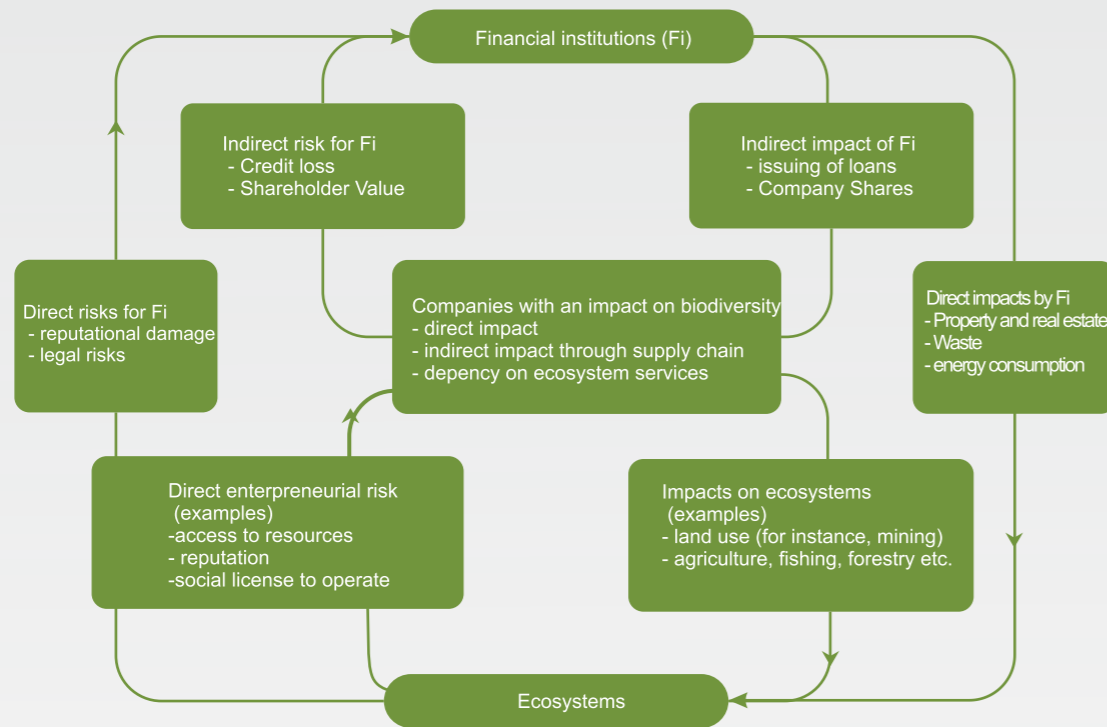


The links between ecosystems and financial institutions (Mulder, Koellner, 2011)



Following are some of the recommendations:

- ❖ Define concepts of biodiversity and ecosystem services (BES) for the financing sector in the country, through a conceptual framework for financing and non-financing components.
- ❖ The role of risk managers in banks to better understand and integrate elements of BES into their operations is critical
- ❖ Dialogue on issues related to BES and financing sector needs to be created soon to attract more information, inputs and ideas to take the issues forward.
- ❖ Show-case business opportunity, mitigation principles, availability of incentives and emerging reporting requirements as the basis for need to focus on BES by the financing sector
- ❖ Localize the global frameworks and principles that suit our business models and needs
- ❖ Banks can be requested to re-look at the appraisal form and format that includes issues of BES.
- ❖ An incremental approach to include BES as a part of systemic review of financing and non-financing sector is critical
- ❖ Priority sector learning programme need to be identified in a way forward to ensure better integration of ideas

Mulder & Koellner (2011) Hardwiring Green: How banks account for biodiversity risks and opportunities. Journal of Sustainable Finance & Investment . (18):103-120.

For Further Information:

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What is Biodiversity?

Biological Diversity (biodiversity) is defined as the variability amongst living organisms. Such diversity is the basis of human survival and well-being since biodiversity offers a range of goods and services for the people. This diversity is fast disappearing from this Earth putting everyone at risk. Unlike climate change that can be reversed by mitigation and adaptation actions over a period of time, biodiversity once lost is lost forever (extinction!).

Comparisons with the rate at which species have disappeared from the planet over a long period of Earth's history indicate that humans have already increased extinctions levels dramatically. Projections suggest that this rate will take another big leap over the next 50 years.

The asset value of biodiversity and ecosystem services (BES) from the market perspective is presented in the table for illustrative purposes and to demonstrate the market as well as investment potential that exist in BES that was hitherto unnoticed.

Asset Value of BES

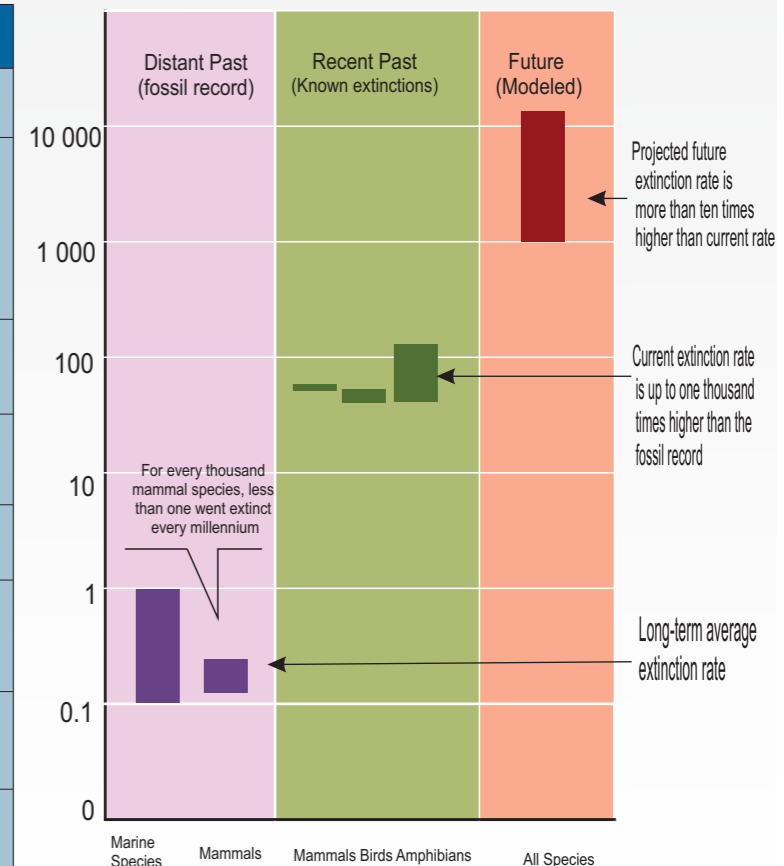
BES asset class	Market value	Year	Market type
Biodiversity mitigation / offsets	USD 1.8 – 2.9 billion		Private (cap and trade) ⁵¹
Biocarbon Voluntary OTC (forestry carbon), incl. REDD+ Chicago Climate Exchange – forest carbon CDM – reforestation/afforestation	USD 31.5 million USD 5.3 million USD 0.3 million	2008 2008 2008	Private (voluntary) ⁵² Private (voluntary) Private (cap and trade)
Cosmetics/personal care/ pharmaceuticals: bio-prospecting contracts	USD 30 million	2008	Private (voluntary) ⁵³
Certified agricultural products, incl. non-timber forest products (NTFPs)	USD 40 billion	2008	Private (voluntary) ⁵³
Certified forest products (FSC, PEFC)	USD 5 billion (FSC certified)	2008	
Payments for Watershed Services (private voluntary)	USD 5 million (e.g. Costa Rica, Ecuador)		
Payments water-related ecosystem services (government)	USD 5.2 billion	2008	Public ⁵³
Other payments for ecosystem services (government-supported)	USD 3 billion	2008	Public ⁵³
Private land trusts, conservation easements	USD 8 billion (in the U.S. alone)	2008	Public ⁵³

(UNEP, FI 2010)



Sustainability Redefined: Banking on Biodiversity

Extinctions per thousand species per millennium



Banking on Biodiversity

The value of natural capital (Biodiversity) is many times never considered as one of the key element for country's growth and performance. Loss of biodiversity has direct and widespread negative effects on country's economic and financial performance. Realising the risks associated loss of BES, banks around the world adopted the Equator Principles. The Equator Principles (EPs) were initially developed in 2003 after a number of banks, including ABN Amro, Barclays, Citigroup and WestLB, received public scrutiny for their involvement in actions impacting ecosystems. As of June 2010, 80 banks representing 85% of the global project finance market signed up to the EPs.

The Biodiversity - Finance links

In the area of operational risks that will be faced by financing institutions during the coming years, the following sectors will have an immense impact in the way socio-political and economic responses will guide the returns – oil and gas, mining, hydropower, fisheries, forestry and agribusiness. Such impacts will be directly guided by issues related to ecosystems and biodiversity.

In addition to the risk related issues, biodiversity and ecosystem services offer a range of opportunities for the financial institutions, namely

- ❖ Early movers can demonstrate integration of biodiversity and ecosystem services can bolster their reputation and create value for marketing practices.
- ❖ The capacities built in-house can benefit in terms of advisory services for corporate clients,
- ❖ Advising clients how to integrate biodiversity and ecosystem services in supply chain management can lead to cost reductions for clients
- ❖ Environmental markets are increasingly starting to take shape in a growing number of countries. Financial institutions that understand these markets may profit through offering brokerage services, registers, or specialised funds.(UNEP FI, 2010)

Given the above, time has come for us to review the preparedness of banking and finance sector in India to seize the potential opportunities that biodiversity and ecosystem services provide to their business and investments. Apart from this, the growing industry (large as well as small and medium scale) and infrastructure sectors provide an opportunity and a challenge for the financing sector to respond to their needs not compromising protection of biodiversity and ecosystems.



- Principle 1: Review & Categorisation
- Principle 2: Social & Environmental Assessment
- Principle 3: Applicable Social & Environmental Standards
- Principle 4: Action Plan & Management System
- Principle 5: Consultation & Disclosure
- Principle 6: Grievance Mechanism
- Principle 7: Independent Review
- Principle 8: Covenants
- Principle 9: Independent Monitoring & Reporting
- Principle 10: EPFI reporting

(<http://www.equator-principles.com>)

Redefining Environmental Sustainability

The directive from Reserve Bank of India to deal with sustainability solutions for the banking sector (2007)¹, the advisory from the Comptroller and Auditor General of India to work towards developing an ecological audit for the country (2010)² and the suggestion from the Planning Commission to develop an Ecological Performance Index (EPI) to deal with resource allocation from the next planning period (2012)³ all need to be linked and discussed together in the country to ensure the impact of such initiatives are collectively felt than dissipated.

To move forward this discussion, the National Biodiversity Authority (NBA) (an independent and statutory body established by an Act of Parliament in 2003 to facilitate conservation, sustainable use and sharing of benefits from biodiversity across the country, to regulate misappropriation of biodiversity and to advise Government of India on related issues) convened an expert meeting on the topic "**Linking Ecological and Economic Indicators**" to begin developing an integrated framework of action. During the meeting, it was suggested to bring on-board the banking and finance sector, a key sector in the country that has both a role and impact in managing our natural resources to identify ways of promoting an India-centric approach to financing and conservation.

Meeting on 'Sustainability Redefined'

The National Biodiversity Authority (NBA) organized a one day expert consultative meeting in May 2012 in Mumbai on the topic of "Sustainability Redefined" to link role of financing and non-financing agencies to deal with issues of biodiversity conservation, sustainable use and sharing of benefits.

The brainstorming discussion focused on the following:

- ❖ The role and relevance of ecosystems in sustainable business, from a banking perspective
- ❖ Possibility of launching a national initiative on the lines of UNEP-Finance Initiative in India
- ❖ Address the emerging role of investments and financing sector in global policy making

The discussion drew attention to the potential new businesses based on BES such as water quality trading, wetland banking, mitigation credit trading, threatened species banking, innovation in pollution treatment, reuse and prevention as well as new markets based on fair trade practice, certification of ecosystem products, organic and environmentally-friendly products.

It was also cited that the finance sector is at a relatively early stage in understanding, assessing and managing risks related to BES. Whilst the implementation of a biodiversity management framework is largely focused at the asset level, the application of the mitigation hierarchy and offsets is in its infancy. While banks in India are in the embryonic stages of addressing biodiversity risks, the bank policy frameworks and procedures lack strategic consideration of biodiversity risks and are primarily focused on negative screening. The Implementation of a biodiversity management framework focusing at the asset level and the need for greater rigour at all levels of assessment management, including at the client and portfolio levels are seen as critical.

¹The RBI/2007-08/214 DBOD. No.Dir. BC. 58/13.27.00/2007-08 "Corporate Social Responsibility, Sustainable Development and Non-Financial Reporting – Role of Banks"

²D.O.No. DAI (RC)/Sectt/2010/98-99 of 13.09.2010\

³Planning Commission (2012) Draft Guidelines for developing Environment Performance Index.