proceed to a higher level, such as a court of law. In the case of ASSBY, a wise practice agreement would involve setting up a mechanism whereby representatives of the four groups meet on a regular basis to discuss pertinent issues in order to prevent and resolve conflicts.

One of the most difficult steps in setting up a wise practice agreement might well be the first stage: to identify the stakeholders. It is necessary to identify the partners in the agreement, and a mechanism for bringing all the stakeholders together under equitable arrangements for discussion. There may be value biases in determining who are valid stakeholders; for instance, there may be a desire to exclude those seen as trouble-makers. Difficulties may also be encountered in determining the representativeness of groups or individuals identified as stakeholders. Also some stakeholder groups may lack expertise in the consultative process.

With the present day focus on participatory processes for conflict resolution, the role of leadership is sometimes lost. A coastal manager in the 1998 workshop (UNESCO, 2000a) noted:

'...the intensity of participation is always linked to the degree of awareness and of personal gain that the population hopes to acquire from the project. People cannot always be counted on to participate – it is necessary to mobilize them incessantly without ever being discouraged'.

The question of who should take the lead in the wise practice agreement or the conflict resolution process is a very pertinent one. The answer will nearly always depend on the specific circumstances and the particular situation. Leadership is

a quality that cannot be taught, more often it emerges, and should be nourished as the process evolves.

Creating a ‘place of encounter’:

Rio de la Plata, Uruguay

(For a description of this case study, see Chapter 2, page 28.)

In the Rio de la Plata area there has been intense internal migration towards the coast in the last decade, resulting in intensification of problems such as coastal erosion, urbanization, increased solid waste and poor water quality. To try and resolve these problems and the conflicts that exist at a local level, an integrated coastal management (ICM) programme was initiated. Several workshops were organized with the local population and the various institutions to identify actions needed to improve the living conditions of permanent residents and tourists and the management of coastal resources. The actions included educational and research-orientated activities, namely:

- Educational activities for the disposal and recycling of plastic containers,
- Preparation of a proposal for coastal land-use planning,
- Identification of feasible solutions for beach and coastal erosion,
- Study to measure water quality at river outlets.

This particular case study, while not focusing on a specific conflict situation, has nevertheless yielded some interesting findings regarding conflict prevention and resolution. In particular, it has emphasized that while it is necessary to work with the local communities in ICM, it is equally important to work with state institutions and private companies. The value of a continuous learning process for each of the different stakeholder groups was also noted.

One of the main results from the ICM programme was ‘to have created a place of encounter, where coastal problems can be dealt with’. For without ICM programmes in place, problems often get passed around from agency to agency and from person to person without any progress towards solutions. It is also one of the goals of wise practice agreements, in that stakeholders will have a ‘place of encounter’ where specific issues and conflicts can be dealt with.

Traditional frameworks for conflict resolution: Saloum Delta, Senegal

(For a description of this case study, see Chapter 2, page 33.)

The specific conflict situations discussed in the Saloum Delta focused on disputes between different groups of fishers, and between the various stakeholders involved in the exploitation of shell middens. These case studies are particularly interesting because specific mechanisms are already in place whereby the various groups get together to solve their differences.

Rural populations in Senegal have a long-standing tradition for solving land-related issues. They rely on traditional frameworks having their own specific rules (rooted in kinship or activity-



Community meeting at Nema Bah (Saloum Delta Biosphere Reserve), Senegal, July 2002.

related ties) and focused primarily on maintaining suitable living conditions and levels of production. Despite social diversity, such frameworks and networks reach beyond ethnic barriers and socio-professional categories to maintain social cohesion. This ensures preservation and protection of the environment and especially the sustainable exploitation of shared resources. The networks strengthen social bonds between individuals and communities and provide a structure to promote development schemes.

Conflicts between fishers in the same village are solved, usually on an amicable basis, at the level of the Local Vigilance Committee, composed of village volunteers who are water and beach wardens. Sometimes there is a need to go to a higher level, the Village Chief. Conflicts between fishers of different villages are solved between the fishers themselves and those who claim themselves as true locals of the area. If this does not work, they rely on the State's Fisheries Monitoring Services, which then applies the Fisheries Code to help solve the conflict.

Some disparities exist. The lack of coherent legislation and regulations, as well as inappropriate institutional framework, lead to disagreements between traditional methods for conflict resolution and present-day legal practices. In addition, illiteracy of local councillors, and their lack of training in the law, sometimes impedes their objective management of conflicts.

In the case of conflicts over the shell-midden resources, the Rural Council is the first place to go when two villages in the same area are in disagreement. A hearing is held with both parties and then a decision is made. For example, in the conflict between the Falia and Moindé villages, the conflict was solved on an amicable basis when the village notables met and found solutions. The Falia village was chosen as the caretaker of the site, being the closest. The Moindé village has right of access to the site as long as no great damage is done and the archaeological heritage is not spoiled. In cases of continued disagreement, the State representative or Préfecture is called in to settle the dispute.

Thus in this case, there are specific mechanisms for conflict resolution, which appear to be working reasonably well. Stakeholders know where to go to settle their disputes, and generally accept the outcome of the resolution process. There is a need for further training and education, particularly of certain groups such as the local councillors.

Establishing lines of communication for conflict resolution: Omisalj, Croatia and Kotor, Yugoslavia (Montenegro)

(For a description of these case studies, see Chapter 2, page 26.)

The conflicts described in the Omisalj and Kotor case studies are all at the very early stage of resolution, during which there is a need to identify the major causes of the conflict situations, to determine the major stakeholder groups and to start a process of dialogue and communication between these groups.

At Omisalj, the movement of a new social group into the coastal area resulted in a conflict with the established residents. A first step is to establish communication between the two groups so as to develop ideas for the common good.

In Kotor, a city emerging from a war, the major problem relates to isolation. In this case, the importance of building confidence and skills was emphasized, particularly in the early stage of 'reconnection'. Participating in regional and international meetings, as well as in networks, was one suggestion for breaking the isolation and starting a process of communication.

Ineffective and inefficient communication lies at the root of many, if not most, coastal conflicts. Often a lack of trust makes it difficult to get information on development projects from governments, who have a tendency to hide information, especially sensitive material. Many countries have government information services through which they prefer to channel their information.

Case studies focusing on activities to change attitudes

Specific actions at the community and other levels are usually needed to help implement an agreement reached through consensus building and to begin the process of changing attitudes. Some examples are discussed here.

Demonstration houses:

Mahdia, Tunisia and Latvia

(For a description of these case studies, see Chapter 2, pages 26 and 29.)

The case study in Mahdia relates to the introduction of tourism to this small historic coastal city and the adverse impact thereof. Following a seminar in 1999 (UNESCO, 2000c), a programme was set up to establish a demonstration house. A building, located in the centre of the Medina between the residential and commercial areas, and formerly used for shops and residential purposes, was rescued from demolition. The main goals of the activity are: (i) to build awareness within the community about the importance of preserving architectural heritage; (ii) to involve the inhabitants, craftsmen, scien-

tists and decision-makers in restoring the building, and at the same time rehabilitating old building techniques and materials, as well as experimenting with new techniques; and (iii) to build associations between local craftsmen and the inhabitants of the Medina, and between Tunisian and French students through joint research work. Local, national and regional partners are involved in this initiative. Once finished, it is planned to use the building as a counselling and support centre for the local population and local authorities.

While many countries have heritage laws, enforcement is often inadequate. Demonstration houses create awareness among the population of the need to preserve historic buildings. However, care is needed in the use of appropriate techniques, since often people do not know how to use old materials, while mixing modern and traditional materials may not work.

Heritage tourism may provide an opportunity to preserve old buildings. In Zanzibar, a similar situation existed, with the old historic houses gradually being destroyed. However, with the arrival of heritage tourism, the preservation of historical buildings is being encouraged.

Along the Baltic Sea and Gulf of Riga coast in Latvia, one of the conflicts discussed relates to the large number of historical buildings in a state of disrepair, because their owners cannot afford to restore them. With the weak institutional structure and the poorly regulated land market, land speculation by a few prosperous people is becoming a major issue and source of conflict. One proposal here, similar to that being undertaken in Mahdia, is to set up demonstration projects to show how the old wooden buildings can be restored using traditional and new technologies. Tax incentives and subsidies for owners of historic buildings may be one way to help finance such restoration work. However, this would need to be part of a proactive planning process.



Tunisian and French students examine the restoration work of the façade of a demonstration house in Mahdia, July 2002. Above right: Detail of the demonstration house.

Pilot farms: Maputaland

(For a description of this case study, see Chapter 2, page 32.)

The conflict between agriculture and conservation is complex, and was much discussed at the workshop, not only as regards agriculture, but also in relation to other extractive industries, e.g. mining, and the need to strike a balance with conservation. Extraction of beach sand in Mahdia, Tunisia, in Yoff, Senegal, and in the Caribbean islands was discussed. It was noted that beach sand continues to be mined for construction uses in many places, despite (i) its poor construction properties, (ii) the fact that alternative sources exist, and (iii) laws exist banning its extraction.

Regarding the Maputaland conflict, there was the view on one side, that agriculture should not be accommodated in a conservation area, while on the other side, the communities, which are very poor, are already living in the area and carrying out subsistence agriculture and monoculture. One proposal was to involve the communities in alternative income-generating activities, e.g. in ecotourism and other types of tourism. However, this is a long-term approach, and is not likely to improve the standard of living of the communities in the immediate future.

Another proposal under consideration is to establish pilot farms. These farms could screen plants used in local agriculture, e.g. groundnut, sunflower and other oil crops, assess their suitability, and screen plant material for breeding purposes. The farms would also test cropping systems and new techniques, as well as provide training for the farmers and agricultural extension officers. The University of Zululand has already investigated the production of other crops in northeast Kwa-Zulu-Natal, e.g. indigenous fruits, which could also be used in a future ecotourism industry. Any approach to improving agriculture in the area should be based on rural innovation and linking the farmers to the market, particularly the development of agro-industries which provide employment and income, food security, and help in poverty eradication.

A postgraduate university course in industrial crop production is scheduled to start at the University of Zululand in 2002. This will also provide capacity building for future agricultural development in the area.

*'Real capacity building takes place from within, such as building networks of farmers, not by bringing in new technology. The role of the specialist should be that of a facilitator'.
(Mr Vidyut Joshi, Workshop discussion, Maputo, 2001)*

Whether these measures and proposals for agricultural improvement turn out to be interim or long-term solutions in Maputaland, the debate continues as to whether an extractive industry such as agriculture should be permitted in a conservation area.

Community environmental committees:**Jakarta Metropolitan Area, Indonesia**

(For a description of this case study, see Chapter 2, page 23.)

The Jakarta case study deals with a major environmental problem rather than a specific conflict situation. Nevertheless, many of the ideas emerging from the workshop are also important for raising awareness and changing attitudes.



A community approach, likely to produce short-term results, was adopted in selected neighbourhoods of Jakarta to improve the waste management system. Identifying a small core group from among the residents of the community was the first step. This core group then formed an environmental committee, which represented the entire community (women, men, youth, local authorities). With the assistance of external experts and special training sessions, the environmental committee mobilized and shared information with other community members. This brought about an internal transfer of knowledge within the community that facilitated the understanding and participation of the more reluctant members.

Specific activities focused on sorting and recycling the waste, creating alternative livelihood activities and greening programmes. At the Bintaro traditional market, organic waste was separated from other waste and used for composting. The compost was then sold providing income for the vendors. In the Banjarsari neighbourhood, a recycling centre was established where young people recycle paper and carry out composting. The villagers also plant medicinal herbs in the compost. A second community-based recycling centre has been set up in Kapuk Muara. It was found that people responded differently to particular activities. Some people in the community reacted positively to having a cleaner environment, e.g. clean and green the *kampung*, and others responded

to economic incentives, e.g. additional income from selling the recycled products and compost.

These community activities are combined with environmental education. Study tours for community leaders and students are regularly



Traditional market waste, Bintaro, Jakarta, Indonesia, 1997.



Group discussion during workshop for fishers at Pari Island, Indonesia, 1997.



Students learning the process of paper recycling, Jakarta, Indonesia, 1999.

organized to show them the condition of the coastal environment and to provide them with an understanding of the relationship between inland waste production and its effect of worsening condition of the local rivers and sea. The study tours are always combined with panel discussions on possible solutions. Training courses on waste management, composting, recycling, marketing of recycled products and co-operative management have been regularly carried out. Usually these training sessions include a visit to one of the pilot project sites to demonstrate activities. Often it is the communities in these pilot areas that train other communities. Training sessions are concluded with discussions on how to adapt these activities to the participants' local environmental and social circumstances. Training and environmental education courses are also organized in schools. In some schools the students have already started a new school waste management system, including composting in the school garden and paper recycling.

In order to ensure the community has a sense of ownership of the project, it is important to start from knowledge already present in the community, and then enhance community capacity with input from external experts. An example of this was a competition to design bins for sorting waste. Waste-bin prototype designs were selected and constructed and are now being tested. Project results are shared within the local community so that people see the positive results from their own initiatives and accomplishments.

Raising public awareness:

Lagos, Nigeria and Latvia

(For a description of these case studies, see Chapter 2, pages 24 and 29.)

The Lagos environmental problem, previously discussed, relates to flooding during the rainy season, which disrupts people's lives. Much of the flooding is the result of indiscriminate dumping of rubbish into the drainage channels. It was decided to try and approach this problem on two fronts simultaneously. Firstly, to present recommendations to the Lagos State Ministry of Environment and Physical Planning for the necessary engineering improvements to the drainage channels, and secondly to conduct a public awareness campaign to discourage dumping of solid refuse in the drainage channels.

A successful media and public forum was conducted on 6 June 2000. More than 200 people attended, including representatives from several government agencies, print media, radio and television stations. Ironically, some of the invited guests could not attend because of the flooding that took place that day following heavy rains. After this public forum, and with the assistance of the NGO, 'Clean-up Nigeria', a public awareness campaign was conducted over a period of several months, using print and electronic media, street theatre and community meetings, talk shows and media chats. The goal was to inform all groups of society about the adverse effects of dumping waste in the drainage channels. These activities are ongoing, but it is likely that further actions will

be needed to effect behavioural changes. These may include continuation of the education and awareness programme, implementation of the proposed engineering measures, and possibly also specific community-based activities, similar to those undertaken in Jakarta.

In Latvia, where one of the conflicts relates to land speculation in a sparsely populated coastal area, it was recognized that the time of the command economy had passed, and that local government only has sufficient funds for day-to-day needs, not for future planning. A suggested first step is to focus on communication through a widespread information and public relations campaign. Schools should also be involved in these activities.

Role of the university chairs in conflict resolution

Several of the conflict resolution case studies described in this chapter have benefited from the involvement and leadership of universities, e.g. the University of Bhavnagar in ASSBY, the Universities of Zululand and Udine (Italy) in the Maputaland case, and the Russian State Hydrometeorological University in the White Sea conflict.

Universities and other research institutions, and in particular the UNESCO university chairs, can play an important role in conflict resolution. They command a certain degree of respect within the community, and bring the advantages of impartiality, a detailed knowledge base and a broad interdisciplinary perspective. They can work together with the stakeholders to facilitate understanding of the factors governing the particular conflict, which, as already noted, is an important first step in conflict resolution.

However, in order to assist in the conflict resolution process, and to bring together people of different interests, backgrounds, institutions, sectors and vocations, there needs to be common terms of reference for all the stakeholders. Often, there are difficulties in communication between scientists from different areas of expertise, between coastal managers and resource users,

and as seen in the case of ASSBY, between the different stakeholder groups.

Universities and UNESCO chairs can contribute to conflict resolution in three ways: (i) through building capacity for a better understanding of the factors governing resource availability and distribution; (ii) through promotion of communication between scientists with different areas of expertise (interdisciplinary research); and (iii) through the promotion of interaction between scientists, coastal managers and resource users.

For example, the UNESCO chair at the University of Maputo in Mozambique is conducting studies into the runoff of the Incomati River so as to maintain the health of downstream and coastal ecosystems. This will provide needed information for water managers and users to help mitigate water-use conflicts.

Concluding comments

An examination of the conflict resolution case studies described in this chapter presents many lessons. Consensus building using participatory processes is a very important tool in building agreement on how to resolve conflicts. But in order to actually implement the particular agreements, other actions usually need to be undertaken, e.g. specific stakeholder activities, education and raising awareness. By helping to change people's attitudes, future conflicts may be less serious or even prevented.

Education is not only a formal activity. People learn by 'doing', as seen in the sorting of waste and recycling in Jakarta. Another common thread running through all these case studies concerns the time factor. Resolving conflicts may be a very time-consuming process, which transcends project time frames. The need to persevere with conflict resolution can be seen clearly at Chumbe Island in Tanzania, at the White Sea in Russia and in ASSBY in India. Preventing future conflicts may involve a different and longer time scale.


One of the interesting concepts proposed in the Uruguay case study, was the need to establish a 'place of encounter'. This is not necessarily a place in the geographical sense of the word, but more a process or mechanism such that the conflicting parties know how to go about resolving the conflict. Such a 'place of encounter' might be a wise practice agreement.

4 Wise practice characteristics

'The Organization's specific mission ... should continue to be the construction of the defences of peace in the minds of men, contributing to peace and security by promoting collaboration between peoples through education, science, culture and communication'.

Interim Report of the Task Force on UNESCO in the 21st Century, 2000





Wise practices have previously been defined (Chapter 1) as actions, tools, principles or decisions that contribute significantly to the achievement of environmentally sustainable, socially equitable, culturally appropriate, and economically sound development in coastal areas. The concept of wise practices takes into account the fact that we live in a heterogeneous and changing world. While the idea of a best practice is laudable, it is often not achievable or desirable. Furthermore, the definition and conceptualization of wise practices will continually evolve and be subject to refinement, as experience and knowledge expands.

A list of characteristics describing wise practices was prepared during a December 1998 workshop (UNESCO, 2000a). Since then, this list has been further discussed and modified. The wise practice characteristics have also been applied and further developed during the assessment of field projects and UNESCO university chair activities.

This chapter presents a revised list of wise practice characteristics and their definitions, based on discussions in CSI workshops in Maputo and Samoa (UNESCO, 2001a), and on the application of the list of characteristics to project assessments. Those characteristics most important for conflict resolution are identified and further discussed. Finally, ways in which the characteristics are used in project assessment are examined.

Wise practice characteristics

The revised list of 17 wise practice characteristics is listed hereafter. None of the characteristics are specific to coastal areas.

- *Long-term benefit*: The benefits of the activity are still evident 'x' years from now and contribute to the improvement of environmental quality.
- *Capacity building*: The activity improves management capabilities, and provides education and knowledge for the stakeholder groups.
- *Institutional strengthening*: The activity enhances existing management mechanisms/structures or creates new ones.
- *Sustainability*: The activity adheres to the principles of sustainability (the extent to which the results will last and development will continue once the project/programme has ended).
- *Transferability*: Aspects of the activity have been applied at other sites in and/or outside of the country or region.
- *Interdisciplinary and intersectoral*: The activity incorporates all relevant disciplines and sectors of society.
- *Participatory process*: Identification of, and transparent consultation with all stakeholder groups, as well as the involvement of individuals, is intrinsic to the activity.
- *Consensus building*: The activity builds agreement among a majority of the stakeholder groups.
- *Effective and efficient communication process*: A multidirectional communication process involving dialogue, consultation and discussion is utilized.
- *Locally responsive*: The activity respects local traditional and cultural frameworks while also challenging their environmental validity.
- *Gender and/or other sensitive issues*: The activity accounts for the many aspects of gender and/or other sensitive issues.
- *Strengthening local identities*: The activity promotes and strengthens a sense of belonging and self-reliance.

- *Contributing to national policy:* The activity assists in informing and shaping government's environmental, legal, economic and social policies.
- *Regional dimension:* The activity takes into account the regional, economic, social and environmental perspective among neighbouring countries.
- *Human rights:* The activity is sensitive to issues concerning the freedom to exercise fundamental human rights.
- *Documentation:* The activity and the lessons learnt are well documented.
- *Evaluation:* The activity is regularly assessed to determine the extent to which integrated coastal management has been achieved and/or wise practice characteristics utilized.

Wise practice characteristics especially important for conflict resolution

While all the wise practice characteristics are important, some are key to conflict resolution. These are discussed below.

Participatory process

(Identification of, and transparent consultation with all stakeholder groups, as well as the involvement of individuals, is intrinsic to the activity.)

While the present day emphasis in ICM is on working with local communities, the need to place comparable emphasis on state institutions and the private sector has already been mentioned. In any particular conflict situation, identification of the stakeholder groups and ensuring each is properly represented may be a lengthy process. Notwithstanding the above, it is sometimes necessary to distinguish between primary stakeholders and other groups. For example, divers and fishers may both depend on the same resource for their livelihood, and while sometimes in conflict, each share an interest in sustainable resource use in order to survive (see the conflict situation in the Seychelles, Chapter 2, page 31). On the other hand, govern-

ment stakeholders are not themselves directly dependent on the sustainable use of a particular resource for their livelihood and may have very different interests, perhaps focusing on sustainability on a larger-scale national front. In addition the short-term political perspective often fails to take into account long-term sustainability.

In order to enhance the participation of stakeholder groups, information and results have to be explained and shared with the stakeholders. This ensures a sense of achievement and ownership. The receipt of national and international awards, as at the Banjarsari kampung in Jakarta, Indonesia, and at Chumbe Island in Tanzania, creates a sense of pride and increases national and international visibility.

Consensus building

(The activity builds agreement among a majority of the stakeholder groups.)

It is important to recognize that in reality, consensus is unlikely to please all stakeholders. The difficulties of dealing with various stakeholder groups, with their differences in social background, education, negotiating skills, and sometimes also language, should not be underestimated. Consensus building may be a complicated and lengthy process. Also, and perhaps most importantly, trust has to be established between the different groups. This may be especially difficult if there is a history of failed conflict resolution in the area. Impartial persons or groups, e.g. universities based in the same geographical area as the conflict situation, and which have no direct involvement in the conflict, may be able to assist in helping the groups reach consensus.

Effective and efficient communication process

(A multidirectional communication process involving dialogue, consultation and discussion is utilized.)

A good communication process is fundamental to conflict resolution. In many cases it will be very time consuming, especially when dealing with illit-

erate stakeholder groups, those not used to negotiating and those unwilling to negotiate. Community meetings and partnerships with media representatives, guided environmental excursions, on-site education, advisory committees and management plans that involve stakeholders, are effective ways of communicating.

Capacity building

(The activity improves management capabilities, and provides education and knowledge for the stakeholder groups.)

Capacity building is part of the process needed to ensure that the various stakeholder groups can understand the nature of the conflict and the various issues involved. There may be a need to help particular groups develop a wider vision beyond their immediate, individual concerns, so that they can resolve existing conflicts and be better prepared to cope with future problems.

Locally responsive

(The activity respects local traditional and cultural frameworks while also challenging their environmental validity.)

The need to fully consider local cultural and social contexts cannot be overstressed in the conflict resolution process. A solution in one region or country may not be appropriate in a neighbouring region dealing with similar issues.

Wise practice characteristics as an assessment tool

Field projects represent the core building blocks of the CSI initiative. Wise practices are generated and refined from actions on-the-ground in the field projects. As those actions become formulated as wise practices, they are then further explored and tested, and ultimately applied to other projects and situations elsewhere in the country and the world.

In setting up the WiCoP forum in 1999, field project leaders were asked to discuss aspects of



Stakeholders discussing project activities during an assessment visit to the ASSBY project, India, July 2000.

their projects in terms of the wise practice characteristics. This proved to be a stimulating activity as one participant noted:

The exercise is useful in that it forces one to really delve into the intrinsics of the project and to think about impact, participation and so on, making it a valuable tool for monitoring and self-evaluation, as the weaknesses and strengths become clear. (UNESCO, 2001b)

In developing this and other suggestions a stage further, it was decided to avoid the pitfalls of self-evaluation, and to conduct non-biased assessments of the field projects and UNESCO university chairs using a team approach. These teams would consist of one or two persons not directly involved in the particular project (external assessors), the project leader(s) and other key persons in the project. In order to interlink the field projects and university chairs, the external assessors should preferably include persons from other field projects or chairs.

Assessments involve a review of all relevant documentation and a field visit to the project site, during which the team can see the activities for themselves and talk to the people on the ground. The wise practice characteristics are used as the criteria for the assessment. Observations and com-

ments relating to how the project activities fulfil each characteristic are noted, and a qualitative scale is used with three categories: slightly, partially and fully. A short synthesis highlighting the major issues is then prepared. This synthesis becomes the focus of the recommended future activities for the project. Once the assessment is completed it is placed on the CSI website, where it also serves to record progress. Annex V contains assessment guidelines.

The purpose of an assessment is not to 'rate' a particular project or university chair, but rather to advance it to fully achieve its overall goals, as well as to assist in extracting wise practices. Assessments are likely to result in refocusing specific project activities.

Assessments have been conducted for several projects, these and their web addresses are included in Annex I.

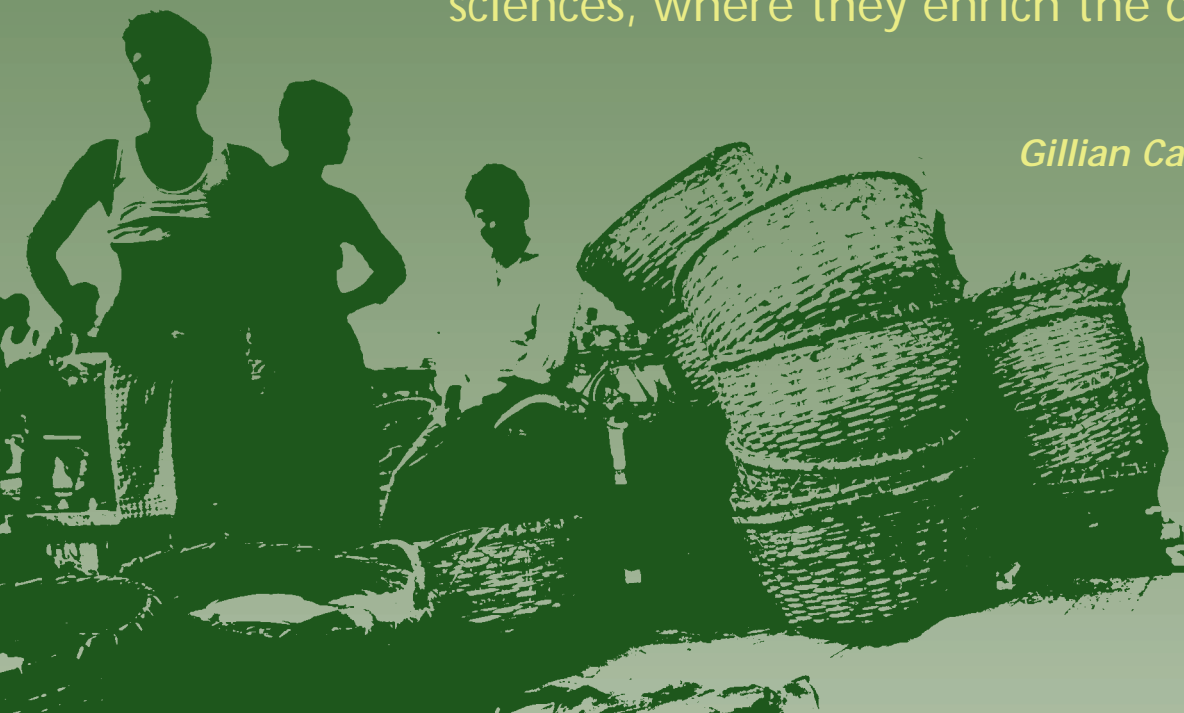
Concluding comments

The list of wise practice characteristics continues to evolve. A comparison of this list with the first one prepared in 1999 (UNESCO, 2000a) shows several significant changes. It is anticipated that the list will continue to change as knowledge and experiences are shared and exchanged. Thus, while not final, the aforementioned list is presented as a collective and dynamic way of defining the nature of wise practices.

5 Ethical codes of practice

'It has been suggested that the inclusion of spiritual and aesthetic resources in a coastal management programme may be seen as a luxury in many countries, which tend to give priority to the material side of things – tangible yields, products and consumption. However, since so many conflicts result from differences in the way a resource is valued, omission of the intangible aspects results in an incomplete picture. Moral and ethical statements and values already exist in the natural and social sciences, where they enrich the discourse'.

Gillian Cambers, 2001





An ethical dimension

Ethics may be defined as a system of moral principles concerning appropriate conduct for an individual or group; or as the study of moral standards and how they affect behaviour. At a workshop in Dominica in July 2001, the ethical dimension of environmental management was discussed (UNESCO, 2002). It was noted that both the social and the natural sciences contain many concepts that are value laden, e.g. as soon as a scientist has suggested a preference for a healthy ecosystem and proposed a strategy for conservation, she/he has introduced the element of value into the situation. The very concept of development contains many imbedded values such as advancement, improvement and progress. Concepts relating to conservation and stewardship often have a high moral tone. For instance, it was suggested in a 1998 workshop that natural areas and their biodiversity have an intrinsic value, so their conservation should be a matter of immediate moral concern. There is no need to refer to their other functions, such as their importance in the food chain, to justify their conservation (UNESCO, 2000a).

Conflict resolution concerns people and thus moral and ethical views must be included. Individuals constantly have to make the choice between undertaking a particular action and/or doing what is right. This depends on listening to one's conscience, and the values there relate to family, cultural and religious backgrounds. In this respect the wise practice characteristics: locally responsive, and the freedom to exercise fundamental human rights are especially relevant.

While this particular workshop focused on conflict resolution and specific cases studies, the wider issue of how foreign aid could be used in an ethical manner for development purposes was a topic that surfaced on several occasions. The issue is immensely complex and also very case-specific.

For instance, the workshop participants had the opportunity to visit an abandoned aquaculture plant at Bairro Triunfo near Maputo. With the assistance of foreign aid, a shrimp aquaculture plant had been developed and run by the government. After five years, when the project funding was finished, the aquaculture plant was sold by tender to a private developer, who after running two shrimp production cycles, abandoned the enterprise, although he still owns the site. One possible reason for the failure of this project relates to the size of the plant, in that it was too large to be merely a pilot project and too small to be profitable for commercial shrimp production, even with good management. Now the site lies abandoned, and the funds, while not wasted since undoubtedly training and other activities were also included, might have been put to better use.

Other examples of what appeared to be ill-conceived projects were also discussed. However, the workshop participants were drawn in the main from universities, non-governmental and governmental organizations, and the private sector; the donor community was not represented.

The issue of aid dependency was also raised. In some countries there is too much reliance on aid, almost to the extent of reducing the need for the collection of national taxes. This may reduce any incentive to create productive activities and investments, and distort local markets. This loss of self-reliance is a very serious issue with many political implications. The dependency of funding on

national per capita income levels was also raised during the workshop. A proposal was put forward that there was a need for ethical codes of practice for donors, and for investors.

Ethical codes of practice

Ethical codes of practice concern behavioural principles, which incorporate a moral dimension for a specific group of people or a specific domain.

There are several models and forms: codes, standards, charters, principles, declarations, policies, and guidelines, among others. They are usually prepared by organizations (often non-governmental) when there is no law or no adequate national or international laws existing to guide people in making particular decisions. They articulate a set of values based on notions of achieving the highest possible good.

In preparing a code of ethics, the following factors need to be taken into consideration (UNESCO, 2002):

- Clarity: codes should avoid ambiguous statements open to wide interpretation.
- Effectiveness: the existence of the code should be well known; it will then stand a better chance of being considered and utilized.
- Enforcement: a code of ethics is not a law. However, there should be mechanisms in place to encourage people to follow the code. Sanctions appear to be the most effective.
- Re-enforcing action by the State: the State may wish to pass certain laws that support the main concerns of the code.
- Legal implications: enforcement of the code or the imposition of sanctions could lead to lawsuits. Options for settlements of disputes should be considered.
- Dissemination and education: this is vital in ensuring the efficacy of the code.



Codes of conduct in Sodwana Bay and St. Lucia, Maputaland, South Africa, 2001.



The preparation of a code of ethics for a particular domain or group of people is a very time consuming process, involving extensive consultation and deliberation often over a period of several years. Such codes of practice have been drawn up by and for specific groups, e.g. landscape architects (The International Federation of Landscape Architects Code of Ethics, 2000), dealers in cultural property (International Code of Ethics for Dealers in Cultural Property, 1999), and for specific domains, e.g. tourism (Global Code of Ethics for Tourism, 2000).

Preliminary concepts for an ethical code of practice for donors

The preliminary concepts for an ethical code of practice for donors proposed at this workshop were as follows:

- ▶ *Aid-recipient countries need to prepare and regularly update priorities for funding. These priorities should be based on a consensus developed together with civil society.*

The complaint is sometimes voiced that projects are imposed on countries by outside agencies and

as such do not necessarily respond to what a country perceives as its immediate and most pressing needs. This recommendation puts the onus firmly on aid-recipient countries to be proactive and to prepare their own list of areas where assistance is needed (some countries may require help in preparing such priority lists). This list should include short-, medium- and long-term needs and projects. Furthermore, such lists need to be updated regularly, at least annually. Developing such priority listings together with civil society will be difficult to implement, for even in those countries where funding priorities are prepared, civil society is not usually a part of the process. Particularly in newer democracies and mono-party states, any proposal by donors to have civil society participating in the determination of funding priorities may be viewed as interference in internal affairs.

► *National governments and the private sector (in both donor and recipient countries) need to collaborate together and with international institutions in the funding of projects.*

External assistance is not just at the level of governments and international institutions; the private sector has a very important role to play in both donor and recipient countries. However, there is often a lack of information exchange between the private sector and the donor community.

► *There needs to be direct communication between the donors and the benefiting communities.* Often the officials, who negotiate funding for a particular project, are not the direct recipients or even the persons executing the project. In order to ensure successful projects it is necessary to have all parties involved together in the negotiating process. The concern was voiced that in some cases, smaller NGOs cannot approach international organizations directly, but have to negotiate through their governments. The more separate stages involved in the negotiation, the more room for misinterpretation, and often the end-result is that the grassroots communities have no voice, nor choice. Furthermore, the donor needs to

know that the intended recipients have indeed benefited and not some other group.

► *There is a need for flexibility in project scheduling and spending regimes.*

Rigid project schedules, which allow no room for negotiated changes or unforeseen events, are one of the main reasons for failed projects. Flexibility in executing the project activities, which may include changes in the schedule of financial payments, is critical for a successful project.

► *Transparency throughout the entire process is essential, from the identification of priorities and the determination of project activities to financial auditing.*

The problems of bureaucracy and corruption exist throughout the world. The only way to try and reduce these problems, at all levels within the recipient and donor countries, is to provide for full and clear transparency in the entire process. Concise and open reporting can assist in the transparency process.

► *Project assessment and evaluation is critical.*

Assessment and evaluation should be mandatory for all projects, large and small. Assessment and evaluation should have the joint aim of examining the execution of the project activities and implementing future activities in an improved manner. Such assessments should include persons directly involved in the project together with knowledgeable outside persons. (Project assessment procedures are discussed in Chapter 4.)

► *Countries, especially small islands with limited national and institutional capacity, should feel free to chose to participate in those projects from which they will receive most benefit, without being penalized or risk being cut off from aid from a particular donor in the future.*

Many countries, small islands in particular, do not have the confidence to refuse or defer certain projects that they do not see as being in their immediate interest. The fear is that if they do this they will not be eligible for future assistance.

There may also be conflicts between political and technical levels of government regarding certain projects. The first concept discussed in this list – aid-recipient countries to prepare, in an open, consultative manner, a list of priorities for funding – may also help in solving such problems.

► *The substance of donor-funded projects should be determined prior to the actual funding negotiations.*

It is most important to start considering the content of an externally funded project, before the funding is negotiated. Again, the starting point should be a country's list of prioritized needs and projects. Projects have a limited time span, thus funding should be at an appropriate level, so that once the project finishes, the recipient country is able to continue at least some of the activities on its own.

Concluding comments


These ideas proposed for an ethical code of practice for donors are merely first thoughts put together by a group of experienced professionals working in the field of integrated coastal management. Extensive consultation with the aid-giving and aid-receiving groups over the coming months and years is needed in order to take these preliminary ideas further. For ultimately, if external aid is to provide for the common good of humanity, then ethical concepts must be considered.

6 Conclusions

‘Conflict management is a well-developed field ... However, to date it has been used very little in an area noted for conflicts and one in which there is a potential for the productive use of conflict management techniques – the management of natural resources in general and coastal resources in particular’.

Frank Rijsberman, 1999





With the rising numbers of people moving to coastal areas and increasing global population, conflicts over coastal resources and values will be on the increase in the years to come. Therefore, coastal managers and people involved in integrated coastal management need to become familiar with the established techniques for conflict resolution.

An examination of the case studies discussed in this publication shows that the tried and tested methods for conflict resolution have worked well in many instances. Identifying the nature and cause of the conflict is the first step, followed by bringing all the concerned parties (or their representatives) together in a consultative framework. Trying to reach agreement on the conflict and then implementing this agreement is the ultimate objective. However, it must be recognized that the agreement will be in the nature of a compromise for most, if not all the parties involved. In other words, everyone gets only a little part of what they want. These are the proven methods of conflict resolution and correspond to some of the previously identified characteristics of wise practices, namely participation, consensus building and an effective and efficient communication process. Another wise practice characteristic – locally responsive – is also important, since the successful resolution of any conflict requires that the local and cultural background is fully understood and taken into account.

However, another dimension also becomes clear and this relates to the prevention of future conflicts. Sometimes, even when a conflict is resolved, individuals and groups do not give up on their ideas easily, and they may still harbour feel-

ings that they were right. So, if another conflict comes up that deals with the same general subject, there is a possibility of being back at the starting point. Thus there is a need to not only resolve conflicts, but also 'to change attitudes so as to prevent future conflicts'.

As seen in the case studies in the earlier chapters, specific activities combined with education and awareness may be the best way to change attitudes and prevent future conflicts. Getting the fishers trained as wardens of the coral park at Chumbe Island was an effective way of reducing fishing disputes in the area of the coral park. Restoring a demonstration house in Mahdia was a way of involving the local population and helping them to understand and benefit from the advantages of architectural and cultural tourism. Assisting a local aquaculture farmer from the White Sea region in Russia in gaining his university diploma in aquaculture studies was a way of better equipping local stakeholders to deal with future conflicts relating to aquaculture farming. Such activities take time, often several years, but they are essential to change people's attitudes so that future situations do not reach the conflict stage.

Another factor that emerges from these case studies is the need to have a mechanism to resolve existing conflicts and prevent future ones. One suggestion has been that wise practice agreements might provide a 'place of encounter' or a mechanism where conflicts can be addressed and resolved. For instance in the case of fishers in the Saloum Delta in Senegal, the Local Vigilance Committee is the 'place of encounter' for resolving disputes. However, in the case of the four main stakeholder groups at ASSBY, there is as yet no 'place of encounter' and there is a need to build upon existing dialogue and initiatives, so that a mechanism, such as a wise practice agreement, evolves to resolve existing conflicts and prevent future ones.

The usefulness of having an outside party involved in conflict resolution has also been demonstrated. In most of the cases discussed here, this third party has been a university, which brings the added advantage of providing a wider vision of the conflict, impartiality, and professional expertise from many different disciplines.

While focusing on conflict resolution at the local level, national and international levels must also be included. The proposal to develop an ethical code of practice for donors is one such idea, which covers all levels – local, national and international, and seeks to ensure that recipient countries benefit from external aid to the maximum extent.

The foregoing discussion and analysis have shown that in order to move beyond conflict resolution to conflict prevention, there is a need to take a multi-faceted approach, incorporating all the tools of integrated coastal management, so as to begin the process of changing attitudes and managing change.

References

- Awosika, L. F. Dublin-Green, C. O., Folorunsho, R., Adekoya, E. A., Adekanmbi, M. A., Jim-Saiki, L. 2000. Study of the main drainage channels of Victoria and Ikoyi Islands in Lagos, Nigeria and their response to tidal and sea level changes. Nigerian Institute for Oceanography and Marine Research. 108 pp.
<http://www.unesco.org/csi/act/lagos/drains.htm>
- Cambers, G. 2001. Conflict resolution in small islands: voluntary contracts and ethical codes of practice. Results of the UNESCO-CSI workshop on 'Furthering Coastal Stewardship in Small Islands', Dominica, 3–6 July 2001. Paper presented at the workshop on 'Wise Practices for Coastal Conflict Prevention and Resolution', Maputo, Mozambique, 19–23 November, 2001.
<http://www.unesco.org/csi/pub/papers2/mapp2.htm>
- De Comarmond, A., Payet, R. 2001. Coastal conflict resolution in the Seychelles. Paper presented at the workshop on 'Wise Practices for Coastal Conflict Prevention and Resolution', Maputo, Mozambique, 19–23 November, 2001.
<http://www.unesco.org/csi/pub/papers2/mapp4.htm>
- International Federation of Landscape Architects Code of Ethics, 2000.
<http://www.ifla.net/>
- Joshi, V., Dube, H. C. 2001. Sustainable development of Alang Soshiya Ship-breaking Yard. Department of Life Sciences, Bhavnagar University, 138 pp.
- Kuijper, M. 2000. The future of the wise practices forum – an Asia-Pacific regional perspective.
<http://www.csiwisepactices.org/?read=285>
 (user name: csi; password: wise)
- Piriz, C., Couto, W. 2001. Integrated coastal zone management in Uruguay. Paper presented at the workshop on 'Wise Practices for Coastal Conflict Prevention and Resolution', Maputo, Mozambique, 19–23 November, 2001.
<http://www.unesco.org/csi/pub/papers2/mapp12.htm>
- Riedmiller, S. 2000. Private sector investment in marine conservation / Chumbe Island – Tanzania.
<http://www.csiwisepactices.org/?read=185>
 (user name: csi; password: wise)
- Rijsberman, F. 1999. Conflict management and consensus building for integrated coastal management in Latin America and the Caribbean. Inter-American Development Bank, 60 pp.
http://www.iadb.org/sds/publication/publication_1532_e.htm
- The Vanguard newspaper, Lagos, Nigeria, 26 June, 2000.
<http://www.unesco.org/csi/act/lagos/flood6.htm>
- UN, 1992. United Nations Conference on Environment and Development. Agenda 21.
<http://www.un.org/esa/sustdev/agenda21text.htm>
- UNESCO, 1999a. The role of communication and education for sustainable coastal development. Proceedings of a PACSICOM technical workshop (Pan-African Conference on Sustainable Integrated Coastal Management, Maputo, Mozambique, 18–25 July 1998). *CSI info 7*, UNESCO, Paris, vi + 81 pp.
<http://www.unesco.org/csi/pub/info/info7e.htm>
- UNESCO, 1999b. International code of ethics for dealers in cultural property.
http://www.unesco.org/culture/legalprotection/committee/html_eng/ethics1.shtml

- UNESCO, 2000a. Wise coastal practices for sustainable human development. Results of an intersectoral workshop, 30 November to 4 December 1998, and preliminary findings of a follow-up virtual forum. *CSI info* 10, UNESCO, Paris. viii + 126 pp.
<http://www.unesco.org/csi/pub/info/wise.htm>
- UNESCO, 2000b. Reducing megacity impacts on the coastal environment: Alternative livelihoods and waste management in Jakarta and the Seribu Islands. *Coastal region and small island papers* 6, UNESCO, Paris, 59 pp.
<http://www.unesco.org/csi/pub/papers/mega.htm>
- UNESCO, 2000c. Développement urbain durable en zone côtière. Actes du Séminaire International, Mahdia, Tunisie, June 1999. *CSI info* 8, UNESCO, Paris, 225 pp.
<http://www.unesco.org/most/dpmahdia1.pdf>
- UNESCO, 2000d. Interim report of the task force on UNESCO in the twenty-first century. 159 Ex/39, Paris, 19 May 2000, 46 pp.
<http://unesdoc.unesco.org/images/0011/001196/119699e.pdf>
- UNESCO, 2001a. Wise coastal practices: Towards sustainable small-island living. Results of a workshop on 'Wise coastal practices for sustainable human development in small island developing states', Apia, Samoa, 3–8 December 2000. *Coastal region and small island papers* 9, UNESCO, Paris, 120 pp.
<http://www.unesco.org/csi/pub/papers/samoa.htm>
- UNESCO, 2001b. Wise coastal practices for sustainable human development. Work in Progress 2. 72 pp.
<http://www.unesco.org/csi/wise/wip2.htm>
- UNESCO, 2002. Wise practices for conflict prevention and resolution in small islands. Results of a workshop on 'Furthering coastal stewardship in small islands', Dominica, 4–6 July 2001. *Coastal region and small island papers* 11, UNESCO, Paris, 70 pp.
<http://www.unesco.org/csi/pub/papers2/domr.htm>
- World Tourism Organization, 1999. Global Code of Ethics for Tourism.
http://www.world-tourism.org/frameset/frame_project_ethics.html

Annex I

CSI field projects, university chairs and networks

1. Projects

AFRICA-EAST/SOUTHERN

Development-conservation strategies for integrated coastal management, Maputaland, South Africa and Mozambique.

Project summary:

<http://www.unesco.org/csi/act/maputaland/summary23.htm>

Project assessment:

<http://www.unesco.org/csi/act/maputaland/assess4.htm>

AFRICA-NORTH/EASTERN MEDITERRANEAN

Sustainable living in small historic coastal cities, Essaouira, Morocco; [Kotor, Yugoslavia]; Mahdia, Tunisia; [Omisaalj, Croatia]; Saida, Lebanon.

Project summary:

<http://www.unesco.org/csi/act/dure/summary21.htm>
(English)

<http://www.unesco.org/csi/act/dure/resume21.htm>
(French)

AFRICA-WEST/CENTRAL

Sustaining human and environmental health in coastal communities and a biosphere reserve, Senegal.

Project summary:

http://www.unesco.org/csi/act/dakar/summary_19e.htm
(English)

http://www.unesco.org/csi/act/dakar/summary_19f.htm
(French)

Saloum assessment:

<http://www.unesco.org/csi/act/dakar/assess10e.htm>
(English)

<http://www.unesco.org/csi/act/dakar/assess10f.htm>
(French)

Yeumbeul assessment:

<http://www.unesco.org/csi/act/dakar/assess9e.htm>
(English)

<http://www.unesco.org/csi/act/dakar/assess9f.htm>
(French)

Yoff assessment:

<http://www.unesco.org/csi/act/dakar/assess8e.htm>
(English)

<http://www.unesco.org/csi/act/dakar/assess8f.htm>
(French)

Reducing the impact of flooding, Lagos, Nigeria.

Project summary:

<http://www.unesco.org/csi/act/lagos/summary22.htm>

Project assessment:

<http://www.unesco.org/csi/act/lagos/assess12.htm>

AMERICA-SOUTH/CENTRAL

Integrated coastal management, Rio de la Plata, Uruguay (ECOPLATA).

Project summary:

http://www.unesco.org/csi/act/plata/summary_17.htm
(English)

http://www.unesco.org/csi/act/plata/summary_17s.htm
(Spanish)

ASIA-SOUTH

Environmental, social and cultural implications of a ship-breaking industry, Alang Sosiya, Gujarat, India.

Project summary:

http://www.unesco.org/csi/act/india/summary_1.htm

Project assessment:

<http://www.unesco.org/csi/act/india/assess6.htm>

ASIA-SOUTHEAST

Reducing the impact of a coastal megacity on island ecosystems, Jakarta and the Seribu Islands, Indonesia.

Project summary:

http://www.unesco.org/csi/act/jakarta/summary_2.htm

Project assessment:

<http://www.unesco.org/csi/act/jakarta/assess13.htm>

Coastal resources management and ecotourism: an intersectoral approach to localizing sustainable development, Ulugan Bay, Palawan, Philippines.

Project summary:

http://www.unesco.org/csi/act/ulugan/summary_3.htm

A place for indigenous people in protected areas, Surin Islands, Andaman Sea, Thailand.

Project summary:

http://www.unesco.org/csi/act/thailand/summary_4.htm

Project assessment:

<http://www.unesco.org/csi/act/thailand/assess7.htm>

CARIBBEAN (SMALL) ISLANDS

Managing beach resources and planning for coastline change, Caribbean islands.

Project summary:

http://www.unesco.org/csi/act/cosalc/summary_7.htm

Caribbean Coastal Marine Productivity Program (CARICOMP): Sustaining coastal biodiversity benefits and ecosystem services.

Project summary:

<http://www.unesco.org/csi/act/caricomp/summary14.htm>

Enhancing coastal and fisheries resource management through stakeholder participation, local knowledge and environmental education, Arcadins coast, Haiti.

Project summary:

<http://www.unesco.org/csi/act/haiti/summary11.htm>

(English)

<http://www.unesco.org/csi/act/haiti/summary11f.htm>

(French)

Sustainable livelihoods for artisanal fishers through stakeholder co-management in the Portland Bight Protected Area, Jamaica.

Project summary:

<http://www.unesco.org/csi/act/jamaica/summary13.htm>

Project assessment:

<http://www.unesco.org/csi/act/jamaica/assess5.htm>

Socio-economic and environmental evaluation and management of the south coast of Havana Province, Cuba.

Project summary:

<http://www.unesco.org/csi/act/cuba/summary12.htm>

Project assessment:

<http://www.unesco.org/csi/act/cuba/assess2.htm>

(English)

<http://www.unesco.org/csi/act/cuba/assess2s.htm>

(Spanish)

EUROPE

Sustainable living in small historic coastal cities, [Essaouira, Morocco]; Kotor, Yugoslavia; [Mahdia, Tunisia]; Omisalj, Croatia; [Saida, Lebanon].

Project summary:

<http://www.unesco.org/csi/act/dure/summary21.htm>

(English)

<http://www.unesco.org/csi/act/dure/resume21.htm>

(French)

Municipal environmental management and public participation, north Kurzeme coastal region, Latvia.

Project summary:

http://www.unesco.org/csi/act/latvia/summary_18.htm

Sustainable coastal development in the White Sea/Barents Sea region, northern Russia.

Project summary:

http://www.unesco.org/csi/act/russia/summary_8.htm

Project assessment:

<http://www.unesco.org/csi/act/russia/assess14.htm>

PACIFIC (SMALL) ISLANDS

Sound development in the Motu Koitabu urban villages, Port Moresby, Papua New Guinea.

Project summary:

http://www.unesco.org/csi/act/png/summary_5.htm

Project assessment:

<http://www.unesco.org/csi/act/png/assess3.htm>

Promotion of indigenous wise practices: medicinal knowledge and freshwater fish, Moripi Cultural Area, Gulf Province; food security, Trobriand Islands, Milne Bay Province, Papua New Guinea.

Project summary:

<http://www.unesco.org/csi/act/png2/summary15.htm>

Education for sustainable village living, Saanapu and Sataoa villages, Upolu Island, Samoa.

Project summary:

http://www.unesco.org/csi/act/saanapu/summary_6.htm

SMALL ISLANDS VOICE

Cook Islands, Pacific Ocean.

Palau, Pacific Ocean.

St. Kitts and Nevis, Caribbean Sea.

Seychelles, Indian Ocean.

Project website: <http://www.smallislandsvoice.org>

2. UNESCO chairs in sustainable coastal development, established at:

Université Cheikh Anta Diop, Dakar, Senegal.

Chair summary:

http://www.unesco.org/csi/act/dakar/summary_20e.htm
(English)

http://www.unesco.org/csi/act/dakar/summary_20f.htm
(French)

Chair assessment:

<http://www.unesco.org/csi/act/dakar/assess11e.htm>
(English)

<http://www.unesco.org/csi/act/dakar/assess11f.htm>
(French)

University of the Philippines, Quezon City, Philippines.

Chair summary:

<http://www.unesco.org/csi/act/ulugan/summary10.htm>

University of Latvia, Riga, Latvia.

Chair summary:

<http://www.unesco.org/csi/act/latvia/latvia-chair.htm>

Universidade Eduardo Mondlane, Maputo, Mozambique (Chair in Marine Sciences and Oceanography established by the Intergovernmental Oceanographic Commission of UNESCO).

Chair summary:

<http://www.unesco.org/csi/act/maputaland/summary24.htm>

3. University networks fostering wise coastal practices for sustainable human development

ASIA-PACIFIC

University of Bhavnagar, Bhavnagar, Gujarat, India.

University of Chulalongkorn, Bangkok, Thailand.

University of Papua New Guinea, Port Moresby, Papua New Guinea.

University of the Philippines, Quezon City, Philippines (co-ordinating).

National University of Samoa, Apia, Samoa.

EUROPE

University of Aveiro, Aveiro, Portugal.

University of Bologna, Bologna, Italy.

University of Cádiz, Cádiz, Spain.

University of Latvia, Riga, Latvia.

Russian State Hydrometeorological University, St. Petersburg, Russia.

Annex II Workshop programme

Monday 19 November 2001

09:00 **Opening ceremony**

Welcome remarks – Mr Antonio Hogueane

Workshop goals and objectives – Mr Dirk Troost

Remarks – Mr Janeario Mutaquia, Secretary-General,
Mozambique National Commission for UNESCO

Remarks – Mr Venancio Massingue, Vice-Chancellor,
Eduardo Mondlane University, Maputo, Mozambique

Feature address – Hon. Mr Francisco Mabjaia,
Deputy Minister of Environmental Affairs, Mozambique

Introductory session

09:30 The UNESCO platform for Environment and Development in Coastal Regions
and in Small Islands – Mr Dirk Troost

09:45 *Discussion*

10:00 *Coffee break*

10:30 Conflict resolution in small islands: voluntary contracts and ethical codes of practice.
Results of the UNESCO-CSI workshop on 'Furthering Coastal Stewardship in Small
Islands', Dominica, 3–6 July 2001 – Ms Gillian Cambers

10:45 *Discussion*

11:00 Coastal problems in a microcosm: the small island experience – Mr Alain De Comarmond

11:15 *Discussion*

Conflict resolution in cities and industrial areas

11:30 Flood mitigation in Lagos, Nigeria, through the wise management of solid waste:
the case of Ikoyi and Victoria Islands – Ms Regina Folorunsho

11:45 *Discussion*

12:00 Reducing megacity impacts on coastal ecosystems: community-based waste
management in the Jakarta Metropolitan Area, Indonesia – Ms Sri Bebasari

12:15 *Discussion*

12:30 *Lunch*

13:30 Natural resource management conflicts in the Saloum Delta Biosphere Reserve
– Mr Alioune Kane and Mr Mamadou Kandji

13:45 *Discussion*

- 14:00 Integrated coastal zone management in Uruguay – Ms Adriana Jorajuria
14:15 *Discussion*
- 14:30 Wise practices for conflict resolution between villagers and migrant workers:
economic co-operation and social segregation, Alang Sosiya Ship-breaking Yard
– Ms Sumanben Chaudhary
14:45 *Discussion*
- 15:00 The latent role of research in conflict management at the Alang Sosiya
Ship-Breaking Yard – Mr Vidyut Joshi
15:15 *Discussion*
- 15:30 *Coffee break*
- 15:45 Two examples of conflict-related initiatives in the Adriatic-Balkan area
– Mr Philippe MacClenahan
16:00 *Discussion*
- 16:15 Natural and cultural heritage in Mahdia, Tunisia – Mr Ridha Boussoffara
16:30 *Discussion*
- 16:45 *Free time*
- 18:30 Informal evening presentations on project sites: videos, slides, overheads, picture displays

Tuesday 20 November 2001

Conflict resolution in rural areas

- 09:00 A contribution to integrated coastal management in Maputaland – Mr Mark Jury
09:15 *Discussion*
- 09:30 Promoting the development of industrial crops in Maputaland through capacity building
– Mr Gian Paolo Vannozzi and Mr Mario Baldini
09:45 *Discussion*
- 10:00 Private sector management of marine protected areas: The Chumbe Island Coral Park
Project in Zanzibar/Tanzania – Ms Sibylle Riedmiller
10:15 *Discussion*
- 10:30 *Coffee break*
- 11:30 Wise practices for coastal conflict resolution: north Kurzeme, Baltic Sea coastal region
– Ms Alanda Pulina
11:45 *Discussion*
- 12:00 Coastal conflict resolution in the White Sea/Barents Sea: case study on aquaculture
– Mr Mikhail Shilin
12:15 *Discussion*
- 12:30 *Lunch*

Wise practices for conflict resolution: Defining the wise practices

- 13:30 Small group discussion sessions
- 15:00 Presentation of results of small group discussion sessions
- 15:30 *Coffee break*

Panel discussion: Capacity building through UNESCO chairs

- 15:45 Panellists: Mr Antonio Hogueane, UNESCO Chair at the Eduardo Mondlane University, Maputo, Mozambique
Mr Aliouane Kane, Mr Mamadou Kandji, UNESCO Chair at Université Cheikh Anta Diop, Dakar, Senegal
Mr Dirk Troost, WiCoP University Twinning Network
- 16:25 *Discussion*
- 17:00 Field trip background and overview – Mr Antonio Hogueane

Wednesday 21 November 2001

Field trip: to observe and assess local conflict situations at the Bairro Triunfo mangrove swamp, Costa do Sol fishing village; the lower Incomati River and Macaneta Beach.

Thursday 22 November 2001 – Open day

- 09:00 Informal opening – Mr Antonio Hogueane, Mr Dirk Troost
- 09:15 Introduction to the Environment and Development in Coastal Regions and in Small Islands intersectoral platform of UNESCO – Mr Dirk Troost
- 09:30 *Discussion*
- 09:45 Brief introduction of workshop participants
- 10:00 *Coffee break*
- 10:30 The experience of co-management in artisanal fisheries in Mozambique – Mr Rui Falcão
- 10:45 *Discussion*
- 11:00 Incomati River health – a shared multidisciplinary research initiative
– Mr Francisco Tauacale
- 11:15 *Discussion*
- 11:30 The role of the Zambezi River in shrimp productivity in Sofala Bank
– Mr Antonio Hogueane
- 11:45 *Discussion*
- 12:00 *Lunch*

- 13:30 Water masses and circulation of Maputo Bay – Ms Veronica Dove
13:45 *Discussion*
- 14:00 The ecoregional approach: World Wildlife Fund East Africa marine ecoregion
– Ms Helena Motta
14:15 *Discussion*
- 14:30 SEACAM's (Secretariat for Eastern African Coastal Area Management) contribution to
conflict prevention in coastal areas – Mr Jorge Banze
14:45 *Discussion*
- 15:00 Closing remarks
- 1530 *Coffee break*

Friday 23 November 2001

Panel discussion: Exploring the potential of the 'Wise coastal practices for sustainable human development' (WiCoP) forum

- 09:00 The WiCoP forum: achievements to date – Mr Dirk Troost
Interaction between the forum and individual projects – Ms Sibylle Riedmiller
The way ahead for the WiCoP forum – Ms Gillian Cambers
09:30 *Discussion*
- 10:00 *Coffee break*

Wise practices for conflict resolution: Translating the wise practices into action on the ground and vice-versa

- 10:30 Small group discussion sessions
- 12:00 Presentation of the results of the small group discussion sessions
- 12:30 *Lunch*

Project assessment and advancement

- 13:30 Procedures for project assessment – Ms Gillian Cambers
13:45 *Discussion*
- 14:00 Small group sessions on project assessment
- 15:00 Presentation of the results of the small group discussion sessions
- 15:30 *Coffee break*
- 16:00 Charting the way forward
Closing remarks

Annex III

List of workshop participants

Mr BALDINI, Mario

University of Udine,
Dipartimento di Produzione Vegetale
e Tecnologia Agraria,
via delle Scienze, 208,
33100 Udine, ITALY.
tel: +39 043 255 8601
fax: +39 043 255 8603
e-mail: baldini@palantir.dpvta.uniud.it

Ms BEBASSARI, Sri

BPPT (Indonesian Research Agency for
Assessment and Application of Technology),
Jl. M.H. Thamrin No. 8,
Jakarta 10340, INDONESIA.
tel: +62 21 316 9762 / 9779
fax: +62 21 316 9760
+62 21 323 935
e-mail: bebassari@email.com
sbebassari@yahoo.com

Mr BOUSSOFFARA, Ridha

Musée régional de Mahdia,
Place 7 Novembre,
5100 Mahdia, TUNISIA.
tel/fax: +216 73 692 752
+216 940 08517 (mobile)
e-mail: ridha57@yahoo.fr

Ms CAMBERS, Gillian

Sea Grant College Program,
University of Puerto Rico,
PO Box 9011,
Mayaguez, PUERTO RICO 00681.
tel: +1 787 832 3585 (work)
+1 787 823 1756 (home)
fax: +1 787 265 2880 (work)
+1 787 823 1774 (home)
e-mail: g_cambers@hotmail.com

Ms CHAUDHARY, Sumanben

Sociology Department,
Bhavnagar University,
Bhavnagar 364 002,
Gujarat, INDIA.
tel: +91 278 519 820
fax: +91 278 426 706
e-mail: hcdube@hotmail.com
hcd@bhavnagar.com

Mr De COMARMOND, Alain

Ministry of Environment, Policy, Planning
and Services Division,
Botanical Gardens,
Mont Fleuri,
Mahe, SEYCHELLES.
tel: +248 224 644
+248 225 672
fax: +248 322 945
e-mail: alaindeco@hotmail.com
a.deco@pps.gove.sc

Ms DOVE, Veronica Fernando

Fisheries Research Institute,
PO Box 4603,
Maputo, MOZAMBIQUE.
tel: +258 1 490 536
+258 82 471 962 (mobile)
fax: +258 1 492 112
e-mail: africa@hotmail.com
niea@iip.co.mz

Ms FOLORUNSHO, Regina

Nigerian Institute for Oceanography
and Marine Research,
PMB 12729,
Victoria Island,
Lagos, NIGERIA.
tel/fax: +234 1 261 9517
e-mail: rolorunsho@yahoo.com
niomr@linkserve.com.ng

Mr HOGUANE, Antonio

Faculty of Sciences,
Eduardo Mondlane University,
University Main Campus,
PO Box 257,
Maputo, MOZAMBIQUE.
tel: +258 1 493 102 (work)
+258 1 455 625 (home)
+258 82 315 286 (mobile)
fax: +258 1 493 049
e-mail: hoguane@hotmail.com
gtamb@zebra.uem.mz

Ms JORAJURIA, Adriana

ECOPLATA,
Avda. Brasil 2653-55
11300 Montevideo, URUGUAY
tel: +598 2 709 2550
fax: +598 2 709 6176
e-mail: ecoplata@adinet.com.uy
joca@fcien.edu.uy

Mr JOSHI, Vidyut

Centre for Social Studies,
South Gujarat University,
Udhna Magdalla Road,
Surat, INDIA.
tel: +91 2613 227 173/ 74 (work)
+91 2613 223 998 (home)
+91 982 506 4748 (mobile)
fax: +91 2613 223 851
e-mail: vidyutjoshi@rediffmail.com
css_surat@satyam.net.in
social@bom6.vsnl.net.in

Mr KANDJI, Mamadou

Faculté des Lettres et Science Humaines,
Université Cheikh Anta Diop,
BP 5005,
Dakar, SENEGAL.
tel: +221 825 29 60
e-mail: mkandji@ucad.sn
mamdoukandji@yahoo.fr

Mr KANE, Alioune

Département de Géographie,
Faculté des Lettres et Sciences Humaines,
Université Cheikh Anta Diop,
BP 5005,
Dakar, SENEGAL.
tel: +221 864 01 04
e-mail: akane@ucad.sn

Mr JURY, Mark

Dept. of Geography and Environmental Studies
and Dept. of Agriculture,
University of Zululand,
SOUTH AFRICA.
tel: +27 35 902 6326
e-mail: mjury@pan.uzulu.ac.za

Mr MacCLENAHAN, Philippe

11, rue Emmanuel Barthélémy,
13600 La Ciotat, FRANCE.
tel/fax: +33 4 4271 7620 (home)
+33 666 254 471 (mobile)
e-mail: pmacclenahan@libertysurf.fr

Ms MAKULUBE, Clara

SEACAM
(Secretariat for Eastern African
Coastal Area Management),
874, Av. Amilcar Cabral,
CP 4220,
Maputo, MOZAMBIQUE.
tel: +258 1 300 641/2 (home)
+258 82 451 201 (mobile)
fax: +258 1 300 638
e-mail: seacam@virconn.com
cnmakulube@yahoo.co.uk

Mr NHACA, Paolo

IDPPE (Institute for Development of
Small Scale Fishers),
Ave. Marginal,
Parcela 141/8, Costo Do Sol,
Caixa Postal 2473,
Maputo, MOZAMBIQUE.

Mr NTIM, Ben

UNESCO Pretoria Office,
PO Box 11667,
Tramshed 0126,
Pretoria, SOUTH AFRICA.
tel: +27 12 338 5183
+27 82 475 7086 (mobile)
fax: +27 12 338 5342
e-mail: bntim@un.org.za

Ms PULINA (Poulia), Alanda

Department of Slitere Coastal National Park,
Dakterlejas 3,
Dundaga, LV 3270, LATVIA.
tel: +371 32 32 81066
fax: +371 32 32 81067
e-mail: alanda@dundaga.lv

Ms RIEDMILLER, Sibylle

Chumbe Island Coral Park Ltd.,
PO Box 3203,
Zanzibar, TANZANIA.
tel/fax: +255 24 223 1040
+255 27 264 3557 (direct)
e-mail: sibylle@twiga.com

Mr SANKEY, Trevor

UNESCO Nairobi Office,
UNON Complex, Gigiri,
PO Box 30592,
Nairobi, KENYA.
tel: +254 2 622 364
fax: +254 2 622 750
e-mail: trevor.sankey@unesco.unon.org

Mr SHILIN, Mikhail

Russian State Hydrometeorological University,
98, Malookhtinsky Avenue,
195198 St. Petersburg, RUSSIA.
tel: +7 812 444 4163
fax: +7 812 444 6090
e-mail: shilin@rshu.ru
shilin@MS1639.spb.edu
SHILIN@SICI.RU

Mr TAUACALE, Francisco

Department of Geography,
Eduardo Mondlane University,
PO Box 257,
Maputo, MOZAMBIQUE.
tel: +258 82 322 644 (mobile)
fax: +258 1 490 890
e-mail: Guale@nambu.uem.mz

Mr TROOST, Dirk

Coastal Regions and Small Islands,
UNESCO-CSI,
1 rue Miollis,
75732 Paris Cedex 15, FRANCE.
tel: +33 1 4568 3971
fax: +33 1 4568 5808
e-mail: d.troost@unesco.org

Mr VANNOZZI, Gian Paolo

University of Udine,
Dipartimento di Produzione Vegetale
e Tecnologia Agraria,
via delle Scienze, 208,
33100, Udine, ITALY.
tel: +39 043 255 8620
fax: +39 043 255 8603
e-mail: vannozzi@hydrus.cc.uniud.it

**Participants at the Open Day
22 November 2001****Mr BANSE, Jorge**

SEACAM (Secretariat for Eastern African
Coastal Area Management),
874, Av. Amilcar Cabral,
CP 4220, Maputo, MOZAMBIQUE.
tel: +258 1 300 641/2
fax: +258 1 300 638
e-mail: seacam@virconn.com

Mr FALCAO, Riu M. M.

Department of Social Development,
IDPPE (Institute for Development of
Small Scale Fishers),
Av. Marginal Parcela 141/8,
Caixa Postal No. 2473,
Maputo, MOZAMBIQUE.
tel: +258 1 490 604 / 490 807 / 494 977
fax: +258 1 498 812
e-mail: rui@idppe.co.za

Mr JOHNSTON, Gareth

Department of Social Development,
IDPPE (Institute for Development of
Small Scale Fishers),
Av. Marginal Parcela 141/8,
Caixa Postal No. 2473,
Maputo, MOZAMBIQUE.
tel: +258 1 490 604 / 490 807 / 494 977
fax: +258 1 498 812
e-mail: johnston@idppe.co.za

Ms LOUREIRO, Narcisa
 Fisheries Research Institute,
 PO Box 4603,
 Maputo, MOZAMBIQUE.
tel: +258 1 490 536
e-mail: naricisa@iip.co.mz

Ms MOTTA, Helena
 Co-ordinator,
 WWF,
 Rua Reinaldo Ferreira, no 72,
 PO Box 4560,
 Maputo, MOZAMBIQUE.
tel: +258 1 301 186
fax: +258 1 312 430
e-mail: hmotta@wwf.org.mz

Mr SOUSA, Manuel
 Grupo de Trabalho Ambiental – GTA
 (Environmental Working Group),
 Av. Tomas Nduda,
 PO Box 2775,
 Maputo, MOZAMBIQUE.
tel: +258 1 493 102
fax: +258 1 493 049
e-mail: manuel_abel_sousa@hotmail.com

Mr VOABIL, Custodio C.
 Co-ordinator,
 SEACAM (Secretariat for Eastern African
 Coastal Area Management),
 874, Av. Amilcar Cabral,
 CP 4220, Maputo, MOZAMBIQUE.
tel: +258 1 300 641/2
fax: +258 1 300 638
e-mail: ccvoabil@virconn.com
 seacam@virconn.com
website: www.seacam.mz

Administrative staff

Ms GRACA CUAMBA, Patricia
 Secretary,
 Faculty of Sciences,
 Eduardo Mondlane University,
 University Main Campus,
 PO Box 257,
 Maputo, MOZAMBIQUE.
tel: +258 82 398 342 (mobile)
fax: +258 1 493 049

Ms MARKS, Bronwen
 Coastal Regions and Small Islands,
 UNESCO-CSI,
 1 rue Miollis,
 75732 Paris Cedex 15, FRANCE.
tel: +33 1 4568 4015
fax: +33 1 4568 5808
e-mail: b.marks@unesco.org

Mr SANTOS, Bibiano
 Officer-in-charge,
 UNESCO Maputo Office,
 515 Av. Frederick Engels,
 PO Box 1397,
 Maputo, MOZAMBIQUE.
tel: +258 1 493 434 / 494 503 / 494 450
fax: +258 1 493 431
e-mail: b.santos@unesco.org

Ms DA SILVA, Ofélia
 Assistant of the Representative,
 UNESCO Maputo Office,
 515 Av. Frederick Engels,
 PO Box 1397,
 Maputo, MOZAMBIQUE.
tel: +258 1 493 434 / 494 503 / 494 450
fax: +258 1 493 431
e-mail: o.da-silva@unesco.org

Annex IV List of workshop papers

(Available at <http://www.unesco.org/csi/pub/papers2/mapp.htm>)

A) LIST OF PAPERS BY AUTHOR

- Boussoffara, R. 2001. Natural and cultural heritage in Mahdia, Tunisia.
- Cambers, G. 2001. Conflict resolution in small islands: voluntary contracts and ethical codes of practice. Results of the UNESCO-CSI workshop on 'Furthering Coastal Stewardship in Small Islands', Dominica, 3–6 July 2001.
- Chaudhary, S. 2001. Wise practices for conflict resolution between villagers and migrant workers: economic co-operation and social segregation, Alang Sosiya Ship-Breaking Yard.
- De Comarmond, A. and Payet, R. 2001. Coastal problems in a microcosm: the small-island experience.
- Fazi, S., Wirjoatmodjo, N., Bebasari, S., and Selvaratnam, S. 2001. Reducing mega-city impacts on coastal ecosystems: community-based waste management in the Jakarta Metropolitan Area, Indonesia.
- Folorunsho, R., and Awosika, L. 2001. Flood mitigation in Lagos, Nigeria, through the wise management of solid waste: the case of Ikoyi and Victoria Islands.
- Hoguane, A. 2001. Wise practices for conflict resolution through UNESCO chair activities: the UNESCO Chair in Marine Sciences and Oceanography.
- Joshi, V. 2001. The latent role of research in conflict management at the Alang Sosiya Ship-Breaking Yard.
- Jury, M., Govender, Y., and Mthembu, A. 2001. A contribution to integrated coastal management in Maputaland.
- Kane, A., and Fall, M. 2001. Natural resource management conflicts in the Saloum Delta Biosphere Reserve.
- MacClenahan, P. 2001. Two examples of conflict related initiatives in the Adriatic-Balkan area.

- Piriz, C., and Couto, W. 2001. Integrated coastal zone management in Uruguay.
- Pulina, A., and Ernsteins, R. 2001. Wise practices for coastal conflict resolution: north Kurzeme-Baltic Sea Coastal Region, Latvia.
- Riedmiller, S. 2001. Private sector management of marine protected areas: the Chumbe Island Coral Park project in Zanzibar/Tanzania.
- Shilin, M. 2001. Coastal conflict resolution in the White Sea/Barents Sea: case study on aquaculture.
- Troost, D. 2001. The UNESCO platform for Environment and Development in Coastal Regions and in Small Islands.
- Vannozzi, G., and Baldini, M. 2001. Promoting the development of industrial crops in Maputaland through capacity building

B) LIST OF PAPERS BY GEOGRAPHICAL REGION

AFRICA-EAST/SOUTHERN

- Hoguane, A. 2001. Wise practices for conflict resolution through UNESCO chair activities: the UNESCO Chair in Marine Sciences and Oceanography.
- Jury, M., Govender, Y., and Mthembu, A. 2001. A contribution to integrated coastal management in Maputaland.
- Riedmiller, S. 2001. Private sector management of marine protected areas: the Chumbe Island Coral Park project in Zanzibar/Tanzania.
- Vannozzi, G., and Baldini, M. 2001. Promoting the development of industrial crops in Maputaland through capacity building.

AFRICA-NORTH/EASTERN MEDITERRANEAN

Boussoffara, R. 2001. Natural and cultural heritage in Mahdia, Tunisia.

MacClenahan, P. 2001. Two examples of conflict related initiatives in the Adriatic-Balkan area.

AFRICA-WEST/CENTRAL

Folorunsho, R., and Awosika, L. 2001. Flood mitigation in Lagos, Nigeria, through the wise management of solid waste: the case of Ikoyi and Victoria Islands.

Kane, A., and Fall, M. 2001. Natural resource management conflicts in the Saloum Delta Biosphere Reserve.

AMERICA-SOUTH/CENTRAL

Piriz, C., and Couto, W. 2001. Integrated coastal zone management in Uruguay.

ASIA-SOUTH

Chaudhary, S. 2001. Wise practices for conflict resolution between villagers and migrant workers: economic co-operation and social segregation, Alang Sosiya Ship-Breaking Yard.

Joshi, V. 2001. The latent role of research in conflict management at the Alang Sosiya Ship-Breaking Yard.

ASIA-SOUTHEAST

Fazi, S., Wirjoatmodjo, N. Bebasari, S., and Selvaratnam, S. 2001. Reducing megacity impacts on coastal ecosystems: community-based waste management in the Jakarta Metropolitan Area, Indonesia.

EUROPE

Pulina, A., and Ernsteins, R. 2001. Wise practices for coastal conflict resolution: north Kurzeme-Baltic Sea Coastal Region, Latvia.

Shilin, M. 2001. Coastal conflict resolution in the White Sea/Barents Sea: case study on aquaculture.

INDIAN OCEAN

De Comarmond, A., and Payet, R. 2001. Coastal problems in a microcosm: the small-island experience.

WORLDWIDE

Cambers, G. 2001. Conflict resolution in small islands: voluntary contracts and ethical codes of practice. Results of the UNESCO-CSI workshop on 'Furthering Coastal Stewardship in Small Islands', Dominica, 3–6 July 2001.

Troost, D. 2001. The UNESCO platform for Environment and Development in Coastal Regions and in Small Islands.

Annex V

Project assessment guidelines

Background

Assessments are conducted to advance field projects and university chairs, not to rate them. Those involved in assessments are expected to adopt an open mind when considering the various activities, and to look for the positive wherever possible, rather than adopting too rigorous an approach.

Guidelines

1. Purpose of the assessment

(i) To advance the field project/university chair, by reviewing the actions already undertaken and planning future activities; (ii) fostering exchanges between different projects and chairs; and (iii) disseminating information about the project/chair through the CSI website.

2. Composition of the assessment team

Assessments should be done by a team including at least one qualified person from outside the project who has never been directly involved with the project or its implementation. The team should always include the field project leader(s) and other key people as appropriate. An ideal team size would be four people. Wherever possible a person from a complementary field project or UNESCO university chair should be part of the team.

3. Team leader

The external team member takes the lead in conducting the assessment, preparing the first draft of the assessment report, circulating the report to other team members, incorporating the comments into further drafts, and preparing the final report.

4. Site visit

Assessments must include visits to the project area by the entire project team and usually lasting two

to four days. The purpose of the site visit is to talk to as many people involved or peripheral to the project as possible, to view activities in progress or completed, and in general to gain an on-the-ground sense of the project.

5. Site visit programme

The site visit should be carefully planned in advance with the field project leader taking the lead, and with the full involvement and agreement of the assessment team members.

6. Documentation

Copies of all relevant project documents, including drafts, and audio-visual material should be made available to the assessment team at least one month in advance of the site visit, so that they have adequate time to review the documentation before the site visit. The project summary has proved to be very useful in assessments.

7. Criteria for assessments

The seventeen wise practice characteristics (Chapter 4) are the main criteria. Other criteria may also be used where appropriate, as long as they are defined during the preparations for the assessment.

8. Preparation of the assessment report

During or towards the end of the site visit, the assessment team, led by the team leader, discusses the project activities¹ in light of the wise practice characteristics. A categorization for each characteristic (slightly, partially, fully)² is determined, and observations and comments are noted (the observations and comments being

¹ Only those project activities undertaken to date are the subject of this discussion, not those planned for the future.

² For more advanced projects, a numerical scale may also be used, none = 0, slightly = 1–3, partially = 4–6, fully = 7–9)

more important than the categorization). At the end of this exercise a short synthesis of the key issues (maximum five) emerging from the assessment is discussed. Future activities are then designed to address these key issues. All or some of the future activities become the nucleus of the terms of reference for a future CSI contract, which should always include revision of the project/university chair summary, and the preparation of at least one contribution to the WiCoP forum. The assessment team leader produces the first draft of the assessment report, either during the field visit or on return to his/her home office. This is then circulated to other team members by e-mail for comments. The process works most efficiently if comments are requested by a certain date. It may take several drafts before all the outstanding points are agreed.

9. Finalization of the assessments

The completed assessment is posted on the CSI website and the field project summary is then revised.

10. Frequency of assessments

Projects should ideally be assessed every two to three years.

11. Time commitment

It may take six months to complete an assessment, from the initial planning stage to the posting of the finished assessment text on the website.

Annex VI Subject index

- A**genda 17, 18
 Agriculture 23, 26, 27, 28, 31, 32, 46, 72, 79
 Aquaculture 10, 28, 31, 37, 39, 40, 57, 63, 72, 79, 80
 Archaeological sites 34
 Architectural heritage 26, 29, 34, 44, 45
 Assessment 10, 18, 19, 20, 37, 51, 52, 53-54, 59, 81-82
- B**arrier islands 24
 Beach resources 19, 69
 Biodiversity 32, 33, 57, 69
- C**apacity building 17, 46, 49, 51, 53, 72, 73
 Cash crops 32, 46
 Coastal erosion 24, 28, 29, 30, 31, 43
 Coastal protection measures 29, 30
 Coastal stewardship 19, 41, 57
 Communication 10, 27, 38, 44, 48, 49, 50, 51, 52, 53, 59, 63, 66
 Communism 29, 31
 Community environmental committees 46-47
 Composting 47
 Conflict prevention 10, 11, 17, 19, 20, 23, 37, 38, 49, 63-64, 74
 Conflict resolution 10, 11, 17, 19, 20, 23, 36-49, 52, 53, 57, 63-64, 66, 71, 72, 74, 79
 Conflicts 10, 16, 17, 20, 23-35, 37, 44, 48, 49, 52, 53, 56, 62, 72, 73, 79, 80
 Consensus building 10, 23, 37, 40, 41, 45, 49, 51, 52, 58, 63, 66
 Conservation 31, 32, 33, 35, 46, 57, 66, 68
 areas 34, 38
 Coral reefs 24, 32, 33, 38
 bleaching 39
 CSI 17, 19, 23, 53, 67, 68, 79, 80
 workshops 10, 17-19, 41-42, 51, 57
 Cultural heritage 34, 58, 66, 72, 79, 80
- D**emocracy 29
 Demonstration house 45, 63
 Developers 23, 27, 30, 57
 Diseases 24
- Diving 31, 52
 Drainage channels 24, 25, 28, 48, 66
 Dunes 30, 35
- E**conomic incentives 45, 47
 Ecotourism 31, 32, 33, 39, 46, 69
 Emigration 26
 Employment 32
 Endemism 32
 Enforcement 10, 33, 39, 41, 42, 45, 58
 Environmental awards 39, 52
 Environmental awareness 32, 39, 45, 46, 48, 49, 63
 Environmental damage 27
 Environmental education 33, 38, 39, 40, 43, 44, 47, 49, 58, 63, 69
 Ethics 57
 Ethical codes of practice 11, 19, 20, 56, 58-60, 64, 66, 71, 79, 80
 Eutrophication 31
 Extractive industries 10, 32, 34, 35, 46
- F**ield projects 17, 19, 23, 51, 53, 54, 68-70, 81, 82
 Finno-Ugric tribe 29
 Fishers 10, 23, 24, 28, 29, 30, 31, 32, 33, 38, 39, 43, 44, 47, 52, 63, 69
 safety 38
 Fishing 24, 28, 29, 30, 31, 32, 33, 34, 38, 69, 73
 artisanal 29, 33, 34, 38
 association 29
 commercial 33, 34
 gear 33, 34
 over-fishing 31, 32
 Flooding 24, 25, 28, 48, 71, 79, 80
 Foreign aid 10, 26, 35, 57, 58-60
 dependency 26, 57
 Forestry 29, 31, 33, 39
- H**istoric cities 23, 26, 45, 68, 69
 Human rights 52, 57
 Human safety 27, 29, 38, 41

- Immigration** 26
Industrial development 26, 27, 28, 41
Industry 27, 28, 31, 35, 41, 46
Integrated coastal management 10, 17, 20, 22, 36, 37, 40, 43, 52, 62, 63, 64, 66, 68, 72, 79, 80
- Land ownership** 29, 30, 31, 43, 45
Legislation 39, 41, 44, 45, 58
Literacy 27, 52
Living conditions 28
Livs 29
Lubombo Spatial Development Initiative 32
- Marine park** 23, 32, 38, 39, 63
Market economy 26
Media 48, 53
Migrant workers 27, 28, 41, 79, 80
Migration 25, 26, 28, 29, 35, 43, 44
Monoculture 32, 46
- Oil and gas exploration** 31
- Participatory processes** 10, 36, 37, 39, 40, 41, 42, 49, 51, 52, 53, 63
Planning 26, 27, 29, 39, 40, 43, 45, 48, 69
Political regimes 28, 29, 32, 35, 36
Pollution 23, 24, 29, 31, 32
Population change 25, 29, 35, 63
Ports 31, 38, 40
Poverty 24, 32, 46
Protected areas 10, 23, 31, 32, 33, 34, 38, 39, 69, 72, 79
Psychological impacts 10, 26, 29, 31, 35
- Ramsar site** 33
Recreation 29
Recycling 27, 43, 47, 49
- Sand extraction** 29, 32, 35, 37, 46
Sand spit 30
Sanitation 24
Seagrass beds 24
- Shell middens** 32, 33, 34, 43, 44
Ship-breaking yard 23, 27, 28, 29, 35, 41, 42, 48, 49, 53, 63, 66, 68, 72, 79, 80
Small island developing states 19, 59
Solid waste 23-25, 28, 29, 43, 47, 48, 49, 67, 71, 79, 80
- Tidal power** 31
Tourism 23, 24, 26, 28, 29, 30, 31, 32, 33, 39, 43, 45, 46, 58, 63, 67
Traditional practices 10, 31, 43-44, 51, 53
Transition period 29
Tribal leadership 32
- Urban migration** 25
Urbanization 29, 32, 43
United Nations Conference on Environment and Development 17, 66
University chairs 17, 19, 23, 48, 51, 53, 54, 68, 70, 79, 81
University twinning networks 17, 19, 68, 70
- Voluntary contracts** 19
- Water** 23, 27, 35, 38, 41, 49
Water quality 29, 43
Wetlands 33, 73
Wise Coastal Practices for Sustainable Human Development Forum 17, 20, 53, 66, 67, 74, 81, 82
Wise practice agreements 10, 19, 41-42, 49, 63
Wise practices 17, 19, 40, 51, 53, 54, 70, 79
 characteristics 10, 18, 20, 50, 51-52, 53-54, 57, 63, 81
 definition 10, 18, 51
Worker safety 27, 28, 41
Workshop participants 20, 75-78
Workshop programme 19, 71-74

Annex VII Geographical index

- A**driatic Sea 26, 72, 79, 80
 Alang Soshiya Ship-Breaking Yard, India 27, 28, 29, 35, 41, 42, 48, 49, 53, 63, 66, 68, 72, 79, 80
 Atlantic Ocean 24, 28
- B**alkans 72, 79, 80
 Baltic Sea 29, 40, 45
 Bangkok, Thailand 18, 70
 Banjarsari, Indonesia 47, 52
 Barents Sea 31, 40, 69, 72, 79, 80
 Bairro Triunfo, Mozambique 20, 57, 73
 Beau Vallon, Seychelles 31
 Belomor, Russia 40
 Belomorskaya, Russia 31
 Beteni, Senegal 34
 Bhavnagar, India 26, 27, 41, 48, 66, 70, 75
 Bihar, India 27
 Bintaro, Indonesia 47
 Black Sea 40
- C**aribbean islands 46, 69
 Chumbe Island, Tanzania 10, 32, 33, 37, 38, 39, 40, 49, 52, 63, 66, 72, 77, 79
 Cook Islands 70
 Costa do Sol, Mozambique 19, 20, 29, 31, 35, 73
- D**ar-es-Salaam, Tanzania 37, 39
 Dominica 18, 19, 41, 42, 57, 66, 67, 71, 79, 80
- E**ssaouira, Morocco 68, 69
- F**alia, Senegal 44
 France 20, 76, 77
- G**uior Island, Senegal 34
 Gujarat, India 23, 41, 76
 Gulf of Riga 29, 45
- H**aiti 69
 Havana Province, Cuba 69
- I**koyi Island, Nigeria 24, 25, 66, 71, 79, 80
- Incomati Estuary, Mozambique 30, 49, 73
 India 20
 Indonesia 75
 Italy 20, 48, 75
- J**akarta, Indonesia 23, 24, 28, 46-48, 49, 67, 68, 71, 79, 80
- K**andalaksha Gulf, Russia 39
 Kandalaksha State Reserve, Russia 31, 39
 Kapuk Muara, Indonesia 47
 Kenya 77
 Kosi Bay, South Africa 32
 Kotor, Yugoslavia 23, 26, 29, 35, 44, 68, 69
 Krk Island, Croatia 26
 Kurzeme, Latvia 69, 72, 79, 80
 Kwa-Zulu-Natal, South Africa 31, 46
- L**agos, Nigeria 23, 24, 25, 28, 48, 66, 68, 71, 79, 80
 Lagos Lagoon, Nigeria 24, 25
 Lagos State, Nigeria 24, 25, 48
 Lake St. Lucia, South Africa 32
 Latvia 20, 28, 29, 35, 45, 48, 70, 76
- M**acaneta, Mozambique 20, 30, 73
 Mahdia, Tunisia 23, 26, 45, 46, 63, 67, 68, 69, 72, 75, 79, 80
 Mahé, Seychelles 31
 Maputaland 32, 46, 48, 58, 68, 72, 79
 Maputo, Mozambique 10, 18, 19, 29, 49, 51, 66, 70, 71, 74
 Mediterranean 26
 Moindé, Senegal 44
 Moripi Cultural Area, Papua New Guinea 70
 Mozambique 20, 28, 29, 31, 32, 68, 73, 75, 76
 Murmansk, Russia 31
- N**ew York, USA 19
 Nigeria 20, 25
- O**misalj, Croatia 23, 26, 27, 28, 29, 35, 44, 68, 69
 Orissa, India 27

- Palau** 70
 Palkin Bay, Russia 39, 40
 Pari Island, Indonesia 47
 Paris, France 17, 18
 Philippines 70
 Port Moresby, Papua New Guinea 70
 Portland Bight, Jamaica 39, 69
 Puerto Rico, USA 20, 75
 Punjab, India 27
 Punta del Este, Uruguay 28
- Richards Bay, South Africa** 35
 Rio de Janeiro, Brazil 17
 Rio de la Plata, Uruguay 26, 29, 35, 43, 68
 Russia 20, 28, 31, 37, 39, 40, 63, 77
- Saanapu, Samoa** 70
 Saida, Lebanon 68, 69
 St. Anne Island, Seychelles 32
 St. Kitts and Nevis 70
 St. Lucia Marine Reserve, South Africa 58
 Saloum Delta, Senegal 32, 33, 34, 43-44, 63, 71, 79, 80
 Samoa 18, 19, 51, 67, 70
 Sataoa, Samoa 70
 Senegal 20, 33, 34, 43, 68, 70, 73, 76
 Seribu Islands, Indonesia 24, 67, 68
 Seychelles 20, 28, 31, 32, 52, 66, 70, 75
 Siberia, Russia 29
 Sodwana Bay, South Africa 56
 South Africa 20, 31, 32, 41, 68, 76
 Surin Islands, Thailand 69
 Swaziland 32
- Tanzania** 20, 32
 Thioupane, Senegal 34
 Trobriand Islands, Papua New Guinea 70
 Tunisia 20
- Ulugan Bay, Philippines** 69
 Uruguay 20, 28, 36, 43, 49, 66, 72, 76, 79, 80
 Uruguay River 28
- USA 26
 Uttar Pradesh, India 27
- Victoria Island, Nigeria** 24, 66, 71, 75, 79, 80
- White Sea** 10, 31, 39, 40, 48, 49, 63, 69, 72, 79, 80
- Yoff, Senegal** 46
 Yugoslavia 26
- Zambezi River** 73
 Zanzibar, Tanzania 32, 38, 39, 45
 Zululand, South Africa 46, 48

Other titles in the CSI series

Coastal region and small island papers:

- 1 *Managing beach resources in the smaller Caribbean islands*. Workshop Papers. Edited by Gillian Cambers. 1997. 269 pp. (English only).
www.unesco.org/csi/pub/papers/papers1.htm
- 2 *Coasts of Haiti. Resource assessment and management needs*. 1998. 39 pp. (English and French).
www.unesco.org/csi/pub/papers/papers2.htm
www.unesco.org/csi/pub/papers/papiers2.htm
- 3 *CARICOMP – Caribbean Coral Reef, Seagrass and Mangrove Sites*. Edited by Björn Kjerfve. 1999. 185 pp. (English only). www.unesco.org/csi/pub/papers/papers3.htm
- 4 *Applications of Satellite and Airborne Image Data to Coastal Management*. Seventh computer-based learning module. Edited by A. J. Edwards. 1999. 185 pp. (English only).
www.ncl.ac.uk/tcmweb/bilko/mod7_pdf.shtml
- 5 *Glimpses of the Blue Caribbean. Oceans, coasts and seas and how they shape us*. By Joy Rudder. 2000. 61 pp. (English only). www.unesco.org/csi/pub/papers/glimpse.htm
- 6 *Reducing megacity impacts on the coastal environment. Alternative livelihoods and waste management in Jakarta and the Seribu Islands*. 2000. 64 pp. (English only).
www.unesco.org/csi/pub/papers/mega.htm
- 7 *Yoff, le territoire assiégé. Un village lébou dans la banlieue de Dakar*. 2000. 90 pp. (French only).
www.unesco.org/csi/pub/papers2/yoff.htm
- 8 *Indigenous people and parks. The Surin Islands Project*. 2001. 63 pp. (English only).
www.unesco.org/csi/pub/papers2/surin.htm
- 9 *Wise Coastal Practices: Towards sustainable small-island living*. Results of a workshop on 'Wise coastal practices for sustainable human development in small island developing states', Apia, Samoa, 3–8 December 2000. 2001. 119 pp. (English only). www.unesco.org/csi/pub/papers/samoa.htm
- 10 *Partners in coastal development. The Motu Koitabu people of Papua New Guinea*. Proceedings of and follow-up to the 'Inaugural Summit on Motu Koitabu Development, National Capital District, Papua New Guinea', Baruni Village, 31 August – 1 September 1999. 2001. 78 pp. (English only). www.unesco.org/csi/pub/papers2/png.htm
- 11 *Wise practices for conflict prevention and resolution in small islands*. Results of a workshop on 'Furthering Coastal Stewardship in Small Islands', Dominica, 4–6 July 2001. 2002. 72 pp. (English only). www.unesco.org/csi/papers2/domr.htm

Titles in the CSI info series:

- 1 *Integrated framework for the management of beach resources within the smaller caribbean islands*. Workshop results. 1997. 31 pp. (English only).
www.unesco.org/csi/pub/info/pub2.htm
- 2 *UNESCO on coastal regions and small islands*. Titles for management, research and capacity-building (1980–1995). 1997. 21 pp. (English only).
www.unesco.org/csi/pub/info/pub2.htm
- 3 *Qualité de l'eau de la nappe phréatique à Yeumbeul, Sénégal*. Étude sur le terrain. 1997. 27 pp. (French only).
www.unesco.org/csi/pub/info/info3.htm
- 4 *Planning for coastline change. Guidelines for construction setbacks in the Eastern Caribbean Islands*. 1997. 14 pp. (English only). www.unesco.org/csi/pub/info/info4.htm
- 5 *Urban development and freshwater resources: small coastal cities*. Proceedings and recommendations. International Seminar, Essaouira, Morocco, 24–26 November 1997. 1998. 109 pp. (English and French).
www.unesco.org/csi/pub/info/info5.htm
www.unesco.org/csi/pub/info/info5f.htm
- 6 *Coast and beach stability in the Caribbean Islands*. COSALC Project Activities 1996–97. 1998. 57 pp. (English only). www.unesco.org/csi/pub/info/info6.htm
- 7 *Role of communication and education*. Workshop Proceedings (PACSIKOM). 1999. 88 pp. (English and French).
www.unesco.org/csi/pub/info/info7e.htm
www.unesco.org/csi/pub/info/info7f.htm
- 8 *Développement urbain durable en zone côtière*. Actes du Séminaire international, Mahdia, Tunisie, 21–24 juin 1999. 2000. 225 pp. (French only).
www.unesco.org/most/dpmahdia1.pdf
- 9 *D'une bonne idée à un projet réussi*. Manuel pour le développement et la gestion de projets à l'échelle locale. 2000. 158 pp. (French) (Original English version published by SEACAM). www.unesco.org/csi/pub/info/seacam.htm
- 10 *Wise coastal practices for sustainable human development*. Results of an intersectoral workshop and preliminary findings of a follow-up virtual forum. 2000. 126 pp. (English and French).
www.unesco.org/csi/pub/info/wise.htm
www.unesco.org/csi/pub/info/sage.htm
- 11 *Petites villes côtières historiques : Développement urbain équilibré entre terre, mer et société*. Actes du Séminaire international, Saida, Liban, 28–31 mai 2001. 2002. xvi + 373 pp. (French/English).
A synthesis report of the seminar (in English) is given at:
www.unesco.org/most/csisaidaeng.htm
- 12 *An ecological assessment of Ulugan Bay, Palawan, Philippines*. 2002. 46 pp. (English only)
www.unesco.org/csi/pub/info/ulu.htm
- 13 *Lois relatives à l'environnement côtier et à la pêche en Haïti*. 2002. 45 pp. (English/Creole)
www.unesco.org/csi/pub/info/haiti.htm