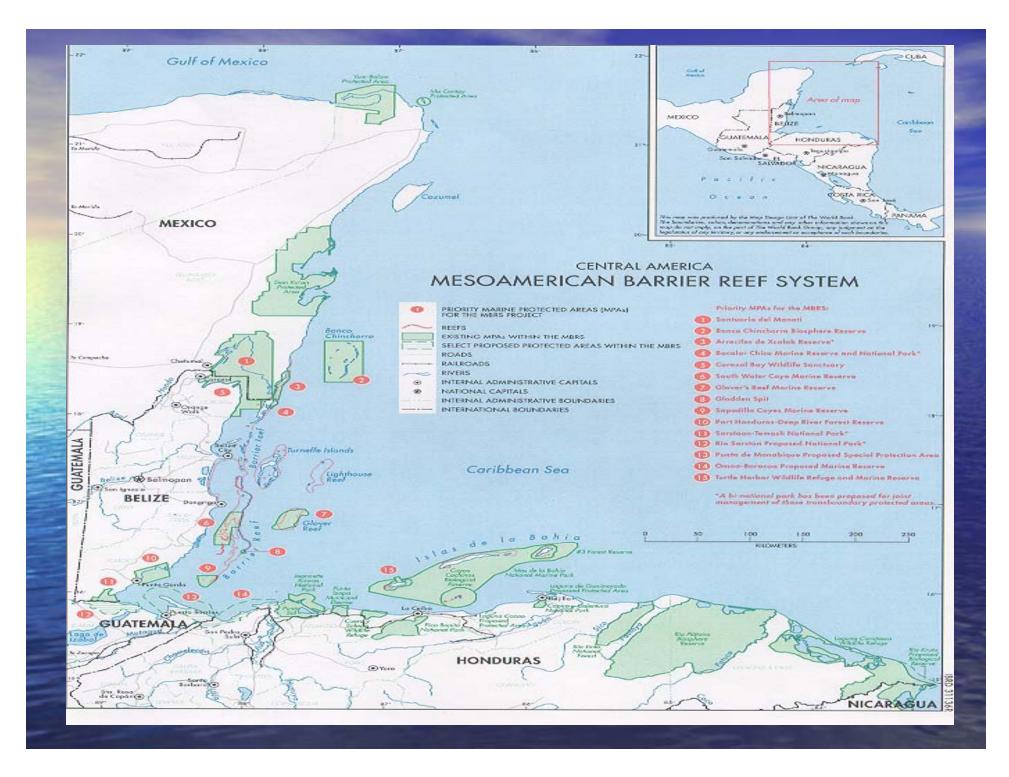
# Foreign Access to Marine Genetic Resources in Belize:

**Cooperation Versus Capture** 

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#### **CONVENTION ON BIOLOGICAL DIVERSITY**

- 1. Reaffirms sovereign right of States to Control access to genetic materials.
- 2. Encourages source States to facilitate access
- 3. In return, requires user States to receive prior informed consent and enter into mutually agreed benefit sharing provisions including:
- Participation in research
- Technology transfer
- Share a percentage of proceeds resulting from commercialization

### **Collection of Marine Organisms**



### **Material Processing**





Plants Dried, Ground and Stored



Marine Organisms Freeze-Dried

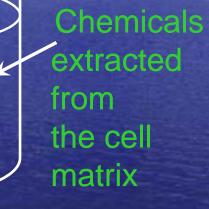
#### **Extraction Process**

Solvent









### **Crude Extract Preparation**



**Solvent Removed** 

**Rotary Evaporator** 



Crude Extract

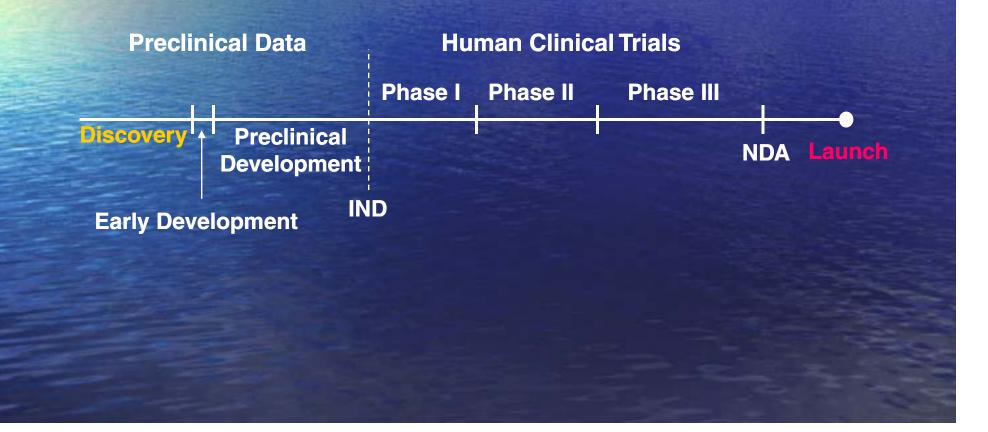


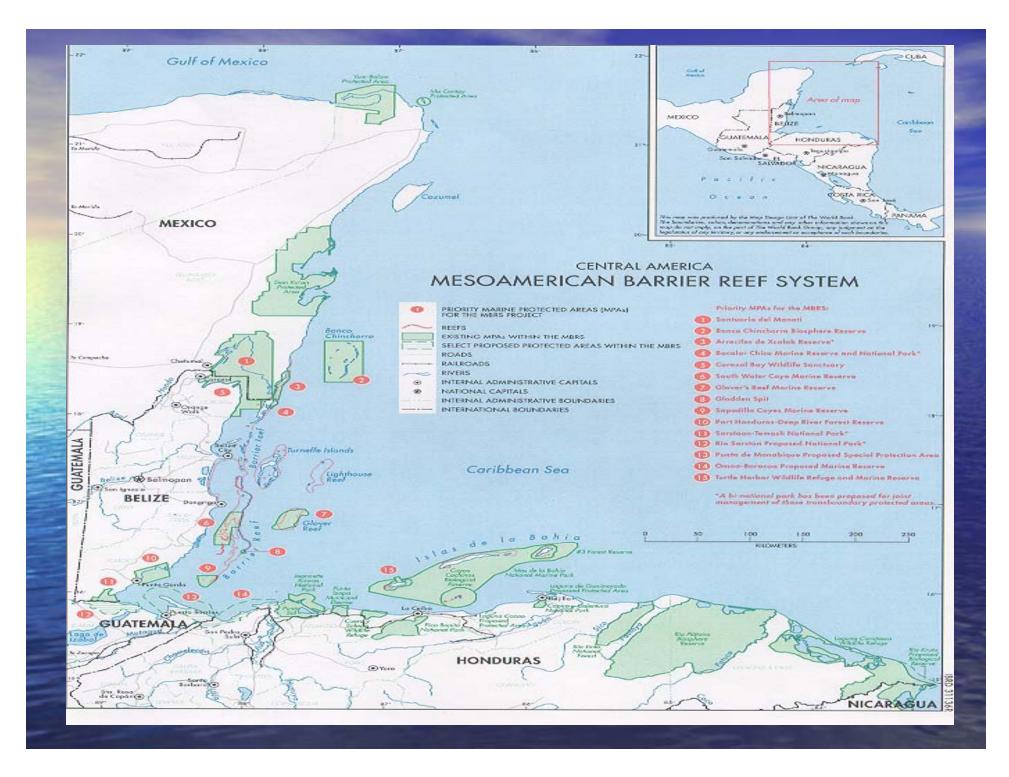
#### **Antifungal Bioassay**



Candida albicans & Plant Extract Candida albicans & Marine Sponge Extract

### **Drug Development Process**





#### SHARED NATURAL RESOURCES

Exploited for physical properties
Exploitation will <u>not</u> deprive sharing nations of <u>all</u> econ. value
Legal remedy available under international law

## **Shared Genetic Resources**

Exploited for informational value + protected by patent

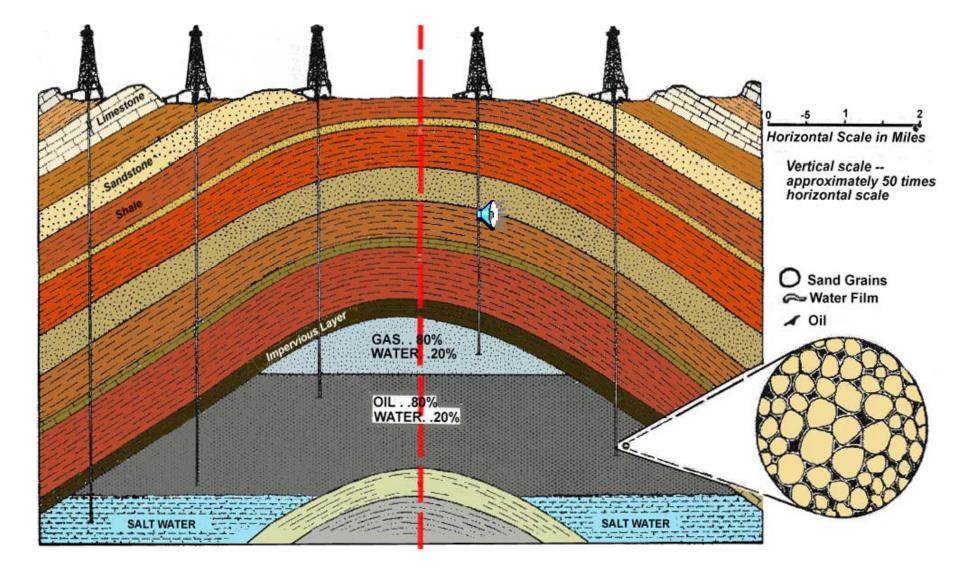
Exploitation may deprive sharing nation of all economic value

•No legal remedy currently available

### **Fugacious = fleeting, passing quickly away**

Examples:
Transboundary oil and gas pools
Int'l rivers and groundwater
Migratory wildlife

# **Transboundary Oil Field**



# Benefits of an Ecosystem-Based Approach

- Prevents one nation from being played against another
- Improves the efficiency and cost effectiveness of scientific research and reduces duplication
   Offers broader opportunities for education and training
- Enhances monitoring and enforcement mechanisms and reduces illicit cross-border movements of genetic resources
   Reduces friction between sharing nations and improves political relations