

# Marine Genetic Resources – Deliberations of the Informal Consultation Process (ICP) within the United Nations

Presentation to the IFLOS Symposium,  
***Biodiversity and Genetic Resources of the Deep Sea***  
Hamburg, Germany  
September 29, 2007

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# Origins of ICP

- **Created by General Assembly in 1999** to enrich annual General Assembly debate on Oceans and Law of the Sea
  - build international coherence on emerging oceans issues; and
  - improve international cooperation and coordination
- **Plenaries, expert presentations (panels) and informal exchange**
- **Co-Chairs' report plus Agreed Elements**
  - elements negotiated, and considered by the General Assembly for formal endorsement through UNGA Resolutions (Law of the Sea, and Sustainable Fisheries)
- **Broad participation** by governments, inter-governmental organizations, environmental groups, industry, academics, others
  - ICP 2007, over 150 states, 15 IGOS, 12 NGOs
- Addresses **current and emerging oceans management issues**
  - 1-2 topics selected through consensus by States: recently single broad topics needing clarity
- Issues under timeframe of current Co-chairs:
  - **Ecosystem approaches and oceans (2006)**
  - **Marine genetic resources (2007)**
  - **Maritime security (2008)**

# Situating the ICP Discussion – some linkages

1. Convention on Biological Diversity – Access and Benefits Sharing (ABS) Working Group Meetings
  - Ongoing Working group meetings prior to CBD CoP (May 2008)
2. **Theme of UN Informal Consultative Process on Oceans and the Law of the Sea– June 25-29, 2007**
3. UN Ad Hoc Working Group on Marine Biodiversity Beyond National Jurisdiction (BBNJ), subtopic on MGR - April 28-May 2, 2008 (following discussions in Feb 2006)
4. Food and Agricultural Organization (FAO) Commission on Genetic Resources –development of a multi-year programme of work on aquatic genetic resources

Other fora – (OECD biotech, WTO, WIPO, UNEP, IOC, GOF and others)

# UN-ICP Discussion

- Planned as a “time-out” on contentious issue with diverse views, to **demystify the issue and build common understanding**
  - Learning exceeded expectations in this respect, according to participants
- Informal nature of ICP enabled discussion of MGR and its elements
  - reality check, and help dispel myths, with broad participation of experts
- Opportunity to look at **sector-specific (marine) issues**/challenges
  - MGR is part of broader discussion of genetic resources (i.e. CBD process covers all genetic resources)

## *Panels:*

- 1. Understanding MGRs**, vulnerabilities and services provided
- 2. Understanding activities related to MGRs** (2 Segments: Experiences in Collection and Experiences in Commercialization)
- 3. International cooperation and coordination on issues related to MGRs** (2 Segments: Current Activities regional and Global and Current and Future Challenges)

# Underlying Context to keep in mind

Debate highlighted implicit links to two broad contextual issues:

- How do Marine Genetic Resources (MGRs) differ from terrestrial?  
For example:
  - Are MGR issues adequately dealt with in generic debates on GRs, such as at the CBD or in national ABS regimes?
  - Are the right people involved in these debates/deliberations, in order account for, or protect, marine interests?
  - Examples: accessibility, vulnerabilities, information and knowledge, interaction of traditional knowledge and Access and Benefit Sharing (ABS).
- How do MGRs issues -- especially in relation to oceans governance -- fit into broader oceans (governance) issues, especially beyond national jurisdiction? For example:
  - Vulnerabilities and conservation issues?
  - Appropriate legal and governance mechanisms/institutions?
  - Examples: fish as MGRs in addition to food, MPAs, UNCLOS interpretation...

# Understanding MGRs, Vulnerabilities, Services

- All **living marine resources**, from fish to microbial (incl. viruses)
  - exist at a variety of depths and environments, incl. extreme environments
- **Challenged traditional notions of biodiversity and vulnerability**
  - (scope, location, dynamism, vulnerability, activities)
- Mega-abundant, gatekeepers of global bio-chemical cycles
  - Nevertheless, distribution, composition, biodiversity, vulnerability broadly unknown
- **Marine Scientific Research essential**
  - Needs *public* research (too low a priority to now?) – MSR feeds upstream and downstream
- Needs **conservation** of marine ecosystems, **access** to remote ecosystems, **enabling** environment for both access and benefits, **collaboration** across-disciplines, **integration** of systems, including informatics, **knowledge sharing** through open-access data bases, **capacity building**
- **Greatest and most accessible biodiversity is present in coastal areas**
  - but deep seas/high-seas highly diverse as well
- **Wide variety of uses**
  - economic, social and environmental – breadth of applications are now just emerging

# Activities related to MGRs: Collection

- **Diverse perspective/access**
  - Panel: large research Institute, developing states (incl. small developing island state), developed coastal state
- **Most MSR activities in coastal zones where biodiversity highest and accessible**
  - but deep seas MSR increasing (costly \$\$\$\$ , difficult)
- Despite clear sovereignty, **few national or regional regimes**
  - incl. both developed and developing states (who license others for export while addressing other priorities, despite claims of “bio-piracy”...)
- **Need enabling environment**
  - activity is mobile. ABS regimes and “smart” regulation prerequisites for commercial risk reduction – legal fwks help predictability for users and coastal states
- **Partnerships of all kinds essential**
  - public/private, coastal state/private sector, developed/developing states, other international
- **Access to results and data**
  - E.g., open data bases, including of patent activity

# Activities related to MGRs: Commercialization

- **No “typical” player** despite focus on big biotech and pharmaceutical companies
- **Industrial organization changing/diverse**
  - rise of small nat’l biotech firms, with strong links to public institutions/libraries
- **Importance of enabling environment**
  - lower commercial risk needs predictability/smart regulation. But activity will flee if regulation is punitive -- examples of mistakes exist
- **Long-term, high-risk, expensive**
  - investment needed but needs legal certainty, stable environment
- **15-20 years** average from compound ID to commercialization
  - a tiny fraction succeed -- *no certain gains from GR collection*
- **Hard to identify source** of inputs
  - also role for intellectual property
- **Intellectual property (IP) rights regime very controversial**
  - diverse views on legitimacy. Incentive or disincentive to sharing info/benefit?
- **Link to traditional knowledge**
  - not same in marine as terrestrial?

# **International Cooperation and Coordination: regional/global links**

- United Nations fora (UNGA, BBNJ, Atlas of Oceans)
- Convention on Biological Diversity (CBD)
- Food and Agriculture Organization (FAO)
- UN Environment Program (UNEP)
- International Oceanographic Commission (IOC)
- World Trade Organization (WTO)
- World Intellectual Property Organization (WIPO)
- International Seabed Authority (ISA)
- Global Oceans Forum (GOF)
- Others.....including regional cooperation...

# International Cooperation and Coordination: Current/future challenges

- Biodiversity conservation -- threats are diverse, dynamism and vulnerability are variable
- Encouraging and disseminating MSR, including tech. development
- Capacity building for all, developing states especially
- Models and best practice for national ABS and other agreements would help capacity building
- Enabling information sharing is essential
- Clarity and completeness of national and international legal and regulatory regimes, including ABS regimes internationally, or not?
- Voluntary measures, codes, standards for responsible access
- Inter-agency collaboration and cooperation -- is what we have already working with synergy?

# Common needs across all aspects of debate

- **Environmental responsibility** and conservation
- **Research** (public and private) and investment
- **Enabling environment/regulatory clarity**
  - **Access and benefit sharing regimes**, especially in marine-biologically diverse states
- **Cooperation** and partnerships
- **Capacity building and technical transfer** especially important for developing states
- **Taxonomists** needed yet not being trained – current weak link across entire agenda
- **Data bases**, sharing
- **Corporate and professional social responsibility**

# Policy and legal issues

- **Definitions matter to regimes** (MGRs, bio-prospecting, MSR, bio-piracy...)
- **Issues highly contentious, positions depend on how see links:** between innovation/regulation; MSR and commercialization, ABS and “fairness”; legal interpretations of UNCLOS (which provisions best apply, and adequacy for biodiversity)
  - UNCLOS overriding legal framework: for some, unclear which provisions apply to MGRs/ search for clarity; others: fears of undermining integrity, comfort with current interpretations
  - Or CBD the most relevant framework? Most developing states prefer CBD principles of sustainable use, fair and equitable sharing, implications for mandate of CBD (which many developing states wish to broaden)
  - Role of the regime of the Area and role of ISA (mining only? or to include living resources and use ISA to regulate MGRs; strong split of views)
- **Forum hopping** (coherence including within states’ positions across fora), and coherence and cooperation among fora
- **Priorities:** Focus on completing national regimes? or international regimes/regulation?
- **Need single new regimes?** Or better coherence with what we have?
- **Marine vs terrestrial** – what’s different for marine? (accessibility, traditional knowledge...). Marine must stay engaged in broad processes
- Numerous issues related to **indigenous peoples and traditional knowledge**
- **Building governance** to protect biodiversity, especially outside national jurisdiction
- **Which fora key?**...related to MGRs fit in current Oceans debates, and what int’l community wants to do as next steps

# Dynamics, Tensions and ICP Outcomes

## **Commercial vs. environmental interests (which risks predominate?)**

- Socio-economic benefits versus environmental risk

## **Defining “socioeconomic benefit”**

- Ownership/sharing royalties versus benefits of commercialized or other products

## **Developing countries issues**

- Frustration of developing states regarding access to value added activities -- emphasis turning to legal means to “force”, capacity building not bearing fruit
- Ongoing debate of legal interpretations favouring ownership and “fairness”

## **Role/ desirability of “hard” versus “soft” tools**

- complements (developed states) or substitutes (fears of developing states)

## **How to protect/sustainably use biodiversity in areas beyond national jurisdiction**

- Implement what we have versus new legal instruments (Implementing Agreement under UNCLOS)

## **Diverse State representatives in debates across fora, and within UN**

- Experts, sectoral specialists and UN lawyers all with different needs/priorities especially affecting adoption of common recommendations and priorities

## Outcomes:

- This year, not a complete set of agreed elements to go forward to UNGA. Debate was rich and met goals for meeting, coupled with differences of view as above. A co-chair’s report submitted [www.un.org/depts/consultative\\_process](http://www.un.org/depts/consultative_process)
- Recommendations to be further considered through the UNGA Resolution process

# Proposed Elements to UNGA

**Co-chairs: 21 recommendations to the General Assembly contained in report**

- Some relate to abundance and diversity of MGRs, vulnerability, need to take steps to ensure sustainable exploration and protection
- Some relate to legal frameworks and conventions and tries to note that disagreement exists over their application
- Some address importance of MSR and shared results, identifying and mapping biodiversity, and current and future benefits of MSR , and issues regarding taxonomy, partnerships, etc
- Others recognize the importance of goods and services from MGRs (food, health industry, environmental) and encourage them, and frameworks that would encourage MSR and commercialization. Fair transparent, predictable frameworks for access needed
- Several aspects of IP that need to be better understood
- Strengthen capacity building
- Integrated and accessible data

# Lessons Learned

- Maturation of the integrated fisheries and oceans agenda
- Shift in understanding and stakes: the benefits of marine environment and biodiversity and its use go well beyond traditional extractive activities (fishing, mining)
  - including critical element of global cycles as well as biotech
- Difficulty distinguishing between marine scientific research (MSR) and commercial interests
  - because it is impossible to predict *ex ante* what might or might not have commercial application and if so, whether came from living samples or IP
- Urgent need for increased capacity building and technological transfer to frustrated developing countries,
  - or risk their attempts to find other solutions especially through seeking legal obligations
- The need to reconcile the divisions between several developing states and developed states
  - on applicability of legal regimes for MGR and implications for debate on high seas biodiversity beyond national jurisdiction