Department for Environment Food & Rural Affairs

ENVIRONMENTAL POLLUTION PROGRAMME

Environmental Pollution Programme - Programme Completion Review

Title	Environmental Pollution Programme 2025/26
Programme Value £ (25/26)	£3,000,000
Programme Start Date	01 April 2025
Programme End Date	31 March 2026
Analysis Code	
Review Date	30 June 2026
Review Period	April 2025 – June 2026

Programme Context

The Environmental Pollution Programme (EPP) was established in 2021 with the programme delivering a successful scoping year through a one-year business case. A three-year programme (2022-25) was developed and partially delivered through the Global Centre on Biodiversity and Climate in Vietnam and South Africa. Please see previous programme documents on Devtracker for further information;

DevTracker Programme GB-GOV-7-EQ Documents.

Following the 2022-25 programme, a one-year programme was developed to expand programming in Vietnam and establish the programme in a new sub-Saharan African country: Uganda.

This report is a review of the stand-alone **2025-26 Environmental Pollution Programme only**. Given this is a one-year programme, there are no previous annual review scores.

Summary of Programme Performance

Year	**2025/26**							
Programme Score	**A+**							
Residual Risk Exposure Rating	**Low**							

DevTracker link to Business Case:	DevTracker Programme GB-GOV-7-EQ Documents
DevTracker links to LogFrame:	DevTracker Programme GB-GOV-7-EQ Documents

See Appendix 1 for PCR Scoring Guidance.

A. Summary and Overview

Programme description and summary of achievement

Environmental pollution is a global challenge that affects climate, biodiversity and health. Pollution, along with biodiversity loss and climate change, is one of the three prongs of the 'Triple Planetary Crisis'. It is estimated that 9 million premature deaths are caused by pollution each year, making it the world's largest environmental risk factor for disease and premature death.[1]

The Environmental Pollution Programme (EPP) was established in 2021 to assess and reduce the impact of pollution in low- to middle-income countries (LMICs). After a successful scoping year that assessed the state of pollution in six LMICs, a three-year programme was developed to address priority pollution issues in South Africa and Vietnam (2022–25). An additional one-year programme was developed to expand programming in Southeast Asia and Sub-Saharan Africa on agricultural pollution and waste management within 2025/26.

Building on the programme's previous success, the 2025/26 EPP has taken a multi-layered systems approach to address three key pollution priorities: air pollution, chemical pollution and waste management.

The programme has expanded work within Vietnam; reducing pesticide use through adoption of Integrated Pest Management, improving air quality through increased monitoring and reduction of agricultural open burning practices, and encouraging sustainable waste management through circular economy approaches. New programming in Uganda has further expanded reach on sustainable waste management, air pollution and pesticide use. Key delivery partners, the Global Alliance on Health and Pollution (GAHP), have collaborated closely with local partners to ensure effective, context-specific implementation on the ground.

A key objective of the programme has been to establish regional pollution fora to amplify the impact of engagement in Sub Saharan Africa and Southeast Asia. Fora events convened governments, research institutions, NGOs, and international partners to address the growing threats of air, chemical, and waste pollution in each region. The platforms provided an opportunity to share knowledge and successful approaches, while promoting practical solutions aligned with national priorities, and supporting countries to move from analysis to implementation. The impacts of the EPP have been amplified through sharing initiatives and encouraging replication of approaches, supporting access to existing international funding streams and aligning with HMG's multilateral approach to development assistance.

Additionally, the programme has contributed funding to support delivery of the UNECE's International Cooperative Programme on the Effects of Air Pollution on Natural Vegetation and Crops (ICP Vegetation) and the UN Climate and Clean Air Coalition (CCAC) on behalf of the Forum on International Cooperation on Air Pollution (FICAP). The initiative will help ODA-eligible countries rapidly cut emissions of major pollutants including methane, black carbon, and HFCs through national coordination teams and tailored technical assistance projects for key sectors.

Achievements

Based on an evaluation of logframe output, outcome and impact indicators, along with a qualitative review of project deliverables and delivery partner performance, overall programme performance has been rated as A+ which signifies outputs have exceeded expectation.

The programme has successfully contributed to the long-term outcomes outlined in the programme's Theory of Change (see Appendix 2), including:

Reduce pollutants entering the environment leading to reduced human and environmental exposure

Increase resilience of communities through improved livelihoods and reduced poverty and inequality

By achieving these outcomes, the programme has significantly contributed to the following impact:

To work with ODA-eligible countries and regions to reduce the adverse impacts of pollution. Work will improve health and reduce environmental harm and poverty that results from chemical, air, waste and water pollution, as part of the Triple Planetary Crisis

[1] Pollution and health: a progress update - The Lancet Planetary Health

Defra and ICF KPIs reported for this programme are:

Defra KPI 7: People with strengthened or new livelihoods.

Achieved 14,153 people

Defra KPI 5: Solid waste and pollution avoided.

Achieved 625 tonnes

Defra KPI 9: People with improved income.

Achieved 6,609 people

ICF KPI 6: Tonnes of greenhouse gas emissions reduced or avoided.

Achieved 405 tonnes.

ICF KPI 17: Hectares of land that have received sustainable land management practices.

Achieved 5,713 hectares.

ICF KPI 15: Likelihood of transformational impact.

Scored 4/5 (See Annex)

ICF TA KPI 2.1: Individuals supported by technical assistance.

Achieved 20,462 people

Targets and supporting data can be found within the outcome and output assessments (section C and D).

Gender Equality, Disability and Social Inclusion (GEDSI)

The GEDSI-sensitive programme has delivered benefits on poverty and GEDSI by tackling sources of pollution impacting vulnerable communities The approach taken by GAHP and in-country partners has promoted gender equality and inclusivity, with a focus on women's self-empowerment and leadership in agricultural management in low-income rural communities. Special emphasis has been placed on empowering vulnerable groups, such as women, ethnic minorities and younger farmers to ensure equal opportunities to benefit from the project's interventions. The programme has delivered significant impact across multiple areas. Over 20,000 people have been supported through technical assistance, alongside the establishment of 32 female-led farming groups Capacity strengthening has been provided to four inclusive civil society organisations representing women, girls, youth, people with disabilities, and other marginalised and vulnerable communities. The programme has also supported CSO engagement in the development of pollution action plans. It has contributed to the production of three academic publications, including a gender equality review of Uganda's agricultural policies. Targeted training has been delivered to women farmers and people with disabilities, helping to build skills and resilience. In total, 19 reports have been produced, including scientific studies on health inequalities, as well as three science-policy briefs incorporating GEDSI (Gender Equality, Disability, and Social Inclusion) recommendations. Overall, the programme has contributed to protecting more than 14,000 livelihoods.

The programme has made significant progress in line with the EPP GEDSI Action Plan detailing actions across analysis, programme design, engagement, monitoring, team capacity and safeguarding against SEAH. External GEDSI analyses for both Uganda and Vietnam were conducted through the Social Development Direct Disability Inclusion Helpdesk to inform programme activities and strengthen understanding of the programme's context. Insights into social practices, national policies, economic inequalities, identification of marginalised communities and gender inequalities across agriculture and waste management sectors in the context of Vietnam and Uganda has been vital to understand local context and tailor programme design. Engagement with stakeholders such as the Ministry of Gender, Labour and Social Development (Uganda), Women's Unions and civil society organisations such as Uganda's Youth Advocacy and Development Network, Equal Lives Foundation, Hands of Hope and Anai Climate Inclusion Network have strengthened programme activities to ensure inclusivity and support more equitable

outcomes. Furthermore, recruitment of social development expertise has increased capacity and embedded inclusive, gender-responsive approaches across programme delivery, strengthening the integration of GEDSI principles not only in EPP activities but across GAHP's wider programming.

Whilst the programme scores a 'significant' score against the DAC gender quality policy marker, there is still scope for improvement with regards to disability inclusion in which the programme scores a 'not targeted' score against the DAC disability marker. This recognises that the programme has been screened and includes some activities that contribute to respect and inclusion of persons with disabilities but is not a principal objective of the project. To further strengthen the programme's approach, consistent GEDSI-disaggregated data practices should be established through common templates and clear, accessible guidance for partners.

Major lessons learned and recommendations

	Lessons Learned	Recommendations
Project design	**Short project duration limited institutionalisation and long-term impact -** While the project generated strong evidence and great awareness, the short timeframe reduced opportunities to embed pilot interventions into government systems and policies and scale successful models.	**Longer funding cycles** are essential for research-driven programme design, policy adoption, enforcement and institutional embedding. **Plan for scale from the outset -** Define how successful pilot approaches will be embedded into national systems and government programmes
Social impact	**Embedding GEDSI principles in project design** ensured that inclusivity was recognised as a priority. However, disability inclusion was limited in practice.	**Integrate GEDSI considerations systematically** to enhance impact and accountability and move towards GEDSI empowering.
Advocacy	**Economic evidence strengthens advocacy** (e.g. the cost of inaction study provides compelling justification for pollution reduction). **Combining technical studies with policy analysis** created a strong evidence base for influencing decision-making National-level events (e.g., conferences) successfully generated visibility, legitimacy, and momentum	**Evidence based policy advocacy -** Combining technical studies with policy reviews creates a strong evidence base to support advocacy and can be replicated in other countries. **Promote joint learning to** strengthen collaboration - national events are effective for disseminating findings and sustaining dialogue.
Stakeholder engagement	**Multi Stakeholder collaboration is essential =** - collaboration across a broad range of stakeholders enhanced ownership and credibility. **Community mobilization drives demand for accountability** - CSO campaigns effectively raised awareness and mobilized communities, especially youth. However, strong engagement did not always translate into sustained behavioural or operational change among institutions and businesses.	**Strengthen mechanisms** to convert stakeholder commitment into action, especially in the private sector (e.g. financial incentives, reduce market barriers) **Cost Sharing and Partnerships -** Leveraging CSO and academic contributions reduced costs and enhanced efficiency. Partnerships with universities and local organizations are a best practice for resource optimization.
Monitoring, Evaluation and Learning	**Commission fully independent external evaluation** to ensure objectivity and transparency. Budget needs to be apportioned within the programme planning stage.	
Sustainability	**Increase mobilisation of both public and private finance**. Future programming should work closer with government, local authorities and NGOs to leverage funding opportunities, identify potential commercial opportunities and engage with private sector stakeholders to improve long-term sustainability.	

How this report was conducted

The Defra EPP team have drawn upon internal lessons learned, direct feedback from partners, project outputs and project management reporting (monthly and quarterly), alongside external programme evaluation reports on Vietnam and Uganda projects, to conduct this report. An external, qualitative evaluation was undertaken for each project to query, challenge and draw insight about the Programme and consider its value and impact. This review complements the more quantitative KPI feedback from the programme as a whole. Value for money analysis has been performed and verified by Defra economists.

Evaluations were based on a mixed-methods approach consistent with OECD-DAC evaluation guidance. Evidence was gathered through documentary review, stakeholder interviews, site visits, and focus group discussions. The documentary analysis covered project proposals, logical frameworks, progress reports, technical studies, financial information, and communication outputs. Primary data were obtained from semi-structured interviews with implementing partners, technical experts, government representatives, and project stakeholders. Field visits took place in selected areas, allowing observation of project activities and consultations with project beneficiaries. Focus-group discussions helped capture beneficiary perspectives and identify behavioural changes and implementation challenges. Information collected from different sources was triangulated to increase reliability and verify reported results.

Analysis focussed on strategic relevance, quality of project design, effectiveness, efficiency, sustainability, and cross-cutting considerations such as gender equality, social inclusion, governance, and stakeholder participation. The reports examined immediate project driven results and possibility of long-term results, identifying achievements, challenges and factors influencing outcomes whilst also considering the likelihood of sustained environmental, social and institutional impact.

The PCR assesses and rates outputs using the following scale. The final programme score is calculated by taking account of the weightings and individual output scores.

Description	***Score***
Outputs substantially exceeded expectation	*A++*
Outputs moderately exceeded expectation	*A+*
Outputs met expectation	*A*
Outputs moderately did not meet expectation	*B*
Outputs substantially did not meet expectation	*C*

B: Theory of Change and Outcome Assessment

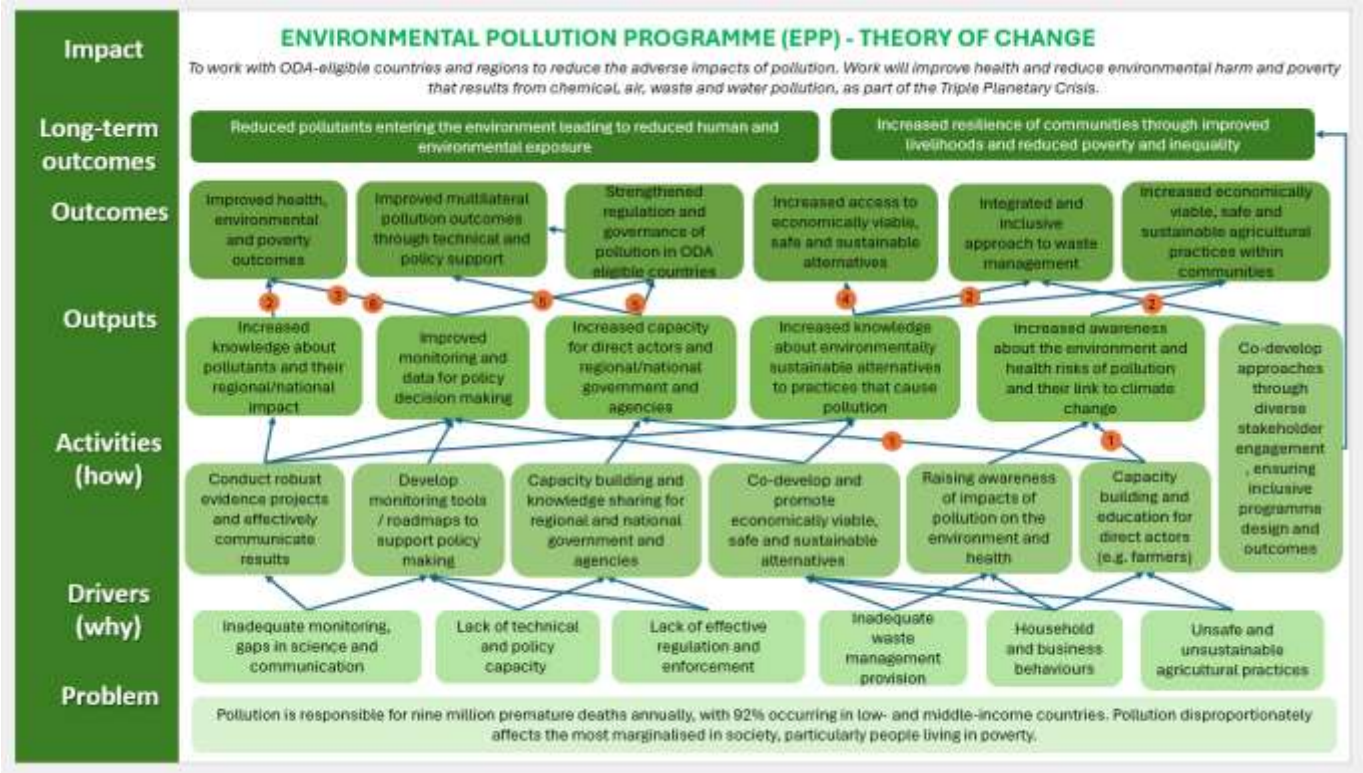
Summary of Theory of Change and results framework

The EPP's Theory of Change (ToC) underwent a major review at the beginning of the programme to ensure the drivers, pathways and assumptions remained correct as the programme transitioned from 2022-25 to 2025-26. The ToC was used as a tool to articulate the underlying assumptions about how change will occur through the EPP programme. Whilst principally, the drivers and pathways remained true given the context of working across issues of pollution within Southeast Asia and Sub-Saharan Africa, the ToC went through a series of major changes to better align to the new context of the programme. The ToC was developed collaboratively, thinking through the impacts, outcomes and outputs of the work and the assumptions of which these are based.

Key changes include a revised impact statement to focus specifically on health, environment and poverty outcomes to deliver a more impact-driven, targeted and outcome specific statement. Drivers have been streamlined into six core areas, each directly linked to the activities that will initiate change. Outputs and outcomes have been refined to better align with the programme's delivery, including the definition of two clear long-term outcomes. These changes have been instrumental in providing a clear framework as to how change will be achieved and establish a structured monitoring LogFrame.

Evaluators concluded the ToC and Log Frame provided a solid foundation for systematic implementation and that the intervention areas - research, education, and policy advocacy - were appropriate for the complexity of the issues to be addressed.

Ultimately, the EPP's ToC demonstrates a clear pathway from activities to impacts, grounded in evidence, inclusivity, and sustainability. By integrating technical studies, policy review, civil society advocacy, and national dialogue, the programme aimed to reduce pollution's health and environmental impacts while strengthening institutional capacity for long term resilience.



The key assumptions underlying the success of the programme were deemed to be: 1) Stakeholders are willing and able to participate and benefit from activities 2) Improved awareness leads to sustainable behavioural change.3) Project activities will lead to environmental benefits.4) Project activities will lead to economic incentives.5) Political will/stability/capacity to support project activities and 6) Project activities will lead to health benefits.

Impact Statement		
To work with ODA-eligible countries and regions to reduce the adverse impacts of pollution. Work will improve health and reduce environmental harm and poverty that results from chemical, air, waste and water pollution, as part of the Triple Planetary Crisis.		
Impact Indicator	Logframe Target	Final Result Achieved
ICF KPI 15 - Extent to which ICF intervention is likely to lead to Transformational Change	*Score of 5*[2]	*Score of 4*

Outcome 1 Statement			
Reduced pollutants entering the environment leading to reduced human and environmental exposure			
Outcome Indicator	Logframe Target	Final Result Achieved	
1.1 - Tonnes of greenhouse gas emissions reduced	*1430 tonnes*	405 tonnes	Not met
1.2 - Solid waste or pollution avoided	*540 tonnes*	625 tonnes	Exceeded
1.3 - Hectares of land that have received sustainable land management practices as a result of ICF	*151 hectares*	5,713 hectares	Exceeded
1.4 - Percentage of farmers that have established buffer zones and natural ecosystems after IPM training	*70%*	No data[3]	
1.5 – Percentage of farmers that have adopted mulching practices after IPM training	*70%*	No data[4]	

Outcome 2 Statement			
Increase resilience of communities through improved livelihoods and reduced poverty and inequality			
Outcome Indicator	Logframe Target	Final Result Achieved	
2.1 – People with sustainable livelihoods created or protected	*14,120 people*	14,153 people	Exceeded
2.2 - Number of consultations held with GEDSI-priority groups	*5 consultations*	37 consultations	Exceeded
2.3 – Number of farmer groups established led by female farmers or trainers to implement IPM on the ground	*20 female led farmer groups*	32 female led farmer groups	Exceeded
2.4 – People with improved income	*8,000 people*	6,609 people	Not met

Overall assessment of programme outcomes, impacts and sustainability

The programme has successfully contributed to the long-term outcomes outlined in the programme's Theory of Change (Appendix 2) within the timeframe and originally allocated budget. These were:

Reduce pollutants entering the environment leading to reduced human and environmental exposure

Increase resilience of communities through improved livelihoods and reduced poverty and inequality

The programme delivered a strong contribution towards Outcome 1 through credible pilot studies and demonstration of scalable initiatives to reduce pollutants such as chemical pesticides, greenhouse gases and solid waste entering the environment and consequential exposure to human health. However, limitations in measurement and compressed delivery timelines has impacted KPI results in the short term. Performance was particularly strong in reducing solid waste and expanding sustainable land management practices, both of which exceeded their targets. The delivery of 625 tonnes of solid waste or pollution avoided reflects the effectiveness of circular economy interventions, while the expansion of sustainable land management to 5,713 hectares further highlights strong adoption of practices such as reduced chemical use and improved soil management, alongside practical innovations like microbial straw decomposition. While the direct emissions reduction target was not formally met, this largely reflects limitations in the original target design rather than delivery performance. The indicator target regarding emissions reductions included projected emission reductions rather than those that could be recorded within the one-

[2] See appendix 2 for ICF KPI15 scoring
[3] Rainforest Alliance report wider IPM adoption rates of 77.7%
[4] Rainforest Alliance report wider IPM adoption rates of 77.7%

year programme. In practice, the programme has demonstrated substantial potential for emissions reduction. Notably, the partnership with Rainforest Alliance supported the distribution of over 180,000 tree seedlings to 7,644 farmers, with estimated carbon sequestration potential of 3.5–5.8 tCO_2 per farmer per year. This equates to a potential annual reduction of up to 44,335 tonnes, far exceeding the original target, and highlights the programme's strong contribution to longer-term emissions mitigation. The programme's pilot-based approach is also an important factor in interpreting results. Interventions such as Integrated Pest Management (IPM), alternatives to open burning, and circular economy practices were deliberately implemented at a demonstration scale to test viability, build local capacity, and generate evidence for wider adoption. While this naturally limits the scale of immediate results, it significantly strengthens the case for replication and scaling through government systems and future investment. The absence of data for key behaviour-change indicators (buffer zones and mulching adoption) limits the ability to fully assess uptake of sustainable practices at the farm level. Initial administrative delays in the approval of funding postponed implementation and limited the ability to align monitoring activities with agricultural cycles. Consequently, there was insufficient time following the IPM training to conduct comprehensive farmer surveys and collect this data. While data on the proportion of farmers adopting mulching and establishing buffer zones specifically is not available, metrics such as wider IPM adoption and compost production provide a useful proxy for assessing uptake of improved practices and programme impact. Rainforest Alliance have confirmed an average adoption rate of 77.7% and estimated around 6,000 tonnes of compost have been produced across the programme, generating savings of approximately 5 million VND per tonne, equivalent to an estimated total of 30 billion VND (around $1.1 million).

Performance against Outcome 2 is positive overall, with strong evidence of inclusive and sustainable impact. The programme met its target for sustainable livelihoods (14,153 achieved), reflecting meaningful benefits such as improved agricultural practices, reduced input costs through IPM, and more stable or diversified income sources for farming households. It also significantly exceeded GEDSI-related targets, with 37 consultations and 32 female-led farmer groups, demonstrating effective engagement of priority groups including a range of ethnic minority groups (such as Tày, Dao, Cao Lan, Nùng, Mông, Thái, Mường, Ê Đê, Gia Rai) and strengthening women's leadership, decision-making, and knowledge-sharing within farming systems. Furthermore, the programme supported 819 vulnerable households through the IPM project in Vietnam, including farmers with disabilities, victims of Agent Orange, and low-income households, helping to ensure that safer agricultural practices are accessible to those most

Case Study: Empowering Women Farmers to Lead Sustainable Change

Across Vietnam's coffee, tea, and pepper farms, pests and diseases are becoming more severe as the effects of climate change intensify. In response, many farmers rely heavily on chemical pesticides, a short-term fix that can ultimately worsen the problem through exterminating natural predators that keep pests in check. Pesticides also pose a risk to human health, soil health and wider ecosystem health.

Integrated Pest Management is a practical and sustainable approach emphasising ecological balance, crop observation, and natural pest control methods. Studies from the 22-25 programme indicated a remarkable 82% reduction in insecticide use on tea farms within two years.

Under the umbrella of the local Women's Union, 32 female-led farmer clubs across Vietnam have been established to continue promoting sustainable pest management techniques. These groups bring together over 800 members from tea, coffee, and pepper companies and are sustainably financed through a 1% benefit-sharing mechanism derived from the added value created by IPM. Through this model, sustainability takes root - led by women who are driving long-term change in their communities.

Pictured above, the My Lam Female Farmer Club hosted a hands-on session attended by more than 210 women farmers, creating a supportive environment for peer learning and leadership development. Rainforest Alliance Vietnam will continue to improve farming techniques through strengthening communities, promoting gender equity, and building a more resilient agricultural future where everyone can thrive.

at risk. The project's gender-responsive approach provided multifaceted support, encompassing technical training, practical demonstrations, livelihood diversification, and gender empowerment activities. Examples include the establishment of 21 IPM demonstration farms managed by women, serving as practical learning sites where farmers could observe the application and outcomes of IPM techniques under local conditions. The involvement of women as demonstration leaders was particularly significant, as it provided visible examples of female leadership and technical competence. These sites also functioned as hubs for community engagement, attracting other farmers and stakeholders interested in sustainable agricultural practices. the project promoted the adoption of circular economy principles within the farming systems of participating households. Furthermore, crop–livestock models were introduced to a group of 45 female farmers combining pepper cultivation with pig and goat rearing. These models provide a practical way to recycle livestock waste, produce organic fertilizer for farm use, and diversify household livelihood activities through livestock production. A total of 310 women participated in dedicated gender equality training sessions covering topics such as household decision-making, division of labour, access to productive resources, leadership, and women's roles in agricultural production. The training aimed to create opportunities for discussion and reflection on gender-related issues within farming households and communities.

While income results narrowly missed the indicator target, this largely reflects the longer-term nature of income gains, which are expected to materialise as practices mature and farmers join carbon markets beyond the reporting period. The Integrated Pest Management initiative has shown annual income to increase as a result of adopting IPM approaches between 10-31% due to an increase in sale prices through access to higher premium markets and a reduction in pesticide costs. Sustainable alternatives to open burning such as microbial treatment of rice straw also provide measurable economic benefits for farmers, primarily through reductions in chemical fertiliser use, pesticide application, and labour costs associated with weeding and field preparation. Whilst a further 7,644 farmers received fruit tree species seedlings, known for their high economic value and potential to provide supplementary income for farming households, it is too early to state whether income has been 'improved' for each farmer. The initiative also estimated a potential generation of approximately 3-6 Carbon Removal Units per farmer per year, further generating additional income through carbon credit markets. This highlights important limitations in the design and selection of this indicator. The indicator inherently requires longer-term tracking to capture income changes, which was not aligned with the programme's relatively short implementation period. This misalignment should have been identified during the target-setting phase, with recognition that a one-year programme would not be sufficient to robustly measure income-level outcomes. Future programmes should prioritise aligning indicators with both the duration of implementation and the feasibility of data collection, particularly where outcomes depend on longer-term behavioural or market changes. However, the results show that the programme has built strong foundations for longer-term economic improvement, alongside clear achievements in equity, capacity building, and resilient livelihoods.

By achieving these outcomes, the programme has significantly contributed to the following impact:

To work with ODA-eligible countries and regions to reduce the adverse impacts of pollution. Work will improve health and reduce environmental harm and poverty that results from chemical, air, waste and water pollution, as part of the Triple Planetary Crisis

With regards to Programme Impact, the programme measured success through the *International Climate Finance KPI 15 indicator. This indicator uses a scale of 1-5 to measure extent to which ICF intervention is likely to lead to Transformational Change. The programme scored* a 4 which equates to partial evidence to suggest transformational change is likely or already occurring. Evidence is drawn from across six key criteria: Capacity and capability increased; Innovative; Evidence of effectiveness is shared; Leverage/incentives for others to act is created; Replicability; Sustainability. Further detail can be found in Annex 2.

- **Capacity and capability increased -** a score of 5 was awarded reflecting the success of targeted technical assistance to equip stakeholders with the skills and expertise to reduce pollution at a transformational level. The number of people informed by technical assistance (12,788 people) captures the scale of capacity-building efforts and sustainability of 'train the trainer' initiatives

- **Innovative** - a score of 5 was also awarded reflecting the development of initiatives and sustainable practices that offer alternatives to polluting practices such as agricultural open burning and improper waste management.

- **Evidence of effectiveness is shared** - a score of 4 was awarded demonstrating the extensive dissemination of findings through reports, workshops, international conferences, and collaborations with national organisations. The production of peer-reviewed academic publications on GEDSI integration, pollution-health impacts, and the investment case to act on pollution ensured learning is disseminated beyond the project.

- **Leverage/incentive for others to act is created** - a score of 3 was given, acknowledging there is not enough evidence to suggest transformational change is likely. Although early evidence points to promising economic co-benefits through the promotion of low-cost, sustainable alternatives and the leveraging of public investment, further validation and clearer demonstration of financial gains at scale are needed to drive wider adoption, with overall investment levels to date remaining modest.

- **Replicability** - A score of 4 was awarded for replicability reflecting the programme's successful demonstration of scalable and adaptable interventions and enabling replication through farmer networks and regional platforms such as the Southeast Asia Regional Pollution Forum and the Sub-Saharan Africa Regional Pollution Forum. These platforms have strengthened capacity across 12 different countries through technical assistance on pollution mitigation and climate adaptation.

Case Study: Southeast Asia Regional Pollution Forum

While countries advance national responses, pollution is a transboundary issue. The Regional Pollution Forum (RPF) provides the platform required for coordinated regional dialogue, practical knowledge exchange, and collaboration on pollution issues, focused on protecting health and supporting sustainable development.

Defra launched the first Southeast Asia RPF in Ho Chi Minh City, Vietnam, convening senior government representatives from Vietnam, Thailand, Cambodia, and other Southeast Asian countries, alongside international organisations such as UNEP and WHO, development partners, researchers and civil society.

Participants examined key environmental health challenges related to air, chemical, and plastic pollution, sharing evidence on sources, exposure, and health impacts, while identifying common priorities for action and funding mechanisms. The event showed demand for continued collaboration: 80% of expressed interest in ongoing working groups, country follow-up meetings and a collaborative platform to continue sharing knowledge and expertise

With regards to "sustainability", a score of 4 reflects strong potential for lasting impact through sustained livelihoods, behaviour change, and institutional integration, including national policy frameworks and retained infrastructure. However, while these foundations support long-term sustainability, further evidence is needed to demonstrate fully self-sustaining systems, particularly in terms of financial mechanisms and continued scaling without external support. To strengthen long-term sustainability, the programme should identify financial and policy support to maintain pilot models, partnerships and knowledge products while embedding its approaches within national systems through integration into government programmes, regulations, and training frameworks.

C: Detailed Output Assessment

Output	Output 1 - Increased knowledge about pollutants and their regional/national impact.		
Output Score	A++	Impact weighting (%)	20%

Output Indicator	Logframe Target	Final Result Achieved	
1.1 - Number of knowledge products about pollutants and their regional/national impact produced to support operational/policy implementation of sustainable pollution reduction.	13	20	Exceeded

Output activities and score

The activities underpinning this output comprehensively generated policy-relevant, scientifically robust, and operationally useful knowledge regarding pollutants and their impact. This included the development of:

- **Peer-reviewed academic publications** examining the relationship between pollution and broader social and health dimensions (e.g. GEDSI, health burdens), alongside scientific outputs such as the Traffic Related Air Pollution study in Kampala
- **A Health and Pollution Action Plan (HPAP)**, endorsed by key stakeholders, providing a national roadmap for coordinated pollution reduction efforts, directly translating evidence into policy
- **Economic and health impact studies**, including modelling the economic cost of air and water pollution and the cost of inaction, supporting government prioritisation, budgeting, and investment decisions
- **Technical tools and models**, including a novel low-cost source apportionment approach (LoCoSA) and exposure modelling tool, supported by a network of 38 air quality monitors generating real-time data
- **Spatial mapping and analytical studies** on agricultural open burning, using satellite data and field surveys to identify hotspots, assess biomass burning, and quantify contributions to PM2.5 pollution in urban centres such as Hanoi
- **Sector-specific assessments**, including detailed studies on the impacts of pesticides on biodiversity and soil health, as well as waste management assessments identifying pollution hotspots and system gaps
- **Policy and institutional analysis**, notably the GEDSI-focused policy review, which identified gaps in enforcement, inclusion (e.g. informal waste workers, disability groups), and data availability, and provided actionable recommendations to strengthen equity integration in pollution policy

These knowledge products were designed not as standalone reports, but as practical tools to support policy and operational implementation. For example, the HPAP and policy review outputs can be used to directly inform government planning and cross-sector coordination, while technical studies and mapping outputs provide evidence for targeted interventions and regulatory action.

The portfolio of knowledge products demonstrates depth (detailed technical analysis), breadth (coverage across air pollution, agriculture, waste, and health), and relevance (tailored to national and regional decision-makers). The inclusion of peer-reviewed publications enhances the credibility and legitimacy of the evidence, while practical tools and reports ensure accessibility and usability for stakeholders.

The output also reflects strong integration across themes, linking pollution with health, economic, social, and environmental outcomes. This systems-level understanding is critical for enabling more effective and coordinated responses to pollution challenges and supports longer-term transformational change pathways.

The programme has significantly strengthened knowledge on pollutants and their impacts through delivering a comprehensive, high-quality, and policy-relevant evidence base and exceeding the target on number of knowledge products. This provides a solid foundation for informed decision-making, improved policy design, and future scaling of pollution reduction interventions.

Lessons learned through this output, and recommendations for future programming

The programme demonstrated strong existing research and technical capacity, particularly through partnerships with academic institutions and investments such as air quality monitoring systems. However, short implementation timelines limited the depth of uptake, meaning that while high-quality evidence was generated, there was insufficient time for wider stakeholder engagement, validation, and dissemination. In addition, data gaps and limited integration

into national systems, including a lack of disaggregated data and incomplete use of monitoring outputs in policy processes, constrained the extent to which evidence could be fully utilised for targeted decision-making and sustained change.

To address these challenges, future programmes should prioritise longer implementation periods to allow time for evidence uptake, policy integration, and follow-through. Early and continuous engagement with policymakers and end users is critical to ensure ownership and relevance. A strong focus is required to integrate data systems and maintain long-term monitoring capacity. Programmes should place emphasis on research-led design with a clear understanding of the local context, followed by a focus on linking evidence to implementation so research can be translated into policy and practice. Finally, addressing data gaps through disaggregated and inclusive data, and continuing to leverage academic partnerships will help ensure that knowledge generation translates into equitable, sustained, and system-wide impact.

Output Number and Title	Output 2 - Increased knowledge about environmentally sustainable alternatives to practices that cause pollution		
Output Score	A+	Impact weighting (%)	20%

Output Indicator	Logframe Target	Final Result Achieved	
2.1 - Number of knowledge products about environmentally sustainable alternatives to practices that cause pollution produced to support operational/policy implementation of sustainable pollution reduction.	6	7	Exceeded

Output activities and score

The activities underpinning this output focused on practical, solution-focused knowledge regarding sustainable alternatives to practices that cause pollution. These included the development of:

- **Technical reports on sustainable agricultural alternatives**, including the use of microbial solutions for accelerated straw decomposition and the use of rice straw for fuel pellet production, both viable alternatives to open burning. These approaches demonstrated favourable cost–benefit outcomes, with farmers reporting intentions to continue adoption due to perceived crop production benefits
- **Economic analyses of Integrated Pest Management** (IPM), including cost-benefit assessments and health risk mitigation studies, aligned with Vietnam's regulatory framework and international sustainability standards (e.g. Rainforest Alliance), supporting safer and more profitable farming practices
- **Policy-oriented recommendations on sustainable plastic alternatives** in Da Nang, directly addressing urban policy needs and aligned with circular economy strategies
- A **pilot circular economy models report**, demonstrating practical waste reduction, resource efficiency, and recycling approaches in sectors such as tourism

These knowledge products were designed to be practical and implementation-focused, supporting both operational actors and policymakers. For example, sustainable straw management reports provide clear pathways to reduce open burning, while IPM studies demonstrate economic, environmental, and health co-benefits, strengthening incentives for farmer adoption. Waste management outputs offer locally tested circular economy models, contributing to Vietnam's alignment with international frameworks such as the Basel and Stockholm Conventions.

Importantly, these outputs are grounded in real-world application and pilot implementation, enhancing their credibility. For instance, IPM approaches expanded significantly to over 11,000 farmers, accompanied by a shift toward ecosystem-based, monitoring-driven agricultural practices and reduced reliance on pesticides. Similarly, open burning alternatives were shown not only to be technically viable but to act as behaviour-change mechanisms, bridging the gap between global policy commitments and on-the-ground practice. In the waste sector, pilot initiatives demonstrated economic rationale for sustainable practices by adopting resource efficiency measures, although broader uptake will require further scaling.

Overall, the programme has delivered a coherent and policy-relevant set of knowledge products that provide credible, field-tested alternatives to pollution-causing practices.

Lessons learned through this output, and recommendations for future programming

The programme showed that field-tested, practical solutions are effective in driving behavioural change and building credibility, particularly for IPM and alternatives to open burning, but scaling beyond pilot sites remains a key challenge. While strong alignment with national policies increased relevance, wider uptake was constrained by limited time for sustained engagement and insufficient communication of economic benefits. Future programmes should focus on clear scaling pathways, stronger evidence on cost-benefit impacts, and deeper engagement with policymakers and market actors to ensure that proven solutions translate into sustained, large-scale adoption.

Output Number and Title	Output 3 - Improved monitoring and data for policy decision making.		
Output Score	A	Impact weighting (%)	10%

Output Indicator	Logframe Target	Final Result Achieved	
3.1 - Number of mapping products produced collating pollution data to inform decision makers	*13 products*	47 products	Exceeded
3.2 – Number of hectares monitored for air quality parameters using aerial vehicles	*30 hectares*	26 hectares	Not met

Output activities and score

The activities underpinning this output focused on improved monitoring, strengthened capacity and an increase in policy-relevant evidence across multiple pollution sources. This included:

- Development of **spatial mapping products** identifying pollution hotspots across Vietnam (e.g. open burning, PM2.5 distribution), supported by satellite data, UAV thermal imagery, and field surveys
- Establishment of a **multidisciplinary monitoring approach**, combining satellite mapping, ground sensors, and modelling to generate detailed pollution inventories and exposure analysis
- Expansion of **air quality monitoring infrastructure** in Kampala, including the deployment of 38 air quality sensors, far exceeding initial plans, and strengthening real-time data availability
- Application of **analytical tools**, such as the low cost source apportionment technique to enable more precise identification of pollution (both PM2.5 and PM10) drivers
- Development of **policy-relevant evidence**, such as the Ugandan economic study analysing health and economic burdens of pollution to quantify the impacts and costs of pollution and support policy prioritisation
- Introduction of **data platforms** (e.g. LoveXair) to support ongoing health surveillance and hotspot identification beyond the project lifecycle

These outputs have strengthened the evidence base available to policymakers with potential to support more targeted interventions, improved prioritisation, and stronger alignment between environmental and health planning. For example, the Traffic Related Air Pollution (TRAP) study in Kampala identified pollution sources and inequalities in pollution exposure and findings shared with key institutions (e.g. Kampala Capital City Authority, Ministry of Health), supporting policy dialogue and planning. Furthermore, open burning analyses across northern Vietnam helped quantify the contribution of agricultural practices to urban air pollution in Hanoi through integration of satellite hotspot mapping, thermal UAV imagery, and remote ground sensors to track PM2.5 concentrations during harvesting and burning periods. Source-apportionment modelling was used to quantify contributions to urban air pollution and spatial analysis to model population exposure.

The programme has contributed to long-term monitoring capacity and sustainability, with air quality sensors transferred to national institutions (National Environment Management Authority of Uganda and AirQo). In addition, solar-powered devices capable of tracking fine particulate matter (PM1, PM2.5, PM10 and TSP) were developed and deployed in Vinh Long, capturing air quality conditions before, during, and after burning periods. This ensures data generation will persist beyond project closure and continue informing decision-making. Minor shortfalls in aerial monitoring and ongoing challenges in system integration mean the output meets, rather than exceeds, expectations.

Lessons learned through this output, and recommendations for future programming

A key lesson from this output is that integrated monitoring approaches, combining satellite mapping, UAV imagery, ground sensors, and modelling, significantly enhance the quality and usefulness of pollution data, strengthening the evidence base for policy and planning. The programme also demonstrated the value of academic and institutional partnerships, with investments such as the 38 air quality monitors in Kampala building long-term national research capacity and enabling future air quality analysis.

However, several constraints limited impact. Geographic coverage in Uganda remained narrow (air quality monitoring was concentrated in Kampala), reducing the national applicability of findings. In addition, while technical outputs provide a foundation for policy influence, integration of data into national systems such as formal regulatory and planning frameworks is yet to take place. Limited uptake of economic and health modelling results into policy dialogue further highlights the challenge of translating evidence into action within a short time period.

Output Number and Title	Output 4 - Increased capacity for direct actors and regional/national government and agencies.		
Output Score	A+	Impact weighting (%)	35%

Output Indicator	Logframe Target	Final Result Achieved	
4.1 - Number of people informed by technical assistance	*11,310 people*	20,462 people	Exceeded
4.2 – Volume of finance mobilised to increase capacity for pollution reduction	*£75,000*	£131,000	Exceeded

Output activities and score

At the local level, the programme delivered large-scale, practical capacity building, particularly in agriculture and waste management. Over 11,000 farmers were trained in sustainable pest management practices through Farmer Field Schools in Vietnam, in addition to workshops for female farmers in Uganda on safe pesticide use and technical support for businesses to adopt sustainable waste management practices. These activities were supported by hands-on approaches, digital tools (e.g. IPM app providing weather-based pest and disease forecasting, automated support for preparing and implementing IPM plans, free access to training materials, a financial module calculating the economic costs and benefits of IPM adoption), and technical assistance to businesses, enabling adoption of sustainable practices. This has led to observable behavioural change, with farmers shifting toward ecosystem-based pest management and businesses implementing waste sorting, composting, and resource efficiency measures. Youth engagement (32 trained leaders) and public education programmes also contributed to building community-level awareness and future leadership capacity. These results demonstrate strong effectiveness in building practical, applied capacity that directly supports behaviour change and improved environmental practices.

At province level, the programme strengthened the foundations for a more integrated and inclusive approach to waste management in the city of Da Nang. Analytical studies, hotspot assessments, stakeholder mapping, and consultations with local authorities improved understanding of waste-management challenges and supported more evidence-based practices among enterprises, including adoption of circular economy measures.

At the national level, the programme strengthened institutional capacity, policy processes, and cross-sector coordination. Key achievements include:

- Development and validation of the **Health and Pollution Action Plan** (HPAP), providing a national framework aligned with Uganda's development plans and international commitments
- **Training of government agencies and stakeholders** (e.g. HPAP training, CSO workshops, women's capacity building) to support policy design and implementation
- Strengthening evidence-based policymaking, including integration of technical, economic, and health analyses into national dialogue

These efforts have enhanced government capability to identify, prioritise, and address pollution challenges, and improved collaboration between ministries, research institutions, and civil society. Collaboration with the Vietnam Chamber of Commerce and Industry provides a channel for integrating project findings into national policy discussions and mechanisms such as the provincial Green Index. However, full institutionalisation (e.g. policy adoption, enforcement mechanisms) remains ongoing, reflecting the short timeframe.

At the regional level, the programme contributed to capacity building beyond national boundaries, supporting knowledge sharing and coordinated action on transboundary pollution. This includes:

- Funding support to the UN Climate and Clean Air Coalition (CCAC), enabling ODA-eligible countries to reduce emissions of short-lived climate pollutants (e.g. methane, black carbon, HFCs) through national coordination teams and targeted technical assistance
- Launch of Regional Pollution Fora in Southeast Asia and Sub-Saharan Africa, providing platforms for knowledge exchange, best practice sharing, and collaboration across 12 countries.
- Technical assistance to international research and policy initiatives (e.g. ICP Vegetation), strengthening global scientific and policy capacity
- Mobilised UNEP funding to support heavy metal pollution programming in Africa.

These contributions extend the programme's impact by supporting replication, scaling, and coordinated regional responses, consistent with the Business Case emphasis on addressing pollution as a cross-border challenge.

Case Study: National Health and Action Plan

Uganda faces growing pollution challenges with serious implications for public health. Air pollution from vehicles and biomass fuels contributes to widespread respiratory illness, while water pollution driven by untreated sewage, industrial effluent and poor waste management threatens communities and ecosystems.

To address these challenges, the EPP has supported the Government of Uganda to develop the Health and Pollution Action Plan (HPAP) in close collaboration with national institutions and provide technical assistance.

The HPAP identifies priority interventions with the greatest potential to reduce disease and improve health outcomes, ensuring resources are directed where they can have the most impact. The process was led by the Government of Uganda, with the National Environment Management Authority (NEMA) coordinating engagement bringing together experts from government ministries and agencies, civil society organisations, academic institutions, the private sector and development partners.

"*The validation of the HPAP marks an important milestone in strengthening the link between pollution control and public health in Uganda. The Ministry of Health welcomes this evidence based and collaborative roadmap and looks forward to its implementation to reduce pollution related disease and protect the health of our communities*." — Ministry of Health, Uganda

Public finance has been leveraged to further support project initiatives such as the continued development of the pesticides survey app and wider initiatives focussed on heavy metal pollution across Africa. The mobilised funding can help catalyse wider impact by supporting the piloting of the pesticides survey app, generating reliable data that can inform policy, strengthen interventions, and help attract further investment to scale efforts addressing pesticide-related risks.

Lessons learned through this output, and recommendations for future programming

The programme evaluation highlighted that high reach does not automatically translate into sustained or institutionalised capacity. While behavioural change is evident, particularly in IPM adoption, continued impact depends on ongoing advisory support, stable market incentives, and access to inputs. In the private sector, businesses faced technical and operational barriers to replacing single-use plastics, and consumer concerns, for example in the hospitality sector, slowed the uptake of reusable alternatives. These constraints indicate that while awareness and initial engagement have increased, deeper behavioural and operational changes will require longer-term support. Long-term investment is required from both public and private sector to support sustainable practices whether the commercialisation of fuel pellet production or strengthened waste management system through public-private partnerships. While at the national level, challenges remain in translating capacity into policy adoption, enforcement, and financing mechanisms.

Future programming should prioritise deepening and institutionalising capacity, rather than focusing primarily on reach. This includes establishing or formalising governance arrangements for coordination platforms such as the Vietnam Environmental Health Network, ensuring that government, academia, civil society and the private sector each have defined roles. Greater emphasis is needed on linking capacity to incentives and financing, ensuring that actors have both the skills and resources to act. Expanding local support structures (farmer networks, trainers, business associations) and strengthening engagement with the private sector will help sustain behavioural change. Finally, building on successful regional platforms, future programmes should actively support replication and scaling across countries, ensuring that capacity gains translate into long-term, system-wide impact.

Output Number and Title	Output 5 - Increased awareness about environmental and health risks of pollution and their link to climate change		
Output Score	A+	Impact weighting (%)	15%

Output Indicator	Logframe Target	Final Result Achieved	
5.1 - Number of people reached through digital media awareness campaigns on pollution issues	10,000	*104,117*	*Exceeded*
5.2 - Number of people reached through in-person awareness campaigns (attending workshops) on pollution issues	6,125	*9,056*	*Exceeded*

Output activities and score

The activities underpinning this output combined mass communication, community engagement, and structured advocacy, ensuring both broad reach and meaningful engagement.

In Uganda, CSO-led campaigns, delivered by Youth Advocacy and Development Network (YADNET) working with Anai Climate Inclusion Network, Hands of Hope Initiative and Equal Lives Foundation, implemented nationwide, multi-channel awareness efforts covering air pollution, water quality, waste, agrochemicals, and heavy metals. Campaigns focussed on raising awareness of pollution's health impacts. Channels included radio, TV, social media, community workshops and school-based activities, enabling tailored messaging across diverse audiences. This focused on strengthening youth engagement, community awareness, and grassroots advocacy on pollution and environmental health. The initiative sought to enhance youth-led participation in policy dialogue, local accountability processes, and behavioural change interventions aligned with priorities under the Health and Pollution Action Plan (HPAP). The intervention combined community awareness campaigns, youth capacity-building workshops, stakeholder engagement forums, and advocacy activities targeting district-level authorities. These approaches contributed to early behavioural change, with communities gaining knowledge and tools to reduce pollution exposure and adopt more sustainable practices. These campaigns reached over 3,200 people through structured CSO activities alone, alongside significantly larger digital audiences.

Awareness activities were reinforced through youth engagement and school-based education programmes. Environmental education was integrated into curricula in five schools across the city of Da Nang in Vietnam, with teachers trained and students participating in hands-on waste management and recycling activities. Youth leaders were trained to promote environmental practices within their communities, helping to extend awareness beyond formal project structures.

Extensive in-person engagement through workshops, training events, and stakeholder meetings, included:

- 768 people reached through open burning knowledge distribution and awareness activities
- 166 participants in IPM dissemination workshops
- 150 stakeholders engaged in waste management cooperation activities in Da Nang
- 4,408 students reached through school-based education programmes
- 113 participants in community workshops and over 100 participants in TRAP dissemination events

It is important to note that the original digital reach target of 10,000 was likely underestimated, as the indicator did not clearly define what constitutes "reach" (e.g. views, impressions or engagements). Furthermore, the final reported figure remains conservative, as some channels (e.g. radio broadcasts and media publications) were undercounted. For example, radio broadcasts and media publications were counted on a one-to-one basis with people reached meaning that the majority of verified reach is driven by the social media campaign alone, which accounted for approximately 96,000 people reached. Despite these limitations, the programme has exceeded expectations.

Lessons learned through this output, and recommendations for future programming

Strengthening CSOs proved especially valuable, with organisations expanding their advocacy role and mandate, and communities gaining practical knowledge and tools to both reduce pollution exposure and demand accountability. School-based interventions and youth engagement also showed strong potential for long-term impact by embedding awareness within future generations.

However, raising awareness is only the first step toward sustained change. While early behavioural shifts were observed among students, teachers, and youth leaders, maintaining these gains requires stronger institutional

anchoring, particularly within education systems and through long-term partnerships with schools and universities. Similarly, in the private sector, businesses continue to face technical and behavioural barriers to replacing single-use plastics, particularly in sectors where customer perceptions influence operational decisions. Indicating that awareness must be supported by enabling infrastructure (e.g. recycling systems) and market incentives.

Future programming should therefore focus on embedding awareness within systems and linking it more directly to action. This includes integrating environmental education into formal curricula, strengthening long-term partnerships with CSOs and educational institutions, and ensuring campaigns are paired with practical solutions, policy measures, and infrastructure improvements that enable behaviour change. Greater emphasis should also be placed on monitoring behavioural outcomes and improving data collection, to better understand impact.

Case Study: Community Awareness Campaigns in Uganda

Uganda faces rising pollution-related health risks, particularly in urban communities where air pollution, poor waste management, and exposure to hazardous chemicals are common.

Uganda's Youth Advocacy and Development Network (YADNET) led a coalition of civil society organisations to deliver a targeted, community-driven campaign combining capacity building with practical action. Training across 5 days equipped local partners with skills in pollution management, inclusive advocacy, and GEDSI integration, enabling them to translate evidence into locally relevant interventions aligned with Uganda's Health and Pollution Action Plan.

The campaign delivered hands-on, localised activities across Kampala to raise awareness of the impacts of pollution and implement solutions.

In Bwaise and Kiteezi, Hands of Hope (HOH) reached over 250 households through door-to-door engagement, set up waste sorting points, mobilised 200+ people for clean-ups, and trained youth ambassadors to drive behaviour change.

In Kisenyi, Equal Lives Foundation used school debates, murals, and community sessions to engage pupils—including refugees and children with disabilities—while media outreach extended messaging citywide.

Anai Climate Inclusion Network targeted high-risk groups through garage "toolbox talks," school-based Lead Detective Clubs, and community dialogues, alongside national TV and radio shows reaching thousands. Overall, 3,219 people were directly reached and over 4,700 via media, with strong participation from vulnerable groups.

D: Value for Money

Evidence is drawn from short-term, small-scale interventions and should therefore be interpreted as indicative. The programme's primary function is to test and demonstrate scalable approaches rather than deliver large immediate returns, with value arising mainly from evidence generation, early market development and non-monetised benefits.

Summary of economic, environmental and health benefits

Private: Across projects there is consistent evidence of positive private economic returns alongside wider public benefits. IPM adoption generates higher incomes through price premiums (16% to 25% per tonne of tea) and improved market access, resulting in profit increases of approximately 17% to 49% per tonne, despite higher labour requirements. Straw decomposition reduced input costs by 15% per with yields broadly unchanged. Biomass pellet production creates a new revenue stream from otherwise unused rice straw, with early evidence of commercial viability and short payback periods for machinery purchases.

Emissions: The programme also delivered environmental and climate benefits. Stopping open burning reduces emissions by an estimated 1.3-1.6 tCO_2e per hectare, while biomass pellets further reduce emissions by stopping burning and replacing fossil fuel use with around 0.86 to 0.88 tCO_2e reduced per tonne of pellets. Agroforestry interventions contribute to longer-term carbon sequestration, with ~186,000 trees distributed to over 7,600 farmers.

Pollution: At programme level, this is reflected in 625 tonnes of pollution/waste avoided and 5,713 hectares under improved land management, alongside circular economy pilots demonstrating waste reduction, recycling, and material recovery at enterprise level. These changes are expected to improve air quality and soil health, although many impacts are not yet directly quantified.

Health: Reduced exposure to air and water pollution and pesticides is expected to improve health outcomes. Modelling from Uganda demonstrates the significant economic burden of avoidable illnesses and deaths from air and water quality improvements. The programme also shows early signs of finance mobilisation, including engagement with 11 private sector partners in agroforestry and emerging market activity in areas such as biomass pellets and sustainable supply chains, although large-scale private investment has not yet been realised.

5E Assessment

Economy

The programme demonstrates strong economy, delivering a £3m, one-year expansion on time and within budget. Cost-conscious procurement and transparent financial management ensured inputs were sourced competitively, supported by monthly risk and performance monitoring. Value was maximised through extensive use of partnerships and in-kind contributions. In Uganda, collaboration with academic institutions, CSOs and government reduced delivery costs through use of existing infrastructure (e.g. AirQo network), subsidised media and partner-provided equipment. Similar approaches in Vietnam lowered data collection costs, while efficiencies (including exchange rate gains) were reinvested to expand outputs, such as additional monitoring capacity and technical support.

Efficiency:

Efficiency was reasonable, with outputs meeting or exceeding targets for 88% of KPIs and exceeding targets by 201% on average. This reflects effective conversion of inputs into outputs across knowledge generation, awareness and capacity building. Leveraging existing systems enabled particularly strong returns (e.g. 38 air quality monitoring sites delivered vs 10 planned). Adaptive delivery approaches mitigated external disruptions (e.g. political campaigns), though some delays arose from complex coordination and limited application at scale.

Effectiveness:

The programme was effective in delivering outputs and progressing towards outcomes. Outcomes exceeded targets for 71% of KPIs (2 KPIs had data limitations; 2 KPIs not met) and exceeded targets by 616% on average across all measured KPIs. It generated a strong, policy-relevant evidence base and delivered key outputs, including the Health and Pollution Action Plan, Farmer Field Schools and the TRAP study. There is evidence of policy influence and institutional strengthening (e.g. ongoing HPAP engagement and a five-year MoU with NEMA), alongside early behavioural change, particularly in Vietnam through increased IPM uptake and reduced pesticide use.

Equity:

Equity considerations were embedded in design and delivery, with targeted support for women, low-income and marginalised groups. This included 32 female farmer groups and inclusive engagement through CSOs and awareness campaigns. There is evidence of improved equal access to knowledge, safer practices and livelihood opportunities, with early signs of women's economic empowerment. However, incomplete disaggregated data and uneven engagement with some groups limit full assessment of distributional impacts.

Cost-effectiveness:

Quantifying cost-effectiveness is challenging as many of the programme's benefits are not readily monetisable, particularly improvements in environmental quality, health outcomes and long-term behavioural change. Estimated emissions reductions of 405 tCO_2e are valued at ~£105,300 in 2025 using UK Government carbon values, increasing to ~£0.97m in present value terms over 10 years if impacts are sustained. While modest relative to programme costs, this captures only a small share of total benefits.

The main benefits are non-monetised, including increased farmer incomes, reduced input costs, improved air and water quality, and strengthened institutional capacity. In this context, the programme is best understood as a catalytic, evidence-generating intervention, demonstrating scalable approaches with the potential to deliver substantially higher returns if expanded. On this basis, the programme represents reasonable VfM.

E: Risk

Overview of risk management

The programme's initial Risk Potential Assessment (RPA) was conducted using the standard set of high-level criteria for assessing the strategic risk potential of programmes and projects, and of emerging policies and initiatives expected to be delivered through the programme, concluding to be Low Risk. The programme's risk appetite has not changed over the course of the programme and has remained within ODA portfolio risk appetites.

The programme's governance structure ensured a continuous risk monitoring process to support informed, risk-based decision making. A live risk register was used to track risks, issues and mitigations in place. Regular monitoring of risks and issues was conducted both informally through day-to-day management and formally through monthly reviews. The programme team met with delivery partners on a monthly basis to assess current risks and issues, review the risk register and provide progress updates on mitigating activities. Risks were assessed using the 5x5 matrix based upon likelihood (1-5) and impact (1-5). Risk escalation routes for those deemed high risk included the Programme SRO, Programme Board and ODA Board where appropriate.

Risk owners took prime responsibility for managing and reporting on key risks. The responsibility at Board level was to take the risk challenge function role, being clear the risk is taken seriously and identify those that prevent the EPP from delivering its targets by agreeing and reviewing the risk register. This included regularly considering the range of risks that the programme is exposing itself to, ensuring that there is a well-judged balance between ambition and achievement. Residual risks were managed with flexibility in delivery periods and mode of delivery with contingency plans and teams pulling together to complete deliverables.

Across the life of the programme, a range of strategic and operational risks have been identified and managed in alignment with Defra's Risk Management Policy and wider government risk guidance. The main trends in programme risk exposure have been driven by wider contextual factors and created fluctuating risk likelihood and impact ratings.

Delivery risks for 2025/26 identified in the business case included political instability, such as the Ugandan elections, amongst other external factors such as extreme weather. Delivery risks were addressed through flexible delivery models and liaison with FCDO colleagues in country. Another major risk identified, delivery partners not fulfilling commitments, was mitigated through tight funding controls, regular workplan reviews and regular, open communication. An additional delivery risk related to the potential for funding to not be secured beyond 2025/26. To mitigate this, programme deliverables were designed to deliver ongoing benefits to in-country stakeholders beyond the programme lifetime.

Reputational risks have been carefully managed through early and respectful engagement with local partners, ensuring that UK involvement is perceived as supportive rather than intrusive. Mechanisms such as local advisor input and locally negotiated MOUs have been used to ensure reliability in delivery partnerships. These efforts reflect a proactive and structured approach to risk management, ensuring the programme remained resilient and responsive to evolving challenges and deliver within the appropriate risk appetite.

With specific regard to safeguarding, the programme carried a continuous safeguarding risk which was reviewed on a regular basis as part of wider risk register updates and will remain outstanding beyond programme closure to reflect the risk relating to historical allegations. A Sexual Exploitation, Abuse and Harassment (SEAH) risk assessment was conducted which required clear safeguarding policies and reporting mechanism. Assurances were provided by GAHP that adequate policies and processes were in place which aligned to Defra's zero-tolerance approach to SEAH. Contractual clauses were added to the main contract with delivery partner, GAHP. As such, all in-country partners working through GAHP were contracted to adhere to GAHP's policies on anti-corruption, safeguarding, and prevention of sexual exploitation and abuse. Contractors and CSOs were required to integrate safeguarding

measures into community engagement activities. Whilst ethical standards were reinforced through training sessions and compliance monitoring.

In relation to fraud risk, the programme conducted a fraud risk assessment (FRA) which identified key risks, controls (including directive, deterrent, preventative and detective controls), risk ratings and risk owners. The assessment identified four fraud risk areas, with scores ranging from low to medium risk. Risk owners concluded these residual risks were within the programme's tolerable range and were confident the controls in place would help mitigate the risks identified. There were no cases of fraud during the programme lifecycle. The programme acknowledges that a history of 'no fraud' is an indicator in itself that both the programme team and delivery partners need to strengthen detective controls, ensure reporting processes are clear and promote a counter fraud culture.

F: Programme Management: Commercial and Financial Performance, Monitoring and Evaluation

Performance summary of partners and Defra, notably on commercial and financial issues

The Global Alliance on Health and Pollution (GAHP) are the primary delivery partners for the 25/26 programme and have extensive experience in guiding and delivering ODA-related activities. GAHP are a not-for-profit company established in 2012 with 60 international representatives from the World Bank, UN, Asian Development Bank and Ministries of Environment and Health of many LMICs. They were appointed based on their previous work with Defra on environmental pollution in Vietnam and were most suited to delivering the key aim of the programme – to improve the ability of the selected countries to monitor, manage and reduce air, chemical, plastic and waste pollution – considering their extensive expertise, experience, and existing networks.

Commercial
Following initial approval delays from Defra, a contract was signed between Defra and GAHP in June 2025 to ensure GAHP delivered the expected objectives and fulfil the desired reporting requirements. A contract change note was issued in November 2025 to extend deliverables to incorporate delivery of a Southeast Asia regional pollution forum, conduct stakeholder mapping for a Sub-Saharan Africa regional pollution forum and prepare final report available to participants and interested parties. A direct award process was approved due to their strong international network and deep expertise in pollution and health prevention and mitigation, governance, and multi-stakeholder engagement making them well positioned to lead the initiative in a resource efficient way in partnership with relevant governmental, non-governmental (private sector, academia and civil society) and international organisations. GAHP have been a successful delivery partner fulfilling all obligations and have surpassed expectations regarding quantity of work delivered.

A new contract was awarded in May 2026 to deliver a Sub-Saharan Africa regional pollution forum and prepare a final report available to participants and interested parties. A direct award process was approved due to their previous stakeholder mapping work in the region, strong international network and deep expertise in pollution and health prevention and mitigation, governance, and multi-stakeholder engagement making them well positioned to lead the initiative in a resource efficient way in partnership with relevant governmental, non-governmental (private sector, academia and civil society) and international Organizations.

Financial
GAHP have demonstrated their ability as a delivery partner to manage funding through the delivery of the EPP on-time and in-budget. Assurance has been continually provided through regular reporting, monitoring and evaluation. The EPP was able to manage funding to be action/response led to be able to maximise opportunities. For example, strategic reallocations as a result of exchange-rate fluctuations enabled additional outputs such as air quality monitors (compared to the 10 that were originally planned), training sessions (female farmer pesticide workshops in Uganda) and academic publications (economic cost of inaction). Further VfM evaluation can be found within section D.

Programme Management
Project management was adaptive and responsive, effectively adjusting to emerging challenges while maintaining strong cross-sector collaboration. The partnership model contributed to capacity building, strengthening implementing partners' technical expertise and organisational capabilities. However, initial approval delays at the outset of the programme had a knock-on impact on mobilisation and compressed the already limited implementation window. This placed pressure on delivery timelines and required implementing organisations to prioritise rapid outputs over longer-term engagement and institutionalisation. This particularly affected engagement with private-sector partners and educational institutions.

Overall, partners regarded Defra's performance as strong in terms of governance, assurance, and strategic oversight, with effective collaboration and openness to adaptation. Earlier approvals and a different payment model to enable advance payments could have further enhanced efficiency and enabled greater focus on long-term outcomes.

Programme-level approach to monitoring and evaluation

All Defra ODA programmes are designed to ensure that Defra ODA Monitoring and Evaluating are consistent with the requirements of the UK International Development Act 2015, while maximizing opportunities for learning and providing accountability.

The main monitoring mechanism was through a monthly Programme Management meeting, attended by the Programme Lead(s), PRO and delivery partners. This is where the Programme's main monitoring tool, the Programme Tracker, incorporating risks, issues, finance, transparency and overall status update, was reviewed. This practical approach enabled regular feedback between Defra and GAHP and encouraged dual responsibility of M&E. The purpose was to:

- Review the programme tracker, as the core monitoring tool, on a monthly basis
- Review the programme forecast, on a monthly basis
- Review progress against the LogFrame, as the core evaluation tool, on a quarterly basis
- Discuss project pipeline and opportunities
- Identify key areas of progress made and potential risks and issues, in order to escalate to the SRO and ODA Board, if appropriate.

Additionally, a programme board was held on a quarterly basis, made up of members of GAHP (the main delivery partner), the Defra Programme Team and other key Defra group stakeholders to discuss and approve key deliverables / products, as well as identify lessons learnt. Both the progress meetings and the programme board were supplemented by informal check-ins between the GAHP Lead and the Defra Programme Lead(s) to ensure continual flow of information.

The implementation process and progress were tracked using programme-specific M&E tools, while attendance logs provided demographic statistics such as gender and age. To assess the reach and effectiveness of interventions within specific communities, small-scale surveys were conducted. Media interventions were evaluated through media activity tracking to determine their reach. At the population level, regional uptake surveys and community engagement activities helped gauge broader impact. Additionally, qualitative outcomes were explored through focus groups, in-depth interviews, listener/viewer group discussions, and case studies, offering contextual understanding of the programme's impact.

KPI Reporting involved a range of indicators set at project level, programme level, Defra indicators and International Climate Finance (ICF) indicators. Where possible KPI data was collated on a monthly basis as part of the monthly partner reporting to monitor progress throughout the year, however the vast majority of results were collated in the final month of the programme. This is due to the short implementation window meaning that most activities were not complete until the final quarter of 25/26.

Field visits took place to conduct robust due diligence by verifying activities of in-country partners and confirming appropriate use of funds, strengthening financial accountability and reducing fraud risk. This comprised one visit to Uganda in October 2025 and one visit to Vietnam in March 2026. The visits provided an opportunity to strengthen stakeholder relationships to drive the programme's legacy, support future multilateral pollution cooperation and gather insights and lessons learned on programme delivery.

End-of-programme evaluations were commissioned to assess the programme's impact, value for money, and overall effectiveness in Uganda and Vietnam. While these evaluations were conducted independently, it should be noted that they were commissioned through GAHP rather than directly by Defra. Best practice would typically involve commissioning fully external evaluations through independent providers (e.g. via frameworks such as ITAD) to ensure maximum impartiality. Both evaluations adopted mixed-methods approaches, combining quantitative and qualitative data to assess performance against intended outputs, outcomes, and impacts. It should be noted that the scope of these evaluations was limited to bilateral country programming. As such, they do not capture the performance or contribution of wider programme components, including the regional pollution fora, ICP Vegetation funding, or FICAP. This limits the extent to which findings can be generalised to the programme as a whole.

To summarise evaluation findings, the programme performed strongly, demonstrating high relevance, robust design, and effective delivery within a highly compressed timeframe. It successfully laid critical foundations for longer-term pollution management through strong policy alignment, evidence generation, and stakeholder engagement, while achieving high efficiency and exceeding key output targets. However, structural constraints, including short implementation duration, political timing, and limited baseline data, restricted the extent to which outcomes could be institutionalised and sustained. While institutional commitment and frameworks are in place to support continuation, financial sustainability and deeper systemic change will require sustained follow-on support and longer-term investment.

Appendix

Appendix 1 – PCR Scoring Guidance

The PCR assesses and rates outputs using the following scale. The programme scoring calculator will calculate the overall output score, taking account of the weightings and individual output scores.

Description	Score
Outputs substantially exceeded expectation	*A++*
Outputs moderately exceeded expectation	*A+*
Outputs met expectation	*A*
Outputs moderately did not meet expectation	*B*
Outputs substantially did not meet expectation	*C*

Appendix 2 – Key stakeholders

Stakeholder	Programme	Role
Global Alliance on Health and Pollution	*Vietnam, Uganda, Regional Pollution Fora*	*Core delivery partner responsible for overall coordination, financial management, and technical oversight*
National Environment Management Authority (NEMA)	*Uganda*	*Primary government partner, supporting policy review and HPAP development*
Ministry of Water and Environment (MWE),	*Uganda*	*Contributed technical expertise on waste pollution management and environmental regulations*
Ministry of Health (MoH),	*Uganda*	*Provided data and guidance on pollution related health impacts*
Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)	*Uganda*	*Supported policy review on agrochemical use and promoted sustainable agricultural practices*
Ministry of Gender, Labour and Social Development (MoGSLD)	*Uganda*	*Supported GEDSI approach and contributed to occupational exposure to pollution.*
Kampala Capital City Authority (KCCA).	*Uganda*	*Supported policy review on improper waste management and promoted waste separation at source, reduction, and sustainable practices*
Makerere University/ AirQo	*Uganda*	*Facilitated the TRAP study, providing access to urban monitoring sites and supporting community engagement in Kampala*
Civil Society Organisations (Youth Advocacy and Development Network, Anai Climate Inclusion Network, Hands of Hope Initiative, Equal Lives Foundation)	*Uganda*	*Led awareness campaigns, mobilizing communities, and ensuring inclusivity of women, youth, and marginalized groups*
Rainforest Alliance (RA)	*Vietnam*	*Implemented the IPM component to reduce pesticide use and support sustainable agricultural practices on coffee, tea and pepper farms*
Vietnam Association for Conservation of Nature and Environment (VACNE)	*Vietnam*	*Implemented the Air Pollution and Agricultural Open Burning components*
Centre for Education and Development (CED)	*Vietnam*	*Implemented the waste burning*

Appendix 3 – Knowledge products about pollutants and their regional/national impact produced to support operational/policy implementation of sustainable pollution reduction

Work package	Knowledge product
U1 - Review of Uganda's Waste Management and Agriculture Policies, in the context of pollution, GEDSI and health	U1 D1 – **Academic journal article**: Assessing the Integration of Gender Equality in Uganda's Agricultural Policies: A Scoping Review
	U1 D2 – **Policy review**: Policy Assessment of Gender Equality, Disability and Social Inclusion (GEDSI) Integration in Uganda's National Policies on Agriculture and Waste Management
U2 - National and community engagement for Health and Pollution Action Plan (HPAP)	U2 D1 – **Policy report: National Health and Pollution Action Plan** endorsed by all key stakeholders, serving as the national roadmap for coordinated pollution reduction efforts
	U2 D2 – **Study report:** Pesticide Management and Use in Uganda
	U2 D4 – **Training materials**: Sound management of pesticides: A 2026 resource tool
	U2 D5 – **Academic journal article**: Investment case for air and water pollution reduction in Uganda
	U2 D9 – **Study report**: Investment Case for Air and Water Pollution Reduction in Uganda
U3 - Improved understanding of health impacts and inequalities associated with Traffic Related Air Pollution in Kampala	U3 D1 – **Study report**: Assessing the Health Impacts of Traffic Related Air Pollution in Kampala, Uganda: Evidence and Decision Support for Policy Action
	U3 D2 – **Model**: Kampala Air Quality Health Assessment Toolkit
	U3 D3 – **Policy brief**: Briefing Note on Assessing the Health Impacts of Traffic Related Air Pollution in Kampala, Uganda: Evidence and Decision Support for Policy Action
	U3 D4 – **Academic journal article**: A Pathfinder assessment of traffic-related $PM_{2.5}$ and associated health burdens in Kampala, Uganda
U6 – Pollution management stakeholder mapping	U6 D2 – **Project report**: Uganda Pollution Management Stakeholder Power Map

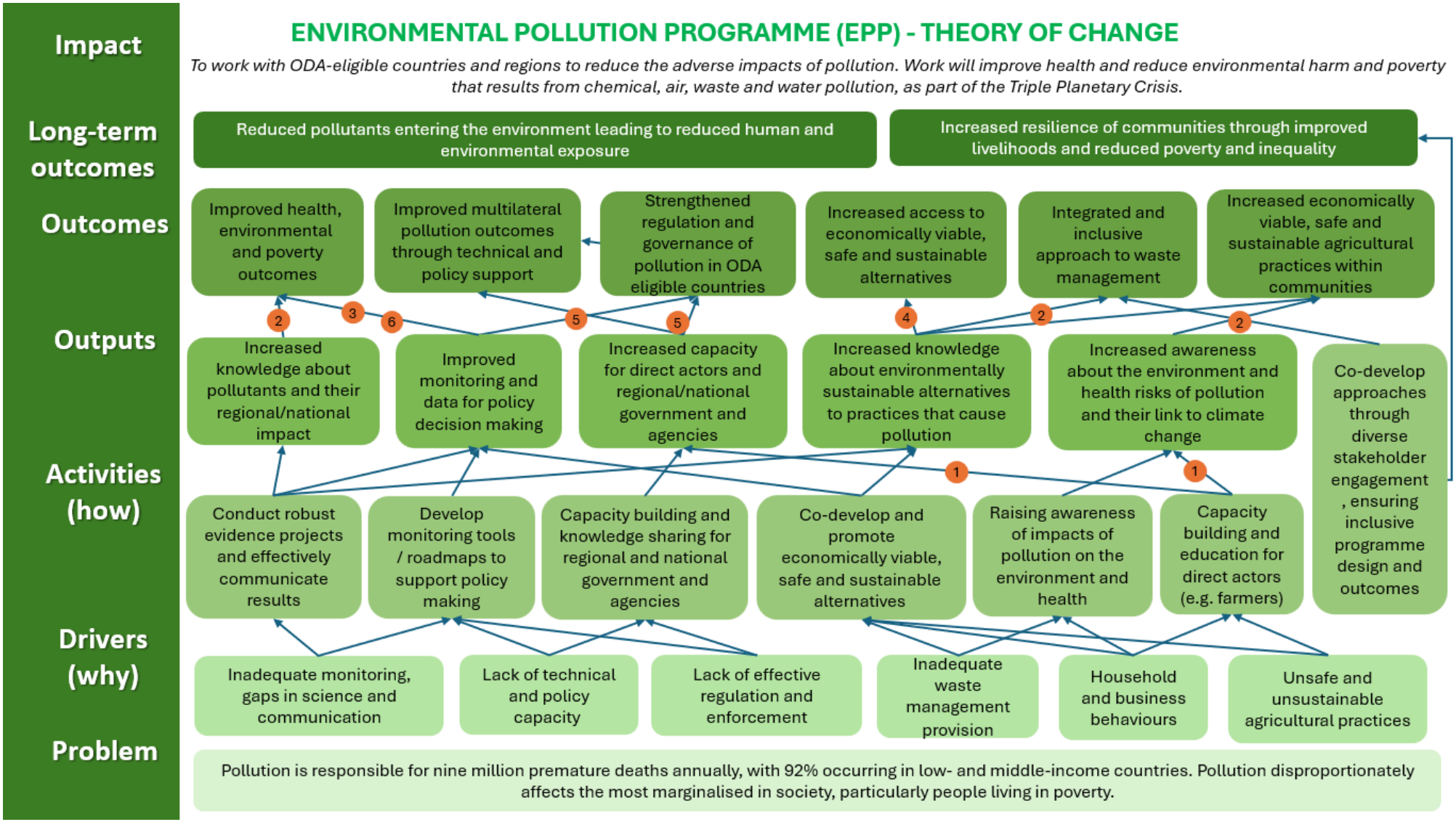
Work package	Deliverable
AP 2 - Improved air quality monitoring, in relation to pollution levels and associated adverse impacts on human health	AP 2.1 D1 – **Project report:** Detection of open field burning and air quality assessment using remote sensing data and on-ground measurements in Vietnam
	AP 2.1 D2 – **Maps:** Monthly and annual maps of the country covering open burning locations and areas, and PM 2.5 distribution
	AP 2.1 D3 – **Study report:** Assessment of contribution of post-harvest rice straw burning on ambient air quality in Hanoi
	AP 2.1 D4 – **Study report:** Assessment of burned biomass and associated air pollution and greenhouse gas emissions
AP3 - Increased awareness of adverse impacts of open burning, in the context of air pollution, GEDSI and human health	AP 3.3 D1 - **Study report:** Health effects of agricultural open burning – a review with special focus on low- and middle-income countries and Vietnam
IPM 2 - Increased knowledge of the adverse impacts of pesticides on human health and the environment and potential to scale approach to other countries	IPM 2.1 D1 - **Study report:** Assessment on the impact of IPM of reducing herbicide and pesticide use on soil health in tea and pepper plantations
	IPM2.2 D3 - **Study report**: Environmental risks of pesticides
WM1 - Development of an integrated and inclusive approach to effective waste management at provincial level through policy and community engagement	WM 1.1 D1 – **Study report**: Locations of waste burning hotspots and potential exposure of people to air pollution associated with waste burning in Da Nang, and recommendations for decision-makers.
	WM 1.2 D1 – **Study report**: Developing an integrated and holistic approach to solid waste management in Da Nang.

Appendix 4 – Knowledge products about environmentally sustainable alternatives to practices that cause pollution produced to support operational/policy implementation of sustainable pollution reduction

Work package	Deliverable
AP 1 - Expanded implementation of environmentally sound alternatives to open burning, with associated health benefits	AP 1.1 D1 – **Project report:** Expansion of the use of accelerated decomposition of straw in the field as an alternative to agricultural open burning.
	AP 1.2 D1 - **Project report:** Selection of locations for fuel pellet production as an alternative to open burning of rice straw
	AP 1.2 D2 - **Study report:** Use of rice straw biomass fuel as an alternative to agricultural open burning.
IPM 1 - Expansion of IPM approaches to new regions to reduce the adverse impacts of agrochemicals on human health and the environment	IPM 1.1 D1 – **Training materials:** Updated guidance for farmers.
	IPM 1.1 D2 – **Training materials:** IPM software for farmers.
	IPM 1.2/1.3 D1 – **Project report:** Farmer Field School – IPM adoption and pesticide use in coffee, pepper and tea farms
IPM 2 - Increased knowledge of the adverse impacts of pesticides on human health and the environment and potential to scale approach to other countries	IPM 2.1 D1 - **Study report:** Assessment on the impact of IPM of reducing herbicide and pesticide use on soil health in tea and pepper plantations
	IPM 2.2 D1 - **Study report:** Adoption, economics and drivers of IPM among tea farmers in Vietnam
	IPM 2.2 D2 - **Study report:** Evaluation of the role of IPM in mitigating health risks of pesticides in Vietnam
WM2 - Increased knowledge of sustainable waste management amongst businesses, and sustainable plastic alternatives	WM 2.1 D1 – **Study report:** Recommendations for sustainable plastic alternatives in Da Nang.
	WM 2.4 D1 – **Project report**: Circular economy introduction in five enterprises in Da Nang City.
WM 3 - Increased awareness of business, government and young people of waste management and sustainable alternatives to plastic	WM 3.1 D1 – **Project report:** Increased awareness of business, government and young people of waste management and sustainable alternatives to plastic through engagement of youth in Da Nang

Annex

Annex 1 – EPP Theory of Change



Several key assumptions underpin the theory of change in terms of how outputs will translate into outcomes and ultimately impact. These include (numbers 1-6 correspond to numbers in diagram):

1. Stakeholders are willing and able to participate and benefit from activities.

- Farmers have capacity to attend and engage with farmer field schools.
- Farmers have capacity to implement IPM approaches following TA.
- Communities can see the benefits of the project and are incentivised to sustainable practices.
- Businesses have capacity to adopt sustainable waste practices.

2. Improved awareness leads to sustainable behavioural change.

- Training materials are sufficiently tailored to local communities and context.

3. Project activities will lead to environmental benefits.

- Alternatives reduce emissions through reduced open burning.
- IPM training leads to reduced pesticide usage.
- Plastic alternatives lead to reduced plastic pollution.
- Sustainable waste management leads to improved environmental outcomes through reduced chemical leaching, microplastics etc.

4. Project activities will lead to economic incentives.

- Alternatives provide additional income sources to create/protect livelihoods.
- Community members have incentives to adopt sustainable practices.

5. Political will/stability/capacity to support project activities.

- Monitoring data is effectively disseminated to relevant stakeholders.
- Policies are informed by improved monitoring and data.
- Government has capacity to implement and enforce policies that may result from EPP work.

6. Project activities will lead to health benefits

- Reducing pollution will lead to reduced exposure
- Lowering exposure to pollutants will lead to improved health outcomes

Annex 2 – KPI15 Supporting Evidence Document

Department for Environment Food & Rural Affairs

Reporting Template: ICF KPI 15 'Extent to which ICF intervention is likely to lead to Transformational Change'

Please return your results in the following template so that analysts can quality assure the data. If your programme is unable to provide this, please state why.

Please use the ICF KPI 15 Methodology Note for further guidance: International Climate Finance KPI 15 Methodology Note: Extent to which ICF intervention is likely to lead to transformational change

Programme/Project Summary

Implementing Years: 2025-2026 (reporting period April 2025-March 2026)

Donors: UK Government (Defra)

Reporting Level: Programme

Total programme size: 3,000,000 GBP

UK contribution to programme: 3,000,000 GBP

KPI15 Score: 4 – *partial evidence suggest transformational change is likely or already occurring*

Transformational Change: Capacity and capability increased; Innovative; Evidence of effectiveness is shared; Leverage/incentives for others to act is created; Replicability; Sustainability

Programme Description

The 25/26 programme targets two key sectors in the context of pollution: agriculture and waste management. The project delivers objectives on chemicals, waste, air and plastics pollution management. Transformational change is achieved through an integrated systems approach on three different levels;

- local and national interventions in Vietnam and Uganda at both community level and national level (Health and Pollution Action Plan)
- regional systemic change through a regional forum to share expertise and knowledge including on bidding for MEA capacity building funding and
- global change through UK's MEA leadership.

In the agricultural sector, direct interventions include: roll out of sustainable alternatives to open burning, research and promote sustainable plastic waste disposal routes and alternatives, increase IPM outreach to monitor and provide sustainable approaches to intensive pesticide use and increase air quality monitoring to increase evidence on geographical patterns and major air pollution drivers.

In the waste management sector, direct interventions include: assessing current waste management strategies to promote existing policies, advise on policy interventions and infrastructure improvements, community-led solid waste pollution mitigation and working with informal settlements to develop an integrated and inclusive approach to effective solid waste management.

These interventions coupled with the new, innovative establishment of regional fora, building MEA capacity, sharing lessons learned and best practice amongst developing country organisations on transboundary pollution issues will further reduce poverty, promote gender equality disability and social inclusion (GEDSI) principles, and provide alternative income streams from regenerative farming and recycling. Additionally, they will improve access to trade markets, employability, reduce pollution impacts on health and the environment and optimise circular economy practices contributing to transformational change.

Transformational Change Criteria

The following criteria are deemed relevant to KPI 15:

1. Political will and local ownership
2. **Capacity and capability increased (TOC level: Drivers)**
3. **Innovative (TOC level: Drivers)**
4. **Evidence of effectiveness is shared (TOC level: Drivers)**
5. **Leverage/incentives for others to act is created (TOC level: Mechanism)**
6. **Replicability (TOC level: Mechanism)**
7. Scalability (TOC level: Mechanism)
8. **Sustainability (TOC level: Enablers)**
9. Critical mass (TOC level: Enablers)

The following standards will be used to score each criteria:

Score	Descriptor
1	Substantial evidence that suggests transformational change is unlikely or will not occur
2	Partial evidence that suggests transformational change is unlikely
3	Not enough evidence yet to assess, or the balance of evidence is inconclusive
4	Partial evidence that suggests transformational change is likely
5	Substantial evidence that suggests transformational change is likely or already occurring

(2) Capacity and capability increased (30%)

Metrics

Metric	Target (2025/26)	Data (2025/26)	Achieved?
Number of people informed by TA	11,305	20,462	*Metric has been achieved and exceeded.*
Number of companies informed by TA	11	12	*Metric has been achieved and exceeded.*
Number of publications supported	1	3	*Metric has been achieved and exceeded.*

Indicator selection narrative:

The programme will demonstrate increased capacity and capability if, through targeted technical assistance, stakeholders in Vietnam and Uganda are equipped with the skills and expertise to reduce pollution at a transformational level. The number of people informed by technical assistance captures the scale of capacity-building efforts at the individual level. It reflects how many stakeholders (including government officials, community members and local businesses) have received relevant knowledge and skills through TA. The number of companies informed by technical assistance measures how many businesses have been reached through TA, such as training, workshops, or advisory support. Supporting the scientific publication process strengthens local scientific expertise.

Justification of score:

A score of 5 was awarded, as each KPI was achieved and exceeded demonstrating strong and systemic capacity strengthening.

The project exceeded targets, reaching 20,462 individuals and 12 companies, and built capacity across a wide range of actors including farmers, private sector companies, government agencies, civil society organisations, women, and youth leaders. Training was practical and embedded, through Farmer Field Schools, IPM training, waste management technical support, and leadership development, resulting in clear behavioural change, notably farmers shifting to sustainable integrated pest management approaches, with results showing improved soil health and reduced pesticide usage. Capacity gains have also scaled and institutionalised (from 2024/2025 baseline), expanding from 6 to 12 companies and from ~3,000 to ~11,000 farmers and geographic spread to new provinces, indicating replication through market and community systems. More importantly, the project contributed to a shift in agricultural practices. Training, field demonstrations, and improved access to decision-support tools reinforced this transition. Systems-level capability has been strengthened through stakeholder coordination in waste management, national policy development (HPAP), and regional knowledge exchange. 12 countries were supported through technical assistance on pollution mitigation across the two regional pollution fora in Southeast Asia and Sub-Saharan Africa. Furthermore, the production of three peer-reviewed academic publications (exceeding the target of one) on GEDSI integration, pollution-health impacts, and the investment case to act on pollution strengthens the knowledge base and policy influence, ensuring that learning is disseminated beyond the project. Together, the scale, depth, institutional embedding, demonstrated behaviour change, and knowledge generation suggest that capacity has been strengthened and is self-sustaining through ‘train the trainer’ approaches, and are therefore likely to drive transformational change beyond the project lifetime.

3) Increased Innovation (20%)

Metrics

Metric	Target (2025/26)	Data (2025/26)	Achieved?
Number of sustainable alternatives supported	2	*2*	*Metric has been achieved*
Scale of pilot studies trialling sustainable alternatives (hectares)	119	*220*	*Metric has been achieved and exceeded*
Number of initiatives to improve solid waste and plastic waste management developed	3	4	*Metric has been achieved and exceeded*
Number of knowledge products about environmentally sustainable alternatives to practices that cause pollution produced to support operational/policy implementation of sustainable pollution reduction.	6	*12*	*Metric has been achieved and exceeded*

Indicator selection narrative:

The programme will demonstrate increased innovation if environmentally sustainable alternatives that reduce pollution are developed to contribute to transformational change. Innovation in this context refers to the development of initiatives, models and sustainable practices that offer alternatives to polluting practices such as agricultural open burning and improper waste management.

Justification of score:

A score of 5 was awarded, as each KPI was achieved and exceeded showing increased innovation. Evidence demonstrates novel solutions are not only being developed but tested and refined in real-world conditions. Whilst knowledge products ensure innovations are evidence-based and accessible for policy uptake and replication.

The project met or exceeded all innovation-related targets, including supporting 2 sustainable alternatives, scaling pilots to 220 hectares (nearly double the 119-hectare target), delivering 4 waste management initiatives (against a target of 3), and producing 12 knowledge products (exceeding the target of 6). Crucially, these innovations represent practical alternatives to polluting practices, such as the pilot of accelerated straw decomposition using microbial mixes (100 hectares) and collection of rice straw for fuel pellet production (approximately 120 hectares), both offering viable substitutes to open burning. The pilot findings demonstrate that the approaches are technically feasible, adaptable across contexts, and capable of moving beyond proof-of-concept toward wider adoption.

Innovation is further strengthened through a system-level approach in waste management and circular economy models. Circular economy interventions across tourism businesses showed that changes such as substituting materials, composting and improving resource efficiency can reduce waste while improving operational performance. Similarly, school-based waste collection pilots collected 3,470 kg of plastic waste in four months, while also spreading awareness and potential behavioural change across households and

communities. Initiatives such as the Youth–Business Connection programme and the Green Environment Design Competition further demonstrate innovative, participatory approaches that reposition plastic waste as a resource and encourage circular economy principles. Activities sought to raise awareness about the value of plastic waste by positioning it as a resource within a circular supply chain, rather than just waste. Initiatives aimed to encourage concrete commitments from businesses and individuals to reduce single-use plastics and improve waste segregation practices, strengthen youth–business collaboration in developing practical solutions and investment opportunities for plastic waste reduction and recycling, and support Da Nang's Net Zero and circular economy goals through pilot actions, knowledge exchange, and scalable zero-waste models.

Importantly, these innovations are supported by a robust body of knowledge products, including technical reports on straw management alternatives, feasibility studies, IPM cost-benefits and health impacts, and recommendations for sustainable plastic alternatives and circular models in Da Nang. This ensures that innovations are evidence-based and accessible for policy uptake and replication. The combination of sustainable alternatives, expanded pilot scale, cross-sector innovation, behavioural and market relevance, and strong knowledge dissemination provides compelling evidence that the project is catalysing new and scalable ways of addressing pollution, with a high likelihood of sustained uptake and transformational change beyond the project lifecycle.

(4) Evidence of effectiveness is shared (20%)

Metrics

Metric	**Target (2025/26)**	**Data (2025/26)**	**Achieved?**
Number of workshops to disseminate findings	4	*16*	*Metric has been achieved and exceeded*
Number of organisations (stakeholders) with which the project results were shared	50	*98*	*Metric has been achieved and exceeded*
Number of knowledge products about pollutants and their regional/national impact produced to support operational/policy implementation of sustainable pollution reduction.	13	*21*	*Metric has been achieved and exceeded*
Number of knowledge products about environmentally sustainable alternatives to practices that cause pollution produced to support operational/policy implementation of sustainable pollution reduction.	6	*12*	*Metric has been achieved and exceeded*

Indicator selection narrative:

The programme will demonstrate effectiveness shared if approaches which have proved successful are made more widely available and generate new investment in climate change and pollution work. The number of workshops held to share findings reflects active engagement and capacity-building efforts among stakeholders. The number of organisations reached indicates the breadth of stakeholder involvement and the project's outreach. Maintaining websites for results sharing ensures sustained access to knowledge and transparency, while the production of knowledge products on pollutants and sustainable alternatives provides evidence to inform decision-making and policy implementation.

Justification of score:

A score of 4 was awarded, as each KPI was achieved and exceeded demonstrating extensive, credible, and multi-level dissemination of project results, but acknowledging further dissemination could take place.

The project significantly exceeded all dissemination targets, delivering 16 workshops (vs. 4 planned) and engaging 98 organisations (vs. 50) across government, academia, private sector, civil society, and community stakeholders. These dissemination efforts were technically robust and grounded in practical experience, including eight workshops and training events and three field demonstrations on open burning alternatives, which shared tested solutions such as microbial straw decomposition and post-harvest straw management with universities, research institutions, and implementation partners. Additional engagement, such as the IPM dissemination workshop with over 100 participants, stakeholder coordination platforms in Da Nang, community workshops and national dissemination events in Kampala, and a regional Southeast Asia Pollution Forum, demonstrates that evidence has been shared through both technical and policy-facing channels, increasing its relevance and credibility across decision-making levels. The work undertaken was aligned to national government priorities by design, hence there was high level government engagement with all national dissemination activities. This ensured more impact for the outputs produced.

The strength of dissemination has been strengthened by a suite of 27 knowledge products (21 on pollution impacts and 12 on sustainable alternatives). These include peer-reviewed academic articles, national policy tools such as the Health and Pollution Action Plan (HPAP), economic and health studies, spatial pollution mapping outputs, and technical reports on sustainable agricultural and waste management practices. These outputs provide a robust, evidence-based foundation for operational and policy uptake, ensuring that lessons from pilot interventions, such as alternatives to open burning, IPM practices, and circular waste models, are well-documented, credible, and accessible for replication. The inclusion of policy-relevant tools, such as stakeholder power mapping and national action plans, also demonstrates progress toward embedding evidence within institutional frameworks. To achieve a score of 5, all knowledge products should be made publicly available for learnings to be shared.

(5) Leverage/incentives for others to act is created (10%)

Metrics

Metric	Target (2025/26)	Data (2025/26)	Achieved?
Increase in farmer income	10% increase	10-31% increase	*Metric achieved*
Volume of finance leveraged	£75,000	*£131,000*	*Metric achieved*

Indicator selection narrative:

The programme will meet this criteria if the costs of acting sustainably are reduced to the point that acting sustainably is a sensible decision for commercial firms, public entities, and private individuals, encouraging investment in sustainable practices. Demonstrating an increase in farmer income as a result of implementing Integrated Pest Management approaches is a crucial way to encourage behavioural change. Financial benefits will be shared informally through farming communities and formally through IPM training to scale uptake of sustainable practices.

Justification of score:

A score of 3 was awarded, as there is not enough evidence that suggests transformational change is likely.

The Integrated Pest Management initiative has shown income to increase as a result of adopting IPM approaches between 10-31% more annual income compared to conventional non-IPM farmers. This is due to an increase in sale prices through access to higher premium markets and a reduction in pesticide costs. Whilst these results indicate economic co-benefits, such as reduced input costs in agriculture and improved resource efficiency in waste and tourism initiatives, results need to be validated at scale and widely communicated to incentivise widespread behavioural change. Financial benefits which reinforce adoption and are disseminated through farmer networks and training systems has not yet been demonstrated at scale.

Public finance has been leveraged to further support project initiatives such as the continued development of the pesticides survey app and wider initiatives focussed on heavy metal pollution across Africa. The mobilised funding can help catalyse wider impact by supporting the piloting of the pesticides survey app, generating reliable data that can inform policy, strengthen interventions, and help attract further investment to scale efforts addressing pesticide-related risks. While the project has exceeded the finance leverage target, the scale of investment remains small and is specific to one-time public finance contributions. For transformational change, long-term investment is required from both the public and private sector to support sustainable practices whether the commercialisation of fuel pellet production or strengthened waste management system through public-private partnerships.

Overall, the project shows early signs of progress in leveraging finance and generating potential economic incentives, but lacks sufficient evidence at scale that cost barriers have been reduced or that strong financial drivers are in place to motivate widespread uptake.

(6) Replicability (5%)

Metrics

Metric	Target (2025/26)	Data (2025/26)	Achieved?
Expansion - Number of provinces	7 provinces	7 provinces	*Metric achieved*
Expansion - Number of hectares adopting sustainable alternatives to pesticides	10,520 hectares	*13,000 hectares*	*Metric achieved and exceeded*

Expansion - Number of hectares adopting sustainable alternatives to open burning	100 hectares	*100 hectares*	*Metric achieved*
Expansion - Number of new farmers trained for 25/26	6,000	*6,509*	*Metric achieved and exceeded*

Indicator selection narrative:

The programme will meet this criteria if the interventions are replicated in other regions of the country. Low-cost sustainable approaches will be scaled up to increase adoption across Vietnam, showcasing the replicability of interventions. The regional forum will take this further to encourage wider adoption by other countries within the region, upscaling the impact of the programme dramatically.

The expansion across provinces demonstrates scalability, indicating that the interventions are adaptable to regional contexts. The number of hectares adopting sustainable alternatives to pesticides and open burning reflects the practical uptake of sustainable practices, showing that the solutions are not only effective but also replicable at scale. Additionally, the number of new farmers trained highlights the project's capacity to strengthen local knowledge and skills, ensuring that sustainable practices are embedded and sustained over time. Together, these indicators illustrate the project's potential to be replicated widely.

Justification of score:

A score of 4 was awarded, as KPIs were achieved and in some cases exceeded demonstrating expansion of successful interventions across Vietnam.

Transformational change requires that interventions are adopted in new regions, scaled at low cost, and demonstrate adaptability across contexts, with potential for further regional uptake. The project has achieved this through expansion to 7 provinces, confirming that interventions such as Integrated Pest Management (IPM) and alternatives to open burning are transferable and adaptable to different geographic and institutional settings. The successful rollout of 100 hectares adopting sustainable alternatives to open burning further demonstrates that innovative practices, such as microbial straw decomposition and straw-to-fuel models, are being replicated beyond initial pilot sites in practical, field-level applications.

The project also exceeded its outreach targets by training 6,509 new farmers (vs. 6,000 planned), which is critical for replication, as it builds local knowledge, skills, and ownership, enabling farmers to adopt, adapt, and further disseminate sustainable practices through community and cooperative networks. These results demonstrate that the project’s approaches are not only effective but practically replicable at scale within the national context.
Furthermore, the programme design incorporates mechanisms to extend replication beyond the immediate project footprint, including national government involvement in knowledge sharing events and regional knowledge-sharing platforms such as the regional forum, which create opportunities for cross-country learning and wider adoption across Southeast Asia. However, while replication within project-supported areas is well evidenced, there is currently limited evidence of independent, self-sustaining uptake beyond these direct interventions, or of large-scale institutionalisation that would ensure continued replication without support.

(8) Sustainability (15%)

Metrics

Metric	Target (2025/26)	Data (2025/26)	Achieved
Volume of finance leveraged	£75,000	*£131,000*	*Metric achieved and exceeded*
People with sustainable livelihoods created or protected	14,100	*14,153*	*Metric achieved and exceeded*
Number of education campaigns implemented in schools	5	*5*	*Metric achieved*
Awareness - Number of people reached	6,125	*9,056*	*Metric achieved and exceeded*
Capacity – Number of people informed through TA	11,305	20,462	*Metric has been achieved and exceeded.*
Adoption of a Health and Pollution Action Plan	1	*1*	*Metric has been achieved*
Number of air quality monitors remaining in country	10	*38*	*Metric has been achieved and exceeded.*
Number of networks developed	1	*1*	*Metric has been achieved*

Indicator selection narrative:

The work in Vietnam will be considered sustainable if change is likely to be sustained once ICF support ends. The volume of finance leveraged reflects the project's ability to attract and mobilize additional resources, ensuring continuity beyond initial funding. The creation or protection of sustainable livelihoods demonstrates lasting socio-economic benefits for communities, combining both environmental and poverty objectives. Education campaigns in schools and the number of people reached through awareness efforts contribute to the legacy of the programme through encouraging behaviour change and influencing values in future generations. The technical assistance provided builds local capacity, empowering individuals and institutions to maintain and expand pollution reduction efforts. The Health and Pollution Action Plan will provide a framework for Uganda to take forward beyond the programme. Whilst air quality monitoring equipment will remain in country with agreements in place to ensure ongoing data collection and maintenance. The development of the environmental health network in Vietnam will provide a framework for experts and interested parties to build relationships beyond the programme.

Justification of score:

A score of 4 was awarded, as KPIs were achieved and in some cases exceeded demonstrating that programme's outcomes are likely to endure beyond ICF support, while some elements of long-term financial and systemic sustainability remain only partially evidenced.

Sustainability is achieved where changes are embedded within local systems, capacities, and behaviours so that they continue independently after project support ends. The project has delivered 14,153 sustainable livelihoods (exceeding the 14,100 target), demonstrating tangible and lasting socio-economic benefits aligned with both environmental and poverty reduction objectives.

Sustainability is further reinforced through widespread awareness and behavioural change initiatives, with 5 education campaigns implemented in schools (meeting target) and 9,056 people reached (well above the 6,125 target). These efforts contribute to a longer-term legacy by influencing values and behaviours among current and future generations, increasing the likelihood that pollution-reducing practices will continue. In parallel, 20,462 people informed through technical assistance (exceeding target) reflects strong investment in local capacity and skills, equipping farmers, institutions, and stakeholders to maintain and expand sustainable practices independently over time.

At the institutional level, sustainability is supported by the adoption of a national Health and Pollution Action Plan (HPAP), which provides a formal, government-endorsed framework for continued action beyond the programme lifecycle. Similarly, the retention of 38 air quality monitors in-country (far exceeding the target of 10), alongside arrangements for continued use, ensures that technical infrastructure and data systems remain in place to support ongoing decision-making and accountability. The establishment of the Vietnam health network further strengthens sustainability by enabling ongoing coordination, knowledge exchange, and relationship-building among experts and institutions.

However, while these achievements provide strong evidence that many programme benefits will persist, there are still limitations in demonstrating fully self-sustaining systems. In particular, the scale of leveraged finance remains relatively small, and there is limited evidence that long-term financial mechanisms, revenue streams, or market incentives are sufficiently developed to support continued scaling without external input. While capacity, awareness, policy frameworks, and infrastructure are well established, the extent to which these will translate into fully autonomous continuation and expansion of activities remains only partially evidenced.
Overall, the project demonstrates robust progress in embedding sustainable practices within communities, institutions, and national systems, supported by strong capacity building, policy integration, awareness raising, and retained assets.

x

Overall Score

Environmental Pollution Programme scored a weighted mean score of 4.4. A whole number is needed so 4.4 is rounded to a score of **4 – *partial evidence suggest transformational change is likely or already occurring*.**

TOC Level	Criteria	Score	Weighting	Weighted Score
Driver	2. Capacity and capability increased	5	30%	1.5
	3.Innovative	5	20%	1
	4.Evidence of effectiveness is shared	4	20%	0.8
Mechanism	5.Leverage/incentives for others to act is created	3	10%	0.3
	6.Replicability	4	5%	0.2
Enabler	8.Sustainability	4	15%	0.6
Total				4.4