Expert's Discussion Report

The Experts discussions covered the following broader areas and issues:

1. ***Valuation Exercises in ABS Project: General***

- Designing the study
- Literature to be collected and sources
- Review of literature: emphasis on ABS related valuation
- Need to explore the overseas studies and findings on ABS and valuation.
- Develop methodology (design the study) in Indian context (and even the 5 project state context).
- Need to examine the NBA's activities in ABS.
- Need to examine the signed agreements in NBA and make further follow-up on benefit share perspectives.

2. ***Biodiversity and its Degradation***

- Reasons and impacts of biodiversity degradation
- Need to conserve biodiversity and ecosystems in sustainable manner: (ecosystem development as well as human welfare perspectives).
- Traditional vs modern approaches on biodiversity.
- Institutional and legal frame works in biodiversity management.
- Role of local communities in biodiversity management
- Traditional knowledge and biodiversity
- Stakeholders' outside biodiversity circle and their role.
- Need for an Integrated approach towards better governance of biodiversity.

3. ***ABS as an Innovative Option for Biodiversity Conservation***

- ABS as an economic instrument – incentive mechanism.
- Emergence of the ABS principle: CBD, Nagoya Protocol, Biological Diversity Act and Rules.
- Implementation and Institutional structures in India: NBA, SBB, and BMC.
- Practical constrains and challenges in operationalization of ABS in a corporate world.

- Need for understand the real value of bio-resources for signing ABS Agreements.
- PBR: A comprehensive data base for ABS related information.

4. Valuation of Ecosystem / Biodiversity vs Valuation of Bio-resources

- Biodiversity and bio-resources are interlinked and are significant in ABS; without ample bio-resources biodiversity never exists and without a rich biodiversity bio-resources never emerge.
- 3 ecosystems (forests, agriculture and wetlands) valuation and existing studies.
- Total Economic Value of ecosystems
- Direct and indirect values.
- Public Good character of biodiversity and market distortions.
- Market imperfections
- TEEB Study
- How ABS related bio-products valuation is differ from the mainstream ecosystem valuation.
- Non-timber forest products and its current marketing and pricing procedures.

5. Valuation Approach and Methodology

- Valuation methods for non- marketed goods and services of ecosystems
- ABS required marketed valuation approach.
- Value addition / value chain analysis of a product derive from bio-resources
- Bottom-up and top-down approaches in valuation of bio-resources.
- Need to select the appropriate approach based on the product and situation.
- Selection of different ABS related products from different ecosystems and do a detailed case study (origin of the bio-product, collection, transfer, users, purpose of use, role in production etc.) with value addition perspectives.

6. Limitations in Biodiversity Valuation

- Uncertainties

- Complexity in valuation
- Data base and accuracy

7. Valuing Bioprospecting Research Lead

- Various Bioresources used for Research and Development
- The production process and its cost
- Stake in Biodiversity Management

8. Developing Models for Bioresource valuation

- Developing a separate model, theory and the logic for valuing bio-resources.
- Literature point of view, the reasons for low value of resources were discussed
- Complexity in valuation of bioprospecting research leads

STRENGTHENING THE IMPLEMENTATION OF THE BIOLOGICAL DIVERSITY ACT AND RULES WITH FOCUS ON ITS ACCESS AND BENEFIT SHARING PROVISIONS: SOME SUGGESTIONS

Comments from

Prof. U. Sankar

For consideration of Valuation of Biodiversity

In connection with the Meetings on

"DEVELOPING METHODOLOGY FOR ECONOMIC VALUATION OF BIO-RESOURCES"

12th December, 2012

National Biodiversity Authority (NBA), Chennai

STRENGTHENING THE IMPLEMENTATION OF THE BIOLOGICAL DIVERSITY ACT AND RULES WITH FOCUS ON ITS ACCESS AND BENEFIT SHARING PROVISIONS: SOME SUGGESTIONS

U.Sankar

A. Valuation and ABS

We know from the Millennium Ecosystems Assessment (2002) that ecosystem services consist of provisioning, regulating, cultural and supporting services. Of these 4 categories, markets exist mainly for a subset of provisioning services. The concept of Total Economic Value (TEV) is useful in estimating marketed and non-marketed benefits at ecosystem or species level. Heal, in his paper Biodiversity as a Commodity in Encyclopedia of Biodiversity, Academic Press (2001), highlights the contributions of biodiversity in raising productivity, its insurance role, source of genetic knowledge and ecosystem services. He raises the capacity of our main economic institutions to realize the value of biodiversity. In this context, the background information provided by the NBA makes an important contribution in realizing the three goals of the CBD.

We must keep in mind the purposes of economic valuation. From a macro economic perspective, the two main purposes are (a) accounting for the overall contribution of natural capital, which is grossly under estimated in our national accounts, to arrive at a sustainable measure of national income, and (b) allocation of public resources especially to provision of merit goods and public goods provided by nature and investment in restoration /enhancement of natural capital, while integrating and balancing the three pillars- economic, social and environmental- of sustainable development in policy making. At regional/ecosystem level, economic valuation provides a basis for designing payment for ecosystem services, wherever feasible, using markets, creation of markets, or negotiation between providers and users of the services.

When the policy focus is on developing an ABS regime for India, the following issues arise:

a) Assuming measurement of TEV is feasible and reliable, what mechanisms are available for capturing the value?
b) As NBA is largely concerned with access to biological resources and traditional knowledge, can the valuation and development of methodologies for ABS be at species level?
c) In case of commercialization of a biological resource and traditional knowledge in a IPR regime, how are issues such as (i) low probabilities or uncertainties of success in developing a new drug or improved variety of agricultural product, (ii) long time span, (iii) measuring incremental contribution of the resource / knowledge, and (iv) monitoring of PIC,MAT, and MTA can be done?
d) What mechanisms are needed for dealing with information asymmetry between the providers and the users, uncertainty reduction, risk-reduction and sharing? For meaningful negotiation in reaching the MAT and MTA what are the roles of scientific inputs, contingency contracts?
e) What kinds of institutional arrangements – markets, cooperatives, government regulation and policies, supplier-user associations – and incentive-based innovative structures are needed to achieve the three goal of CBD?

B. Capacity Building

Apart from developing taxonomy, databases, functional groups on the basis of their intrinsic physiological and morphological characteristics, and biodiversity characterization at landscape level using remote sensing and geographic information system, the following classification of biological resources and traditional knowledge would be useful for developing an ABS regime:

- Private goods :Marketability

a. Perfectly competitive market with full internalization of environmental costs and sustainable resource use
b. Competitive market meeting rivalry and exclusion but not sustainability
c. Imperfect market

d. Not traded now but market can be developed

- Merit /social goods
- Public goods: local , regional, and global (Privatization of public good due to IPR, new technology)
- Intangibles/incommensurables
- Information/knowledge goods (asymmetric information, latent knowledge and discovering knowledge over time)

Case studies suggested;

- Feasibility of introducing Minimum Support Prices for selected NTFPs
- Feasibility of creating self-governing community –based organizations of Ostrom type
- Mechanisms for bio-prospecting for a few medicinal plants and associated traditional knowledge for addressing issues such as long time span between acquisition of resources and traditional knowledge and commercialization of the products, high risks, incremental contribution of the acquired resource and knowledge, time-pattern and mix of monetary and non-monetary payments, governance issues

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