

PROJECT IDENTIFICATION FORM (PIF) 1

PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT IDENTIFICATION

Project Title:	Development and promotion of non-POPs alternatives to DDT				
Country(ies):	The Republic of India	GEF Project ID: ²	4612		
GEF Agency(ies):	UNIDO UNEP (select)	GEF Agency Project ID:			
Other Executing Partner(s):	MoEF, MHF&W, MoCF, WHO and	Submission Date:	2011-12-29		
	other relevant national partners				
GEF Focal Area (s):	Persistent Organic Pollutants	Project Duration (Months)	60 months		
Name of parent program (if		Agency Fee (\$):	1,000,000		
applicable):					
➤ For SFM/REDD+					

A. FOCAL AREA STRATEGY FRAMEWORK³:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
(select) CHEM-1	Outcome 1.1: Production and use of controlled POPs chemicals phase out	Output 1.1.1: Countries receiving GEF support to phase out the production or use of controlled POPs (other than new POPs)	GEFTF	7,100,000	29,500,000
(select) CHEM-1	Outcome 1.5: Country capacity built to effectively phase out and reduce releases of POPs	Output 1.5.1: Countries receiving GEF support to build capacity for the implementation of the Stockholm Convention	GEFTF	2,423,810	8,595,000
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)	Others		(select)		
		Sub-Total		9,523,810	38,095,000
		Project Management Cost ⁴	GEFTF	476,190	1,905,000
		Total Project Cost		10,000,000	40,000,000

B. PROJECT FRAMEWORK

Project Objective: To introduce bio- and botanical pesticides and other alternatives to DDT as first step for elimination of dependency on DDT, ensuring food safety, enhancing livelihood and protecting human health and the environment. The project will demonstrate cost-effective, socially acceptable and environmentally sustainable alternatives to DDT and other POP chemical of similar use.

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Cofinancing (\$)
1. Legislation,	TA	Adoption and	- Regulatory mechanism in	GEFTF	500,000	1,445,000
policy framework		enforcement of	place and enforced			

¹ It is very important to consult the PIF preparation guidelines when completing this template.

Project ID number will be assigned by GEFSEC.

³ Refer to the reference attached on the <u>Focal Area Results Framework</u> when filling up the table in item A.

⁴ GEF will finance management cost that is solely linked to GEF financing of the project.

and institutional capacity (UNEP)		legislative and policy framework and strengthening of capacity	- National standards for LLIN established and enforced			
2. Alternatives to vector control (UNIDO)	TA	Development and production of bio-and botanical pesticides as well as other alternatives to DDT	- Neem-based botanical pesticides ten (10) pilot production facilities established and existing facilities scaled up - Bt- and Bs-based biopesticides one (1) pilot production facility meeting international operational standard established - LLIN production potential scaled up and operational at one (1) site - Support for chemical alternatives to DDT provided - Business model for alternatives developed, promoted and marketed	GEFTF	7,100,000	29,500,000
3. Promotion of Intergrated Pest Management (IPM) and new cultivars of Neem (UNIDO/UNEP)	ТА	Promotion of IPM and new dwarf cultivars with early maturity and higher lemonoids yield	- IPM promoted through Farmer's Field Schools - Adoption of tissue culture technology in propagating new cultivars across agro- climatic zones to achieve increased lemonoids production at six (6) sites	GEFTF	1,260,000	4,900,000
4. Monitoring of impact and evaluation of results (UNIDO / UNEP)	TA	Proper monitoring of project interventions and evaluation of impact	Monitoring indicators identified and implemented Impact indicators identified, evaluated and reported	GEFTF	663,810	2,250,000
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
			Sub-Total		9,523,810	38,095,000
			Project Management Cost ⁵	GEFTF	476,190	1,905,000
			Total Project Costs		10,000,000	40,000,000

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
National Government	MoEF	In-kind	6,000,000
National Government	MoCF	Unknown at this stage	1,000,000
National Government	MoCF/HIL	In-kind	23,520,000
National Government	MoF&W	In-kind	6,000,000
GEF Agency	UNIDO	In-kind	600,000

⁵ Same as footnote #3.

GEF Agency	UNEP	In-kind	120,000
(select)		(select)	
Other Multilateral Agency (ies)	Global Fund for Aids, Tuberculosis, Malaria (GFATM)	In-kind	500,000
Others	Public sector entity, WHO, Secretariat of Stockholm Convention, Foundations, NGOs, etc.	Unknown at this stage	2,260,000
(select)		(select)	
Total Cofinancing			40,000,000

GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹ D.

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
UNIDO	GEF TF	Persistent Organic Pollutants	India	8,275,000	827,500	9,102,500
UNEP	GEF TF	Persistent Organic Pollutants	India	1,725,000	172,500	1,897,500
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Gran	t Resources			10,000,000	1,000,000	11,000,000

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table
² Please indicate fees related to this project.

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1 the GEF focal area/LDCF/SCCF strategies:

- 1. The project is consistent with GEF-5 POPs CHEM-1 "Phase out POPs and reduce POPs releases", Outcome 1.1 "Production and use of controlled POPs chemicals phased out", Output 1.1.1 "Countries receiving GEF support to phase out the production or use of controlled POPs (other than new POPs)" and Outcome 1.5 "Country capacity built to effectively phase out and reduce releases of POPs", Output 1.5.1 "Countries receiving GEF support to build capacity for the implementation of the Stockholm Convention" through introduction and demonstration of viable, cost-effective and sustainable alternatives to eliminate dependency on DDT and other POPs chemicals. The amount of DDT not produced or used following demonstration of alternative; measured in tons per year against baseline.
 - A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities: N/a

A.2. national strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

- 2. The Government of India (GoI) signed the Stockholm Convention on POPs in May 2002 and ratified it on 13 January 2006. India committed to fulfill its obligations under the Convention, prepared its National Implementation Plan (NIP) and submitted it to the Secretariat of the Stockholm Convention on 21 April 2011. The National Portfolio Formulation Exercise (NPFE) was voluntarily conducted by the GoI in March 2010 using its own resources and prepared the Program Framework Document (PFD) "Support for implementation of Stockholm Convention National Implementation Plan (NIP) by addressing principal concerns of BAT/BEP, alternatives/formulation to pesticides, industrial capacity building resulting in POPs phase out, reduction of releases and amelioration of contaminated sites." The PFD approved by the GEF Operational Focal Point of India (MoEF) on 7 October 2010, identifies six (6) projects that rank as top priority of the India NIP, among them is identifying and introducing alternatives to DDT.
- 3. According to the World Health Assembly resolution 50.13, member states are urged to initiate sustainable action related to malaria vector control to reduce the use of and dependency on DDT. In India, the National Vector Borne Disease Control Programme (NVBDCP) is using DDT for malaria vector control on the basis of epidemiological impact and insecticide resistance. However, recent data⁶ show in general, a low susceptibility of adult mosquitoes to DDT. The 2010 resistance data shows for all states in India similar low susceptibility. As a result, it might be expected that the quantities of produced DDT for malaria vector control in India will gradually decrease over the next period of 5 years.
- 4. Due to the above, the GoI through the NVBDCP is enhancing its alternative vector control strategy based on Integrated Vector Management (IVM), including the following interventions: biological control; chemical control; environmental management; all in combination with legislative measures and alternative approaches. Under the NVBDCP all the components of IVM have been introduced to reduce the reliance of DDT in public health. All efforts need further development, scale enlargement and further support.
- 5. In January 2011, the Ministry of Health and Family Welfare (MHF&W) recommended the registration of Long Lasting Insecticidal Nets (LLINs) for commercial marketing in highly malaria endemic areas. It was further recommended to encourage potential indigenous manufacturers of LLINs to produce and distribute LLINs in India.
- 6. The Global Fund for Aids, Tuberculosis, Malaria (GFATM) and the World Bank have supported alternative interventions to DDT in high malaria risk areas of India.

B. PROJECT OVERVIEW:

B.1. Describe the baseline project and the problem that it seeks to address:

- 7. The baseline project, that is described as the NIP action plan for DDT, is being implemented under the guidance and monitoring by the National Steering Committee on the Stockholm Convention (chaired by the Minister, MoEF) through the MHF&W along with the Hindustan Insecticides Limited (HIL) and the NVBDCP. The main component of the DDT action plan is developing alternatives to DDT. The baseline project consists of six major outputs as follows:
 - DDT situation analysed in different malaria and kala- azar endemic areas/states of India;
 - Viable alternatives, both chemical and biological, for DDT evaluated;
 - Alternative technologies evaluated for the production of compounds such as dicofol where DDT is used as the raw material / intermediate;
 - Costs of substitutes and implementation plans for such substitution worked out;
 - DDT phase out strategy in place; and
 - Institutional capacity strengthened.
- 8. On page 166-167 of the NIP, the baseline project budget for 2011-2022 for "Environmentally sound alternatives to DDT" is US\$ 28.0 million that is part of the total budget amounting to US\$ 45.0 million (being the incremental budget US\$ 17.0 million).
- 9. Relevant activities of baseline project such as developing the production and application processes of the proposed alternatives have been successfully completed. Their field tests on malaria vectors have also been carried out and indicated positive results for its large scale effectiveness at national level.
- 10. The baseline situation is characterized by the fact that DDT has been the main stay for the mosquitoe control since the early 1950's, when the

⁶ Results of adult Susceptibility tests received from various states in India during 2007

first plant of DDT manufacture was set up by HIL, a government of India enterprise. The capacity of DDT manufacture was increased by setting up 3 production units, in Delhi; Udyogamandal, Kerala; and Rasayani, Maharashtra with annual installed capacity of 18,500 MT of active ingredient and 35,000t of formulated DDT. Additionally, import from Russia was made to meet the total DDT demand in the country. The entire programme comprising the NVBDC using DDT as the main stay had indoor residual spraying. The following amounts of formulated DDT were used in India since 2006: 2006-2007: 6,826 MT; 2007-2008: 6,000 MT; 2008-2009: 6,821 MT that is less than 20% of the installed capacity. In 2000-2001, the DDT use was close to 13,000 MT in the country that shows a significantly decreasing trend as seen from the volumes used in the last couple of years shown in above. Since 2006, India has been exporting DDT to Mozambique (2006-2007: 430,140 kg; 2007-2008: 612,690 kg; and 2008-2009: 165,180 kg), Eritrea (2006-2007: 1,500 kg) and Gambia (2007-2008: 8,000 kg). With the continued use of DDT in the country and elsewhere in the world viz. countries in Africa, the mosquitoes have developed resistance and the recommended dose of DDT no longer remain effective to combat the mosquitoes menace. Presently, despite all efforts under the NVBDC programme, about 1.5 million cases of malaria are still reported on an annual basis. Since India is the only country that remained to continue producing and using DDT in a large volume, there is an urgent need to work a phase-out strategy of DDT in the country. Therefore, the present project brings a paradigm change and aims to shift the dependency on DDT to the use bt-based biopesticides and neem-based botanical pesticides, reinforcing with LLIN impregnated with synthetic pyrethroids.

- 11. Drawing upon the results of the successfully completed projects executed by the Regional Network on Pesticides for Asia and the Pacific (RENPAP)/UNIDO "Technical Support for Development and Production of Neem Products as Environment Friendly Pesticides", and its Phase-II "Production and Promotion of Neem based pesticides as Environment Friendly Biodegradable Alternatives to Chemical Pesticides", it is proposed that the cost-effective, safe and environmentally sound technology developed in regional cooperation be scaled up for domestic manufacturers using newly selected cultivars with early maturity and higher yield taking also into consideration the agroclimatic zones of India. Through the RENPAP, Bacillus sphaericus and thuringiensis based pesticides have been found to be effective as larvicide against a large number of insect pests in the region including mosquitoes. The production technology is available in the RENPAP region of coverage and proposed to be established in the country using local strains of Bacillus.
 - B. 2. incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:
- 12. The GEF grant will be used primarily for the procurement of the new technologies and strengthening the existing infrastructure base available on the ground. It will also be used for developing capacities to master newly procured technology. The capacities to be developed are of two types. Technical capacities of producing quality bio-pesticide products, screening and development of superior grade plant materials and sound application processes of efficacious new substances to be used. Enhanced capacities are also envisaged in human resource development (HRD) wherein training and experience gained throughout the process of execution would lead to substantial improvement in understanding technical information and accumulation of critical knowledge that will contribute to the sustainability of the project outcomes. The proposal targets to develop economically viable alternatives to DDT through developing neem biobotanical pesticides and bt a biopesticides for the control of mosquitoes both at the breeding site as well as in-door control. Through the introduction of LLIN, it would be possible to restrict significantly mosquitoe bites which process malaria and filaria. Facilities would be created for the manufacture of synthetic pyrethroids following the established technological roots along with impregnation of the bed nets utilizing the facilities of the HIL. Therefore, the 3 approaches eliminating mosquitoe larvae at the breeding sites and eliminating inside the household and ensuring full protection in the endemic areas using bed nets, the sustainability of the project outcomes will be fully achieved.
- 13. The Government of India will provide co-financing to the project in the following ways:
- Land, building, machineries and infrastructure for the manufacture of LLIN utilizing the existing DDT production facilities of HIL in 3 major parts of India namely Rasayani in Maharashtra, Udyogamandal in Kerala and Bhatinda in Punjab. The infrastructure support base to be extended to the project for the various manufacturing could be the order of US\$ 23.9 million;
- For the manufacturing of neem based pesticides, facilities already set up under the "Development of Eco-friendly Neem based Pesticides" project of the Government of India with the investment of US\$ 3.0million, are available on the ground; and
- NVBDC budget is US\$104 million.
- 14. The applied methodology that has recently been piloted in India and the field surveys that parallelly carried out with the alternative products have resulted in positive outcome. Based on this, one can realistically assume that the project will provide guidance to developing countries in Asia and Africa in meeting their obligations towards introducing alternatives to DDT under the Stockholm Convention. Strong linkages will be established with the countries participating in the global UNEP/WHO programme of "Demonstrating and Scaling-up Sustainable Alternatives to DDT in Vector Control Management (DSSA)". To facilitate dissemination of technologies and best practices applied, an outreach programme will be developed to obtain the above-mentioned global environmental benefits. To quantify global benefits the project will record the amount of DDT not produced and used, and the amount of UP-POPs avoided by reducing the production of DDT.
- B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF). As a background information, read Mainstreaming Gender at the GEF.":
- 15. The attempt to replace DDT is primarily targeted through the use of biopesticides and botanical pesticides which are entirely biodegradable and environmentally friendly. The only area where chemicals are considered is for the impregnation of the bed nets where synthetic pyrethoids will be used that are considered as green chemicals due to their very limited toxicity and high biodegradability. One of the notable socioeconomic benefits is creating job opportunities in farmer communities, particularly for women and unemployed young. Others are the low price of biobotanical pesticides, very low or lack of toxicity of pesticides, the biodegradability of alternatives to DDT, and take back arrangements with LLIN vendors. The increasing green cover due to new neem plantations will, as an additional benefit, contribute to

mitigating climate change, land degradation and desertification.

- 16. The core concerns and objectives of this project have been focused to developing and promoting neem and other biobotanical pesticides for vector control. However, given the complexity and inter-connected issues around the use of non-POPs alternatives in areas beyond vector control, it has to be understood that any positive benefits both tangible and intangible could be seen as welcome additions that will further enhance the acceptability of the project by the population at large.
- 17. The use of neem is very limited compared to the application of DDT. To timely implement the project, therefore, a very large number of neem trees should be planted that could not be achieved without the intensive use of the tissue culture techniques, which is an accepted intervention under the GEF. The vector control is the "acceptable purpose" by the Stockholm Convention under which DDT can legally be used, but a part of it is illegally applied in the farm sector as inexpensive and effective pesticide. Most of the latter cases, however, can be regarded borderline cases as it might be difficult to make a distinct differentiation between DDT use at vector breeding areas and cultivated land in close vicinity to rivers, lakes, wetlands or other water bodies. Due to this socioeconomic and political sensitivity introducing alternatives to DDT and phasing out DDT should be approached in a very cautious and considerate manner. Component 4 is to implement such an approach with its advocacy for showcasing the benefits of alternatives in rural/farmer communities supported by a considerate regulatory and enforcement mechanism.

B.4 Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:

18. The alternatives considered but particularly botanical pesticides are environmentally friendly and their large scale manufacture would add towards conservation of the ecosystem including preventing land degradation and mitigation of climate change. The robustness of the concept of neem and other biopesticides intervention envisaged in the project ensures effectiveness, even if there are perceptible changes in the vector habitats, both in the existing and in the new areas. The sustained backward linkages of sourcing neem as basic ingredient (only in present in India) leans good reason to go ahead with the proposal to deal with any unforeseen impact of climate change on vector control in the future.

RISKS	LEVEL	RISK MITIGATION MEASURES
1. Due to conflicting interests of the involved ministries, the adoption of policy and legislative framework is delayed	Moderate	The involvement of all relevant government authorities specifically the Ministry of Environment and Forests, Ministry of Chemicals and Fertilizers and Ministry of Health and Family Welfare will ensure that the new policy and legislative framework prepared take into account the overall interest of the country
2. Lack of multi-departmental commitment to support alternatives to DDT	Low	Sensitization of policy makers is timely made and environmentally sound and socio-economically acceptable alternatives will be provided
3. Business model for scaling up production and marketing faces unforeseen	Low	Inter-departmental coordination is established and close coordination ensured throughout project life.
obstacles due to inadequate inter- departmental coordination		In parallel gradual phasing of SMEs as a private sector will ensure business sustainability.
4. For propagating new cultivars at all agro-climatic zones of higher productivity	Low	Propagation of new cultivars is assigned a high priority in the work program of relevant stakeholders.
are not prioritized		Special attention will be made to exploit domestic cultivars at state level.
5. Regional and interregional outreach program does not receive adequate Government support	Low	Government fully sentisized to provide support for the outreach program. The signed endorsement letter confirms the commitment of the Government. At PPG phase, fund raising activities carried out by all involved agencies will clearly minimize this risk.
6. Monitoring and impact indicators are not agreed upon by stakeholders	Low	Both environmental and socio-economic indicators are identified and agreed upon at the early planning (PPG) stage of project and taking into consideration those already adopted in the NVBDCP and other programmes.
7. Climate Change		The long term outcome of this project will be beneficial to climate change as the neem forestation program and IPM under its Component 3 will mitigate changes to the vector habitats that may occur.

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

- 19. The project implementation would primarily be the responsibility of the established governmental agencies engaged under the NVBDC programme, which combats malaria. While the infrastructural execution arrangement available with the NVBDC programme would be utilized for the field execution, the manufacturing activities would be dealt with utilizing the infrastructure and support base available at the HIL. UNIDO would primarily provide the support base for the production and use of biopesticides and botanical pesticides and will support the synthesis of pyrethroids and production of LLIN and the UNEP would assist in strengthening of the legislation, policy framework and institutional capacity building. The collaborative implementation mechanism of the 2 UN agencies involved is in line with India's UNDAF.
- 20. Key stakeholders that will be involved in the project are the Ministry of Environment and Forests (MOEF) as lead ministry of the project; the

Ministry of Agriculture (MOA) would undertake and guide on the evaluation of the new products developed using latest technologies in the field of multi-location trials; the Ministry of Chemicals and Fertilizers (MoCF) will cover the alternatives to non-POPs chemical pesticides; the Ministry of Health and Family Welfare (MHF&W) will be responsible for the application, assessment and adoption of alternatives in public health activities; the State Health Departments will coordinate and implement the project activities at the respective state level for the evaluation and assessment of newer alternatives to DDT in the field on the target pest; the National Vector Borne Diseases Control Programme (NVBDCP), Malaria Research Centre will undertake activities at the national level and make recommendations on the newer alternatives for adoption at the country level; the public sector namely Hindustan Insecticides Limited (HIL) will be involved in the production, scaling up and setting up of the facility for industrial production of the alternatives, viz. production of latest variety of synthetic pyrethroids, production of LLIN, neem based pesticides and Bt based pesticides; participating Research Institutions, Universities and NGOs.

B.6. Outline the coordination with other related initiatives:

- 21. The core commitment of India is expressed not only in the form of ratification of the Stockholm Convention, but also in the active implementation of the World Health Assembly Resolution 50.13, which urges judicious use of pesticides. India actively committed to scaling up non-POPs alternatives to DDT⁷ and has secured funding through various sources to support scaling up the coverage by Insecticide Treated Nets (ITNs) and other chemical and non-chemical vector control interventions. The project will be strongly linked with the latest strategies related to IVM in the country, MHF&W is supporting the objectives of the current project, following numerous World Health Assembly resolutions (e.g. WHO 50.13) urging environmentally sound vector control through the reduction of reliance on, and improve management of (POPs) pesticides. Furthermore, WHO is currently collaborating with project partners to accelerate the development of environmentally friendly (low risk) insecticide alternatives to DDT as a long-term goal to phase out DDT.
- 22. WHO, UNEP, GEF and GFATM are jointly developing a global strategy on achieving the objectives of the Stockholm Convention relating to the provisions on DDT and more precisely the Decision SC-1/25 on DDT of the COP 1. The joint global strategy will address issues relating to complementarity of GEF funding with other funding sources such as that of the GFATM, national funding and other bilaterals and multilaterals. This project will also enhance synergies between the regional WHO/UNEP DDT projects under the Global DSSA Program to facilitate sustainable reduction and ultimately elimination of global reliance on DDT.
- 23. The integration of the project results, with the outcomes and lessons from the other programmes in the various DSSA regions, will be ensured. Other IAs and ExAs will be invited to the project Steering Committee meetings, and included in project related communications as appropriate, to maximize consultation and coordination.
- 24. During the preparation of the NIP the coordination and collaboration between and among different implementing agencies in the country and the implementing agency (UNIDO) had worked out on a regular basis. Similar coordination has been worked out for the present project. MOEF is responsible for looking after the Stockholm Convention and the Project. The National Steering Committee (NSC) already constituted within MOEF represents the nucleus for sustainable and integrated management of the Convention implementation activities. The NSC will be responsible for planning, guidance and monitoring all actions needed for the compliance of the provision of the Stockholm Convention. The NSC of the Stockholm Convention have representatives from all the relvent stakeholder ministries. This helps to ensure that there is no duplication in project activities/implementation and formulation of regulation, thus, enhances the synergy. Linkages with the NGOs and other stakeholders have been established. The project will elaborate various linkages with terms of reference.

C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

- 25. **UNIDO** is within the comparative advantage matrix set out in GEF/C.31/5. UNIDO is mandated to assist developing countries and countries on economy in transition to achieve sustainable industrial development. The organization has developed and actively implemented GEF-funded projects on industrial environmental issues where alternative, innovative and cost-effective technological solutions are required to address environmental and health problems. The proposed project will incorporate technology transfer in introducing alternatives to DDT, which clearly in the comparative advantage domain of UNIDO.
- 26. UNIDO has established, developed and maintained RENPAP since 1992 and created an Agro-chemical unit promoting the production of safe and environmentally sound pesticides formulation in the developing countries. A yearly supported workshop (technical and scientific) is carried out by RENPAP in the domain of formulation of alternatives to pesticides. Agro-industry is a major focus of development programmes of UNIDO and constitutes the main approach of poverty reduction for the Millennium Development Goal (MDG).
- 27. **UNEP**, as GEF Implementing Agency, has since recent years gained wide experience in working together with other Agencies in the field of promoting alternatives to DDT for malaria vector management. UNEP's work in the POPs focal area has been built on its leading role in the UN chemicals management where its expertise lies in identifying best practice approaches and tools and methods, where it works with UN organizations and others to introduce phase-out plans and environmentally sound management of chemicals. As such UNEP is well placed to partner with other mentioned organizations to phase out current and avoid future practices of DDT use in the proposed project in India.
- 28. UNEP is mentioned in the comparative advantage matrix of the GEF agencies as Technical Assistance and Capacity Building providing agency for initiatives under the POPs Focal Area.

C.1 Indicate the co-financing amount the GEF agency is bringing to the project:

29. A total of US\$ 720,000 will be provided as in-kind co-financing to the project from UNIDO (\$600,000) and UNEP (\$120,000).

⁷ Minutes of Meeting held on 05 January 2010, chaired by Joint Secretary Ministry of Health & Family Welfare,

C.2 How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

- 30. UNIDO, as part of its thematic priority on environmental management, recognizes the relationship between poverty and the potential exposure to toxic substances, pollutants and wastes and that eliminating the health and environmental impacts of POPs leads to a sustained and more equitable economic development.
- 31. UNIDO delivers its technical assistance to countries through a global set of institutional network ranging from field and desk officers, cleaner production centres, investment and technology promotion centres and environment technology centres. Thus, UNIDO (India Country Office and RENPAP) has an excellent network of staff to implement the project on the ground.
- 32. The proposal is complementary to UNEP's Subprogramme 5 (Hazardous Substances and Hazardous Waste) focused on minimizing the impact of harmful substances and hazardous waste on the environment and on human beings and with expected accomplishments as follows:
- States and other stakeholders have increased capacities and financing to assess, manage and reduce risks to human health and the environment posed by chemicals and hazardous waste;
- Coherent international policy and technical advice is provided to States and other stakeholders for managing harmful chemicals and hazardous waste in a more environmentally sound manner, including through better technology and best practices;
- Appropriate policy and control systems for harmful substances of global concern are developed and in place in line with States' international obligations.
- 33. UNEPs regional staff (based in Bangkok), UNEPs global DSSA support staff (based in Nairobi HQ), as well as UNEPs Regional Office staff will be available to support and facilitate the correct and cost-effective implementation of the project.
- 34. The proposed project is in line with UNDAF collaborative implementation mechanism with two(2) UN agencies jointly addressing an issue (promoting alternatives to DDT in vector management for protection of human health and the environment) of particular global and national interest.
- 39. The project supports India's UNDAF (2008-2012) two cross-cutting priorities namely promoting gender equality and strengthening decentralization.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mr. Hem Pande	GEF Operational Focal	MINISTRY OF	01/23/2012
	Point, Joint Secretary	ENVIRONMENT	
		AND FORESTS	

B. GEF AGENCY(IES) CERTIFICATION

Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Telepho ne	Email Address
Mr. Dmitri Piskounov, Managing Director, UNIDO	J. Punn	03 23 2011	Mr. Mohamed Eisa	+43 1 26026 4261	M.Eisa@unido.org
Ms. Maryam Niamir- Fuller GEF Coordinator UNEP	W. Man Tille	08/23/2011	Mr. Jan Betlem	+254-20 7624067	Jan.Betlem@UNEP.or