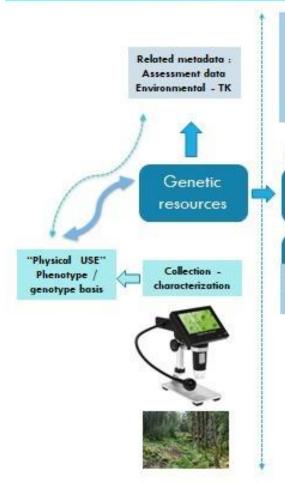
What capacity-building needs to generate/use DSI by developing countries?



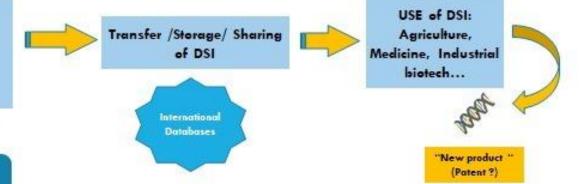
Generating information (Sequence/ Structure /Function..)



DNA; RNA; Proteins

Metabolites

- Identification
- bio-activity of molecules



The development/strengthening of national genetic resources research in the use of DSI requires a major capacity building effort, especially in the following key areas:

- 1/General understanding of issues related to digital sequence information;
- 2/Science and Technology: Taxonomy, PCR and/or sequencing, molecular biology-gene engineering...
- 3/Analysis and processing of large data related to DSI- bioinformatics;
- 4/Increased effective access to international databases and their use by the research community in developing countries;
- 4/Other capacities are needed: availability of research networks, links between public-private research...
- 5 / Human resources / infrastructure / service labs...

What capacity-building needs to generate/use DSI by developing countries?

Conclusion

- The national ABS framework is very important
- Capacity building is essential for DSI, including the ability to keep up with the rapid development of DSI-related technologies, and to
 identify, monitor and manage our own genetic resources and biodiversity.
- Open access to DSI is not really an advantage for countries or regions that do not have the capacity to use such information.
- There is some analogy with access to agricultural genetic resources accessions sent by international gene banks under the FAO
 International Treaty: we can take advantage efficiently of the samples received if strong, species-specific breeding programs are able to
 use them at the national level (the dilemma of access without concrete use)
- Capacity building in the use of GR and DSI should be integrated into broader capacity building initiatives/strategies, adapted to the needs of individual countries and research institutions