### Claims without Boundaries: Can We Define Genetic Resources and Stop the Bleeding?



Leonard P. Hirsch Smithsonian Institution

## ABS and Research Institutions

 The lack of definition to "the utilization of genetic resources" has:

- Created barriers to research.
- Created increased transaction costs
- Created increased uncertainty
- Created increased fears
- Created increased hostility

## Impact of Bio-paranoia



- It is creating an anticommons in raw genetic material where material is used less than it otherwise would be used
- It reduces opportunities for collaborative research, capacity building and technology transfer
- Increases the transaction costs for research and development
- Decreases benefits that can be shared

## **ABS** Politics

#### Rhetorical

- Biodiverse vs others (Like minded Megadiverse)
- Users vs providers
- Biopiracy, misappropriation, unequal exchange

#### Substantive

- (Over)use vs Conservation
- Value to be gained from its use and conservation
- Sovereignty, ownership and control
  - Uses beyond permits (misappropriation redux)
  - Capturing royalties from products and processes created from the original genetic resource
  - Future values

# Can we bound the concept of "genetic resources"

 We know it is different (a subset?) of biological resource

#### Are all living things by definition GR?

- Impacting the pet, horticulture, agriculture, IPM industries
- When GRs become information, how can it be traced and controlled?
- When GRs become modified, what claims can be made?
- Is it also on processes using GRs rather than the GR themselves?

## Should we first define the Property Rights to GR before going to the IPRs?

- Intellectual property rights are developed to support innovation, providing a temporary monopoly
- Property rights involve a bundle of rights and responsibilities which may be of longer duration and apply in different conditions
  - Which would allow transfer of use-rights

## Would Property Rights definitions help the utilization question?

#### Time

- Pre-CBD materials
- Post-CBD, pre-ABS IR
- New commercialization
- Post IP claims
- Biological-genetic-modified (derivatives)analogy
  - Immediately based on, substantially based on, used in discovery, informatics vs material based
- Competing claims
  - Genes and chemicals are not unique to a specific sample

## Can we learn from Software IP systems for GR systems?

 What is the difference between computer code and genetic code?

- Is there a difference between "based on" and "utilizing"
- Traceability and fair use
- Accounting systems

## It's time for action

Can a nexus based system actually work (where the specific benefit is linked to the specific genetic resource)?

- If so, can it be effectively bounded to reduce transaction costs and litigation?
- If not, is there a fair and equitable way of providing benefits?

## Thanks Leonard Hirsch lhirsch@si.edu