

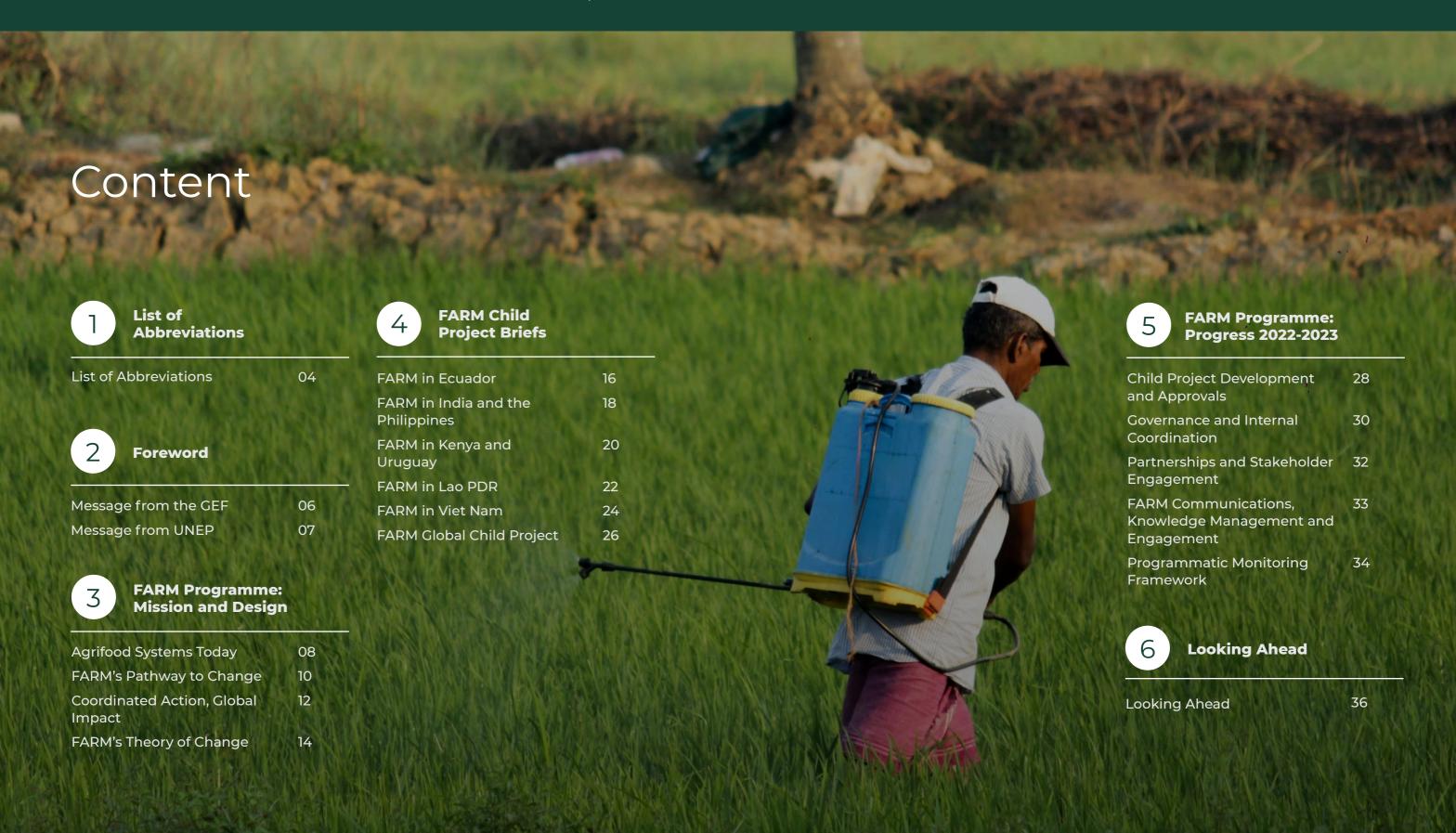
December 2021 - December 2023

# PROGRAMMATIC REPORT

Financing Agrochemical Reduction and Management

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# List of Abbreviations

**ADB** | Asian Development Bank

EA | Executing Agency

**EAC** | East African Community

**FAO** | Food and Agriculture Organization of the United Nations

**FARM** | Financing Agrochemical Reduction and Management

| Fertilizer and Pesticide Authority, the Philippines **FPA** 

**GEB** | Global Environmental Benefits

**GEF** | Global Environment Facility

**GGKP** | Green Growth Knowledge Partnership

GHG | Greenhouse Gas

gTEQ | Grams of Toxic Equivalent

**HHPs** | Highly Hazardous Pesticides

IA | Implementing Agency

**MAF** | Ministry of Agriculture and Forestry, Lao PDR

**MAATE** | Ministry of Environment, Water and Ecological Transition, Ecuador

**MARD** | Ministry of Agriculture and Rural Development, Viet Nam

**MERCOSUR** | Southern Common Market

**PAG** | Programme Advisory Group

**PARRFI** | Philippine Agriculture and Resources Research Foundation, Inc.

**PCPB** | Pest Control Products Board, Kenya

**PFD** | Programme Framework Document

PIR | Project Implementation Report

**POPs** | Persistent Organic Pollutants

**PPG** | Project Preparation Grants

**PSC** | Project Steering Committee

**TEEB** | Economics of Ecosystems and Biodiversity

**UNDP** | United Nations Development Programme

**UNEP** | United Nations Environment Programme

**UNEP FI** | UNEP Finance Initiative

**UNEP-WCMC** | UNEP World Conservation Monitoring Centre

**UNIDO** | United Nations Industrial Development Organization



Foreword Programmatic Report 2021-2023

# Message from the GEF

Agriculture stands as a cornerstone of human civilization — an enduring and transformative endeavour that has driven our progress. However, as our world grapples with unprecedented environmental change, it is clear that conventional approaches to farming — relying heavily on land, water and chemicals — have become untenable.

Climate change is altering pest dynamics, while monocropping practices are diminishing agricultural biodiversity, rendering our food systems vulnerable. We urgently need a paradigm shift towards a more sustainable model — one that nurtures the planet rather than depletes it.

The FARM Programme is designed to address this challenge by harnessing nature-based solutions and improving farmers access to innovative solutions that eliminate our reliance on hazardous chemicals, all while meeting the demands of a growing population without further degrading our planet.

At the Global Environment Facility, we recognize the critical role of that finance plays in catalysing this transformation. Through strategic partnerships and targeted investments, FARM aims to empower farms and farmers to adopt nature-based alternatives and transition towards more responsible practices.

This annual report marks the beginning of our journey. In the following pages, you will discover the progress we have made in beginning to spark change across Ecuador, India, Kenya, Lao PDR, the Philippines, Uruguay and Viet Nam.

FARM is poised to revolutionize the way we produce food and commodities. In the next five years, we look forward to the integration of indigenous pest management practices in India and the Philippines, the establishment

of an extended producer responsibility fund in Viet Nam, and many more innovations that will reduce the use of harmful chemicals and waste including persistent organic pollutants (POPs), highly hazardous pesticides (HHPs) and agricultural plastics, to safeguard our lands, mitigate carbon emissions and protect our precious biodiversity.

I extend my gratitude to all countries, partners and supporters of the FARM Programme. Together, we are reimagining the system—paving the way for a future that prioritizes sustainability, resilience and long-term prosperity, where agriculture thrives in harmony with nature.

#### Anil Sookdeo Coordinator, Chemicals and Waste Global Environment Facility



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# Message from UNEP

Today, global agriculture faces a big challenge: feeding the planet sustainably.

Chemicals play a key role in farming. However, widespread pesticide, chemical fertilizer and plastic use are contributing to a potential ecological and health crisis.

Highly hazardous pesticides (HHPs) and mismanaged plastics release toxic chemicals into our environment, potentially contaminating air, water and food. Chemical residues for some of the chemicals can be found up to 30 years after originally being applied/released into the environment, reducing microbial activity and leading to significant additional stress on biodiversity.

These inputs are generally cheaper and less labour intensive than more sustainable, less toxic, alternatives and the adoption of more ecological farming approaches.

In view of food safety, this challenge demands the use of better, non-toxic alternatives to existing inputs. Many steps have been taken by countries and agencies such as the UN Food and Agriculture Organization (FAO) to jointly address hazardous chemicals in agriculture. However, thus far limited attention has been paid to the reorientation of financial flows.

The FARM Programme aims to fill this gap by elaborating the business case for banks and policymakers to reorient policy and financial resources towards farmers to help them adopt low- and non-chemical alternatives.

Aiming to promote a more resilient and environmentally-conscious system, the programme will support Ecuador, India, Kenya, Lao PDR, the Philippines, Uruguay and Viet Nam to drive change in their respective contexts, while a global platform will amplify the programme's results to a wider audience.

This work supports the United Nations Environment Programme's (UNEP) efforts to combat the triple planetary crisis of climate change, pollution and biodiversity loss, building on a long history of collaboration between UNEP, the Asian Development Bank (ADB), United Nations Development Programme (UNDP), United Nations Industrial Development Organization (UNIDO), Global Environment Facility (GEF) Secretariat and local partners, underlining the importance of collective action for agricultural transformation. Together, we have the opportunity to create a greener and healthier future. I invite you to join us on this journey, and I extend my thanks to our partners, stakeholders and dedicated teams for their commitment.

#### **Kevin Helps**

Portfolio Manager, GEF Chemicals and Waste United Nations Environment Programme







# Agrifood Systems Today

Agriculture is essential to achieving food security. However, its extensive use of highly hazardous pesticides and plastics poses significant environmental and health risks. With demand for food driving a greater dependence on harmful chemicals, the sector finds itself at a critical juncture: continue harming ecosystems, or transition towards a non-toxic, nature and carbon-positive path.

**Pollution and Agriculture in Numbers** 



4 million tons of pesticides used every year.



12.5 million tonnes of agricultural plastics used every year.

1.23 billion people are employed in agrifood systems.

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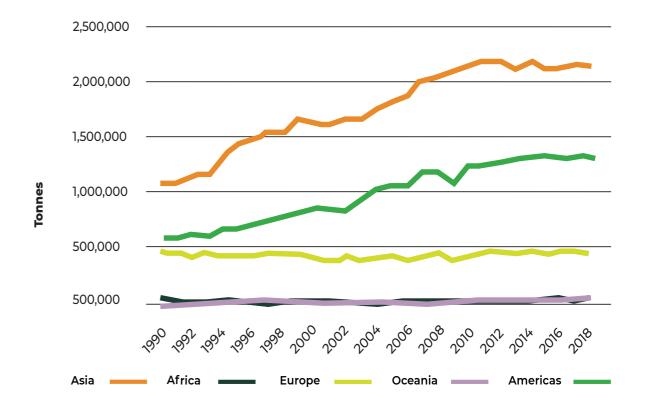
3.83 billion
people worldwide live in households
linked to agrifood systems-based
livelihoods.

Industrialized farming costs the environment the equivalent of about

**\$ 3 trillion** annually every year.

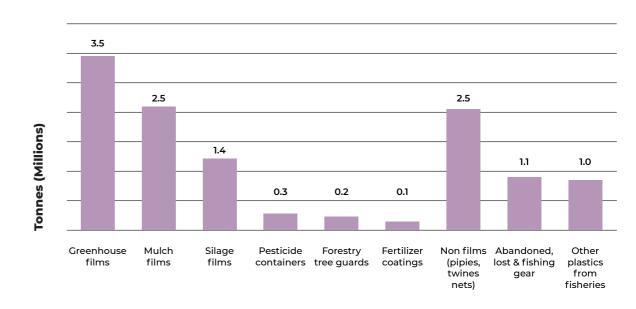
385 million people are poisoned by pesticides every year

Figure 1: Pesticide consumption by continents



Source: Recreated from FAO. 2021. Pesticides use. Global, regional and country trends, 1990-2018 FAOSTAT Analytical Brief Series No 16. Rome.

Figure 2: Estimated global annual quantities of agricultural plastics



#### **Product types**

Source: Recreated from FAO. 2021. Assessment of Agricultural plastics and their sustainability. Rome.

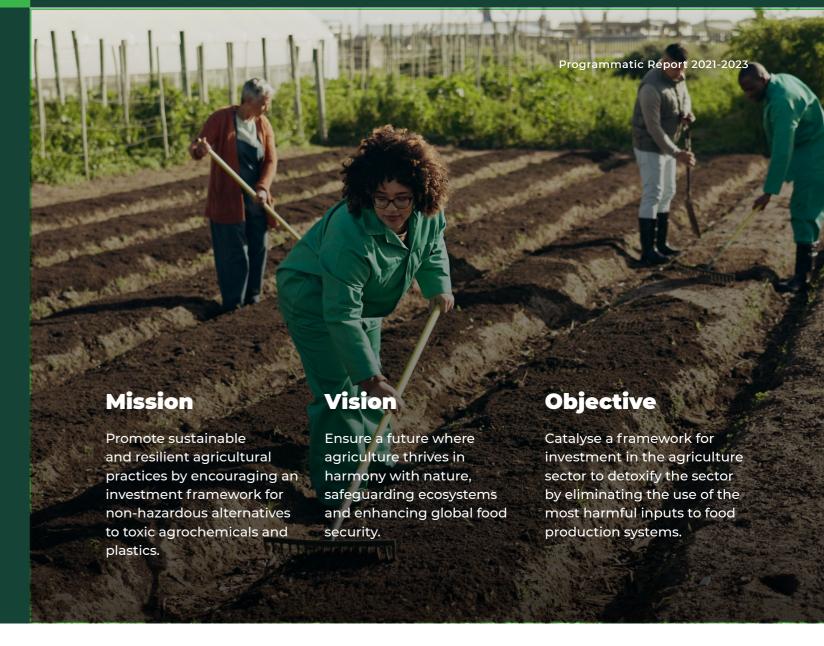


# FARM's Pathway to Change

The goal of the Financing Agrochemical Reduction and Management (FARM) Programme is to enact transformative change within the agriculture sector. By reorienting policy and financial resources away from toxic agrochemicals, it aims to create a future where:

- Agricultural systems are detoxified and less chemicalintensive.
- Ecosystems are protected and restored.
- Harmful inputs like persistent organic pollutants (POPs)containing plastics and highly hazardous pesticides (HHPs) are phased out.
- Carbon emissions from agriculture are reduced.
- Smallholder farmers thrive in sustainable and resilient farming communities.

Supported by: Led by:



## **Key Information**



\$341 million









Implemented by:





#### Implemented from 2023-2028

#### 7 countries:

Ecuador, India, Kenya, Lao PDR, the Philippines, Uruguay, Viet Nam

















#### **Executing agencies:**

Ministry of Environment, Water and Ecological Transition (MAATE) of Ecuador; Department of Chemicals & Petrochemicals; Ministry of Chemicals and Fertilizers of India; HIL (India) Limited; Food and Agriculture Organization of the United Nations (FAO); Ministry of Agriculture and Forestry (MAF) of Lao PDR; Fertilizer and Pesticide Authority (FPA) of the Department of Agriculture of the Philippines; Philippine Agriculture and Resources Research Foundation, Inc. (PARRFI); Ministry of Agriculture and Rural Development (MARD) of Viet Nam and Green Growth Knowledge Partnership (GGKP)

## **Key Global Environmental Benefits**



Prevent over 51,000 tons of hazardous pesticides from being released



Prevent over **20,000** tons of plastic waste from being released



Improve the lives of 3.8 million people



Avoid **35,000** tons of carbon dioxide emissions



Protect over hectares of land from degradation

# Coordinated Action, Global Impact

FARM seeks to reduce environmental pollution, safeguard human health and foster long-term agricultural sustainability through a dual strategy:

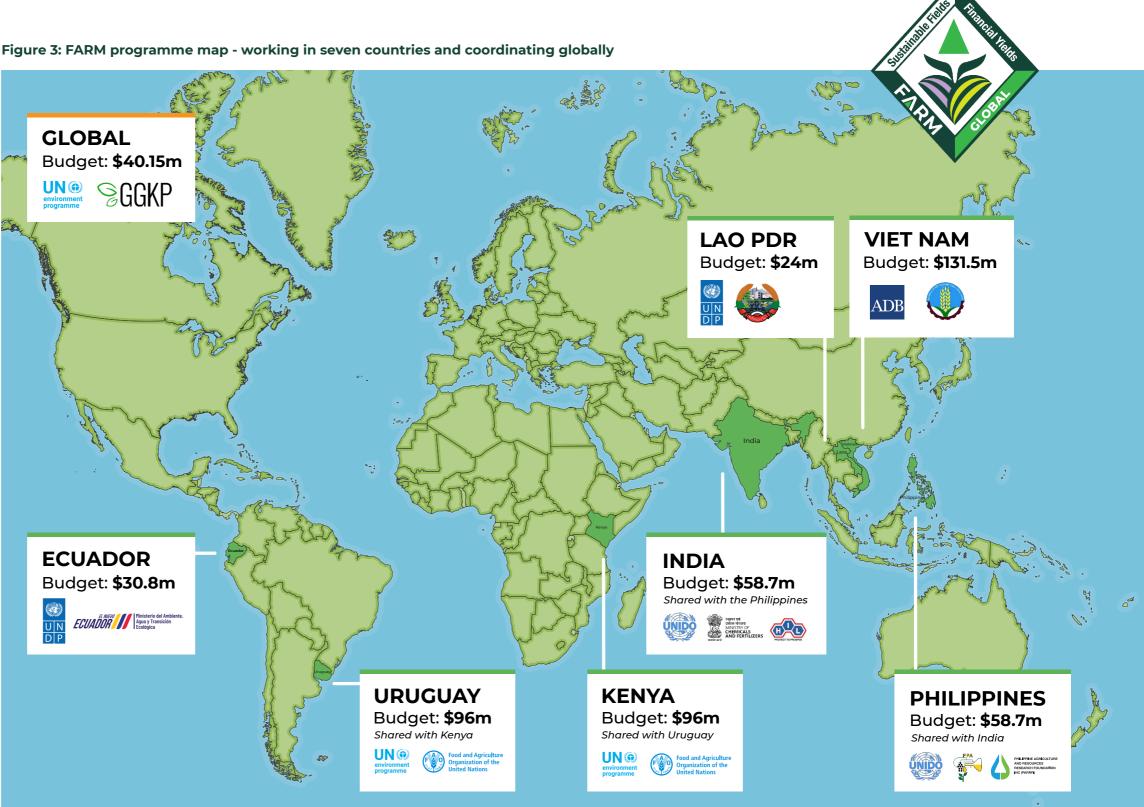
#### **In-country projects**

FARM's implementing agencies – UNEP, ADB, UNDP, UNIDO – engage with agencies, national governments and local partners in-country to align policy, enforcement and finance towards the environmentally sustainable management of pesticides and agricultural plastics, reducing the use of harmful inputs and accelerating the adoption of low- to non-chemical alternatives.

#### **Global platform**

FARM's global platform, coordinated by the Green Growth Knowledge Partnership, provides technical guidance and tools to incountry projects, ensuring they learn from each other, as well as other leaders in the sector, while connected to the wider programme. This is achieved through common approaches in three areas:

- 1. Communication, branding and knowledge management
- 2. Partnerships and gender
- 3. Monitoring and evaluation



FARM Programme: Mission and Design

Programmatic Report 2021-2023

# FARM's Theory of Change

FARM goes beyond traditional interventions on sustainable agricultural production, not only supporting smallholders and promoting policy shifts but also addressing the financial, investment and market levers that control the availability of effective pest control, production alternatives and trade in sustainable produce. It has three core priorities: policy and enforcement, financing and investment, and capacity and knowledge.

Figure 4: FARM Programme theory of change

The FARM Programme pilot interventions encompass seven child projects operating at country, regional and global levels. Led by UNEP and implemented with the collaboration of various organizations, including the ADB, UNDP, UNIDO and FAO, these initiatives target

Ecuador, India, Kenya, Lao PDR, the Philippines, Uruguay and Viet Nam. Additionally, the global child project is overseen by the Green Growth Knowledge Partnership. These are presented in the following section.

## Components

#### **Component 1**

#### Policy and enforcement

Enhancing surveillance to improve the management of pesticides and agricultural plastics and promote the adoption of safer alternatives.



#### **Component 2**

#### Financing and investment

Ensuring mechanisms incorporate environmental considerations and support the promotion and adoption of new technologies for sustainable agricultural practices.



#### **Component 3**

#### Capacity and knowledge

Informing stakeholders of environmentally sustainable management of pesticides and hazardous pesticide waste, agricultural plastics and adoption of safer alternatives.

#### **Programmatic Outputs**

- **1.1** National regulations apply life cycle approaches for phasing out POPs and HHP agrochemicals and agri-plastics, and are regionally equivalent to control international supply chains.
- 1.2 Faster and easier registration of alternatives andt procurement of emergency pest control products.
- **1.3** Stronger enforcement of pesticide/ plastic management standard, (e.g. import and manufacture of POP's, counterfeit pesticides, analytical capacity, monitoring of health and environmental impacts) and equivalent enforcements for export and domestic consumption.
- **2.1** Government subsidies promote alternative pest control measures; and sustainably fund regulatory system and needs.
- **2.2** Responsible banking/investment/criteria and safeguards exist and are applied to reorient investment from POPs and HHPs.
- **2.3** Ag investment programmes reach the least connected smallholder farmers and incentivize use of alternative pest and crop management.
- **2.4** Commercial banks provide access to finance for commercialization and uptake of alternatives for pesticides and plastics (insurance, credit, loans, etc.) including via criteria and positive target.
- **2.5** Resources mobilized for collection and disposal channels and disposal channels and infrastructure for agrochemicals and plastic wastes.
- **3.1** Extension and advisory services guide farmers to replace POPs and HHPs with viable, locally appropriate alternatives for agrochemicals and agri-plastics; agronomy education curricula include biological and alternative pest control.
- **3.2** Provision and uptake of professional crop spraying and plastic management services.
- **3.3** Global access to knowledge and best practices available and used to inform and drive scaling up of low/no chemical agriculture.

#### **Programme Objectives Impacts** Increased financing for manufacture & commercialization of low/ no chemical pest control alternatives, Environmental: facilitated by access to knowledge. Prevention of POPs/ and HHP releases to land, water, air. Human health Increased knowledge, and ecosystem and incentives for farmers to adopt damages due to alternative crop chemical and management waste pollution approaches. are prevented and/or alleviated Socio-economic: Farmers incomes boosted by fewer days lost and maximum Access to finance and residue limit knowledge of best exceedances practices for the environmentally Health benefits sound management (DALY) of hazardous waste includina unwanted pesticides

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and agri-plastics.

**FARM** FARM Child Project Briefs Programmatic Report 2021-2023

## **FARM** in Ecuador

#### Financing agrochemical reduction and management (FARM) in Ecuador

Ecuador is one of 12 megadiverse countries in the world and agriculture is a core part of its economy and culture. Smallholder farmers account for 64% of the countries' production and agriculture comes just behind oil in terms of income generation. However, 34.3 million kg of pesticides are used yearly, with 44% of that volume being HHPs, putting the country's biodiversity, environment and human health at risk.

The child project in Ecuador will make direct interventions at the national and local levels to address the barriers preventing farmers from utilizing more sustainable agricultural practices. Interventions will include implementation of a capacity-building programme and development of a national plan focused on reducing harmful chemical use, as well as using the global component to connect international buyers with local producers to motivate producers to use the best practices available and provide responsible products to a larger market.

#### Goal

To reduce the global use of harmful agrochemicals by supporting farmers to access finance, innovative and sustainable production practices, and competitively access consumer markets in Ecuador.

## **Planned Project Activities**



Policy and enforcement

Finance and

investment

50 customs and enforcement officers trained on illegal trade prevention

30 government officers trained on FAO Pesticide Registration Toolkit

5 feasible fiscal incentives explored

**Creation of 1 finance** programme tailored for farmers to adopt sustainable agriculture practices

2 pilot projects implemented in participatory research and action in agroecology

1 National Action Plan developed for International Code of Conduct application

1 official Information Exchange Platform designed and 1,000 people trained for the identification, control and final disposal of pesticides and wastes

2 pilot projects implemented for building capacity in management of plastics for agricultural use in rural areas

1 competitive fund mechanism **developed** for the reduction of HHP use

**1,400 farmers** (420 women and 980 men) trained and 2,000 **people** (1,000 women and 1,000 men) aware of sustainable agriculture production



Project approval

2 Jun 2023

Inception

Budget

August 2024

\$30.8 m

\$4 million

in co-financing

in GEF grant funding

\$26.8 million

Agricultural commodities

Banana, corn

Implementing agency

#### **Global Environmental Benefits**



tonnes of CO2eq GHC emissions mitigated

tonnes of DDTcontaining materials and products directly avoided



tonnes of HHPs containing materials and products directly avoided

**Executing agencies** 



aTEO POPs to air reduced or avoided



7,800

beneficiaries

2,721 Female

5,079

Co-financing partners

Agencia de Bioseguridad Galápagos (ABG) Asociación de Exportadores de Banano del Ecuador (AEBE)

Consorcio De Gobiernos Autónomos Provinciales Del Ecuador (CONGOPE)

Corporación Nacional de Finanzas Populares y Solidarias (CONAFIPS)

Crop Protection Industry Association (APCSA) Ecuadorian Chamber of Agricultural Innovation and Technology Industry

(INNOVAGRO)

Contact

Mario Rodas Programme Officer, UNDP mario.rodas@undp.org

Heifer Ecuador Ministry of Environment and Water (MAAE) Ministry of Agriculture (MAG) Ministry of Health (MSP) Phyto and Zoo-Sanitary Control Agency (AGROCALIDAD) Pedro Mocayo Municipality Servicio Nacional de Aduana del Ecuador

**UNDP** Ecuador

Universidad Técnica de Machala (UTMACH)

public demand

Value chains and

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**<b>FARM** FARM Child Project Briefs Programmatic Report 2021-2023

## FARM in India and the Philippines

Promoting eco-friendly crop protection solutions for persistent organic pollutant and highly hazardous pesticide reduction in Asia

India's agriculture sector has been steadily growing over the last few decades; over half of its population relies on the agricultural sector for their livelihoods and the country is one of the largest producers of key staples and cash crops, such as spices, wheat, rice and tea. In the Philippines, as of 2019, there were over 9.7 million agricultural workers yet only a little over 80 registered organic farms and companies.

This child project for India and the Philippines will address existing barriers preventing the reduction of the use of POPs and HHPs while supporting the development and scaling of alternatives. Key to this will be cross-country collaboration that facilitates the transfer of technology and the exchange of knowledge and experience. Activities will range from harmonizing legislative and policy frameworks on biopesticides, registration, or import/export rules between the two countries to establishing demonstration sites and providing on-field training.

#### Goal

To establish sustainable financing, investment and incentive mechanisms in the formulations, production and application of eco-friendly crop protection solutions for the reduction of POPs and HHPs, enhancing livelihood, food safety and protection to human health and the environment.

## **Planned Project Activities**



Policy and enforcement



Finance and investment



Value chains and public demand

Legislative and policy framework covering clear definition for bio-pesticides, their registration modalities, and import/export rules harmonized among India and the Philippines.

Technology transfer and upscaling of biopesticide production.

Financing mechanisms **established** including loans, marketing infrastructures and insurance schemes, quality enhancement application and fair price initiatives to facilitate the shifting from conventional pesticides to biopesticides.

Relevant stakeholders in the agricultural sector such as decision-makers, manufacturers in public and private sector, farmers including women and youth and others trained and awareness raised on greener and eco-friendly alternatives.

Database on pesticide manufacturing, import, export and usage, including HHP, POPs and biopesticides in the Philippines improved.

**Demonstration of** biopesticides and phasing-out of HHPs in significant crops in the Philippines, including onfield training.

Scaling-up of bio-pesticides manufacturing and phasing out of POPs.

Digital hub established for global exchange and access to best practices, knowledge and experience and promote further business opportunities with international and regional buyers.





#### Project approval

9 August 2023

#### Inception

India: August 2024 The Philippines: TBD

#### Budget

\$58.7 m

\$7 million in GEF grant funding

\$52.7 million in co-financing

#### Implementing agency



**UNITED NATIONS** INDUSTRIAL DEVELOPMENT ORGANIZATION

#### Agricultural commodities

Tea, coffee, chilli, ginger, tomato, cucumber, okra, banana, orange, paddy wheat, cotton, mustard

#### Executing agencies









### **Global Enviromental Benefits**



hectares of landscapes under improved practices



2,900,000 7 32,900

tonnes of HHPs eliminated



tonnes of POPs removed or disposed



127,500

beneficiaries

28.300

99.200 Male

Co-financing partners

Department of Agrarian Reform Tarlac Development Bank of the Philippines District 1 of Tarlac Province Fertilizer and Pesticide Authority HIL (India) Limited JC Dots Agri Trading

Contact

Carmela Centeno, Industrial Development Officer, Responsible Materials and Chemicals Management Unit, Division of Circular Economy and Environmental Protection, UNIDO, c.centeno@unido.org

Leganes Premier Land Corp. Taguibo Integrated Farmers Association, Inc

Vivekananda Institute of Biotechnology

Maren Mellendorf, Industrial Development Officer, Responsible Materials and Chemicals Management Unit Division of Circular Economy and Environmental Protection, UNIDO, m.mellendorf@unido.org

**<b>FARM** FARM Child Project Briefs Programmatic Report 2021-2023

## FARM in Kenya and Uruguay

Strengthening investment for adoption of alternatives and sustainable management of agrochemicals and agriplastics in Africa and Latin America through pilots in Kenya and Uruguay

Agriculture is the backbone of both Kenya and Uruguay's economies. It employs over 40% of Kenya's population and accounts for about a third of its GDP, while 93% of Uruguay's land is under agricultural production and provides produce for over 28 million people globally.

The child project will pilot solutions in Kenya and Uruguay, engaging with relevant national ministries and agencies, farmers organizations, environmental organizations,

universities and research centres, and private companies. The policies and strategies developed or reviewed through the project will assist national governments and regional economic communities, such as the East African Community (EAC) and Southern Common Market (MERCOSUR), to improve their regulatory and financial frameworks to support sustainable agriculture.

#### Goal

To reduce the global use and prevalence of harmful agrochemicals by supporting farmers to access finance, innovative practices, and markets required to incentivize sustainable practices.

## **Planned Project Activities**



Policy and enforcement 4 risk reduction plans implemented

4 draft regulations and/or procedural tools for registration of alternatives

2 draft policy, budget, or guidelines agreed by national stakeholders for lifecycle management of agricultural plastics

2 draft regulations on EPR agreed by national stakeholders



Finance and investment

**Environmental criteria** incorporated into 4 EPR, investment program or government subsidies and 2 loans from private financial institutions to the agriculture sector



Value chains and public demand

250 individuals report changes

in behaviour

**2,000** end recipients (>30% female) of FARM campaigns messages and materials

6 recommendation proposals validated by national workshops

4 green finance models in Kenya and Uruguay adjusted or codeveloped with private sector partners

500 agencies personnel, retailers, farmers trained (>30% female participants)

4 technical engagement events between Kenya and Uruguay

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#### Project approval

8 Jun 2023

#### Inception

Kenya: 17 March 2024 Uruguay: June 2024

#### Budget

\$96.38 m

\$7.48 million in GEF grant funding

\$88.9 million in co-financing

#### Implementing agency



#### Executing agencies



#### Agricultural commodities

Kenya: Horticulture sector

#### **Global Enviromental Benefits**



6,657

hectares of landscapes under improved practices



tonnes of avoided residual plastic waste



metric tonnes of CO2ea greenhouse gas emissions mitigated



grams of toxic equivalent gTEQ POPs to air and uPOPs reduced or avoided



tonnes HHP containing materials and products directly avoided



1,407,000

beneficiaries

363.000 | 1.044.000

Co-financing partners

Agrochemicals Association of Kenva (AAK) Centre for Agriculture and Bioscience International

Centre for Environment Justice and Development (CEJAD-Kenya)

Effective IPM Association (Kenya)

General Directorate for Agricultural Services, Ministry of Livestock, Agriculture and Fisheries (DGSA

International Centre for Genetic Engineering and Biotechnology (ICGEB-Kenya)

Contact

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Juanco SPS Limited (Kenya) Kenya Organic Agriculture Network (KOAN) and Organic Consumers Alliance Pest Control Products Board (PCPB-Kenya) Ministry of Environment (Uruguay) Ministry of Environment and Forestry (Kenya) Osho Chemicals Limited (Kenva) Plant Protection and Food Safety Directorate. Ministry of Agriculture and Livestock Development (PP&FSD-Kenya)

Oxana Perminova, Agricultural Officer, Pest and Pesticide Management Team, Plant Production and Protection Division Food and Agriculture Organization of the United Nations (FAO), Oxana.Perminova@fao,org

**FARM** FARM Child Project Briefs Programmatic Report 2021-2023

## FARM in Lao PDR

#### Financing agrochemicals removal and management (FARM) in Lao PDR

The agriculture sector in Lao PDR employs about 61% of the country's workforce, with almost 30% of that population being under 15 years old and most of the produce sold locally. Pesticide use has been limited due to the high level of subsistence farming; however, as farms move to commercialization, pesticide use is increasing significantly.

In the Lao PDR child project, the component activities will address issues relevant across multiple landscapes and crop supply chains. It has a strong focus on long-term sustainability, establishing systematic governance approaches such as a National Pesticides Alternatives Promotion Plan, developing financial products that will be available and relevant post-2028, and increasing capacity among key stakeholders, empowering farmers to continue implementing sustainable practices.

#### Goal

To reduce the use of harmful agrochemicals by incentivizing farmers to adopt sustainable crop management practices, improving access to low- and non-chemical pest control alternatives, and improving access to finance for the environmentally sound management of hazardous pesticides and agricultural wastes, including plastics.

## **Planned Project Activities**



Policy and enforcement

Finance and

investment

**Promulgate regulations** for the management of import and use of agricultural chemicals and hazardous chemical waste

Add a list of highly hazardous agricultural chemicals that are restricted or prohibited for use in Lao PDR

Collaborate and design innovative financial products to reduce the use of agricultural chemicals and pollution from agricultural waste

Create awareness about the risks associated with the use of and exposure to harmful pesticides

Value chains and Train and share experience with public demand sub-projects across the country and region

**Carry out training for relevant** officials and increase cooperation with neighbouring countries in the region to prevent the importation and trade of hazardous and illegal agricultural chemicals

Develop and apply FAO tools for pesticide registration

Conduct demonstration pilots to show that farmers can increase their income and reduce the use of harmful chemicals in priority crops for export and domestic consumption

**Provide technical support** in plastic agricultural waste business



#### Project approval

13 October 2023

#### Inception

15 May 2024

## Budget

**\$24 m** 

\$4 million in GEF grant funding

\$20 million in co-financing

#### Implementing agency

Executing agencies





#### Agricultural commodities

Maize (Kham and Houn Districts), watermelon (Viengphoukha District), vegetables (Hadxayfong

#### **Global Enviromental Benefits**



tonnes of CO2 GHG emissions mitigated



qTEQ POPs to air reduced or avoided



tonnes of pesticides (POPs and HHPs) containing materials and products avoided



4,200

tonnes of avoided residual plastic waste



16,600

beneficiaries

2.800

13.800 Male

Co-financing partners

Contact

Government of the Republic of Korea International Fund for Agricultural

Development (IFAD) MAF

UNDP World Bank

Bounchanh Kombounyasith, Director General, Department of Agriculture, MAF, Lao PDR

Thome Xaisongkham, Programme Analyst, thome.xaisongkham@undp.org

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## **FARM in Viet Nam**

Financing agrochemical reduction and management (FARM) in agri-food value chains

Agriculture is a significant sector in Viet Nam's economy and culture. It accounts for 39% of land use, contributes to almost 12% of 12% of the country's GDP and together with the wider agri-food industry employs almost 14 million people, with smallholder farmers making up a majority of the sector. Each year, about 9,000 tonnes of hazardous agricultural waste is generated, mainly consisting of highly toxic pesticides.

innovative green financing mechanisms, the child project aims to reduce the use of and improve management of agrochemicals to create competitiveness and environmental sustainability of the agri-food sector in Vietnam. There is a large focus on ensuring local ownership and that technologies and techniques introduced by the project are simple, readily available and environmentally friendly to sustain continued use post-project.

#### Goal

To promote financing for improved agrochemical and agricultural plastic management in agri-food value chains.

## **Planned Project Activities**



Policy and enforcement



Finance and investment



Value chains and public demand

Gaps in the green finance policy and regulatory framework, and mechanisms and their implementation identified and remedial measures proposed

EPR fund accessed by 5 project provinces.

At least 3 private sector investments made in collection/ recycling/treatment of pesticide containers and agricultural plastic wastes

Agriculture product monitoring and management systems developed and implemented at 3 government food safety testing centres

Targeted behaviour change and technical advisory campaigns designed and implemented

Regulatory enforcement guidance notes for agrochemical and agricultural plastics management developed and implemented at national and project provincial levels

2 community-based pesticide container management models and food safety technical guidelines for at least 5 highvalue crops developed

Capacity building of 3 government food safety testing centres for pesticide residue analysis strengthened

**Pilot Natural Capital Assessment** and Accounting for at least 2 selected provinces

**Natural Capital Accounting** and Assessment capacity strengthened in 5 project provinces for at least 50 provincial government officers in charge of environmental management (30% or more of participants are women)

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#### Project approval

08 Jun 2023

Inception

August 2024

#### Implementing agency



#### Executing agencies



#### Budget

\$131.5 m

\$7.5 million in GEF grant funding

\$124 million in co-financing

#### Agricultural commodities

Coffee, pepper, avocado, mango, durian, custard apple, passionfruit, vegetables

#### **Global Enviromental Benefits**



1,085,841

hectares of landscapes under improved practices (excluding protected areas)



hectares of marine habitat under improved practices (excluding protected areas)



tonnes CO2e GHG emissions mitigated



tonnes POPs reduction, disposal/destruction, phaseout



low chemical/ no chemical food

production systems implemented



3.586.91 2,132.15

tonnes of HHPs eliminated



tonnes of avoided residual plastic waste



gTEQ POPs to air reduced or avoided



386,379

direct beneficiaries

196,034

190,345 Male

partners Contact

Co-financing

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# FARM Global Child Project

Global coordination, knowledge management and common finance tools

Agriculture is a major contributor to the triple planetary crisis. Annually, 4 million tonnes of pesticides are applied globally – a 74% increase from 1990 – and 12.5 million tonnes of plastics are used in plant and animal production. FARM represents one of the first concerted efforts to reduce and better manage the use of harmful agrochemicals and agricultural plastics on a global scale, bringing together multi-sectoral partners and stakeholders from around the world.

The global child project will coordinate activities across the FARM programme and provide a mechanism by which other FARM child projects can engage with international regional stakeholders, including institutions, expert networks and platforms. It supports in-country child projects as a unifying communications, coordination and knowledge management platform. The global project will compile, curate and create information and solutions that help shift the global food system towards the environmentally sustainable management of pesticides and agricultural plastics, and utilizing the expertise of the UNEP Finance Initiative, develop metrics and tools for banks and investors.

#### Goal

To address the global and regional knowledge capacity of policy, finance, and value chain actors to sustainably regulate, finance, and reduce pesticides and plastics use.

## **Planned Project Activities**



Policy and enforcement

·



Finance and investment



Value chains and public demand

**7 regulatory bodies** engaged

1 guidance developed

**4 reports** produced

10 value chain actors and 5,000 individuals engaged

**3 global or regional partnerships** established

10 new knowledge products published

**30 private finance professionals** trained

**50 experts and stakeholders** engaged

**100 knowledge products** made publicly available

2 biennial forums held

#### Project approval

12-15 March 2024

08 Jun 2023

Inception

Implementing agency



Executing agency



Budget

\$40.15 m \$7

\$7.45 million \$32 in Co-f

\$32.7 million in Co-financing

#### **Global Enviromental Benefits**



beneficiaries

50%

50% Male

Co-financing partners

BioProtection Global Centre for Pesticide Suicide Prevention

GGKP

Natural Resources Institute (NRI)
Pesticide Action Network UK (PAN UK)

Rainforest Alliance

Contact farm@ggkp.org

The Economics of Ecosystems and Biodiversity (TEEB)
UNEP Finance Initiative (UNEP FI)

UNEP World Conservation Monitoring Centre (UNEP-WCMC)



This report highlights progress made by the Financing Agrochemical Reduction and Management (FARM) Programme, covering the period from December 2021 to December 2023.

# Child Project Development and Approvals

The FARM Programme Framework Document implementing and executing agencies and (PFD) was approved by the GEF Council at its the GEF Secretariat in 2022 to enable the coordinated design of the child projects.

In 2022 – the preparation year of the FARM Programme – all six child projects obtained Project Preparation Grants (PPG) and prepared CEO Endorsement Requests for formal submission to the GEF Secretariat. Two major consultation meetings were organized by the Lead Agency, UNEP, among FARM

the GEF Secretariat in 2022 to enable the coordinated design of the child projects. These hybrid meetings were organized and facilitated by the Global Child Project and took place in Geneva, Switzerland, on 8-9 June 2022, and in Rome, Italy, on 14-16 September 2022. Throughout the PPG period, regular coordination calls were hosted online by the Lead Agency.

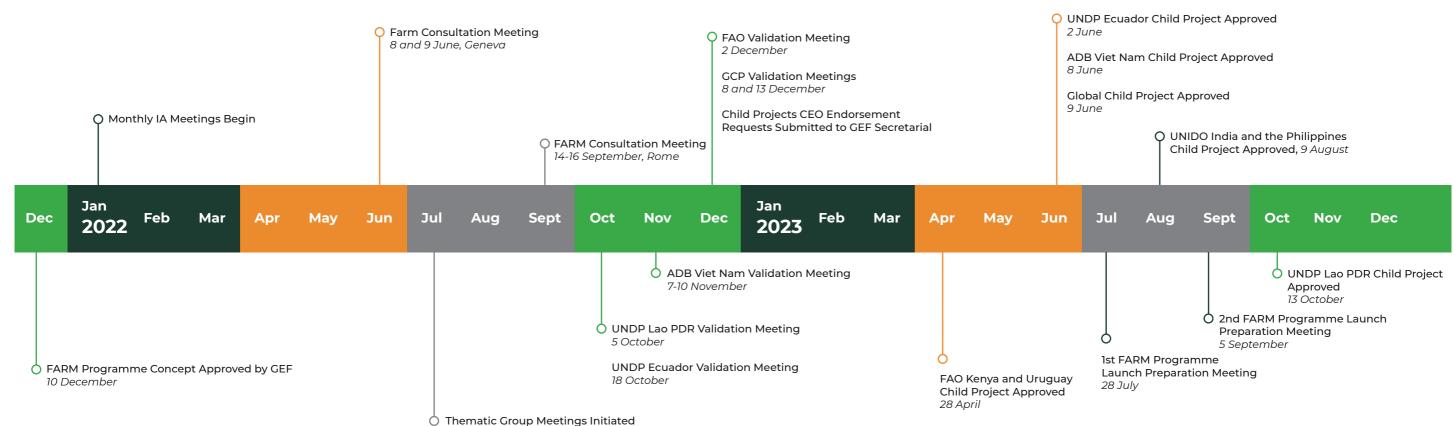
During Q3 and Q4 of 2022, five of the six child projects held validation meetings for their CEO Endorsement Requests to ensure that all key partners had an opportunity to provide feedback on and align around each project proposal. Participants consisted of the child project's implementing and executing agencies, co-financel partners, and a representative from the Lead Agency and Global Child Project. The Global Child Project validation meetings invited all FARM implementing and executing agencies, government representatives and Global Child Project co-finance partners to give feedback on the project framework and its plans for global coordination. By the end of 2022, five

of the child projects had submitted their CEO Endorsement Requests to the GEF Secretariat, with UNIDO having obtained an extension to March 2023.

In QI and Q2 of 2023, the child projects were reviewed by the GEF Secretariat, with feedback incorporated into the final versions of CEO Endorsement Requests, followed by a GEF CEO Endorsement by Q3. The implementing agencies then began working with their respective executing agencies to get the necessary government approvals and agreements in place to begin implementation in-country by the first half of 2024.

\*As per GEF co-Financing Guidelines (FI/GN/01), co-Financing means financing that is additional to GEF Project Financing, and that supports the implementation of a GEF-financed project or program and the achievement of its objective(s). Co-financing partners are those who provide co-financing.

Figure 5: FARM programme 2021-2023 milestones



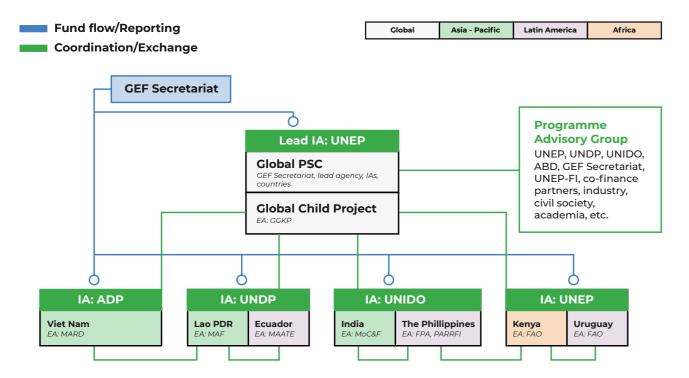
FARM Programme: Progress 2022-2023 Programmatic Report 2021-2023

# Governance and Internal Coordination

The FARM governance arrangements established in the programme framework document and child project CEO Endorsement Requests are summarized in the organigram below. The fund flow and associated reporting requirements (e.g. PIR) from the GEF are directed to the implementing agencies and then executing agencies of each child project. Each child project has its own Project Steering Committee (PSC) as per the requirements of the respective implementing agencies.

As a programmatic approach, the global coordination project plays a central role and its PSC is made up of the GEF Secretariat, implementing agencies and government representatives of each participating FARM country. The inception and PSC meetings of all the child projects are planned for early 2024.

Figure 6: Farm programme organigram

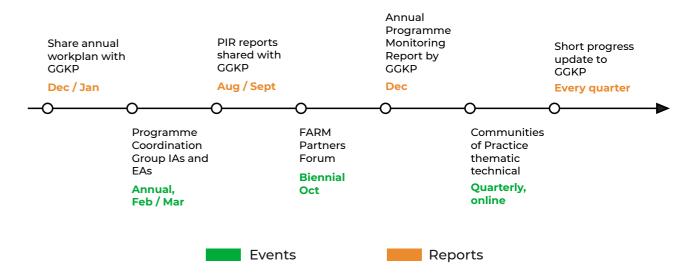


In addition to the child projects PSCs, the FARM Programme will convene a Programme Advisory Group (PAG) in 2024, consisting of a much wider group of stakeholders, co-finance partners and experts to provide technical guidance and direction to the programme rollout. Every two years, starting in 2025, a FARM Forum will be organized where the PAG and all stakeholders, including beneficiaries, will convene.

Effective coordination and outreach efforts are fundamental to facilitating dynamic exchange

among child projects, amplifying project outcomes and ensuring coherence. The global child project has laid the groundwork for a coordination ecosystem, facilitating both informal and formal exchanges and collaborations. This ecosystem includes a collaborative workspace, web platform, and proposed thematic groups and communities of practice, providing opportunities for implementing agencies, executing agencies and FARM partners to actively engage, identify synergies, share knowledge and avoid duplication of work.

Figure 7: FARM programme reporting and coordination



Reporting by the national child projects to the global child project underpins the programme and is aligned with the existing reporting lines (depicted in the organogram above), where possible. For example, annual work plans, PIR

reports and quarterly progress reports are all aligned with existing requirements and practices in the child projects. FARM Programme: Progress 2022-2023 Programmatic Report 2021-2023

# Partnerships and Stakeholder Engagement

The FARM Programme built up its partnerships both internally and externally in the first reporting period. The global child project held thematic meetings during Q3 and Q4 of 2022 on finance, communications, stakeholder engagement and knowledge management – bringing together relevant child project focal points to give input and feedback on the global child project's project plan and coordination processes for the implementation phase of FARM.

Additionally, throughout 2022, child projects met with key players in the FARM space who could be potential partners. By the end of the year, they had established more than 35 formal partnerships with a co-finance value of over \$342 million. These co-finance partners include: Agrocalidad, Economics of Ecosystems and Biodiversity (TEEB), Natural Resources Institute (NRI), Rainforest Alliance, Pest Control Products Board – Kenya, Technical University of Machala, UNEP Finance Initiative (UNEP-FI) and UNEP World Conservation Monitoring Centre (UNEP-WCMC).

In the second half of 2023, the global child project reconnected with its co-finance partners and began meeting with other relevant FARM stakeholders to identify opportunities for collaboration and to keep them informed of FARM's implementation progress.

FARM's Programme Advisory Group is composed of child project agencies, co-finance partners and additional external partners working in areas relevant to FARM activities and objectives. The PAG provides feedback and offers an outside perspective on FARM's current and future activities; it does not have decision-making power. Throughout 2023, the PAG started the formalization process and was brought together informally by the global child project for several feedback sessions.



# FARM Communications, Knowledge Management and Engagement

Beginning in 2022 and continuing into 2023, the global child project developed a programme-wide approach under Component 3 for knowledge management, communications and stakeholder engagement. The three key workstreams have distinct scopes and activities, but are interlinked under a joint strategy to create a feedback loop between knowledge generation, application and lessons learned.

A Gender Action Plan was developed to mainstream a gender-responsive approach, enabling capacity building and knowledge sharing in gender mainstreaming and gender equality. The plan aims to ensure women's participation and agency in the sustainable management of pesticides and institutionalize gender mainstreaming in project operations.

Efforts were initiated to develop a strong FARM brand in consultation with child projects and the GEF Secretariat. Consistent use of the agreed visual identity by all FARM partners and executing agencies will ensure brand coherence and visibility.

#### Figure 8: Joint strategy for engagement, communications and knowledge management

#### **ENGAGEMENT**

Stakeholder consistently engaged troughout project and programme lifecycle.

Provides the opportunities and spaces for input and feedback from and discussion among relevant stakeholders.

#### **COMMUNICATIONS**

Develops and actively uses communication channels to inform various stakeholders internal and external, of programme progress and results.

Facilitates the flow of information among child projects and components, allowing for joint planning and alignment.

#### KNOWLEDGE

Compiles and analyses knowledge from child projects and global community, and feed that analysis back to child projects.

Identifies gaps and learnings.

Provides knowledge management platform designed to grow and support stakeholders.

#### **GENDER**

#### **Component 1**

Sets the parameters

#### Component 2

Establish enabling environment

#### Component 3

Creates the bussines case



# Programmatic Monitoring Framework

FARM's objective of detoxifying the agricultural sector rests on producing long-term and demonstrable global environmental benefits (GEBs) as defined by the GEF, including several additional "programmatic indicators" that will track other environmental as well as social and economic benefits. Each child project has its own monitoring and evaluation framework and reporting structure that is determined by the requirements of their respective implementing agency. In addition, implementing agencies share their monitoring and evaluation reports with the global child project to facilitate the annual programmatic monitoring report.

Programmatic monitoring and evaluation is the responsibility of the global child project. Standardizing monitoring and evaluation is key to capturing best practices, lessons learned and results, and supporting exchange beyond the reach of the programme. The Lead Agency and global child project report annually to the GEF Secretariat to ensure accountability, progress towards results, as well as the exchange of knowledge across the programme. This requires tracking GEF core indicators and the FARM programmatic indicators across all child projects.

Figure 9: FARM programmatic monitoring and evaluation methodology

#### **GEF Core Indicators for FARM**

- Core Indicator 5: Area of marine habitat under practices (excluding protected areas) (Hectares), sub indicator: Amount of Marine Litter Avoided (Sub indicator 5.3)
- Core Indicator 6: Greenhouse Gas Emissions Mitigated (metric tons of CO2e)
- Core Indicator 9.1: Reduction, disposal/ destruction, phase out, alimination and avoidance of chemicals of global concern
- Core Indicator 10: Reduction, avoidance of emissions of POPs to air from point and non-point sources (grams of toxic equivalent gTEQ)

**Note:** Core Indicators 4 (land under improved practices) and 11 (beneficiaries) are covered in FARM, will be measured by CPs

Reference: GEF Policy on Monitoring (ME/PL/03)

## Example of calculation Methodology of 9.1

**Baseline Calculation:** Use five-year import data on POPs and HHPs to establish baseline.

**Data Sources:** FAO, OECD and market research reports.

**Baseline Target:** Individual Reduction rates for each child project.

**Reduction Monitoring:** Annual calculation of POPs and HHPs emissions reduction.

Inclusion of Candidate POPs: Initial categorization as HHPs until listed in POPs chemicals. The programmatic indicators will supplement the core indicators to provide a more granular and cross-cutting assessment of the programme's achievements. At the end of 2023, the following high-level programmatic indicators were proposed based on an analysis of the outputs and outcomes set out in the child projects' results frameworks, with subindicators to be added to each:

**Land:** Number of hectares under improved practices

**Policy:** Influencing policies to reduce the negative impact of agricultural production

**Finance:** Unblocking access to financial flows in the agriculture sector

**Knowledge:** Number of finance, policy and value chain actors engaged

After consultation with the implementing agencies and GEF Secretariat, these indicators will be finalized in 2024 and a methodology for reporting and assessing progress towards these objectives will be developed. The core indicator and programmatic indicator information will be displayed on a publicly available dashboard developed by the global child project and updated annually.





# Looking Ahead

Looking ahead to the programme's first full year in implementation, FARM is focused on ensuring the successful launch of the programme and set up of the various child projects.

A majority of the child projects will hold their inception meetings within the first half of 2024. These meetings will establish the foundation from which FARM will function over its five years of implementation. These will also be the first official meetings of each child project's Project Steering Committee (PSC). The PSCs will approve the Year 1 work plan and budget, as well as sign off on the operational procedures and overall direction of each child project.

The global FARM launch and global child project inception will take place online and in person at UNEP Headquarters in Nairobi, Kenya, on 12 March 2024. The launch introduced FARM to the public and features key value chain actors to lend their perspective on how to reduce and better manage agrochemicals and agricultural plastics, including the current challenges and knowledge gaps, and how financing can provide solutions.

Key steps for the global child project to achieve in Q1 2024, before the public launch of FARM, include developing and disseminating FARM's visual identity and a basic FARM brand book, creating an initial FARM website, launching the FARM Green Forum group, and establishing a schedule for thematic and annual meetings.

Programmatic-level indicators will be set in 2024. The process for approving the high-level indicators will be established during the FARM global child project inception, which will take place on 12-14 March 2024. Sub-indicators and progress calculation methodologies will follow.

Upon the commencement of child projects' implementation, the global child project will roll out agreed programmatic coordination and reporting mechanisms, ensuring efficient collaboration and monitoring across the programme's initiatives.







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