“Practices and experience documenting and negotiating contractual provisions for tracking genetic resources: the case of INBio

INBio
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de Biodiversidad

Costa Rica Strategy to protect and use biodiversity




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Save

Conserve representative samples of the ecosystems of the country

Know

What is the existent biodiversity, where can I find it, and what is its natural history

Use

Use these resources in a sustainable manner for socio-economic development

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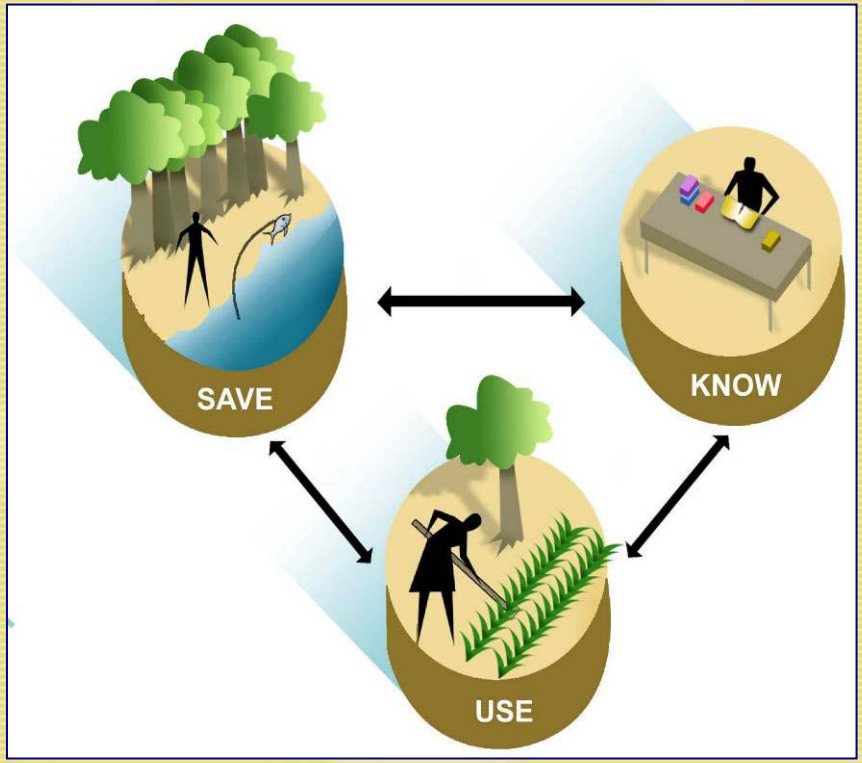
- A governmental commision recommended its establishment
- Founded in 1989 as a non-profit, public good, NGO

Mission: *"To promote a greater awareness of the value of biodiversity as a means to ensure its conservation and to improve the quality of life of human beings"*

Action Areas

- Biodiversity Informatics
- Inventory and Monitoring
- Conservation
- Education and communication
- Bioprospecting



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Bioprospecting Strategic Action Unit

- Established in 1991
- Four main areas:
  - Sample Management
  - Chemical Prospecting
  - Biotechnological Prospecting
  - Informatics

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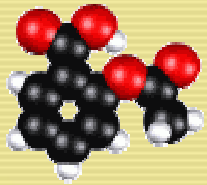
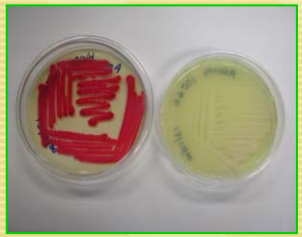
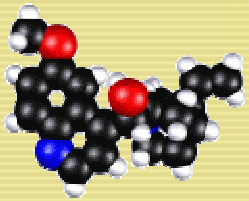
BIOPROSPECTING



Systematic search for new sources of compounds, genes, designs, whole organisms and other products that have potential economic value and can be found in our biodiversity.





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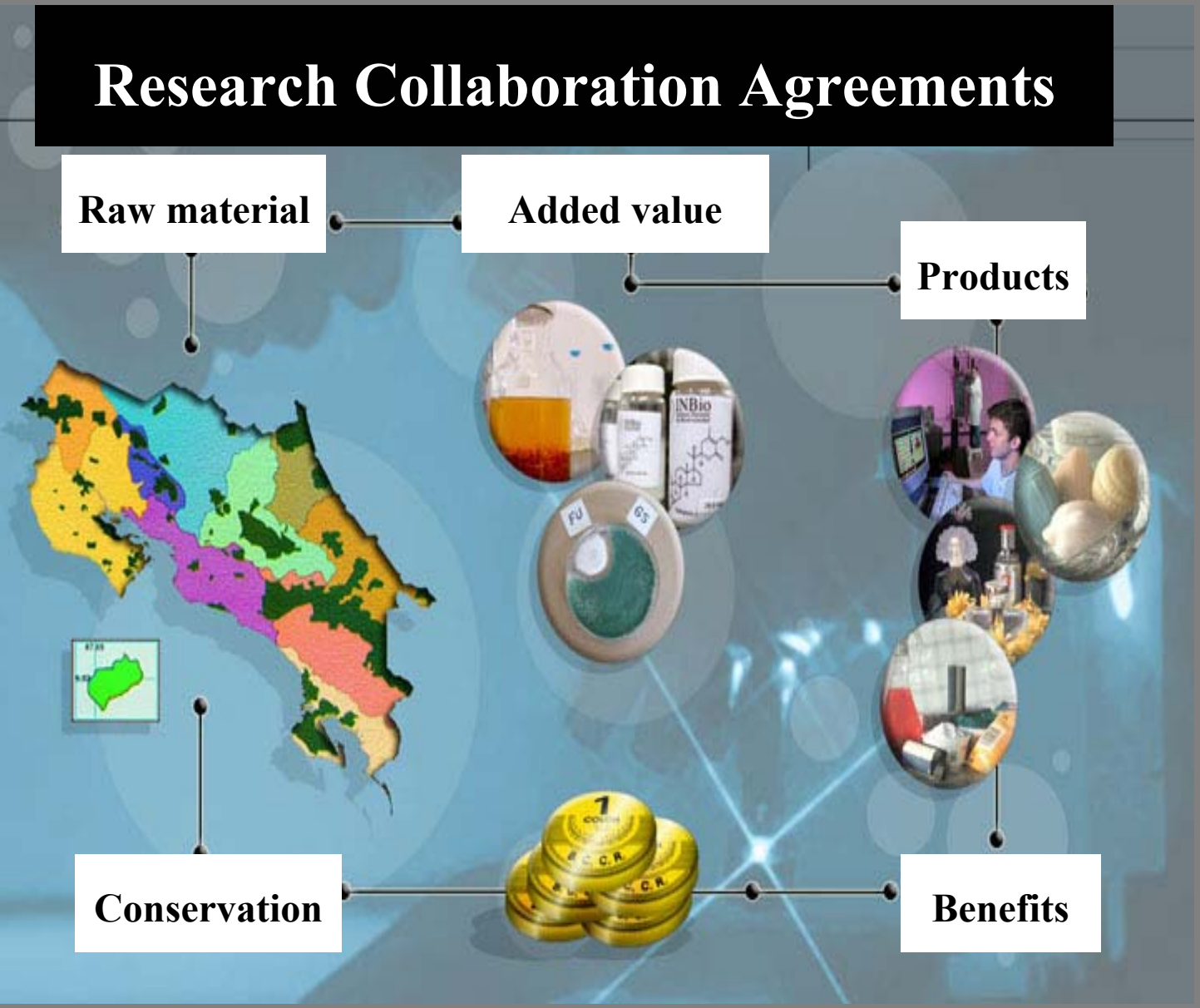
Research Collaboration Agreements



- Non-destructive uses
- Limited access
- Up-front payment for conservation
- Tech transfer and training
- Compensation: research budget and benefit sharing

Collection and identification

- Material is collected in the field under permit system. A standard agreement applies to taxonomic research while unique legal agreements are developed for bioprospecting research. Information is written in a Bitacora for each collector.

- Specimens are often only identified to Family or Genus level in the field and so many specimens from a collection trip may have the same textual description on the label. This can be a collecting number, the name of the collector, the date and information about the location. (Management Sample Unit.). From this point all the information is digitalized and is found on the database.

Collection and identification

- As specimens are sorted in the laboratory, each receives a unique barcode which is physically attached to the specimen e.g. pinned to a insect or fixed to a vial of fungi.

- Barcode indicates the type of work done in the Lab (isolation, etc) and the name of the Project (contract under which the work is developed). However, information on the contract terms is not on the database.

Transfer

- All material leaving INBio's Bioprospecting Unit is labelled with a barcode and identification number.
- Samples to be transferred to a third party (under an existent contract or a new MTA) receive a new Bar Code (sample screening code). Partner receives the sample with the Bar Code and related information.
- Partner may use its own Bar Code for material resulting from its research. In accordance to the contract, Partner shall assure that its code correlates with INBio´s Bar code.
- Any resupply requested indicates the INBio´s bar code and usually the Partners new code.

Contractual provisions

I1. Access is limited in time and quantity. Any transfer to a third party of sample is made using a material transfer agreement (MTA) or under a collaborative research agreement (with companies, research institutions, etc). INBio agrees to transfer the materials specified in detail in the annex of the MTA or the contract.

- 2. The recipient may transfer the material only with prior written authorization. The terms and conditions of the original MTA shall apply equally to these third parties. A letter with the following wording is usually required to accompany all transfers:

- “This material has been received under a Material Transfer Agreement which includes terms and conditions for use by Third Parties”.

Contractual provisions

- 3. The Recipient shall assign a unique identification number to each of the materials obtained and to the resulting materials from the research that will ensure traceability.

- 4. Usually the recipient is obligated by the contract to maintain complete and accurate internal written records and reporting systems so as to keep track of all the materials and any research and/or development activities.

- 5. The recipient has the duty to allow INBio upon request to audit and/or inspect such records and reporting systems from time to time and to make such changes in such reporting system as INBio may reasonably request to ensure the accurate tracking of all materials.

Contractual Provisions

- 6. INBio may have access to the lab notes on INBio material.
- 7. The recipient shall submit periodical reports to INBio on materials, stage of the research, IPR, research results, etc.
- 8. The monitoring of uses is provided by the Bioprospecting Unit. There is no Department or special personnel dedicated to the monitoring of contracts, it is done by the current scientific and technical personnel of in charge of other Bioprospecting tasks. IPR search is carry out on occasions.

Purpose

- The database and barcode system effectively enable tracking however the purpose of the system is not primarily for tracking, it is to associate information with the material to facilitate biodiversity research. Hence, the costs associated with tracking are difficult to separate from the wider research information management system.

- Researchers at INBio do not routinely record publications citing INBio specimen numbers.

Limits

- Difficult in practice to monitor subsequent third party uses and transfers.
- Audits never have been used. Visits, for different purposes (coordination of work, training, etc), allow to monitor compliance.
- No prove of compliance with bar code correlation is required.
- No specific check points (but reporting provisions could apply).
- Illegal transfer detected once. Contract provision and potential legal action were sufficient to recover samples.
- Costs to access to justice.