













TEEB for Agriculture and Food in India Inception Workshop

13-14 July 2020, via video conference















Contents

Executive Summary	3
Detailed Summary of Day 1: Consultations with Government Organizations	5
Detailed Summary of Day 2: Consultations with Technical Organizations	10
Annex 1: Poll Results	14
Annex 2: Agenda	16
Annex 3: List of Registered Participants	18



Executive Summary

The virtual inception workshop for TEEB AgriFood project India was held on 13th and 14th July¹. This was the official launch of the Indian component of the EU-funded TEEB for Agriculture and Food ('TEEBAgriFood) project which also involves implementation in Brazil, China, Indonesia, Malaysia, Mexico and Thailand.

This project aims to protect biodiversity and contribute to a more sustainable agriculture and food sector in seven EU partner countries. It is based on an internationally agreed methodological framework, introduced in the G8+5 context by the EU, addressing the economics of ecosystems and biodiversity. 'The Economics of Ecosystems and Biodiversity' (TEEB) initiative, hosted by UN Environment, has developed an Evaluation Framework that provides a comprehensive and universal approach to capture all the positive and negative impacts and externalities across the entire agri-food value chain, and specifically whether policy interventions produce any hidden or unaccounted for outcomes on natural, human, social and manmade capitals.

The first day (13th July) was targeted at discussion with officials working in key government organizations including Ministry of Environment, Forest and Climate Change (MoEFCC), Ministry of Agriculture and Farmer Welfare (MoAFW) and several institutes of Indian Council of Agriculture Research. The second day (14th July) was targeted at interacting with technical organizations working in the space of sustainable agriculture and food systems.

This workshop followed on from recent stakeholder interactions under the auspices of the project. A joint webinar was organized by TEEB office and UNEP India on 'Valuing nature for sustainability in the agriculture and food sector of India' on 19th June 2020, as a part of the 2020 World Environment Day Webinar Series. Under Work Package 4 (Business and Biodiversity), Capitals Coalition organized two webinars, on 29th April 2020 and 13th May 2020, in collaboration with the Indian Business Council for Sustainable Development and Centre for Responsible Business (C4RB), India.

All presentations and recordings of the inception workshop and other events are available on the <u>India</u> page of the project website.

The objectives of the inception workshop were to raise awareness about the implementation of TEEBAgriFood project, and to provide a platform to discuss policy priorities relevant to decisionmakers in the context of mainstreaming biodiversity conservation and ecosystems. In particular, the workshop sought to identify policy questions which would benefit from the application of the TEEBAgriFood evaluation framework in providing policy-relevant evidence to support decision-making to mainstream biodiversity conservation. Based on an intensive desk-based review, a set of four options were highlighted for discussion:

- 1) Evaluating zero budget natural farming (ZBNF);
- 2) Promoting sustainable land management for agriculture in drought prone areas;
- 3) Strengthening agroforestry initiatives in India; and
- 4) Moving towards a sustainable rice agronomy.

¹ The Inception Workshop was initially scheduled for 12th March 2020 in New Delhi but was postponed due to COVID-19, and a virtual event organised instead.



For each option, participants were provided a synopsis of a desk-based review on the national policy context in India, gaps in research, challenges, opportunities and scope for application of a TEEBAgriFood study. The options were presented to the participants on both days to get their opinions on the best choice vis-à-vis implementing the project.

During the discussion on both days, several participants favoured the options of evaluating ZBNF and strengthening agroforestry initiatives in India. It was also suggested that given the interlinkages between the first three options, they could be merged. There was less support for investigation of sustainable rice agronomy, in part due to a wealth of existing studies. Agroforestry and natural farming, in contrast, are relatively new areas, so the TEEBAgriFood project could have a higher opportunity for impact and development of novel findings.

Regarding the geographical scope of the project, there was some consensus on choosing Karnataka, given the success of watershed development plans in the state, and the synergies with an ongoing pilot on ecosystem accounting (funded by the EU and implemented by MOSPI, UNEP and United Nations Statistics Division), as well as with the forthcoming implementation of a GEF Project on national accounting project in the state. There was also interest to shortlist Andhra Pradesh, given that the state has been heralded as the resource state for ZBNF, and the potential for the TEEBAgriFood evaluation framework to add value to existing studies by integrating assessment of health and social impacts – in additional to natural capital impacts – which have been somewhat overlooked to date.

In summary, the event brought together leading experts working in the area of environment and biodiversity, both in the government and technical organizations, and generated some consensus for implementing the project in India. It served the objective of developing and streamlining option(s) for deliberation by the project Steering Committee as per the project plan. Based on the discussions and comments received during the virtual workshop, it was decided that further exploration will be done to identify which region to focus on with respect to natural farming and agroforestry and this will be presented to the steering committee for their approval to make a final decision.



Opening Session

Mr. Atul Bagai, Head of UN Environment Programme India welcomed all the participants and the key speakers including Mr. Jigmet Takpa and Mr. Uma Kant from Ministry of Environment, Forest and Climate Change and Department of Land Resources, Ministry of Rural Development and Ms. Henriette Faergemann, counsellor of EU to India. In his remarks, he mentioned:

- Day 1 of the inception workshop is a focused discussion for government organizations working in the area of conservation of biodiversity and ecosystem services.
- The workshop comes at an opportune time and helps to gather partnerships across all relevant organizations working in this space.
- The COVID situation arises in large part owing to our broken relationship with nature; and
- The need for interdisciplinary research and the interconnectedness between the natural environment and agricultural production means that the TEEBAgriFood project is ideally placed to provide answers to policy questions.

Ms. Henriette Faergemann, Counsellor, EU Delegation to India, gave a brief background on the challenges faced by the agriculture and food sector of India. She stressed:

- The need to look at the entire value chain of the agri-food sector which includes food production, processing, marketing and consumption.
- Given the multi-faceted nature of this sector, it is important to have a multi-disciplinary approach
 to come up with solutions. The EU is reforming its own food system as a part of the Green Deal
 where all aspects of the value chain are considered and this is highlighted in the recently
 released Farm to Fork Strategy of EU. In the implementation of the TEEBAgriFood project this
 perspective needs to be taken into consideration, and the EU can work jointly on how this can
 be made relevant in India.

Dr. Salman Hussain, TEEB Coordinator, UNEP, introduced to the audience the evolution of TEEB as a global initiative and the reason for selecting the agriculture sector as the focal sector for this project. He noted:

- The visible and invisible flows of agricultural production in human systems, agriculture and food systems, biodiversity and ecosystems. Nine out the top twenty global sectors in terms of environmental impact are agriculture related.
- The importance of this project for the Indian government and private sector, and the power of using scenarios analysis to inform decision-making.
- Specifics about the EU Partnership Instrument project implementation
- The six-step approach for scenario development, analysis and implementation using the <u>.TEEBAgriFood Framework</u>.

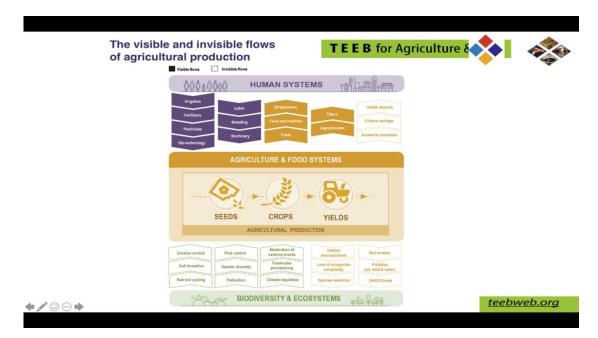
Dr. Harpinder Sandhu, UNEP-TEEB expert, outlined challenges and policy options, notably:

• Agriculture and food systems in India from the perspective of produced capital, social capital, human capital and natural capital.



- A timeline of major agricultural policies and outcomes, highlighting a transition from outcomes of food self-sufficiency of 1950s-2000 to doubling farmers income from 2015 onwards.
- The current policy approaches in India to social, human and natural capital.

Invisible and visible flows of agricultural production, presented by Dr. Hussain



Source: TEEBAgriFood India

Timeline of major agriculture policies, presented by Dr. Sandhu



Source: TEEBAgriFood India



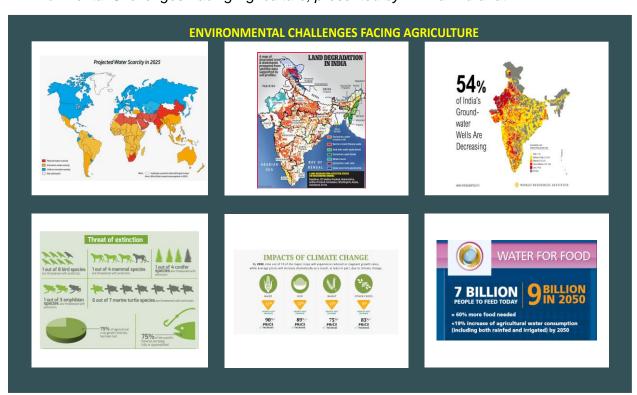
Dr. Simi Thambi, UNEP-TEEB India Office, presented the four options, their national context, scope for application of the TEEB evaluation framework and the opportunity for policy impact.

- 1. Evaluating zero budget natural farming
- 2. Promoting sustainable land management for agriculture in drought prone areas
- 3. Strengthening agroforestry initiatives in India
- 4. Moving towards a sustainable rice agronomy

Dr. N H Ravindranath, Professor, Indian Institute of Science, talked about the major environmental challenges for agriculture in India such as water scarcity, land degradation, groundwater depletion, biodiversity loss and impacts of climate change. He highlighted the following research challenges for sustainable agriculture:

- Limited understanding of status, trends and drivers and economic implication of biodiversity loss
- Limited understanding of economic loss due to land degradation and the associated impact on production and farmers livelihoods
- Limited information on what kind of strategies and interventions are required for sustainable agriculture that also ensure profitability for farmers in the short and long run
- Knowledge gaps in generating and creating access to information and weather, climate and adaptation information at local levels. More studies on long term impacts of climate change on agriculture and biodiversity are also needed.

Environmental Challenges Facing Agriculture, presented by Dr. Ravindranath



Source: TEEBAgriFood India



Dr. Ashok Patra, Scientist, Indian Institute of Soil Science, introduced major challenges in the context of soil, shrinking resources (land, water and biodiversity), increasing costs of inputs, impact of climate change, decreasing productivity and farmers' income, and other adverse environmental impacts. He also identified some focus some areas for future research as being soil health improvement, water resources management, climate smart agriculture, precision and digital agriculture, valuation of ecosystem services, extension services and mass awareness raising.

Soil health and water resources management, presented by Dr. Patra

Major Focus

Increasing Productivity and Farmers' Income, Food and Nutritional Security, Ecological Safety

- Soil Health Improvement
 - Organic recycling, INM, fossil fuel substitution
 - Enhancing NUE
 - New fertilizer products (Nano, specialty)
 - Restoration, Remediation and Reclamation of problematic soils
- Water Resources Management
 - Reduce, Recycle, Reuse, Recharge (4R)

Session 2: Panel Discussion

Mr. Jigmet Takpa, Joint Secretary, Ministry of Environment, Forest and Climate Change and National Focal Point of UNCCD for India, was asked to give his thoughts on the four options. He pointed out the following:

- All options look good but natural farming stands out. Any option that moves away from a highinput chemical-based agriculture should be encouraged. The scope of work of the project can explore the amalgamation of some of the options.
- Cross-ministerial collaboration is important as land is a matter that spans across many ministries including MoEFCC, MoRD (DoLR), MoAFW. There is a need to synergize views of different ministries for such projects. Land tenure issues should also be considered in evaluation.
- A landscape approach and an integrated value chain approach are important for implementation.

Mr. Uma Kant, Joint Secretary, Department of Land Resources, Ministry of Rural Development (MoRD), which leads the watershed management programme of India, was asked to give his perspective on where the project will be most useful. He highlighted:



- It is better to zoom in on an area with a mix and match of options, where the project can be translated into action, depending on the land availability, climate variability, and resource base both human and natural capital
- The suggestion of Karnataka and ZBNF can include drought management. There are some successful projects that could be useful for setting the baseline, <u>LRI (Land Resources Inventory)</u> work in Karnataka, the <u>REWARD Project</u> – Rejuvenating Watershed for Agriculture Resilience through Innovative Development. Water harvesting techniques from these projects can be included in these areas.
- There is a strong advantage of looking at policy interventions that are already lukewarm, as in active to some extent yet still desirous of further evidence. Given the confines of the project of 2.5 years, if the study starts from the scratch it will be too ambitious to expect enough evidence. By the same token, if there is abundant evidence already for an option, there might be no scope for value addition from the project.

Concluding Session

Mr. Will Speller, Programme Officer, UNEP TEEB Office, Ecosystems Division informed the participants about valuation of ecosystems work, Natural Capital Accounting and Valuation of Ecosystem Services (NCAVES) project in South Africa and India. In India, the project is being undertaken in Karnataka and includes biophysical modelling and valuation of ecosystem services in a spatially explicit manner, so as to facilitate land use planning decisions and to analyze policy trade-offs. It is being coordinated by Ministry of Statistics and Programme Implementation with technical work by the Indian Institute of Science in 14 districts. There are great potential synergies between this work and the proposed TEEB project.

After the moderated panel discussion, a virtual discussion was held with the participants via the online chat functionality. Participants mentioned three major aspects that need to be considered by the project:

1) How does the selected policy contribute to doubling farmers' income? 2) How can it help in building a climate change resilient agriculture system in the most vulnerable parts of the country? 3) How does it help to reduce grassland conversion and degradation?

Mr. Atul Bagai thanked the presenters and participants for their enthusiastic engagement with the project.



Opening Session

Mr. Atul Bagai, Head, UNEP India welcomed the participants of Day 2 consisting of technical organizations and partners.

Dr. Salman Hussain, TEEB Coordinator, UNEP introduced the TEEB concepts and evaluation framework to the participants of Day 2. He gave an introduction on how putting a value to ecosystem's services can make an economic case for change and in that context explained TEEB global initiative and TEEB Agrifood Evaluation Framework, in line with his remarks on Day 1.

Dr. Harpinder Sandhu and Dr. Simi Thambi repeated the background presentation and the presentation of the four options, a summary of which is above under Day 1.

Panel Discussion Session 1

Mr. T Vijay Kumar, Advisor, Government of Andhra Pradesh, was asked to explain the impact of ZBNF and the additional benefit associated with using the TEEBAgriFood framework to study ZBNF. He made the following key points:

- The biggest contribution that TEEB can make is to add to the scientific evidence on ZBNF by
 making values of externalities explicit to policymakers. In Andhra Pradesh, ICRAF is already
 carrying out some long-term studies on soil, water and other critical parameters.
- ZBNF has been **renamed Community Managed Natural Farming (CMNF)**, because innovative derivations of ZBNF have broadened its scope beyond its original framing.
- These are the other specific areas where a TEEB study can quantify indirect benefits of ZBNF, moving beyond the usual analysis of yield per hectare:
 - health benefits
 - improvement in the soil organic carbon and water holding capacity
 - improvement in energy saving
 - reduction in desertification, land degradation and droughts
 - impacts on women's livelihoods and self-help groups (as well as human and social capital more broadly)
 - reduction in government subsidies for fertilizers and energy subsidies, and the induced fiscal savings

Dr. Javed Rizvi, Director South Asia, World Agroforestry Centre, was asked about the potential value added from application of the TEEB study. He spoke about the work of ICRAF and ZBNF in Andhra Pradesh that examines the combination of agroforestry and ZBNF and for potential for scaling up such measures across the state.

Dr. Madhu Verma, Chief Economist, WRI India was asked about the kind of evidence can be brought to bear if the study focusses on ZBNF and agroforestry in Karnataka. She highlighted the following:

• ZBNF is rightly a policy priority; however, a challenge is that there cannot be a blanket application of it across the country due to the need to tailor farming methods to different agroclimatic zones.



- The combination of agroforestry and ZBNF is useful because both have ecosystem-wide approaches that consider much more than simple food production (yield per hectare).
- COVID 19 has underscored the need to transform food systems, with due consideration for the unique advantages of each state in India.
- Traditional knowledge, cultural values, gender, migration and farmer wellbeing all need to be women into the study – and the Framework allows for this through inclusion of human and social capital.

Dr. Haripriya, Professor, IIT Bombay was asked to share some of the challenges in applying TEEBAgriFood to India and some of the outcomes, given her experience with developing the framework and pilot studies. She mentioned an application of the Framework in Punjab state and how it brought to light complexities in the decision-making process. The policy conflicts with respect to ground water, soil management and air pollution were discussed.

Panel Discussion Session 2: Mainstreaming Biodiversity

Dr. Rita Pandey, Professor, National Institute of Public Finance and Policy was asked about challenges of mainstreaming biodiversity outcomes, particularly in the context of COVID-19 recovery packages. She highlighted the following:

- It is important to understand the nexus implications of policy actions. The Water Conservation Act of Punjab succeeded in the conservation of water due to changes in the rice production cycle, but it also created negative externalities for air pollution. As the window between rice harvest and wheat sowing was shortened, rice farmers started resorted to burning residue. It is thus important to not just look at direct impacts but also indirect negative externalities, and the entire production cycle.
- There is limited mainstreaming of biodiversity because of limited awareness and funding. Biodiversity targets are often seen as distinct from economic goals and so do not receive political support.
- For mainstreaming agroecological practices such as organic farming there needs to be consistent support until farmers can self-sustain the application of these practices. Farmers should not be locked into alternative systems, where self-sustainability has not been tested in the long run.

Dr. Jai Rana, Country Representative, CGIAR (Consortium of International Agricultural Research Centers) talked about working with traditional regional varieties as a part of his work. CGIAR research shows that marketing of traditional varieties is not easy, but opportunities have been created by marketing the unique advantages, such as taste, of these traditional varieties to meet changing habits and diets.

Dr. A Damodaran, Professor, Indian Institute of Management Bangalore, was asked to give his views on mainstreaming ecosystem valuation in India. He discussed the following:

 For natural resource management in Karnataka, an agroecosystems approach to measure ecosystem services is needed that incorporates the different crops that grow on low, middle and highlands.



- Quality of food and water is also important. For instance, food that comes from traditional varieties on farms and the water in coffee plantation areas of Western Ghats
- Heterogeneity across the states should be appropriately considered in modelling so as to upscale it effectively later for mainstreaming.
- The study can use language in a manner that makes it easy for implementation by farmers.

Ravindra Singh, Director, Biodiversity Programme, GIZ was asked about lessons learned from TEEB India initiative led by GIZ. He mentioned the following:

- GIZ experience shows that technical studies that addressed policy dilemmas such as identification of a challenge or problem, its trade-offs and measures to address them, were more welcome by decision makers as compared to studies that focused on precise valuation numbers of ecosystem services. In evaluating policy questions, it is useful to identify the trade-offs and link it relevant stakeholders for action.
- For mainstreaming, the objective should be clear at the outset, whether it is policy changes, integration into policy or change in the conservation status on the ground. An enabling framework does not by itself lead to a change: policies have to be supported by programs and schemes.
- It is important to address the short-term negative consequences of conservation, so that the long-term benefits can be yielded. In the Himalayas, GIZ is working with spice farmers to strengthen market linkages so that export companies who buy from spice farmers help them manage short-term risks of shifting to more sustainable agricultural practices.

Isabel Hoffman, TEEBAgriFood Collaboration Officer, Capitals Coalition gave a presentation on the work package relating to private sector engagement of the project. After an introduction about Capitals Coalition and country by country implementation plan, she explained some key aspects of TEEBAgriFood Implementation Operational Guidelines for Business of which the first draft is ready. The project design is such that there should be strong linkages between the private sector engagement and public sector policy components.

Will Speller, Programme Officer, TEEB Office, UNEP gave an introduction about the NCAVES project, reiterating the links summarized on Day 1. Mr. Speller also summarized the results to the poll questions (See Annex 1: Poll Results). The majority of participants favored the policy option of ZBNF and strengthening agroforestry. They recognized soil and land degradation as the main threat to biodiversity and ecosystem services in India and identified cultivation and production as the value chain components that adversely affect biodiversity the most.

After the moderated panel discussion, an open discussion with participants was conducted. During the discussion, the following points came up:

- Dr. Satyanarayana Masabathula, UNEP consultant on the NCAVES project, mentioned shifting
 cultivation as a challenge in India (particularly in North East India) and suggested its inclusion
 either in agroforestry or sustainable and management option in India. He also suggested
 inclusion of millet and pulses into the options, as these crops are vital to move away from
 monocropping cultivation.
- Mr. Edward Millard from Rainforest Alliance spoke about the GEF Cycle 7 project on transforming agriculture through biodiversity conservation in Karnataka and Andhra Pradesh.
 He added that in both spatial and thematic terms the project is going to be a value addition for



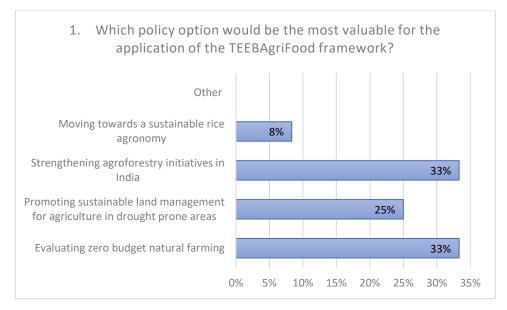
the proposed TEEBAgriFood study. Rainforest Alliance expressed interest in collaborating with TEEB.

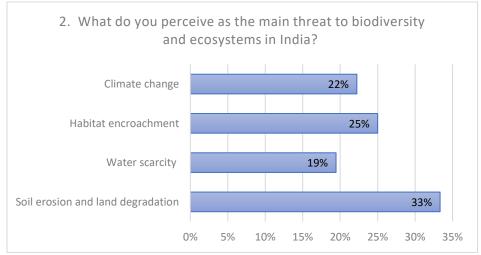
- Mr S Vijay Kumar from TERI remarked that the discussion on ZBNF needs to mature more for it to be scaled up or replicated, and that the temporal dimensions of sustainability need to be further tested. He supported agroforestry because as a concept it has been advocated for decades, but not much has been done for implementation since the new agroforestry policy has been in place. With the Ministry of Agriculture and Farmers' Welfare now taking responsibility, there is now an opportunity to bring about change.
- Mr. Vijay Kumar, from Andhra Pradesh Government, was asked about whether it would be better
 to focus on Andhra Pradesh which is already scaling up ZBNF as a success case and has
 completed/is conducting several research studies or on Karnataka where there is possibility to
 build on some ongoing seedling initiatives. He suggested that Andhra Pradesh is the resource
 state for ZBNF and since the state of knowledge in still insufficient to measure the multiple
 impacts, it would be preferable to focus there.

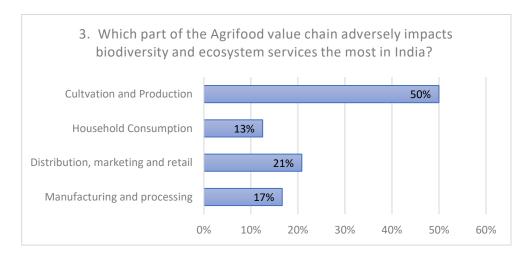
Mr. Atul Bagai, Head, UNEP India concluded the workshop with closing remarks by thanking all participants. He highlighted that this project assumes a lot of importance because 2020 is the Super Year of Nature and kicks off the 2020-2030 UN Decade of Ecosystem Restoration. The inception workshop has been a good beginning, and UNEP looks forward to continuing engagement with stakeholders as the project evolves.



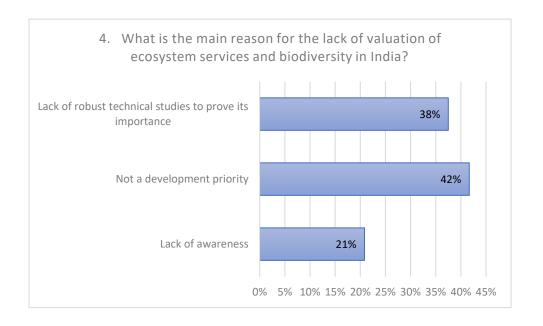
Annex 1: Poll Results

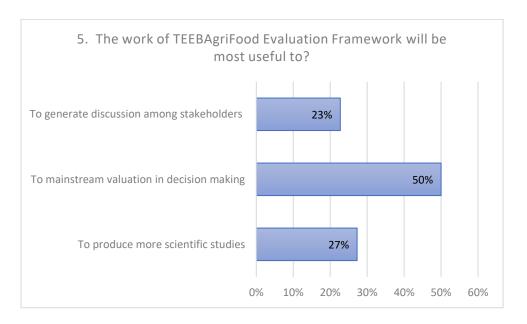
















Virtual Inception Workshop for UNEP Project

TEEB Implementation: Promoting a Sustainable Agriculture and Food Sector

July 13th - Day 1- Monday

Time: 3 pm to 5 pm IST

		120 minutes
Welcome	Mr. Atul Bagai, Head, UNEP India	35 minutes
Introduction	Dr. Salman Hussain, UNEP-TEEB	
	Coordinator	
Opening Remarks	Ms. Henriette Faergemann, Counsellor	
	of EU to India	
Presentation by TEEB	Background, Dr. Harpinder Sandhu	20 minutes
	Four Options for TEEB, Dr. Simi Thambi	
Setting the context	Indian Institute of Science, Prof NH	20 minutes
	Ravindranath	
Presentation– Research		
Priorities	Indian Institute of Soil Science, Director,	
	Dr. Ashok Patra	
Madagata d Diagrapian	Description of the second of t	00
Moderated Discussion	Promoting a sustainable agriculture and	20 minutes
	food sector in India: Challenges and	
	Opportunities	
	Mr. Jigmet Takpa, Joint Secretary,	
	Ministry of Environment, Forest and	
	Climate Change	
	Olimato Chango	
	Mr. Umakant, Joint Secretary,	
	Department of Land Resoucrces,	
	Ministry of Rural Development	
	,	
	Moderator: Dr. Salman Hussain	
Open Discussion	Moderator: Dr. Salman Hussain	20 minutes
Summary and Way forward	Dr. Salman Hussain and Mr. Will Speller	5 minutes



Virtual Inception Workshop for UNEP Project

July 14th - Day 2- Tuesday

Time: 3 pm to 5.30 pm IST

		150 minutes
Welcome	Mr. Atul Bagai, Head, UNEP India	
Introduction	Dr. Salman Hussain, TEEB Coordinator	20 minutes
Setting the context	Background, Dr. Harpinder Sandhu	20 minutes
	Four Options for TEEB, Dr. Simi Thambi	
Moderated Panel Discussion Round 1 Promoting a sustainable agriculture and food sector:	 Mr. T Vijay Kumar, Advisor, Zero budget Natural Farming Dr. Madhu Verma, Chief Economist, World Resources Institute Prof. Haripriya Gundimeda, IIT Bombay Dr. Javed Rizvi, Director, World Agroforestry (ICRAF) 	35 minutes
	Moderator: Dr. Salman Hussain	
Moderated Panel Discussion Round 2 Mainstreaming Biodiversity and Ecosystem Services in India:	 Dr. Rita Pandey, Senior Fellow, National Institute of Public Finance and Policy Dr. J. Ranna, Alliance of Biodiversity International and the International Center for Tropical Agriculture Prof . A. Damodaran, Professor, IIM Bangalore Mr. Ravindra Singh, Director, Biodiversity Programme, GIZ 	35 minutes
	Moderator: Dr. Salman Hussain	
Private Sector Engagement	Ms. Isabel Hoffmann, Capital Coalition	10 minutes
Open discussion and Polling	Moderator: Dr. Salman Hussain	25 minutes
Summary and Way forward	Dr. Salman Hussain and Mr. Will Speller	5 minutes



Annex 3: List of Registered Participants

Virtual Inception workshop			
	Day 1		
Name	Job Title	Company Name	
 Henriette Faergemann 	Counsellor	EU Delegation to India	
2. Jigmet Takpa	Joint Secretary	Ministry of Environment forest and Climate Change	
3. Uma Kant	Joint Secretary	Department of Land Resources	
4. Namita Priyadarshee	Joint Secretary	Department of Agriculture, Cooperation and Farmer Welfare	
5. N.H. Ravindranath	Prof	Indian Institute of Science	
6. A.C. Lakshmana	IFS Retired.	Formerly Govt. of Karnataka	
7. Ashok Patra	Director	ICAR-Indian Institute of Soil Science	
8. Ajay Pratap	Professor	Banaras Hindu University	
9. Anand Kumar Singh	Deputy Director General (Horticultural Science)	Indian Council of Agricultural Research (ICAR)	
10. Anita Chaudhary	Scientist	ICAR- Indian Agricultural Research Institute	
11. Antonis Constantinou	Junior Professional Officer	EU Delegation to India	
12. Asi Guha	Not mentioned	World Resources Institute	
13. Ayyanadar Arunachalam	Assistant Director General	ICAR- Indian Council of Agricultural Research	
14. Damodaran Nair	Professor	Indian Institute of Management Bangalore	
15. Divya Shah	Consultant	Department of Agriculture Cooperation & Farmers Welfare	
16. Dr Soora Naresh Kumar	Professor	ICAR- Indian Agricultural Research Institute	
17. Elphin Tom Joe	Intern	World Resources Institute	
18. JK Jena	Deputy Director General (Fisheries Science)	ICAR- Indian Agricultural Research Institute	
19. Kiran Kumar T M	Scientist	ICAR-National Institute of Agricultural Economics and Policy Res	



20. Lokesh Chandra Dube	Programme Officer	Ministry of Environment forest and Climate Change
21. Maria Fladl	Counsellor	EU Delegation to India
22. Parul Sharma	Not Mentioned	Indian Institute of Foreign Trade
23. Pratap Birthal	Professor	ICAR- National Institute of Agricultural Economics and Policy Research
24. Rama Shankar Sinha	Assistant Deputy Commissioner	Department of Agriculture, Cooperation and Farmer Welfare
25. Rakesh Kumar Maurya	Deputy Director General	MoSPI
26. Ravindra Singh	Director, Biodiversity Programme	Biodiversity Programme, GIZ
27. Shubhra Agarwal	Trade Adviser	Department of Agriculture, Cooperation and Farmer Welfare
28. Suresh Pal	Director	ICAR- National Institute of Agricultural Economics and Policy Research
29. Madhu Verma	Chief Economist	World Resources Institute
30. Salman Hussain	TEEB Lead, Coordinator, UNEP	United Nations Environment Programme
31. William Speller	Programme Officer	United Nations Environment Programme
32. Atul Bagai	Country Head	United Nations Environment Programme
33. Divya Datt	Programme Officer	United Nations Environment Programme
34. Simi Thambi	India TEEB Coordinator	United Nations Environment Programme
35. Rebeca Leonard	Coordinator, Malaysia and Indonesia	United Nations Environment Programme
36. Reuben Gergan	Intern	United Nations Environment Programme



Virtual Inception workshop			
Name		Day 2 Job Title	Company Name
1.	Ajay Pratap	Professor	Banaras Hindu University
2.	Amar D	Not mentioned	FSC Intl
3.		Not mentioned	WWF India
3. 4.	Anjana Shanmugavel Antonis Constantinou		
		Junior Professional in Delegation (FPI)	European Delegation to India
5.	Ashok Patra	Director	ICAR-Indian Institute of Soil Science
6.	Asi Guha	Not mentioned	WRI
7.	Ayyanadar Arunachalam	Assistant Director General	Indian Council of Agricultural Research
8.	Damodaran Nair	Professor	Indian Institute of Management Bangalore
9.	Tania Ray Bhattacharya	Founder CEO	The Celestial Earth
10.	Edward Millard	Director, Landscapes & Communities	Rainforest Alliance
11.	Elphin Joe	Intern	WRI
12.	Haripriya Gundimeda	Professor	Indian Institute of Technology Bombay
13.	Harpinder Sandhu	Assistant Professor	Flinders University
14.	Indu K Murthy	Principal Research Scientist	CSTEP
15.	Isabel Hoffmann	NA	Capitals Coalition
16.	Jayahari KM	FOLU India Country Coordinator	FOLU India
17.	Jai Rana	Country Representative	Bioversity
18.	Javed Rizvi	Director	World Agroforestry (ICRAF)
19.	Kamal Seth	India Representative	Roundtable on Sustainable Palm Oil
20.	Kusum Arunachalam	Professor	Doon University
21.	Makiko Yashiro	Programme Officer	UNITED NATIONS ENVIRONMENT PROGRAMME-ROAP
22.	Maria Fladl	Counsellor	EU Delegation to India
23.	Milcah Ndegwa	Associate Programme Officer	UNITED NATIONS ENVIRONMENT PROGRAMME



24.	Minakshi Dey	Head - Corporate	Sodexo
		Responsibility	
25.	Monalisa Sen	Programme Coordinator (Biodiversity)	ICLEI-Local Governments for Sustainability, South Asia
26.	Murli Dhar	Director, SAP	WWF
27.	Nachiketa Das	Vice President	GIST Advisory
28.	Nitya Chhiber	Programme Officer	Centre for Responsible Business
29.	Pia Sethi	Independent Consultant	Formerly Senior Fellow, TERI, now a consultant
30.	Parul Sharma	NA	lift
31.	Pravir Deshmukh	Counsellor	Confederation of Indian Industry
32.	Purnamita Dasgupta	Professor	IEG
33.	Ranjini Murali	Conservation Scientist	The Snow Leopard Trust
34.	Raghuram Nandula	Professor of Biotechnology and Chair, INI	INI, Sustainable India Trust and GGSIP University
35.	Rakesh Kumar Maurya	DDG	Ministry of Statistics and Programme Implementation
36.	Ramesh Ramachandran	Director	National Centre for Sustainable Coastal Management
37.	Ravindra Singh	Director, Biodiversity Programme	GIZ
38.	Rijit Sengupta	CEÖ	Centre for Responsible Business (CRB)
39.	Ritesh Kumar	Director	Wetlands International South Asia
40.	Rosy Choudhury	Director, South Asia	Rainforest Alliance
41.	Sai Kishore Nellore	Head of Research	Sustainable India Finance Facility
42.	Saravanakumar Veerasivam	Assistant Manager - Sustainable Agriculture	WWF-India
43.	Saroj Barik	Director	CSIR-NBRI
44.	Saroj K Barik	Director	CSIR
45.	Satyanarayana Msasabathula	Natural Resource Management Expert	United Nations Environment Programme
46.	Seema Bhatt	National Biodiversity	FAO, United Nations



India 47. Shivaprakash K N Senior Applied Scientist 48. Sridhar Ampilli 49. Syamala Lingala 50. Vamshi Krishna 51. Vibha Ahuja 52. Vijay Kumar Thallam 53. Vijay Sardana Fexcutive Vice Chairman 54. Vivek Saxena Senior Applied Senior Applied Scientist NA WWF-India Biodiversity Initiative (IBBI) WWF-India Biotech Consortium India Limited Executive Vice Rythu Sadhikara samstha, Depriof Agriculture, Govt of A.P High Court, Delhi Expert & Advocate Senior WWF-India Biotech Consortium India Limited Executive Vice Rythu Sadhikara samstha, Depriof Agriculture, Govt of A.P Fechno-Legal Expert & High Court, Delhi Expert & Advocate Senior WWF-India Biotech Consortium India Limited Fecutive Vice Chairman Fechno-Legal Expert & High Court, Delhi Expert & Advocate Senior WWF-India Biotech Consortium India Limited Fecutive Vice Consulture, Govt of A.P Fechno-Legal Expert & High Court, Delhi Expert & Advocate Senior WWF-India Biotech Consortium India Limited Fecutive Vice Consulture, Govt of A.P Fechno-Legal Expert & Advocate Fechno-Legal Expert & Ad			T	T
Scientist 48. Sridhar Ampilli 49. Syamala Lingala Executive Officer Officer Senior Manager 51. Vibha Ahuja Chief General Manager Executive Vice Chairman Techno-Legal Expert & Advocate 54. Vivek Saxena Country Representative 55. Vivekanandan Elayaperumal Scientist NA WWF-India Biotech Consortium India Limited Rythu Sadhikara samstha, Depriof Agriculture, Govt of A.P High Court, Delhi Central Marine Fisheries Research Institute 56. Zakir Hussain Thematic RySS			Expert, FAO India	
49. Syamala Lingala Executive Officer Officer Senior Manager 51. Vibha Ahuja Chief General Manager Executive Vice Chairman Somior Manager Executive Vice Chairman Techno-Legal Expert & Advocate 54. Vivek Saxena Country Representative Techrol Limited Executive Vice Country Representative Consultant Consultant Consultant Consultant Consultant Consultant Coll India Business and Biodevire (IBBI) WWF-India WWF-India Biotech Consortium India Limited Rythu Sadhikara samstha, Depresentative, Govt of A.P High Court, Delhi Control Marine Fisheries Research Institute RySS	47.	Shivaprakash K N		The Nature Conservancy
Officer Biodiversity Initiative (IBBI) 50. Vamshi Krishna Senior WWF-India 51. Vibha Ahuja Chief General Manager Limited 52. Vijay Kumar Thallam Executive Vice Chairman of Agriculture, Govt of A.P 53. Vijay Sardana Techno-Legal Expert & Advocate 54. Vivek Saxena Country Representative 55. Vivekanandan Elayaperumal Consultant Central Marine Fisheries Research Institute 56. Zakir Hussain Thematic RySS	48.	Sridhar Ampilli	NA	WWF-India
50. Vamshi Krishna Senior Manager 51. Vibha Ahuja Chief General Manager Senior Manager Senior Manager Senior Manager Chief General Limited Senior Manager Biotech Consortium India Limited Rythu Sadhikara samstha, Deproof Agriculture, Govt of A.P Techno-Legal Expert & Advocate Senior Manager Biotech Consortium India Limited Rythu Sadhikara samstha, Deproof Agriculture, Govt of A.P Techno-Legal Expert & High Court, Delhi Expert & Advocate Senior Manager Chief General Biotech Consortium India Limited Fermion of Agriculture, Govt of A.P IUCN Sepresentative Country Representative Senior Manager Country Representative Thematic RySS	49.	Syamala Lingala	Executive	CII India Business and
Manager 51. Vibha Ahuja Chief General Manager Executive Vice Chairman Techno-Legal Expert & Advocate 54. Vivek Saxena Country Representative Solution Sakir Hussain Manager Biotech Consortium India Limited Rythu Sadhikara samstha, Depresentative Rythu Sadhikara samstha, Depresentative Rythu Sadhikara samstha, Depresentative Rythu Sadhikara samstha, Depresentative, Govt of A.P IUCN Consultant Consultant Central Marine Fisheries Research Institute RySS			Officer	
51. Vibha Ahuja Chief General Manager S2. Vijay Kumar Thallam Executive Vice Chairman Techno-Legal Expert & Advocate 54. Vivek Saxena Country Representative S5. Vivekanandan Elayaperumal Chief General Manager Executive Vice Chairman Faythu Sadhikara samstha, Depro of Agriculture, Govt of A.P High Court, Delhi Expert & High Court, Delhi Country Representative Consultant Central Marine Fisheries Research Institute RySS	50.	Vamshi Krishna	Senior	WWF-India
Manager Limited 52. Vijay Kumar Thallam Executive Vice Chairman Techno-Legal Expert & Advocate 54. Vivek Saxena Country Representative 55. Vivekanandan Elayaperumal Consultant Central Marine Fisheries Research Institute Techno-Legal High Court, Delhi Expert & Advocate Country Representative Consultant Central Marine Fisheries Research Institute RySS				
52.Vijay Kumar ThallamExecutive Vice ChairmanRythu Sadhikara samstha, Depro of Agriculture, Govt of A.P53.Vijay SardanaTechno-Legal Expert & AdvocateHigh Court, Delhi54.Vivek SaxenaCountry RepresentativeIUCN55.Vivekanandan ElayaperumalConsultant Consultant Research InstituteCentral Marine Fisheries Research Institute56.Zakir HussainThematicRySS	51.	Vibha Ahuja		
Chairman of Agriculture, Govt of A.P 53. Vijay Sardana Techno-Legal Expert & Advocate 54. Vivek Saxena Country Representative 55. Vivekanandan Elayaperumal Consultant Consultant Central Marine Fisheries Research Institute Thematic RySS				
53. Vijay Sardana Techno-Legal Expert & Advocate 54. Vivek Saxena Country Representative 55. Vivekanandan Elayaperumal Consultant Central Marine Fisheries Research Institute Thematic RySS	52.	Vijay Kumar Thallam		
Expert & Advocate 54. Vivek Saxena Country Representative 55. Vivekanandan Elayaperumal Consultant Central Marine Fisheries Research Institute Thematic RySS				
Advocate 54. Vivek Saxena Country Representative 55. Vivekanandan Elayaperumal Consultant Central Marine Fisheries Research Institute Thematic RySS	53.	Vijay Sardana		High Court, Delhi
54. Vivek Saxena Country Representative IUCN 55. Vivekanandan Elayaperumal Consultant Consultant Research Institute 56. Zakir Hussain Thematic RySS			-	
Representative	<i>E1</i>	Vivok Savana	_	ILICN
55.Vivekanandan ElayaperumalConsultantCentral Marine Fisheries Research Institute56.Zakir HussainThematicRySS	34.	VIVER Saxeria	-	IOCN
Research Institute 56. Zakir Hussain Thematic RySS	55	Vivekanandan Elavanerumal		Central Marine Fisheries
56. Zakir Hussain Thematic RySS	55.	vivekanandan Elayaperumai	Consultant	
	56.	Zakir Hussain	Thematic	
Lead-Science		Zami riassam	Lead-Science	1.1,000
57. Madhu Verma Chief World Resources Institute	57.	Madhu Verma		World Resources Institute
Economist			Economist	
58. Rita Pandey Senior. Fellow National institute of public	58.	Rita Pandey	Senior. Fellow	National institute of public
finance and policy				
59. Salman Hussain TEEB Lead, United Nations Environment	59.	Salman Hussain		United Nations Environment
Coordinator, Programme				Programme
UNEP			_	
60. William Speller Programme United Nations Environment	60.	William Speller		
Officer Programme		Atal Dana'		
61. Atul Bagai Country Head United Nations Environment	61.	Atui Bagai	Country Head	
Programme C2 Divis Dett Programme United Nations Environment	62	Disag Dott	Drogramma	
62. Divya Datt Programme United Nations Environment Officer Programme	6∠.	Divya Dall		
Officer Programme 63. Simi Thambi India TEEB United Nations Environment	63	Simi Thamhi		United Nations Environment
Coordinator Programme	03.	Simi mambi		
64. Rebeca Leonard Coordinator, United Nations Environment	64	Rebeca Leonard		
Malaysia and Programme	07.	Nobood Econard	-	
Indonesia				g.s
65. Reuben Gergan Intern United Nations Environment	65.	Reuben Gergan		United Nations Environment
Programme		.		Programme

