

Background document for the TEEBAgriFood Inception workshop

Scoping Document for TEEB Agri-Food

This document gives a summary of the projects in India under the Biodiversity Focal Area. It records the key projects discussed in a conversation with Head, UNEP India Country Office. The first part gives a summary of projects where UNEP is the lead agency, both GEF and EUPI funded. The second part gives details of GEF projects of other organizations in the scope of TEEB Agrifood. In addition, Annex -1 presents all UNEP Projects in India under GEF (Biodiversity Focal Area), Annex 2 gives GEF Projects in the Area of Biodiversity (All GEF Agencies- Cycle 1 to Cycle 7).

Part 1: UNEP projects within the direct scope of TEEBAgrifood

1. Integrated Management of Wetland Biodiversity and Ecosystems Services (IMWBES)

GEF Cycle	GEF 5	
Duration	60 months	
GEF Focal Area	BD1 Protected Areas	
Type of Project	GEF FSP	
Status	Project Approved	
From/ to	July 2015 to June 2020	
Cost of the Project	\$24,413,575	
Cost to the GEF Trust Fund	\$4,196,575	
Co-financing	\$20,217,000	
Type of Project	GEF FSP	
Project executing organization	Ministry of Environment, Forests and Climate Change, Government of India	

Background of the project:

Despite their wide ranging ecosystem services¹ and biodiversity values, wetlands continue to be degraded and under threat from a range of developmental pressures emanating from *inter alia* urbanization, agriculture intensification, and industrialization. As per various estimates, nearly 30% of natural wetlands in the country have been lost in the last three decades alone. At the core of wetland degradation is weak recognition of their ecosystem services and biodiversity values within broader developmental programming. Degradation of wetlands,

¹As defined by Millennium Assessment, 'Ecosystem services' are the benefits people obtain from ecosystems. These include provisioning services (food and water), regulating services (regulation of floods, droughts, land degradation and disease), and cultural services (recreational, spiritual and other non-material benefits). The term ecosystem services corresponds with the usage of terms "products, functions and attributes".

and the concomitant decline in ecosystem services, increases water and food insecurity, as well as constrains climate change adaptation in a number of ways.

The Integrated Management of Wetland Biodiversity and Ecosystem Services (IMWBES) project aims at improving management effectiveness of the nationally and internationally significant wetlands of India. This GEF Full-Size Project (FSP) complements the National Plan for Conservation of Aquatic Ecosystems (NPCA), flagship programme of the Ministry of Environment, Forests and Climate Change (MoEFCC), Government of India (GoI), for conservation and sustainable management of wetlands in the country.

The IMWBES project is structured around four principle components listed in the table below:

Component 1: National wetland biodiversity and ecosystem services based knowledge systems

Component 2: National scale capacity building for applying integrated wetland management

Component 3: Demonstration of integrated wetland management

Component 4: Project monitoring, evaluation and outcome dissemination

Connection with TEEBAgriFood and scope for Collaborative Work

The knowledge based systems component under component will lead to delivery of a tool to enable systematic assessment and evaluation² of wetland ecosystem services and biodiversity values to support site prioritization for integrated management. The tool will be based on indicators enabling identification and assessment of extent of ecosystem services provision at multiple scales, underlying biophysical and socio-economic conditions that support delivery of ecosystem services. An assessment of the available national and international methodologies, tools and best practices for wetland ecosystem services and biodiversity values will precede tool development.

During scoping phase of this project, the TEEB³ studies were among the major tools and methodologies identified along with the other methodologies such as: a) Ramsar Convention Wise Use Handbooks⁴; b) UNEP Ecosystem Services Methodology related toolkits⁵; c) TESSA (Toolkit for Ecosystem Services Site Based Assessment)⁶; d) TEEB framework; e) WAVES⁷; and f) Values⁸.

Under this project, three pilot sites have been selected:

- Pilot Site 1- Sasthamcotta Lake, Kerala: Located in Kunnathur Taluk of Kollam District, Sasthamcotta is the largest freshwater wetland of Kerala State and one of its three designated Ramsar Sites (since 2002). The lake is the principal source of water for 0.5

² Inventory is aimed at establishing the baseline, whereas assessment refers to deriving status and trends in various wetland features, governing factors and threats. Reference: Ramsar Handbook 11 – An Integrated Framework for Wetland Inventory, Assessment and Monitoring

³ Available at: www.teebweb.org

⁴ http://www.ramsar.org/library/field_document_type/guidelines-429/field_document_type/handbooks-4th-edition-494/type/document?search_api_views_fulltext=handbooks&items_per_page=20#

⁵ List available at: http://www.unep.org/publications/contents/pub_details_search.asp?ID=4041

⁶ Available at: <http://www.birdlife.org/worldwide/science/assessing-ecosystem-services-tessa>

⁷ Wealth Accounting and Valuation of Ecosystem Services, tool available at: <https://www.wavespartnership.org/en>

⁸ Available at: <http://www.aboutvalues.net/>

million people living in Kollam City and its suburbs. The lake also plays a role in cycling nutrients received from the agricultural catchment, utilized within the ecological production processes and the food chain.

- Pilot Site 2 – Kanwar Jheel, Bihar: Kanwar Taal is a part of an extensive floodplain in north Bihar. Despite having such high ecological and socioeconomic significance, conservation and sustainable management of Kanwar has received very limited attention in developmental planning in the state. Support for policies aimed at enhancing food security by bringing in additional areas under agriculture brought in tremendous pressure on the naturally fertile floodplain wetlands as Kanwar. Agriculture has gradually intensified with shrinking inundation areas, and traditional varieties giving way to more water demanding crops as sugarcane, and peppermint. Shrinking resource base further accentuated conflicts between farmers and fishers, the latter having to shift to aquaculture fisheries and agriculture labour as source of livelihoods. Kanwar has gradually transformed into contested common with the wetland use made subservient to conflicting sectoral and stakeholder interests.
- Pilot Site 3 - Harike Lake, Punjab: Harike is a riverine wetland created at the confluence of Rivers Sutlej and Beas, covering an area of over 28,500 ha spread across four districts of Amritsar, Ferozepur, Kapurthala and Jalandhar. A substantial part of the wetland is used for agriculture. Located within an intensively cultivated catchment and a modified hydrological regime, Harike is subject to intensive pollution from upstream industrial townships of Ludhiana and Kapurthala, as well as runoff from neighbouring agricultural fields.

2. Mainstreaming agricultural biodiversity conservation and utilization in the agricultural sector to ensure ecosystem services and reduce vulnerability.

GEF Cycle	GEF 5
Duration	60 months
GEF Focal Area	Biodiversity Production land/seascapes
Type of Project	GEF FSP
Status	Project Approved
From/ to	From 2016 till November 2022,
Cost of the Project	13,491,097 USD
GEF Project Grant	3,046,347 USD
Co-financing	10,294,750 USD
GEF Agency Fees	289,403 USD
Type of Project	GEF FSP
GEF Agencies	UN Environment

Executing organization	Indian Council of Agricultural Research (ICAR); Bioversity International, Office for South Asia
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Background of the project:

The project aims to mainstream the conservation and use of agrobiodiversity for resilience agriculture and sustainable production to improve livelihood and access and benefit sharing capacity of farmer communities across four agro-ecoregion of India. This will be done through mainstreaming a number of tested community-based participatory approaches which support the maintenance of existing crop diversity, the introduction and deployment of appropriate new materials of 12 crops. The project will develop one national and four regional level strategies and plans on integrated sustainable agricultural improvement and use of agrobiodiversity that will provide an enabling environment for diversity deployment in order to support adaptation of agricultural ecosystems with unpredictable temperature and precipitation conditions.

The project has 4 subcomponents-

Component 1: Adaptive management for conservation and use of crop agrobiodiversity for resilient agriculture and sustainable production.

Component 2: Strategies and policies for sustainable conservation and use of crop diversity.

Component 3: Institutional frameworks, increasing capacity and building partnership among policy-makers, researchers, extension workers and farmers.

Component 4: Project monitoring and evaluation and knowledge management

Connection with TEEBAgriFood and scope for Collaborative Work

Component 3 and 4 will focus on strengthening relevant institutions and building the capacity of rural communities to enable the custodians of agricultural genetic resources to share in the benefits of the materials they are conserving and ensure recognition by the agricultural sector of the role of agrobiodiversity. Component 3 will also strengthen the capacity of research, extension and outreach workers to identify and support. Under Component 3, the research aspects can be linked to TEEBAgri food.

The work will be undertaken in four agro-ecoregions:

- Western Himalayas including the cold arid tract: Rich genetic diversity occurs in wheat, barley, buckwheat, prosomillet, amaranth, chenopods, field peas, lentil and several other crops, possessing adaptability to cold and tolerance to drought conditions.
- North-eastern region and the Eastern Himalayas: The tribal dominated belts of Mizoram, Manipur, Meghalaya, Tripura, Sikkim, North Bengal and parts of Nagaland and Arunachal Pradesh, are rich in local variability of cereals.
- *Western arid/semi-arid region*: In Rajasthan and Gujarat (including Saurashtra), rich diversity occurs in sorghum, pearl millet, moth bean, cluster bean, cowpea, black gram, green gram, Brassicae, sesame, cucurbits, forage legumes and grasses.
- *Central tribal region*: Madhya Pradesh and adjoining tract of Maharashtra possess rich diversity in wheat, rice, sorghum, minor millets, grain legumes - particularly cowpea,

chickpea, pigeonpea, black gram and green gram; oilseeds - niger, sesame, Brassicae; and cucurbits.

These agro-ecoregions have been chosen because they are rich in agrobiodiversity of the target crops and are different geographically, ecologically and culturally. These four agro-ecoregions include a range of agro-ecosystems allowing for the conservation of varieties with a range of characteristics supporting the adaptation of agro-ecosystem at a global level.

3. Transforming agricultural systems and strengthening local economies in high biodiversity areas of India through sustainable landscape management and public-private finance

GEF Cycle	GEF 7	
Duration	60 months	
GEF Focal Area	Multi-focal area (LD and BD) Land Degradation and Biodiversity	
Type of Project	GEF FSP	
Status	Concept Note Approved	
From/ to	TBD	
Cost of the Project	\$76,266,883	
Cost to the GEF Trust Fund	\$6,266,883	
Co-financing	\$70,000,000	
Type of Project	GEF FSP	
GEF Agencies	UN Environment, IUCN	
Project organization	Ministry of Environment, Forest and Climate Change (MoEFCC); Ministry of Agriculture and Farmers' Welfare (MoAFW); State Government of Karnataka; State Government of Andhra Pradesh; Rainforest Alliance (RA); Rythu Sadhikara Samstha (RySS)	

Background of the project:

For India to achieve stable, long-term agricultural growth that slows biodiversity loss and land degradation, while also providing viable employment for its rural population, alternative low-input farming practices are required on a large scale. Two particularly promising and related approaches are (i) the market-driven application of sustainable agriculture practices that can lead to Rainforest Alliance certification; and (ii) Zero Budget Natural Farming (ZBNF), a type of low-input, climate-resilient farming that encourages farmers to use low-cost, locally-sourced inputs, eliminating the use of artificial fertilizers, and industrial pesticides.

The practice of intercropping is encouraged under the Rainforest Alliance standards of best practice and ZBNF, which ensures that vulnerable communities have access to a suite of nutritional sources and income-generating crops throughout the year. Farmers are encouraged to plant trees in the same plot of land. Agroforestry not only improves the productivity of the land, but also plays a pivotal role in landscape restoration and prevention of biodiversity loss. Locally-adapted crops and livestock breeds also require fewer inputs – inputs that often pose threats to biodiversity⁹.

The project objective is to reduce land degradation and conserve biodiversity in agricultural landscapes in the states of Andhra Pradesh and Karnataka by promoting sustainable agricultural production, supply chains and public-private finance.

The project has the following components:

Component 1. Enabling institutional, fiscal, and strategic frameworks, at the national and state levels, that promote sustainable agriscapes contributing to LDN and biodiversity conservation

Component 2. Scaling up of sustainable agriculture and landscape management for attaining LDN, biodiversity conservation and inclusive economic growth among rural producers in priority agriscapes of Karnataka and Andhra Pradesh

Component 3. Market mechanisms and public-private finance for long-term adoption of SLM practices and increased investment in priority landscapes in the two project states

Component 4. Knowledge management and national outreach.

Connection with TEEBAgriFood and scope for Collaborative Work

The scope of TEEB Agri-food fits within Component 4 of this project. The outcome of this component is to develop Evidence-based Monitoring, Evaluation & Learning (MEL) system that documents, analyses and disseminates effective intervention strategies for restoring productive landscapes and sustainable food systems to enable uptake and replication at national and state levels. The targets as mentioned in the PIF are:

- One policy document in each state incorporates learning from the project
- 20 media products discuss and disseminate project learning
- Landscape-based ZBNF and sustainable agriculture replicated in at least one new State

Under this project, two pilot sites have been selected:

- Karnataka: Karnataka is among the states with the highest desertification/land degradation level in India. About 54% of the area of the state is under cultivation (of which 13% is irrigated); 16% is under forests, and the remaining 30% is either left barren or is unculturable/ culturable wasteland. Water erosion is the primary cause of land degradation (26.29%), followed by vegetation degradation (8.93%), which has been a particular problem in the biodiversity hotspot of Western Ghats. As per Indian Space Application Centre study, Karnataka has about 36.24% of TGA under

⁹ For example, diclofenac given to cattle in India caused the deaths of over 90% of several species of endangered vultures in the late 1990s and early 2000s (Asian white-backed vulture, Indian vulture, and slender-billed vulture).

desertification/ land degradation for the period of 2011-13, an increase of about 0.05% since 2003-05. More than 75% of the entire geographical area of Karnataka witnesses arid or semi-arid climate. Karnataka has about 15% of the total semi-arid or 3% of the total arid areas marked in India.

- Andhra Pradesh: The state is divided into nine agroclimatic regions, and agriculture plays an important role not only in the economy – 30% of GDP- but also for achieving food security for the country. The sector is vital for livelihoods, as 63% of the population in AP live in rural areas and depend on agriculture and related livelihood opportunities. According to the Indian Space Application Centre data, 14.35% of the state’s TGA is under desertification/land degradation (2011 –13, a 0.19% increase since 2003 –05). The most significant process of desertification/land degradation is Vegetation Degradation (7.27% in 2011 – 13 and 7.29% in 2003 – 05), followed by Water Erosion (4.93% in 2011 – 13 and 4.899% in 2003 – 05). Vegetation degradation is observed mainly as deforestation/forest-blanks/shifting cultivation and degradation in grazing grassland as well as scrubland. Destruction of vegetation, most often by human activities, has accelerated soil degradation and desertification.

4. Natural Capital Accounting and Valuation of Ecosystem Services Project (NCAVES)

Funding	EUPI (European Union through its Partnership Instrument (PI))
Implementing Agency	MOSPI, Government of India with United Nations Statistics Division, in collaboration with UN Environment TEEB office and the secretariat of the Convention on Biological Diversity (CBD).

Background of the project:

The project funded by the European Union through its Partnership Instrument (PI), aims to assist the five participating partner countries, India, Brazil, China, Mexico, and South Africa to advance the knowledge agenda on environmental-economic accounting, in particular ecosystem accounting. It will initiate pilot testing of SEEA Experimental Ecosystem Accounting (SEEA EEA) with a view to:

- Improving the measurement of ecosystems and their services (both in physical and monetary terms) at the (sub)national level;
- Mainstreaming biodiversity and ecosystems at (sub)national level policy planning and implementation;
- Contribute to the development of internationally agreed methodology and its use in partner countries

The project will have a duration until the end of 2020.

The Social Statistics Division (SSD) of Central Statistics Office of Ministry of Statistics and Programme Implementation (MoSPI) is the nodal agency for implementation of the project

in India. The role of MoSPI is to coordinate with all the stakeholders through a consultative process to evolve a model which can help in “Natural Capital Accounting and Valuation of Ecosystem Services” by building upon the various datasets generated through surveys, studies, remote sensing as also through the administrative mechanisms.

Connection with TEEBAgriFood and scope for Collaborative Work

In September 2018, the CSO released India’s first official environmental economic accounts containing asset accounts in physical terms of four natural resources – forest, land, minerals and water. The accounts revealed a nuanced picture of the state of India’s natural capital, with several regions showing a net-positive increases in assets like forest cover and carbon stock. However, the accounts also revealed potentially unsustainable trends in groundwater extraction as well as serious declines in snow and glacier cover.

Explore ways to use these statistics proactively in TEEB India studies.

On 04 September 2019, a Side Event of CoP14 India was held in New Delhi, India, Natural Capital Accounting in Support of Land Degradation Neutrality, panellists from that session must be invited for the inception workshop.

In India, as a pilot, A suite of ecosystem accounts will be assessed in a pilot for the State of Karnataka. Several ecosystem services will be assessed at the national scale. Connect with MoSPI to track progress on this.

5. Mainstreaming natural capital values into planning and implementation for sustainable blue economic growth in Indian coastal districts

(Details requested)

6. BioSafety Capacity Building on Biosafety for Implementation of the Cartagena Protocol - Phase II under the Biosafety Program

GEF Cycle	GEF 4
Duration	4 years
GEF Focal Area	Biodiversity
Type of Project	GEF FSP
Status	Project Closed
From/ to	2008 to 2014
Cost of the Project	8,727,273.00 USD
GEF Project Grant	272,727 USD
Co-financing	6,000,000 USD

GEF Agency Fees	272,727 USD
GEF Agency	UNEP
Project executing organization	Ministry of Environment and Forest Government of India National Biodiversity Authority State Biodiversity Boards UNEP Division for Environmental Law and Conventions United Nations University Institute of Advanced Studies

Background of the project:

The objective of the project is to strengthen the biosafety management system in India with special emphasis on Risk Assessment and Management, Handling, Transport, Packaging and Identification of LMOs, Socio Economic Considerations and Public awareness, to ensure adequate protection of human health and biodiversity from potential harm arising from all LMO-related activities.

Status:

The next phase of this project is under discussion. A Letter of Commitment to the UNEP Project- Support for Preparation of the Fourth National Biosafety Reports has been received from MoEFCC.

Connection with TEEBAgriFood and scope for Collaborative Work

Keep in the loop:

Ms. Vibha Ahuja from Biotech Consortium India Limited

7. Strengthening the Implementation of the Biological Diversity Act and Rules with Focus on its Access and Benefit Sharing Provisions

GEF Cycle	GEF 4
Duration	4 years
GEF Focal Area	Biodiversity
Type of Project	GEF FSP
Status	Project Closed
From/ to	2008 to 2014
Cost of the Project	9,889,000.00 USD
GEF Project Grant	3,561,000 USD
Co-financing	6,278,000 USD

GEF Agency Fees	356,100 USD
GEF Agency	UNEP
Project executing organization	Ministry of Environment and Forest Government of India National Biodiversity Authority State Biodiversity Boards UNEP Division for Environmental Law and Conventions United Nations University Institute of Advanced Studies

Background of the project:

Institutional, individual; and systemic capacities of stakeholders are increased to effectively implement the Biological Diversity Act and the Rules to achieve biodiversity conservation through implementing ABS agreements in India.

Connection with TEEBAgriFood and scope for Collaborative Work

Keep in the loop:

From Ministry: Mr. Tarun Kapura

Part 2: Relevant GEF Projects of Other Organizations in the area of Biodiversity

8. Green-Ag: Transforming Indian agriculture for global environmental benefits and the conservation of critical biodiversity and forest landscapes

GEF Agency	FAO
GEF Cycle	GEF 6
Duration	60 months
GEF Focal Area	Multi Focal Area Biodiversity, Land Degradation, Sustainable Forest Management, Climate Change Mitigation
Type of Project	GEF FSP
Status	Project Approved
From/ to	1 June 2018 to 30 June 2025
Cost of the Project	\$527,680,074
Cost to the GEF Trust Fund	\$33,558,716
Co-financing	\$494,121,358
Project executing organization	The Ministry of Agriculture & Farmers' Welfare (MoAFW); The Ministry of Environment, Forests, and Climate Change (MoEFCC)

Background of the project:

This project aims to mainstream biodiversity, climate change, and sustainable land management objectives and practices into the Indian agricultural sector. Its overall objective to “catalyse transformative change of India’s agricultural sector to support achievement of national and global environmental benefits and conservation of critical biodiversity and forest landscapes”. The project will be delivered through the following two Project Components:

Component 1: Strengthening the enabling framework and institutional structures to mainstream BD, SLM, CCM and SFM policies, priorities and practices into India’s agricultural sector

Component 2: Improved agricultural and conservation practices demonstrating sustainable production, resilient livelihood advancements, habitat improvements, and delivery of tangible BD, LD, CCM, and SFM benefits.

Connection with TEEBAgriFood and scope for Collaborative Work

All areas are directly related to TEEBAgriFood work. Brainstorm on means of collaboration and engagement.

The project will be implemented at five landscapes in five States of India: in i) Madhya Pradesh, ii) Mizoram, iii) Odisha, iv) Rajasthan and v) Uttarakhand. Within these ecologically important “Green Landscapes” GEF’s incremental investment will serve to catalyse the alignment of the much larger government, donor and private sector investments to promote and incentivize wide adoption of new agroecological practices to reverse the negative impacts of current unsustainable agriculture and land use policies, plans and practices, to maximize multiple global environmental benefits (biodiversity, sustainable land management, greenhouse gas emission reduction, and maintenance of high conservation value forests).

9. Capacity building on ENVIS-Environmental Management Capacity Building Technical Assistance Project-- World Bank Project

Background:

Environmental information plays a vital role not only in formulating environmental management policies but also in the decision making process aiming at environmental protection and improvement of environment for sustaining good quality of life for the living beings. Hence, management of environment is key component and thus plays an important role in effecting a balance between the demands and resources available for keeping the environmental quality at a satisfactory level. Realizing such need Ministry set up an Environmental Information System (ENVIS) in 1983 as a plan programme as a comprehensive network in environmental information collection, collation, storage, retrieval and dissemination to varying users, which include decision-makers, researchers, academicians, policy planners and research scientists, etc. ENVIS was conceived as a distributed information network with the subject-specific centers to carry out the mandates and to provide the relevant and timely information to all concerned. Further, association of the various State Governments/UTs was also felt necessary in promoting the ENVIS network to cover a wide range of subjects. The subject area for States/UTs ENVIS Centers was the status of

environment and related issues. Thus, the network was expanded gradually with the involvement of thematic subject-areas and State Government/UT departments to make it a more comprehensive environmental information network. ENVIS network at present consists of a chain of 69 network partners out of which 40 are on subject-specific and 29 on State/UT related issues. These network partners are called ENVIS Centers and are located in the notable organizations/institutions/State/UT Government Departments/Universities throughout the country. The focal point of ENVIS is located in the Ministry and assists the Environment Information (EI) Division in coordinating the activities of all the ENVIS network partners by making ENVIS a web-enabled comprehensive information system.

ENVIS (Environmental Information System) started implementing the World Bank assisted Environment Management Capacity Building Technical Assistance Project (EMCBTAP) since January, 2002 which aims at structuring the ENVIS scheme by extending its reach through involvement of Institutions/Organizations in State Governments, academia sector, corporate sector, NGO sector, etc.

Connection with TEEBAgriFood and scope for Collaborative Work

Invite the Envis Cell at the Ministry of Environment in loop regarding progress of TEEB Agri. Nodal Person who replaces former adviser Ms. Anandi Subramanian is Mr. Yashvir Singh, Economic Adviser.

Annex -1 UNEP Projects in India under GEF (Biodiversity Focal Area)									
S.No	Title	GEF Cycle	Countries	Focal Areas	Agencies	Type	GEF Grant	Cofinancing	Status
1.	Transforming agricultural systems and strengthening local economies in high biodiversity areas of India through sustainable landscape management and public-private finance	7	India	Land Degradation, Biodiversity	United Nations Environment Programme	Full-size Project	6,266,883	70,000,000	Concept Approved
2.	Mainstreaming Agrobiodiversity Conservation and Utilization in Agricultural Sector to Ensure Ecosystem Services and Reduce Vulnerability	5	India	Biodiversity	United Nations Environment Programme	Full-size Project	3,046,347	10,294,750	Project Approved
3.	Integrated Management of Wetland Biodiversity	5	India	Biodiversity	United Nations	Full-size Project	4,196,575	20,217,000	Project Approved

	and Ecosystems Services (IMWBES)				Environment Programme				
4.	Strengthening the Implementation of the Biological Diversity Act and Rules with Focus on its Access and Benefit Sharing Provisions	4	India	Biodiversity	United Nations Environment Programme	Full-size Project	3,561,000	6,278,000	Project Approved
5.	<u>BS Capacity Building on Biosafety for Implementation of the Cartagena Protocol - Phase II under the Biosafety Program</u>	4	India	Biodiversity	United Nations Environment Programme	Full-size Project	2,727,273	6,000,000	Project Approved
6.	<u>Support to Preparation of the Interim National Report on the Implementation of the Nagoya Protocol</u>	6	Several countries	Biodiversity	United Nations Environment Programme	Medium-size Project			
7.	<u>Support to Preparation of the Third National Biosafety Reports to the Cartagena Protocol on</u>	6	Several countries	Biodiversity	United Nations Environment Programme	Medium-size Project			

	<u>Biosafety - Asia Pacific Region</u>								
8.	Sustainable Cities Impact Program	7	Several Countries	Biodiversity, Land Degradation, Climate Change	United Nations Environment Programme	Full-size Project			

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Annex 2
GEF Projects in the Area of Biodiversity
(All GEF Agencies- Cycle 1 to Cycle 7)

S. No	Title	Focal Areas	Grant and Cofinancing	Implementing Agencies	Countries	Fund Source	Period	Status
9.	Food Systems, Land Use and Restoration (FOLUR) Impact Program Addendum	Biodiversity, Land Degradation, Climate Change	\$67,922,022 \$768,939,498	The World Bank	Brazil, India, Nigeria, Paraguay, Uganda	GEF Trust Fund	GEF - 7	Concept Proposed
10	Sustainable Cities Impact Program	Biodiversity, Land Degradation, Climate Change	\$146,742,453 \$1,689,754,351	United Nations Environment Programme	Argentina, Brazil, China, Costa Rica, Indonesia, India, Morocco, Rwanda, Sierra Leone	GEF Trust Fund	GEF - 7	Concept Proposed
11	Seventh Operational Phase of the GEF Small Grants Programme in India	Biodiversity, Climate Change, Land Degradation	\$4,474,886 \$11,000,000	United Nations Development Programme	India	GEF Trust Fund	GEF - 7	Concept Approved
12	Support to Preparation of the Interim National Report on the Implementation of the Nagoya Protocol	Biodiversity	\$1,430,000 \$1,111,321	United Nations Environment Programme	Antigua And Barbuda, Albania, Burkina Faso, Burundi,	GEF Trust Fund	GEF - 6	Project Approved

					Benin, Bolivia, Bhutan, Botswana, Belarus, Congo, Cote d''Ivoire, Cameroon, Cuba, Djibouti, Dominican Republic, Egypt, Ethiopia, Fiji, Micronesia, Gabon, Gambia, Guinea, Guatemala, Guinea-Bissau, Guyana, India, Kenya, Kyrgyz Republic, Cambodia, Comoros, Kazakhstan, Lao PDR, Liberia, Lesotho, Moldova, Madagascar, Marshall			
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					Islands, Mali, Myanmar, Mongolia, Mauritania, Mauritius, Malawi, Mexico, Mozambique, Namibia, Niger, Philippines, Pakistan, Rwanda, Seychelles, Sudan, Sierra Leone, Senegal, Sao Tome and Principe, Eswatini, Togo, Tajikistan, Uganda, Viet Nam, Vanuatu, Samoa, South Africa, Zambia, Congo DR			
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13	Support to Eligible Parties to Produce the Sixth National Report (6NR) to the CBD (Asia)	Biodiversity	\$1,963,500 \$2,148,902	United Nations Development Programme	Bangladesh, Bhutan, China, Indonesia, India, Cambodia, Lao PDR, Sri Lanka, Myanmar, Malaysia, Nepal, Papua New Guinea, Philippines, Thailand, Timor Leste, Viet Nam, Samoa	GEF Trust Fund	GEF - 6	Project Approved
14	Securing Livelihoods, Conservation, Sustainable Use and Restoration of High Range Himalayan Ecosystems (SECURE)Himalayas	Biodiversity, Land Degradation	\$11,544,192 \$60,820,000	United Nations Development Programme	India	GEF Trust Fund	GEF - 6	Project Approved
15	Support to Preparation of the Third National Biosafety Reports to the Cartagena Protocol on Biosafety - Asia Pacific Region	Biodiversity	\$1,099,050 \$995,000	United Nations Environment Programme	Afghanistan, Bangladesh, Bahrain, Bhutan, China, Fiji, Indonesia, India, Iraq, Jordan, Kyrgyz Republic, Cambodia,	GEF Trust Fund	GEF - 6	Project Approved

					Kiribati, Kuwait, Kazakhstan, Lao PDR, Lebanon, Sri Lanka, Marshall Islands, Myanmar, Mongolia, Maldives, Malaysia, Nauru, Niue, Oman, Papua New Guinea, Philippines, Pakistan, Palau, Solomon Islands, Thailand, Tajikistan, Turkmenistan, Tonga, Turkey, Viet Nam, Samoa, Yemen			
16	Cities-IAP: Sustainable Cities Integrated Approach Pilot (IAP-PROGRAM)	Biodiversity, Chemicals and Waste, Land	\$275,229 \$1,478,647,433	The World Bank	Brazil, Cote d'Ivoire, China, India, Mexico,	GEF Trust Fund	GEF - 6	Concept Proposed

		Degradation, Climate Change			Malaysia, Peru, Paraguay, Senegal, Viet Nam, South Africa			
17	Mainstreaming Agrobiodiversity Conservation and Utilization in Agricultural Sector to Ensure Ecosystem Services and Reduce Vulnerability	Biodiversity	\$3,046,347 \$10,294,750	United Nations Environment Programme	India	GEF Trust Fund	GEF - 5	Project Approved
18	Integrated Management of Wetland Biodiversity and Ecosystems Services (IMWBES)	Biodiversity	\$4,196,575 \$20,217,000	United Nations Environment Programme	India	GEF Trust Fund	GEF - 5	Project Approved
19	India Ecosystems Service Improvement Project	Biodiversity, Climate Change	\$20,500,000 \$115,000,000	The World Bank	India	GEF Trust Fund	GEF - 5	Project Approved
20	Developing an Effective Multiple Use Management Framework for Conserving Biodiversity in the Mountain Landscape of the High Ranges, Western Ghats	Biodiversity	\$6,275,000 \$30,000,000	United Nations Development Programme	India	GEF Trust Fund	GEF - 5	Project Approved
21	Strengthening the Enabling Environment for Bd Conservation and Management in India	Biodiversity	\$246,000 \$260,000	GEF Secretariat	India	GEF Trust Fund	GEF - 5	Project Approved

22	IND-BD Mainstreaming Coastal and Marine Biodiversity Conservation into Production Sectors in the Malvan Coast, Maharashtra State	Biodiversity	\$3,438,294 \$12,000,000	United Nations Development Programme	India	GEF Trust Fund	GEF - 4	Project Approved
23	IND-BD Mainstreaming Coastal and Marine Biodiversity Conservation into Production Sectors in the Godavari River Estuary in Andhra Pradesh State	Biodiversity	\$6,023,636 \$18,000,000	United Nations Development Programme	India	GEF Trust Fund	GEF - 4	Project Approved
24	Strengthening the Implementation of the Biological Diversity Act and Rules with Focus on its Access and Benefit Sharing Provisions	Biodiversity	\$3,561,000 \$6,278,000	United Nations Environment Programme	India	GEF Trust Fund	GEF - 4	Project Approved
25	BS Capacity Building on Biosafety for Implementation of the Cartagena Protocol - Phase II under the Biosafety Program	Biodiversity	\$2,727,273 \$6,000,000	United Nations Environment Programme	India	GEF Trust Fund	GEF - 4	Project Approved
26	IND-BD: GEF Coastal and Marine Program (IGCMP)	Biodiversity	\$0 \$0	United Nations Development Programme	India	GEF Trust Fund	GEF - 4	Concept Proposed
27	Biodiversity Conservation and Rural Livelihoods Improvement	Biodiversity	\$8,140,000 \$22,880,000	The World Bank	India	GEF Trust Fund	GEF - 3	Project Approved

28	Conservation and Sustainable Use of Cultivated and Wild Tropical Fruit Diversity: Promoting Sustainable Livelihoods, Food Security and Ecosystem Services	Biodiversity	\$3,661,674 \$6,714,074	United Nations Environment Programme	Indonesia, India, Malaysia, Thailand	GEF Trust Fund	GEF - 4	Completed
29	Conservation and Sustainable Management of Below Ground Biodiversity, Tranche 2	Biodiversity	\$4,007,124 \$7,438,678	United Nations Environment Programme	Brazil, Cote d'Ivoire, Indonesia, India, Kenya, Mexico, Uganda	GEF Trust Fund	GEF - 2	Project Approved
30	Conservation & Management of Pollinators for Sustainable Agriculture through an Ecosystem Approach	Biodiversity	\$7,810,682 \$18,647,321	United Nations Environment Programme	Brazil, Ghana, India, Kenya, Nepal, Pakistan, South Africa	GEF Trust Fund	GEF - 4	Project Approved
31	Coastal Resilience to Climate Change: Developing a Generalizable Method for Assessing Vulnerability and Adaptation of Mangroves and Associated Ecosystems	Biodiversity	\$975,000 \$0	United Nations Environment Programme	Cameroon, Fiji, India, Tanzania	GEF Trust Fund	GEF - 3	Completed
32	Capacity Building for Implementation of the Cartagena Protocol	Biodiversity	\$1,000,000 \$2,070,000	The World Bank	India	GEF Trust Fund	GEF - 3	Completed
33	Conservation and Sustainable Management of	Biodiversity	\$5,022,646 \$9,000,000	United Nations	Brazil, Cote d'Ivoire, Indonesia,	GEF Trust Fund	GEF - 2	Project Approved

	Below Ground Biodiversity, Phase I			Environment Programme	India, Kenya, Mexico, Uganda			
34	Mainstreaming Conservation and Sustainable Use of Medicinal Plant Diversity in Three Indian States	Biodiversity	\$4,935,000 \$6,479,121	United Nations Development Programme	India	GEF Trust Fund	GEF - 3	Completed
35	Andaman and Nicobar Islands: Ecologically-Sustainable Island Development	Biodiversity	\$3,388,600 \$5,998,600	United Nations Development Programme	India	GEF Trust Fund	GEF - 3	Completed
36	Conservation and Sustainable Management of Dryland Biodiversity, Phase 1	Biodiversity	\$1,710,000 \$1,795,000	United Nations Development Programme	India	GEF Trust Fund	GEF - 2	Cancelled
37	Conservation and Sustainable Use of the Gulf of Mannar Biosphere Reserve's Coastal Biodiversity	Biodiversity	\$7,650,000 \$19,085,000	United Nations Development Programme	India	GEF Trust Fund	GEF - 2	Completed
38	National Biodiversity Strategy and Action Plan	Biodiversity	\$968,200 \$0	United Nations Development Programme	India	GEF Trust Fund	GEF - 1	Completed
39	First National Report to the CBD	Biodiversity	\$25,000 \$0	United Nations Development Programme	India	GEF Trust Fund	GEF - 1	Completed

40	India Ecodevelopment	Biodiversity	\$20,000,000 \$54,000,000	The World Bank	India	GEF Trust Fund	GEF - 1	Completed
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Note on

Andhra Pradesh 'Zero-Budget' Natural Farming (APZBNF) Programme

1. Background

Zero Budget Natural Farming (ZBNF) is a low-input, climate-resilient type of farming that encourages farmers to use low-cost locally-sourced inputs, eliminating the use of artificial fertilisers, and industrial pesticides¹⁰. The movement of ZBNF in India was initiated by Mr Subhash Palekar, a farmer from the state of Karnataka, who won the Padam Shri for his initiative. Adopting ZBNF, small landholders were able to earn more while simultaneously increasing the amount of food available for their families. The practice of intercropping – growing multiple crops in proximity to each other – is encouraged under ZBNF as it ensures vulnerable communities access to a suite of nutritional sources and income-generating crops throughout the year. ZBNF is considered 'zero budget' because the costs of the main crop are offset by the income that farmers earn from intercrops during the agricultural season

Recognizing the importance of this programme to boost sustainable agriculture, Government of Andhra Pradesh decided to implement Zero Budget Natural Farming in the state. Rythu Sadhikara Samstha (RySS)¹¹ a not for profit organization was established under the Department of Agriculture (DoA) as the executing agency to implement the project. The first pilot phase of the APZBNF programme was initiated in 2015-16. Azim Premji Philanthropic Initiatives provided initial support, in addition to the support provided by Government of India through its national schemes.

CEEW¹² conducted two assessment studies within a span of one year in 2018. They mapped the possible social, economic and environmental impacts of the GoAP-led ZBNF programme vis-à-vis specific targets under each SDG, their findings show that the ZBNF program has potential to achieve most of the SDGs. Their findings also show that Andhra Pradesh could save nearly INR 2100 crores (~USD 292 million) in fertiliser subsidies annually if it scaled up Zero Budget Natural Farming (ZBNF) to all six million farm families in the state by 2024.

In addition, there are several land-water-energy implications of this type of farming:

¹⁰ Council for Energy Environment and Water. ("Sustainable agriculture, Agriculture in India | CEEW," n.d.)

¹¹ RySS can be translated as corporation for farmers' empowerment in English.

¹² Ibid

- ZBNF stresses on the moisture or water vapour requirements of the plant roots. This has been shown to reduce water input requirement, improve water efficiency in agriculture, and also make crops drought resilient without affecting crop yields.
- Groundwater irrigation has been expanding in India since the Green Revolution, and now accounts for over 60 per cent of the total irrigated area in India. As it promotes economic use of water, and reduces irrigation requirements of crops, ZBNF can help prevent over-extraction of groundwater, enable aquifer recharge, and eventually contribute to increasing water table levels.
- The ZBNF inputs by replacing fertilisers and pesticides require much less energy at farmers' level for preparation. Given that Andhra Pradesh is one of the largest consumers of fertilisers in the country, a possible consequence of the transition to ZBNF is the reduction in energy intensity per unit of gross domestic product. Further, due to the reduced water requirement under ZBNF, the pumping energy need also reduces. This would also help the government reduce outlay on subsidies for electricity for agriculture.

2. Program Implementation

ZBNF program has leveraged the institutions developed as a part of the past and ongoing initiatives of the State Government. At the implementation front, transition towards ZBNF has been based on a three level approach:

i) ZBNF transition at a farmer level

The adoption of ZBNF at a farmer level is envisaged in such a way that each farmer takes 3 years to cover his/her entire landholding under ZBNF practices. Under a typical adoption pattern at a farmer level, it is assumed that 25 percent of the farmer's land is converted under ZBNF in the first year, 50 percent in the second year and complete adoption in the third year.

ii) ZBNF transition at a village level

With respect to the village/ GP level, it is assumed that it takes 3 years to convert more than 80 percent of the farmers in the entire village. In the first year, it is expected that 15 percent of the farmers will be converted whereas in the second year, more than 50 percent will be covered and by third year, more than 80 percent of the farmers will be converted as ZBNF farmers.

iii) Conversion of existing ZBNF farmer to Community Resource Persons (CRPs)

The ZBNF program focuses on building capacities of farmers and their continuous handholding during the transition to ZBNF practices. To undertake effective capacity building of the target farmers, the program has adopted a farmer-to-farmer knowledge dissemination

strategy wherein best practicing ZBNF farmers are positioned as Community Resource Persons (CRPs) for mobilising the target farmers to undertake ZBNF practices. As the CRP has already undergone the ZBNF transition process, they are considered best equipped to train the target farmers. The CRPs are not only involved in educating the farmers about the ZBNF practices but also guiding the farmers in the preparation and application of ZBNF inputs in their respective fields. As the CRPs are based out of the same village of the target farmer, they are able to provide continuous handholding support under the ZBNF program.

3. Rationale for UNEP's involvement in APZBNF:

3.1. Scaling up of the successful pilot: The pilot phase in 2016 was implemented across 704 villages covering 48, 565 farmers. The pilot was successful with around 10,000 farmers adopting ZBNF practices and the remainder adopting it partially. The practices and the benefits recorded include improved yields, lower costs and better ability to withstand climate adversities – prolonged dry spells or heavy rains. A study of 285 crop yield experiments conducted in paddy fields observed that ZBNF farm plots had an average yield of 6417 kg/ha, compared to 5816 kg/ha in non-ZBNF farm plots¹³. Following the success of pilot, the Andhra Pradesh Government is interested in scaling up the programme to 500,000 farmers in all the districts of AP. RySS is the Project Executing Agency. RySS is seeking UNEP's involvement in the scaling up of the programme.

3.2. Scaling up of successful partnership: BNP Paribas, a French banking group and UNEP collaborated to work as a part of the Tropical Landscape Finance Facility (TLFF) , which was launched in Indonesia in 2016. TLFF is a green loan platform for financing projects in Indonesia's in rural areas. Following the positive outcomes of the 1st initiative collaborative initiative, BNP Paribas and UNEP in December 2017 signed an agreement with the aim to support projects for small farmers in fields such as access to renewable energies, agroforestry, access to water, etc. In June 2018, BNP Paribas and UNEP announced their 2nd initiative of working together in the scope of the Sustainable India Finance Facility (SIFF) with the Indian state of Andhra Pradesh for Zero Budget Natural Farming (ZBNF).

4. Proposed Activities under ZBNF:

4.1 Components in the Feasibility Report submitted by Deloitte:

Deloitte (Deloitte Touche Tohmatsu India LLP) submitted a Rapid Feasibility Study related to

¹³ History of ZBNF, <http://apzbnf.in/about-zbnf/history-of-zbnf-in-ap/>

the Project “Zero Budget Natural Farming in Andhra Pradesh” to KfW Development Bank and Government of Andhra Pradesh for scaling up the ZBNF programme in the State. The report identifies 4 components in the area of work:

Component 1 (C1): Adoption of ZBNF by 591 Gram Panchayats (new GPs)

Component 1 or ‘C1’ is the major component of the ZBNF Programme. This component aims at expansion of ZBNF practice to 591 Gram Panchayats in the State, where farmers predominantly practice chemical farming and ZBNF programme has not been implemented. This component is built on three pillars - Capacity Building, Institution Building and Inclusion.

Component 2 (C2): Creation of 26 Resource villages, 4 Tribal Resource Clusters and Fellowships for 3000 Community Resource Persons for new Gram Panchayats (GPs) : This component targets the villages with more than 80% of the farmers practicing ZBNF, these villages are selected and are converted into Resource villages.

Component 3 (C3): Knowledge Management and Research Support (Science)

This component of the programme focuses on knowledge management and research support for the programme.

Component 4 (C4): Technical Support to the State and District Institutions

This component includes technical support to the programme in form of technical staff at State and the District levels.

4.2. Suggestions for UNEP’s role in the proposed activities:

RySS reached out to UNEP seeking support in the Component 3 and Component 4 of the proposal.

Component 3 worth INR 71 Cr, suggests setting up of a Knowledge Centre for Knowledge, Learning, Models, Dissemination and Mentoring; and Science in Partnerships. They are looking at having a TSU Agency to - hold, and support high-end human resource in Technical Support Unit and Global Knowledge Centre; and manage Science related knowledge outputs.

Component 4 worth INR 119 Cr, specifies direct recruitment of staff at the district and state level in Andhra Pradesh. This includes hiring for the Technical Support Unit TSU is currently supported by APPI (Azim Premji Philanthropic Initiative) and TSU will be taken under KfW in 6-9 months from now. It includes about 100 HR from the market, mostly to be positioned at the state level; and some in the districts.

Under these components, the following activities can be considered for support by UNEP:

4.2.1. Mainstreaming ZBNF into National Policy Framework

a) Linking to the National Aspiration Districts

Launched by the Prime Minister of India in 2018, the 'Transformation of Aspirational Districts' programme aims to quickly and effectively transform least developed districts of India. In Phase 1, 101 aspirational districts were selected from all across India. A baseline index was created to measure the performance of these districts, 20 % weight in the Aspirational district is given to Agriculture. The focus is on outputs (yield, price realisation etc.), inputs (quality seed distribution, soil health cards), and institutional support (crop insurance, electronic markets, artificial insemination, animal vaccination etc)¹⁴. Andhra Pradesh has three aspirational districts. In these villages, ZBNF work can be mainstreamed through the agriculture component of the Aspirational District Program of Government of India. This will ensure greater visibility for efforts under ZBNF and easy scaling up to other states under the Aspiration Districts.

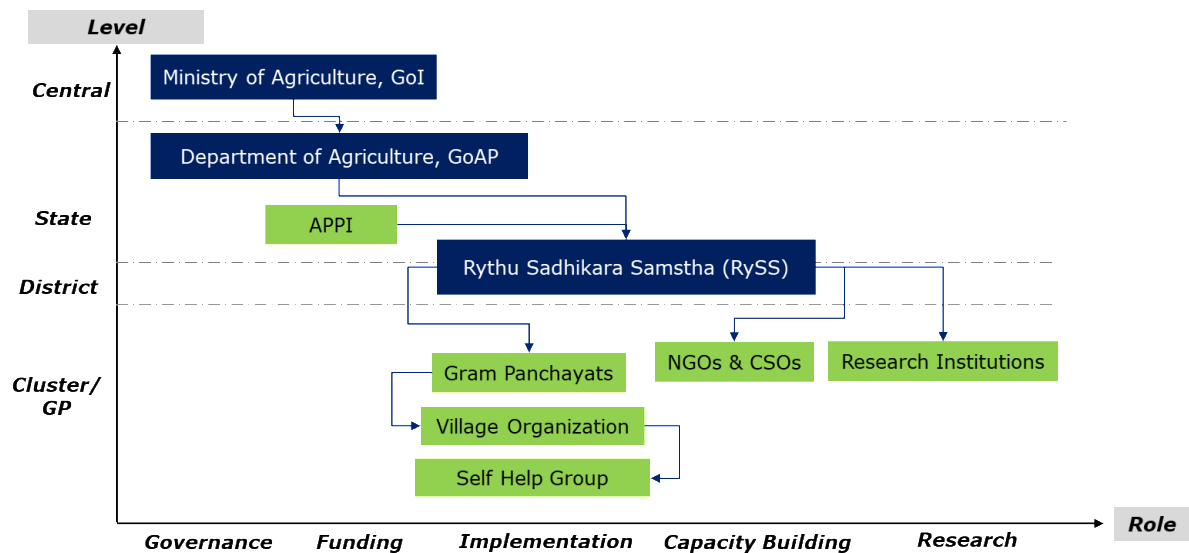
b) Linking with National Agendas and Plans

UNEP could leverage its institutional networks to mainstream ZBNF into national institutional structure. The MoEFCC with which UNEP India office interacts on a regular basis houses National Focal Points for UNCCD, UNFCCC, UNCBD. The National Biodiversity Action Plan was released in 2018, UNEP can facilitate institutionalizing ZBNF into the roadmap for National Biodiversity Action Plan. It can also facilitate mainstreaming ZBNF work into reporting of these focal agencies. India is COP president of the UNCCD until 2021. As ZBNF is directly related to combating desertification, UNEP could use its network to mainstream AZBNF model in that work.

4.2.2. Centre for ZBNF Research

A Global knowledge management is proposed to be set up, which can serve as a centre for excellence in this field. UNEP 's existing work can be beneficial in providing research in this area. IN the mandate of this organization, UNEP with its international network could support RySS in undertaking research in collaboration with national and international research organizations. In the feasibility report, provided by Deloitte to KfW, the research component can be strengthened. This can be seen on the Y axis of the chart below.

¹⁴ <https://niti.gov.in/sites/default/files/2018-12/FirstDeltaRanking-May2018-AspirationalRanking.pdf>



This kind of research will connect well with the ongoing TEEB AgriFood project of UNEP: UNEP can facilitate these technical studies using an integrated modelling approach and systems analysis. The ongoing work of UNEP through TEEB can feed into this work. By establishing a baseline scenario and alternative scenario analysis, these studies will be able to demonstrate efficient use of resources using the ZBNF method. For instance, to show water and energy savings from ZBNF field results, invest models and SWAT models of expert institutions in India can be used to analyse the business as usual scenario and alternative scenario. Initial reports from the farmers show that conversion of agricultural lands to ZBNF helps restore degraded soil and improves the fertility of drought-prone land. Such results need to be further validated by scientifically assessing the change in soil quality after transition to ZBNF. Alternative scenarios can be used on models to show how these techniques result in better outcomes, thereby creating science based evidence for mainstreaming and scaling up

This will directly feed into the result outcome matrix presented in the feasibility report, in point number 3 (**Result Area 3:** Ecological and micro economic improvements as well as enhanced climate resilience from the ZBNF programme).

4.2.3. Capacity Building of Technical Staff in the TSU

a) Training of technical staff- NFF: The Project hires several National Farm Fellows, who are technical people responsible for conducting field experiments. UNEP could support their training. The training could benefit from UNEP’s network in other states. If the project has to be scaled up to other states of India, UNEP’s knowledge base in training of trainers could help in replicating the Andhra Pradesh model. The Indian states of Kerala, Karnataka and Himachal Pradesh are also interested in regenerative agriculture, Andhra Pradesh can provide an agricultural blueprint that can be adapted to other areas.

b) Two way interaction- from Farmers to Academic Institutes: In the existing arrangement, master farmers in each village transfer their knowledge of ZBNF practices to other farmers in neighbouring areas and help them transition from conventional agriculture. The programme has a video dissemination component to accelerate the knowledge sharing and awareness-raising process. However, what is also important is to educate future generation of agro-economics, ecologists and scientists for more research in scaling up the ZBNF model to changing climate. Through UNEP's connections BMC, JFMCs in other states can also learn from Andhra Pradesh

4.2.4. Documentation of best practises and a Realtime dashboard

National platforms and UNEP's network can be used to communicate the findings from ZBNF nationally and internationally. A real time dashboard like UJALA dashboard, or GARV Dashboard under the Government of India can be supported. This would be useful to replicate learnings from ZBNF to other states and countries that face similar challenges. UNEP can help to document best practises from Andhra Pradesh State of India and use its global network to share the results with other countries.

5. Cost Modalities- Component 3 and Component 4

		INR (Total 5 years)	cr	Suggested Involvement	Agency
3.	Knowledge Management and Research Support	71.28			
3.1	Establishment of Cell/ Centre for ZBNF	34.98		Supported by UNEP	
3.1.2	Establishment of a cell within Biodiversity Board	1.08		RySS	
3.1.2	Establishment of Global Knowledge Centre	33.90		Supported by UNEP	
3.2	Conducting field experiments on ZBNF	8.50		RySS	
3.2.1	Intensive experiments by NFFs and RAs on ZBNF (National Farming Fellows and Research Assistants)	2.5		Supported by UNEP	
3.2.2	Extensive field experiments by NFF	4		Supported by UNEP	
3.2.3	Integrated Farming Experiments	2		Supported by UNEP	
3.3	Knowledge Dissemination and Outreach	9.3		Supported by UNEP	
3.3.1	Publication of researches	1.80		UNEP's and collaboratively	RySS
3.3.2	Workshops	2		UNEP's and collaboratively	RySS
3.3.3	Research and Skill development training to ground staff and farmers	2		RySS	

3.3.4 .	Establishing Farmer Field Schools	1	RySS
3.3.5	Academic certification for CRPs and NFFs	2.5	RySS
3.4	Indicative Science Agenda (in partnership with external agencies / experts)	18.50	UNEP
4.	Component 4: Technical Support and District level State Management	119.36	
4.1.	State Project Management Unit Hiring, salaries, travel, other non HR costs	101.49	Hiring by UNEP with support from UNDP
4.2	District Project Management Unit Hiring, salaries, travel, other non HR costs	17.87	Hiring by UNEP with support from UNDP

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