

F.No.22-5/2013- HSMD
Government of India
Ministry of Environment, Forest and Climate Change
(HSM Division)

Indira Paryavaran Bhawan,
Aliganj, Jorbagh Road,
New Delhi – 110003.

Dated: 11th March, 2024

OFFICE MEMORANDUM

Subject: Record of discussions of the Project Review Meeting of the GEF funded project “Development and Promotion of Non-POPs Alternatives to DDT”-reg.

The undersigned is directed to refer the review meeting of the GEF funded project “**Development and Promotion of Non-POPs Alternatives to DDT**” held on 05.12.2023 at 12:00 PM.

2. In this regard, the record of discussions of the meeting is hereby enclosed.

Encl: As stated


(Dr. Satyendra Kumar)
Director

To

1. Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex East Arjun Nagar, Delhi - 110 032
2. Director, CSIR – National Environmental Engineering Research Institute (CSIR- NEERI), Nagpur.
3. Director, Institute of Pesticide Formulation Technology, Sector-20, Udyog Vihar, Gurgaon-122016
4. Director, CSIR-National Botanical Research Institute, 436, Rana Pratap Marg, Lucknow – 226001
5. CMD, HIL (India) Limited, Scope complex, core 6, 2nd floor, 7, Lodhi road, New Delhi-110003
6. Head Country Office, United Nations Environment Programme, UN House, 55 Lodi Estate, New Delhi, India – 110003

7. Ms. Carmela Centeno, Project Manager, UNIDO, A-1400, Vienna International Centre, PO Box 300, Vienna, Austria
8. Dr. Y.P. Ramdev, National Technical Advisor, UNIDO, 55 Lodhi Estate, New Delhi-110003

Copy to :-

1. Mr Jaime Moll de Alba, Director Regional Bureaus and Field Offices, Officer-in-Charge, UNIDO, New Delhi-110003
2. PPS to AS (NPG)
3. PS to Dir.(SK)
4. SO, HSMD

Record of Discussions of the Project Review Meeting of the GEF Funded Project titled 'Development and Promotion of non-POP alternatives/environmentally sound alternatives to DDT' held on 05.12.2023

The project review meeting of the GEF funded project 'Development and Promotion of non-POPs alternatives alternatives to DDT' was held on 05.12.2023 at 12:00 PM under the chairmanship of **Dr. Satyendra Kumar, Director, HSM Division, MoEF&CC**. The list of participants has been given in **Annexure I**.

2. The project was initiated in June, 2015 for a period of five years. The tenure of the project was extended for 2.5 years upto 31.12.2022 beyond the completion date of 25.06.2020. PSC, during the last meeting held on 13.12.2022, had recommended the extension of the project by 24 months, w.e.f 1st January, 2023 till 31st December, 2024, with no additional cost, for completion of the project activities.

3. The project aims to introduce bio- and botanical pesticides as alternatives to DDT for reduction and eventual elimination of dependency on DDT in India. There are three types of alternatives being developed as alternatives to DDT under the project:

- i. Long Lasting Insecticide Net (LLIN)
- ii. *Bt* Based Pesticides (Suspension Concentrate, Wettable Powder and Spreading Oil)
- iii. Neem Based Pesticides (Neem Oil, Floating Tablets, Mosquito Coil, Repellent Cream and Suspension Concentrate)

4. The total cost of the project is USD 53.15 million (GEF grant: USD 10.0 million- USD 8.3 million to UNIDO and USD 1.7 million to UNEP; co-financing: USD 43.15 million).

5. The following five components of the project are being implemented by UNIDO and UNEP:

Sl. No.	Component	Implementing agency	Executing Institution	GEF grant in USD
i	Component 1: Legislation, policy framework and institutional capacity for DDT alternatives	UNEP	<ul style="list-style-type: none"> Enviro Legal Defence Firm for gap analysis Toxics Link for preparation of guidance documents 	500,000
ii	Component 2: Development and	UNIDO	IPFT/CIPET/ ICMR-VCRC: for	7,100,000

	efficient pilot production of bio- and botanical pesticides as well as other alternatives to DDT ready for enhancement to large scale production		developing technology and formulations HIL: for implementation and commercial production	
iii	Component 3: Promotion of five new dwarf cultivars of Neem with early maturity and higher limonoids yield for large scale cultivation	UNIDO	NBRI	490,485
iv	Component 4: Development and Promotion of Integrated Vector Pest Management (IVPM)	UNEP	CPCB & NEERI	795,825
v	Component 5: Monitoring and Evaluation of the project	UNIDO & UNEP		637,500
Project Management Cost (PMC)		476,190		
Total		10,000,000 (10 million USD)		

6. The expenditure of the project for the UNIDO components till 15.11.2023 is USD 7.97 million of the GEF grant of \$8.3 million (96.04%). The expenditure of the UNEP components as on 15.11.2023 is \$ 852,861.1 out of the sanctioned funds of \$1.675 million (51%).

7. The physical progress of the project is given below:

Sl.No.	Component	Status
i	Component 1: Legislation, policy framework and institutional capacity for DDT alternatives throughout their life cycle (production, registration, use and disposal)	<p>i. Gap Analysis report and action plan to identify legal requirements for the lifecycle of DDT alternatives and measures to streamline legal requirements prepared by Enviro Legal Defence Firm</p> <p>ii. Guidance documents prepared by Toxics Link on LLIN, <i>Bt</i>-based and Neem to</p>

		<p>support stakeholders to meet legal requirements for DDT alternatives</p> <p>iii. Reports to be reviewed by Sub-Committee/ Technical Working Group (TWG)</p>
ii	<p>Component 2: Development and efficient pilot production of bio- and botanical pesticides as well as other alternatives to DDT ready for enhancement to large scale production</p>	<p>i. LLIN:</p> <ul style="list-style-type: none"> a. Technology transferred by CIPET for impregnating pesticide in plastic pellets used for making mosquito nets. b. First stream of LLIN (5 million LLINs per annum) commissioned and operational. c. Application submitted in November 2023 for extension of provisional registration with CIB&RC. d. Phase-II trial by VCRC-ICMR is in progress. e. Application for permanent registration with CIB&RC shall be submitted after generation of Bio-efficacy Phase-III report. f. Around 16 lakhs LLINs have been sold as on date. g. The capacity of the LLIN plant is being enhanced to 10 million nets per annum. <p>Second stream of LLIN:</p> <ul style="list-style-type: none"> h. Application for CTE submitted in July 2023. i. Tender floated in October 2023 for award of contract for installation of equipment and commissioning of plant. j. Installation of equipment and commissioning to be completed by July 2024. <p>ii. Neem-based pesticide:</p> <ul style="list-style-type: none"> a. Technology transferred by IPFT to HIL in September 2020 b. Application for CTE submitted in July 2023. Site inspection completed.

		<ul style="list-style-type: none"> c. DPR prepared in October 2020 d. Award for work for tender specifications to be done by Dec 2023 e. Detailed engineering report is expected by June 2024. f. Installation of equipment is expected to be completed by August 2024 and commissioning and operationalization of plant is expected to be completed by December 2024. <p>iii. <i>Bt based bio-pesticide:</i></p> <ul style="list-style-type: none"> a. Technology transferred by VCRC to HIL in June 2022 b. CIB&RC application submitted in Feb 2023. Revised application submitted in Oct 2023. c. Application for CTE submitted in July 2023. Site inspection completed. d. Factories and Boilers Consent by April 2024. e. Work has been awarded to M/s Kamtech for DPR preparation in September 2023. f. Project execution tender is to be floated by January 2024. g. Site preparation by March 2024. h. Installation of equipment is expected to be completed by October 2024 and commissioning of plant by December 2024.
iii	Component 3: Promotion of five new dwarf cultivars of Neem with early maturity and higher limonoids yield for large scale cultivation	<ul style="list-style-type: none"> i. Multi-location trials (MLT) have been undertaken for evaluation of growth, yield and quality of four neem cultivars at five different agro climatic zones, at North-East (NEHU) Shillong; North Central (CSIR-NBRI Lucknow), North CSIR-CSIO Chandigarh; South CSIR CIMAP Centre

		<p>Bangalore and East (CSIR – IIMT Bhubaneshwar).</p> <p>ii. 4 varieties of neem dwarf cultivars have been identified, out of which 1 has been identified as the most potent, and will be propagated in large scale in different parts of the country using tissue culture technique and clonal propagation.</p>
iv	Component 4: Development and Promotion of Integrated Vector Pest Management (IVPM)	<p>iii. Modules on Integrated Vector Pest Management (IVPM) drafted.</p> <p>iv. IVPM modules to be reviewed by Sub-committee / TWG.</p>
v	Component 5: Monitoring and Evaluation of the project	Midterm evaluation of UNIDO and UNEP components completed.

8. During the meeting, **the following discussions** were held:

- i. **Representative from MoEF&CC** highlighted that two sub-committees were formed during the last TWG meeting held on 06.07.2022 for examination of the legal documents and IVPM modules.

It was stated that most of the regulatory gaps as presented in the gap analysis report prepared by the UNEP Law Division do not exist and most of the protocols are already in place for the alternatives in the existing acts, rules and notifications.

It was emphasized that gap analysis report should have been prepared in consultation with CIB&RC. It was suggested that CIB&RC's comments may be incorporated in the gap analysis report.

It was highlighted that any future work within Component 4 may be taken forward only after discussion and review of the sub-committee.

It was emphasized that any information already provided/ prepared by the Government of India (Ministry of Health and Family Welfare and its organisations) may not be duplicated in the IVPM modules.

- ii. **Representative from UNEP** highlighted that the revised work plan submitted by UNEP has to be approved by the Project Steering Committee.

UNEP further informed that the project implementation deadline for UNEP components of the project (components 1 and 4) is December 2023, operation completion deadline is January 2024 and financial closure is June 2024.

The total sanctioned funds, utilized funds and the balance funds for the UNEP components have been given below:

Sanctioned Funds	Expenditure	Balance funds
(To UNEP Law Division) USD 762,575 (sanctioned)	USD 476,005.15	USD 286,569.85
(To CPCB/CSIR-NEERI) USD 912,425 (sanctioned)	USD 376,856	USD 535,569
Total sanctioned funds: USD 1,675,000	USD 852,861.15	USD 822,138.85

The following options were discussed for utilization of the remaining funds for the UNEP components:

- Remaining funds from the UNEP components may be transferred to the other components of the project, if the PSC is empowered to do so.
- The extension of UNEP components of the project may be aligned with the UNIDO components i.e. till 31 December 2024 for utilization of the balance funds.

- iii. **Representative from NEERI** stated that a survey among the training participants may be conducted to obtain their feedback on the IVPM modules.

NEERI further informed that there are two pending tasks under Component 4: development of website (inputs are needed from UNIDO) and translation of the training modules. Additional six months (till June 2024) are required for completion of these tasks.

- iv. **Representative from NBRI** informed that four Neem cultivators have been developed and after the multi-location trials and evaluation of growth, yield and quality, one cultivator will be identified as the best and will be used as the raw material for the neem based alternative of DDT.

NBRI reported that the training programs for beneficiary farmers at five different locations are to be carried out.

NBRI further informed that data from different multi-location trials needs to be collected and compiled.

9. After deliberations, the **following decisions** are made:

- (i) The project (including all the Components) has been extended till 31 December 2024. UNEP to align the extension of their Components till 31 December 2024. Revised work plan submitted by UNEP is recommended to PSC.

(Action: UNEP and MoEF&CC)

- (ii) MoEF&CC to forward the IVPM modules to MoH&FW for obtaining their inputs.

(Action: MoEF&CC)

- (iii) All concerned stakeholders to prepare and present to the Project Steering Committee the list of residual activities of the project with tentative timelines for completion, completed activities and plan for utilisation of the remaining funds.

(Action: HIL, NBRI, NEERI, CPCB, UNEP, UNIDO, Enviro Legal Defence Team and Toxics Link)

- (iv) All concerned stakeholders to present the physical and financial progress of the project from January 2022 to November 2023 to the Project Steering Committee.

(Action: HIL, NBRI, NEERI, CPCB, UNEP, UNIDO, Enviro Legal Defence Team and Toxics Link)

- (v) MoEF&CC to share the guidance documents prepared by Toxics Link with DPIIT, DCPC, HIL and other concerned stakeholders for their inputs/comments.

(Action: MoEF&CC)

- (vi) UNEP to present the detailed work plan to the Project Steering Committee, if there are any activities remaining.

(Action: UNEP)

- (vii) Meetings of the sub-committees to be convened for examination of the documents prepared by UNEP under Components 1 and 4 of the project.

(Action: MoEF&CC)

- (viii) NEERI to organize trainings for aspiring entrepreneurs seeking to establish facilities for manufacturing alternatives to DDT. These modules would provide insights into the prospects and requirements for establishing such facilities.

(Action: NEERI)

10. The meeting ended with a vote of thanks to the participants.

List of Participants

MoEF&CC

1. Dr. Satyendra Kumar, Director, NPC, MoEFCC
2. Shri N. Subrahmanyam, Scientist D, MoEFCC
3. Ms. Shraddha Dhakhwa, Assistant Project coordinator, UNIDO
4. Ms. Preeti Dubey, Project Assistant, UNIDO

CPCB

5. Sh. Dinabadu Goda, Scientist F
6. Sh. R. N. Pankaj, Scientist E

UNIDO

7. Dr. Carmela Centeno, Project Manager, Head Office, Vienna
8. Dr. Y.P. Ramdev, National Technical Advisor

UNEP

9. Sh. Atul Bagai, Head, UNEP
10. Ms. Divya Datt, Project Management Officer
11. Ms. Neha Dharmshaktu, Associate Project Management Officer
12. Ms. Valentina Ricca, Associate Legal Officer, Law Division

National Botanical Research Institute (NBRI)

13. Shri Puneet Singh Chauhan, Director

CSIR-NEERI

14. Dr. A Ramesh Kumar, Senior Scientist
15. Sh. Abhishek Chaudhary, Project Associate

HIL (India) Ltd.

16. Shri Kuldeep Singh, CMD
17. Shri Shashank Chaaturvedi, Director (M)
18. Shri Rahul K Ponnann, Assistant Manager

Institute of Pesticide Formulation Technology (IPFT)

19. Dr. Mohana Krishna Reddy Mudiam, Director, Gurugram
20. Shri Amrish Agarwal, Scientist