GREENING NUTRITION

INTEGRATING ENVIRONMENTAL SCREENING INTO GAIN PROGRAMMES



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Oliver Camp, Roseline Remans, and Jessica Colston



ABOUT GAIN

The Global Alliance for Improved Nutrition (GAIN) is a Swiss-based foundation launched at the UN in 2002 to tackle the human suffering caused by malnutrition. Working with governments, businesses and civil society, we aim to transform food systems so that they deliver more nutritious food for all people, especially the most vulnerable.

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The Global Alliance for Improved Nutrition (GAIN) Rue de Varembé 7 1202 Geneva Switzerland T: +41 22 749 18 50 E: info@gainhealth.org



www.gainhealth.org

SUMMARY

Food and nutrition security are highly dependent on the environment, yet current food systems continue to degrade the environment on which they depend. To sustainably address food and nutrition insecurity, we must include environmental considerations in nutrition programmes, not only strategically at a high level, but also operationally.

GAIN's Environment Screening Tool represents a key step towards systematically incorporating environmental considerations into GAIN's programmes. It is designed to enable a rapid self-assessment, which identifies environment-related risk factors, prompts mitigation actions, and encourages teams to explore opportunities for environment-nutrition win-wins. In each of ten pilot projects, concrete, actionable entry points to 'green' the project were identified through application of the tool. An accompanying co-learning process supported the tool's actionability and contributes to engagement with GAIN partners. GAIN staff have welcomed capacity building to become more environmentally sensitive and engage with environmental partners.

The success of integrating environment into nutrition programmes can be initially monitored by considering concrete environmentally sensitive actions taken and capacities built, followed by tailored impact measures. Its success relies on strategy, partnerships, and fit-for-purpose processes and tools. Examples of this are outlined in this working paper and presented as work in progress in the spirit of continuous learning, reflection, and documentation.

KEY MESSAGES

- It is feasible to integrate environmental considerations operationally and systematically into nutrition programmes. The screening tool is a practical approach to enable this.
- The tool was piloted on ten different nutrition projects. In each of these, concrete opportunities for integrating environmental co-benefits or risk mitigation were identified.
- Trade-offs between nutrition and environment sometimes exist. The tool and related process help make potential trade-offs explicit and visible. This is important to stimulate long-term thinking, planning, and partnerships.
- The process for integrating environment into nutrition programmes is not clear-cut. Collaborative learning and adaptive management throughout the process are critical.
- Integrating environment and nutrition is not a choice, it is a must-do to address trade-offs and manage risks at the programme and broader societal level. It also offers opportunities to innovate, improve, and scale nutrition solutions.

BACKGROUND AND OBJECTIVE

A fundamental paradox in our current food systems is that the ways we produce, process, transport and consume food, continue to degrade the environment that our food and nutrition security depend on.

There is mounting evidence of negative consequences of climate change and environmental degradation on human nutrition worldwide, from both direct and indirect effects, mediated by ecosystems and socioeconomic systems (2). These impacts are complex and multifaceted, affecting various aspects of the food system and individuals' access to and consumption of nutritious foods.



Figure 1. Multi-faceted interactions between environment and nutrition

This figure illustrates the multi-faceted interactions between environment and nutrition. The figure builds upon existing frameworks of determinants of nutrition (UNICEF, 1990 & 2020), social-ecological systems (Ostrom, 2009), food systems and nutrition (HPLE 2017), and the nexus between climate, biodiversity, and nutrition (FAO, 2021). The figure does not aim to be comprehensive but to outline major domains and give examples of the various pathway components through which environment impacts nutrition (purple boxes), and through which nutrition, and in particular food systems, impact the environment (light-brown boxes).

At the same time, current food systems continue to be a major contributor to climate change and environmental degradation (3,4,5) (Figure 1). Limiting the increase in global temperatures to 1.5 degrees Celsius above pre-industrial levels and bending the curve on biodiversity loss are unachievable without transformative changes in food systems (3,4,5).

To combat malnutrition sustainably, these interdependencies between nutrition, climate, and environment need to be taken into account explicitly, both at strategic and operational level.

GAIN, as a nutrition NGO, aims to take environmental considerations seriously. GAIN's purpose is to advance nutrition outcomes by improving the consumption of nutritious and safe food for all people, especially those most vulnerable to malnutrition.

GAIN believes that transforming food systems to make them work better for people's nutrition and health in a sustainable way is one of the biggest challenges facing humanity in the 21st century. GAIN pursues this mission by supporting countries and key stakeholders in implementing proven and new solutions to malnutrition while engaging in national and global arenas to influence the context of broader food, health, and development strategies that contribute to the achievement of the United Nations Sustainable Development, environment, and nutrition communities.

GAIN's ambition to ensure access to healthier diets for the most vulnerable is particularly affected by climate and environmental shocks and challenges (1). GAIN's environmental strategy explicitly recognises that nutrition goals cannot be achieved without addressing climate and other environmental challenges (6). A key question is how.

A growing evidence-base and a number of strategic reports indicate multiple options for policies and actions to manage potential synergies and trade-offs between nutrition and environment (7 -14, among others). For example, Caleffi et al. identified 45 actions considering co-benefits and trade-offs between environmental sustainability and nutrition (11). It is further promising that nutrition and environment are increasingly integrated together into high-level frameworks, strategies, monitoring efforts, and cross-sectoral partnerships (6-13, among others).

Frameworks and pathways for change are early signals of transformative change (12). But, moving a step further, how can environment systematically and operationally be integrated in on-the-ground nutrition programmes?

As a start to achieving that outcome, a GAIN environment working group together with an environmental consultancy has developed a simple, user-friendly Environment Screening Tool to be used by all project teams across the organisation. The purpose of the screening tool is three-fold (Figure 2): 1) to ensure GAIN is minimising harm to the environment; 2) to meet donor expectations on environmental outcomes; and 3) to build knowledge and awareness. The tool was consequentially piloted with ten different nutrition projects of GAIN. This paper discusses the tool, initial results, and ways forward. This is work in progress, and this working paper aims to document the evolution and learning.



Figure 2. Purpose of the Environmental Screening Tool

METHODOLOGY

TOOL DEVELOPMENT PROCESS

GAIN's Environment Working Group (EWG) worked together with Accenture Development Partners to develop a screening to with the following criteria: 1) easy-touse by GAIN programme teams, 2) taking a holistic and food systems approach to environment and nutrition interlinkages, including climate as a critical challenge but also including other environmental domains, 3) building upon existing tools, frameworks, and evidence, and 4) being flexible to accommodate the diversity of GAIN programmes.

The group considered the application of environmental considerations in GAIN programmes to date and found that the existing programme portfolio was considering environmental impacts to a varied extent. A few programmes had already adopted a high-level approach to assess impacts on the natural ecosystem, whereas others had not considered environment in the programme design, implementation, or assessment at all.

The group also conducted a review of existing tools and identified how they would need to be adapted for GAIN's purposes while also being able to be integrated into existing approaches for project management, planning, and implementation. This review showed that GAIN needed to consider metrics from multiple sources to holistically address programme impacts on the natural ecosystem. From the literature, five relevant environmental assessment frameworks were identified, such as the European Sustainable Food and Nutrition Security (SUSFANS) framework (16) and the Food Systems Countdown Initiative (12). The review also identified three sustainability key reporting standards, including the Global Reporting Initiative, and related environmental digital tools, for example the FutureFit SDG Hierarchy Map. From the frameworks and reporting standards, ten environmental levers were identified for validation with programme managers (17). These levers also align with the environmental domains of the Food Systems Countdown Initiative (12) and with environmental data categories of the Food Systems Dashboard (15).

Box 1. Ten impact levers of the environmental screening tool

- 1. Strategy, Governance, and Risk Management
- 2. Environmental Regulation Compliance
- 3. Supplier / Partner Environmental Maturity
- 4. Energy
- 5. Emissions
- 6. Biodiversity and Land Use
- 7. Soil
- 8. Materials
- 9. Water and Effluents
- 10. Waste

Based on the diversity of GAIN programmes, and building upon existing tools and frameworks, six key implications for the environmental screening tool guidelines were further taken into account in the development of the tool:

- GAIN's nutrition programmes cover different phases of the food value chain, which should also be considered in the structure and specific questions of the tool.
- Environmental considerations should be included early in project planning, followed by check-ins later in the project.
- Users without deep environmental expertise should be able to conduct the assessment.
- Impact levers assessed should be comprehensive and adaptable depending on respective project activities.
- Results of the assessment should be easy to understand and reportable.
- Suggestions for mitigation actions should be provided to address the assessed impact.

The tool was first developed in Microsoft Excel format but later transferred to an easierto-use online digital platform in collaboration with Node Digital.

TOOL STRUCTURE AND GUIDELINES

The Environment Screening Tool is available as an online self-assessment tool – an open-access test link is available <u>here</u> (note that this link will lead to an updated version of the tool, to be further described in a future working paper). The tool prompts project teams to consider risks and opportunities around ten clustered environmental impact levers, asking several questions about each of them at the inception/design phase, during implementation, and after completion of the project. The tool thereby allows teams to a) identify the 'impact levers' likely to be associated with their project and b) delve deeper into each of the relevant impact levers to tackle specific impact pathways, risks, mitigation actions, and opportunities for positive impact. The tool is accompanied by a set of guiding materials including a short video, user guidelines, and a straightforward five-step process, outlined in Figure 3.

TOOL PIONEERING PROCESS

The tool and process were piloted throughout 2022 with a diverse set of ten GAIN projects (Table 1), most of which came under a new portfolio of work that was in its inception period. In the ten workshops, the environment technical support team took the project implementation teams and partners through a guided discussion designed to analyse project activities in the context of the impact levers, considering both the effects of the environment on the project, and the effects of the project on the environment.

STEP 1 Co-learning working session STEP 2 Self-assessment using online tool

needed

STEP 3 Quality check and fine-tuning STEP 4 Summary and report of screening

Facilitated session organised with project team, relevant global teams and where possible, external partners (approximately 1 - 2 hours)

Aim to:

- Identify environmental impacts of project (direct and indirect, positive and negative) under the 5 levers
- Agree concrete actions to take forward, linked to the project activities





Complete online self-assessment tool, informed by

Select most relevant levers and assess risk, adding

results of workshop (approximately 1 – 2 hours)

Environment team to review and support where

in mitigation actions where relevant

Generate graph using results of online tool & summarise key risks, opportunities and actions to take forward to be included in project inception report etc. (approximately 30 min. - 1 hour)

STEP 5

Inclusion of

actions in

operational

planning

Include mitigation actions in project planning, operations and reporting



Figure 3. Five-step process accompanying the implementation of the Environmental Screening Tool. First, a co-learning working session is facilitated to discuss project activities and identify the 'impact levers', including any potential environmental risks or benefits associated with each one. Second, the online screening tool is completed by the project team as a collaborative exercise. Third, the environment team performs a quality check and, where useful, suggests places to fine-tune. Fourth, the results are summarised, and a write-up is included in project documentation. Fifth, an essential step is to incorporate the risk mitigation actions and new ideas for positive impact in project plans and results frameworks. By doing so, project teams can ensure that there is follow-up and that the actions are integrated into existing workstreams. Time estimates depend on the complexity of the projects.

Table 1. Ten pioneering projects for the Environmental Screening Tool, with main identified risks and opportunities

	Project name	Project primary objective	Environmental risks	Environmental opportunities
			Impact levers identified as high risk	Examples of mitigation actions identified
1	Pakistan Access to Better Dairy – greening and scaling	Increase access to better dairy products Reduce loss and waste in dairy sector and increase consumption of nutritious dairy by-products, including a whey- based drink	 Production footprint associated with dairy production (emissions, biodiversity, land use, water) Whey wasted rather than used to contribute to soil fertility or nutrition Energy, water, and material use for whey processing and packaging 	 Increase nutritional value from the same amount of milk produced and processed through efficiency gains: using by-products (e.g., whey) as a nutritious ingredient Investigate current use of whey in terms of contribution to soil fertility, pollution of water streams Minimise waste by addressing poor handling practices Promote use of solar energy
2	Tanzania Access to Better Dairy – greening and scaling	Increase consumption of nutritious dairy products, such as a 'matindi' fortified yoghurt drink. Work on milk handling and waste, including using by- products as inputs for other nutritious foods	 Production footprint associated with dairy production (emissions, biodiversity, land use, water) Energy, water, and material use for fermenting and packaging 	 Focus primarily on efficiency: monitor waste in processing and ensure that by-products (e.g., whey) are used as a nutritious food ingredient in the yoghurt. Maximise nutrition benefits through fortification. Address food loss and waste associated with poor handling and storage practices.
3	Ethiopia Access to Better Dairy – greening and scaling	Increase consumption of nutritious dairy products by creating demand (including through religious leaders and by addressing cultural norms) and addressing access constraints. Specifically, working with SMEs	 Emissions associated with dairy production Packaging materials High losses (14%) in milk value chain. Waste due to low consumption 	 Work with implementing partners to promote sustainable production practices Focus on reducing waste associated with fluctuating consumption Use automated milk dispensers to minimise material (packaging) waste Promote use of cold chain technologies in institutional settings Work on dairy policy to improve production practices, efficiency, food safety, and waste
4	Kenya: Providing 'Veg4All'	Increase consumption of vegetables in Kenya by increasing access through stronger value chains and increasing demand by addressing critical issues of safety, freshness, seasonality, taste, affordability, and access.	 Increased energy use and emissions through measures taken to reduce food loss and waste. Impact on water use and water quality due to increased vegetable production Limited control over production practices of suppliers 	 Establish partnerships to reduce excessive agrochemical use in vegetable production Smart use and management of local agrobiodiversity, e.g., targeting African green leafy vegetables Reduce loss and waste of vegetables along the value chains
5	Mozambique: Increasing Consumption of Sustainable Animal- Source Foods	Increase consumption of nutritious animal-source foods (fish and chicken parts) by increasing access through strengthened value chains.	 Higher emissions (and other environmental impacts) inherent in animal-source foods. 	 Increase supply by focusing specifically on loss and waste reduction and use of the whole animal. For fish: reduce waste by investing in solar drying and cooling.

6	Nigeria: Enhancing Access to Safe, Nutritious Diets (ENSAND)	Ensure 915,000 children are eating at least one egg per week through improved supply, access, and demand - working with poultry associations, aggregators, school meal programmes, and cultural norms around egg consumption.	 Impact of increased egg production (run-offs from chicken manure, land use [direct and to provide feed], waste [carcasses, manure, loss of eggs] Waste at market level, as well as water and energy use issues at market. 	 For chicken parts: increase demand for all parts of the animal, and develop logistics, distribution hubs, cold storage, and solar freezers. Work with poultry association to promote sustainable production practices, including sustainable feed options, waste management, and energy use. Address cold chain infrastructure and handling / storage practices associated with food loss, waste, and safety. Use renewable energy sources and promote recycling of materials.
7	Nigeria: Strengthening Nutrition in Priority Staples (SNiPS) - <u>Biofortification</u>	Increased consumption of safe, nutritious foods among smallholder farmers and the wider population. Strengthen value chains of priority staple foods, including production of biofortified crops; Improve food access in the workplace; and work with SMEs in the rice, maize,	Production footprint associated with production of biofortified crops (water use, land use, emissions, energy)	 Promote sustainable production practices (Good Agricultural Practices) and training to government agricultural development programmes. Support on inputs (fertiliser, seed) and best practices through training. Review agronomic practices, including minimising use of pesticides, and optimise on-farm storage to reduce losses. Use crop varieties requiring less water. Select suppliers according to environmental standards and compliance with regulations.
8	Nigeria SNiPS - Workforce Nutrition	sweet potato, and cassava value chains to strengthen supply.		 Primarily a demand-side campaign, offering opportunities to promote healthy and sustainable diets and to advocate reduction of food loss and waste.
9	Nigeria SNiPS - <u>Business</u> <u>Support</u>			Deliver training on handling, packaging, storage, value- addition, food safety, and food loss and waste. Deliver training with environmental bodies.
10	India: Workforce Nutrition	Increase consumption of diverse, nutritious foods on tea estates through various supply, access, and demand-side measures. Promote availability of nutritious foods in shops on tea estates through a local distribution model linking retailers to wholesalers. Educate people living on estates to understand nutrition and healthy cooking.	 Water, land, soil, and emissions associated with production. Materials, energy, and emissions associated with processing, distribution, and storage. Food loss and waste 	 Promote sustainable production practices and supplier selection via partners involved in supply. Promote a healthy and sustainable diet in consumer communications. Maximise inherent benefits of short, efficient supply chains to Fair Price Shops on the tea estates. Minimise food loss and waste through inventory management and behaviour of value chain actors. Promote food waste reduction through consumer behaviour change campaigns. Continue litter pick-ups and provision of solar-powered products and clean cooking devices

RESULTS

APPLICABILITY

The Environmental Screening Tool was piloted with ten very different GAIN projects (Table 1). The projects covered different geographies and social-cultural settings (Pakistan, India, Nigeria, Mozambique, Kenya, and Ethiopia), focused on a diversity of food groups (vegetables, animal-source foods, and biofortified staples), and used different levers of change (workforce nutrition, value chain approaches, business empowerment, and policies, among others). The tool was applicable and relevant to all the ten projects. For each project, at least one environmental lever was identified as relevant, considering project impact and/or potential co-benefits. Some specific questions or environmental levers were not applicable or relevant for specific projects; this could be clearly indicated in the tool. On average, 83% of questions from the screening tool were completed and identified as relevant for a given project, and between four and nine environmental levers were selected per project. The environmental levers that were across all ten projects were: 1) governance, 2) compliance, 3) waste, and 4) energy. For those, in each project, concrete entry points to make a positive impact on minimising waste and emissions could be identified.

This illustrated that the Environmental Screening Tool was applicable across projects, and for each project, relevant environmental entry points could be identified.

RISKS AND OPPORTUNITIES ACROSS TEN PROJECTS

In each of the ten projects, concrete opportunities for integrating environmental cobenefits or risk mitigation could be identified (Table 1). Some of these opportunities were already included in the original design of the project, for example better waste and by-product management in the Access to Better Dairy projects. Others surfaced during the screening and co-learning process, for example better monitoring and management of what happens currently with the whey by-product in Pakistan. Potential trade-offs were also identified and need to be recognised. For example, fermentation processes to reduce waste contribute to energy and water use. The environmental screening tool and process helped to make these trade-offs visible and explicit, to consider them in relation to the benefits, and to identify potential ways to mitigate or minimise their environmental impact.

Several of the mitigation or co-benefit actions fall outside the scope of GAIN's area of work, for example sustainable production practices for livestock or vegetables. In these cases, potential engagement or partnership with organisations active in these areas of work were identified. The insights from the tool also gave concrete reasons to reach out across sectors. For example, in Pakistan, the GAIN team contacted Pakistan's environmental policy department to ask about local rules and regulations for handling whey.

Across projects, one re-emergent opportunity included more specific efforts for management of food losses and waste.

CASE STUDIES

Here we describe in greater detail three case studies of projects that pioneered the tool and that represent different types of programmes in GAIN's portfolio. Figure 4 synthesises the scores of the screening tool of these three case studies. The results indicate that for each project, areas of environmental risks (orange-red) and opportunities (green) were identified. Below we describe these three cases and provide insights on specific environmental entry/leverage points identified through the screening process.



Figure 4. Initial screening scores at the design phase of three pioneering projects. A) Access to Better Dairy in Pakistan, B) Vegetables for All in Kenya, and C) Enhancing access to Safe and Nutritious Diets (ENSAND) in Nigeria. Scores indicate areas for improvement and risk mitigation are in orange and red, and areas of opportunities for mitigating risks and/or co-benefits for the environment are in green.

Case study 1: Pakistan Access to Better Dairy - Greening and Scaling

The Access to Better Dairy project in Pakistan, funded by DANIDA, sought to increase access to affordable, safe, and nutritious milk-based products, targeting children and women in particular, and thus to help reduce the very high stunting rates in the country. This required catalysing the development of the dairy value chain and market, increasing profitability for farmers and processors, and creating a more regular supply of milk and dairy products for low-income consumers.

One of the key opportunities identified was to repurpose the so-called 'waste' product of cheese production: whey. This would bring triple benefits: to nutrition, as

the whey is a good source of highly bioavailable proteins and (especially when fortified) other nutrients; to the environment, as this allows more nutritional value to be derived from the same production processes; and to business, as the whey-based product could represent an additional income stream for processors. Any remaining by-product that could not be converted to a nutritious food could also be considered as a component in a fertiliser or as a feed supplement for local farmers. A full summary of the co-learning workshop can be found <u>here</u>.

Case study 2: Kenya Fruit and Vegetable Value Chain Project

The Veg4All value chain project in Kenya, funded by the Dutch Ministry of Foreign Affairs, is designed to increase access to vegetables through the development of supply and demand. GAIN's work focuses on the middle of the value chain: from aggregators through to last-mile vendors. This requires a holistic approach that addresses handling, storage, transportation, and retailing practices among value chain stakeholders, as well as the physical infrastructure throughout storage, transportation, retail, and markets.

Based on the initial screening and scientific insights, four leverage points of the project were identified and discussed to strengthen synergies and manage trade-offs between nutrition, environment, and livelihoods: 1) reduce food loss and waste, 2) leverage local agrobiodiversity, 3) trigger demand to reduce use of agrochemicals, and 4) support more efficient water use and management. Three of these entry points reducing loss and waste, using local agrobiodiversity, and reducing use of agrochemicals - were already part of the project design but had not yet been envisioned as an environmental strategy. Management of water use and quality was raised as important because in peri-urban settings, wastewater may be used to cultivate vegetables. This can come with certain food safety risks and contributes to a negative perception among consumers. Water quality is also very important for washing vegetables before consumption. Further, but more outside the scope of GAIN's area of work, vegetables generally require large amounts of water for production. It is thus important to work with partners to strengthen water-use efficiency and take into account potential water stress in vegetable production and processing (e.g., washing processes). A summary of the co-learning workshop can be found <u>here</u>.

Case study 3: Nigeria Enhancing Access to Safe and Nutritious Diets

The ENSAND project in Nigeria focuses on the value chain for eggs, in particular seeking to increase access to eggs through school meal programmes and to families with children through the open market. As well as a consumer-facing component (aimed at strengthening demand for eggs and addressing cultural constraints to egg consumption), the project works with the Poultry Association of Nigeria (PAN) on distribution, coordination, finance, and business services for producers, as well as with aggregators on their operations and financial management.

During the screening, it was flagged that scaling up egg production may lead to increased volume of dead birds and other related by-products, including faeces,

depending on production processes. A related risk identified was that poultry production might contribute to contamination of surface and ground water due to increased runoff of chicken manure. Through working with PAN, the project will adhere to all existing environmental and animal welfare standards for egg production. In addition, participatory capacity-building with smallholder poultry farmers will provide an opportunity for increasing awareness of environmentally harmful practices, including preventative measures at the community level. Further, some crop farmers use organic waste from poultry farmers as manure, which can contribute to soil fertility and improve production and affordability of food items.

Across the project, there are opportunities for reducing food loss and waste through improved distribution channels and increased demand for eggs. Further, sourcing eggs locally through home-grown school meal programmes may reduce transportation distances and energy use in distribution.

CO-LEARNING AND CAPACITY BUILDING

Collaborative learning calls or workshops stimulated critical thinking and exchange of experiences and knowledge. Participants included various GAIN staff and, when feasible, external partners, such as project implementers and organisations with relevant environmental expertise. In five of the co-learning processes, short real-time surveys captured shifts in thinking before and after the workshop or call. All co-learning workshop participants noted having learned something new that was relevant for their work. This included new thinking on environmental leverage points relevant for the project. For example, Figure 4 highlights that after the co-learning call for the Access to Better Dairy project in Pakistan, participants explicitly included governance and risk management as an additional lever that was important to act upon. This related to the discussion on current uses of whey by farmers and communities, the risks/benefits associated with redirecting this, and the related local environmental rules, regulations, and guidelines.



'What environmental impact levers do you consider most relevant to act upon for the project?'

Figure 4. Insights from a real-time poll. Responses to the question 'What environmental impact levers do you consider most relevant to act upon for the project?' illustrate new thinking fat the end of the Access to Better Dairy co-learning working session. Specifically, at the start of the working session, none of the participants identified governance and risk management as a relevant lever to act upon, while at the end of the working session, five out of six participants, selected this lever as relevant to act upon.

DISCUSSION

Integrating environment into nutrition is not just a choice, it is a must-do to address trade-offs and manage risks at programme and societal levels. It also offers opportunities to innovate, improve, and scale nutrition solutions for nutrition-environment co-benefits. The environmental screening tool provides a concrete and feasible entry point for nutrition programmes to connect to the environmental dimension of food systems. Taking a food systems approach, the tool has been designed as an easy-to-use self-assessment approach (Box 2). It serves as a qualitative screening tool to identify risks and opportunities and build organisational awareness. It does not give quantitative estimates of environmental footprints; project-specific measures would be needed to monitor quantitative environmental footprints.

Box 2. What can the environmental screening tool do for you?

What the tool can help do:

- Assess the biggest environmental risks and opportunities of a project
- Identify mitigation actions to reduce harm or areas to increase positive impacts

What the tool is not:

- Detailed or quantitative assessment of environmental impact (e.g., greenhouse gas emissions, biodiversity loss)
- Complex or in-depth assessment that requires specialist or external support

Five overarching take-aways were identified from pioneering the environmental screening tool with the diversity of ten GAIN projects. First, accompanying the application of the tool with an open, facilitated, and structured co-learning discussion was found essential to integrate environment in nutrition programmes in an actionable way. The project teams bring deep knowledge of the proposed activities and the local context, while the environmental technical support brings expertise around impact pathways and potential environmental effects of the work. The workshop and the tool facilitate the discussion and bring structure. Inclusion of partners, whether private-sector collaborators or NGO implementers, in these collearning processes brings major benefits, as they bring insights and expertise based on their areas of focus. Their knowledge enables a deeper discussion of the impact pathways beyond the immediate scope of GAIN's activities.

Second, all ten teams were able to identify immediate, direct entry points for making project activities more sensitive of environmental impacts, especially where those issues were visible locally (e.g., acting upon food waste or excessive use of plastic packaging materials). Similarly, mitigation actions were easier to identify and introduce into project plans when they were associated with direct impacts and areas within GAIN's control.

Third, wider, less immediate, less visible, 'systemic' effects (e.g., implications of increased land use or reliance on imported feeds or agri-inputs) were more challenging to pinpoint and identify ways to manage, as these are mostly out of GAIN's control. 'Indirect' mitigation actions, especially those relying on third parties, required more creative thinking to understand how GAIN's influence could be used to

shift others' actions towards more environmental sustainability (e.g., through policy action, work with partners, advocacy, or training to other organisations). But making these explicit and more visible contributed to enhanced understanding and longer-term thinking among the teams. It also enhanced capacity to engage with external partners active in areas of work that fall outside GAIN's scope.

Fourth, the strength of the GAIN Environmental Screening Tool was its relative simplicity to complete compared to more in-depth, quantitative, data-driven tools that would require greater investment of time and resources. This approach enabled teams to understand and address their environmental impact without having to delay projects or dedicate a large budget to a full environmental impact assessment.

Fifth, the output must include clear follow-up actions and goals. As well as an analysis of the risks and opportunities, it is important to identify specific additions to the project implementation plan and results framework that ensure measures are taken to maximise the good impacts and minimise the bad ones.

A MUTUALLY EMPOWERING COMMUNITY OF PRACTICE AND LIST OF ACTIONS

After publicising the Environment Screening Tool, a group of interested parties came together to form a Community of Practice where various organisations could share information on the critical topic of integrating environmental considerations into nutrition programming—including new approaches and attempts in addition to refined 'best practices'. Members currently include Forum for the Future, FAO, INCAP, WFP, Wellspring, GreenBiz, IFPRI/HarvestPlus, OCDC, CSIRO, WRI, FOLU, Netherlands Food Partnership, and several other NGOs and development organisations.

Through the interactions of the Community of Practice and the implementation of the Environmental Screening Tool, a practical set of actions to integrate environmental considerations into development programmes has been developed, as outlined in Box 3.

NEXT STEPS

The pilot phase uncovered various insights about how the tool and process can be streamlined and optimised. Simplicity is key, so a first step will be to reduce the number and complexity of questions in the tool, shifting the focus from a 'wide and deep' analysis to an analysis that focuses on the key risk factors and opportunities in detail. This will help to retain focus and ensure that the outcomes can be integrated into the project. Further efforts are needed to support the development of mitigation actions after risks are identified, especially in cases where the project teams lack environment specialists. Alternatively, increasing efforts to partner with local organisations offering environmental expertise could fill this knowledge gap and help increase skills. Going forward, GAIN will continue to use the tool for new projects across a wide range of programmes and countries. In time, the current hands-on approach will transition to a light-touch engagement, relying more on guidance materials and a wider effort to increase skills and knowledge in the organisation.

Box 3. Actions to integrate environmental considerations into development programmes

- 1) Establish an overarching strategy to guide environment work. Make clear whether the approach is to 'do no harm' or to actively seek out environment win-wins.
- 2) Engage colleagues from all relevant organisational teams and functions. Share the vision and strategic intent and try to do so in a way that makes it fun and engaging.
- 3) Identify potential external collaborators, such as partners with environment expertise or implementing agencies with the ability to drive change on the ground.
- 4) Review the systems, processes, and tools needed to a) assess and b) address environmental issues. Make sure that any new assessments, analyses, and planning are integrated into usual project management processes. Tools might be simple paper-based questionnaires, or you may wish to develop an online survey or analysis tool to support thinking.
- 5) Engage directly with project teams, partners, and experts. Air all environmental positives and negatives through an open discussion process, before prioritising the key 'impact levers' to address in the project.
- 6) Establish some baseline measures of the status quo and targets for postimplementation.
- 7) Plan, budget, resource, and formalise actions (e.g., in project planning documents) to achieve environment mitigation or co-benefits.

You can join discussions with other like-minded organisations through the Greening Programmes Community of Practice. To get involved, please email Oliver Camp (ocamp@gainhealth.org). For other enquiries related to GAIN's environment work and our screening tool, please contact Oliver Camp and/or Jess Colston (jcolston@gainhealth.org).

CONCLUSION

An easy-to-use environmental screening tool was developed to start integrating environmental considerations systematically and operationally into GAIN's nutrition projects. The tool was piloted and demonstrated to be applicable and relevant across ten very different nutrition projects. For each of the ten projects, concrete and feasible entry points to 'green' the project were identified. A practical collaborative learning process was included in the tool application to make the insights concrete and actionable and to build organisational capacity. This further also contributed to partner engagement. A broader Community of Practice to exchange experiences on integrating environment into development programmes was established, and related practical guiding actions were formulated. Next steps include mainstreaming the Environmental Screening Tool across GAIN's programmes and following up on greening actions.

REFERENCES

- FAO, IFAD, UNICEF, WFP and WHO. 2023. The State of Food Security and Nutrition in the World 2023. Urbanization, agrifood systems transformation and healthy diets across the rural–urban continuum. Rome, FAO. https://doi.org/10.4060/cc3017en
- 2. Owino V, Kumwenda C, Ekesa B, Parker ME, Ewoldt L, Nanna R, Warren LT, Tome D. 2022. The impact of climate change on food systems, diet quality, nutrition, and health outcomes: A narrative review. Frontiers in Climate 4, 2624-9553. DOI 10.3389/fclim.2022.941842
- 3. IPCC, 2019. Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.
- IPBES, 2019. Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES secretariat, Bonn, Germany. 1148 pages. <u>https://doi.org/10.5281/zenodo.3831673</u>
- 5. UNCCD, 2022. Global Land Outlook (GLO2), Land Restoration for Recovery and Resilience, second edition.
- 6. UNICEF Conceptual Framework on Maternal and Child Nutrition, 1990
- 7. UNICEF Conceptual Framework on Maternal and Child Nutrition, 2020
- 8. Ostrom E. A General Framework for Analyzing Sustainability of Social-Ecological Systems. Science **325**, 419-422 (2009). DOI: <u>10.1126/science.1172133</u>
- HLPE, 2017. Nutrition and food systems. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome.
- 10. FAO 2021 Climate change, biodiversity and nutrition nexus: Evidence and emerging policy and programming opportunities. https://www.fao.org/documents/card/en/c/cb6701en
- 11. GAIN environmental strategy
- 12. Willett W, Rockström J, Loken B, Springmann M, Lang T, Vermeulen S, Garnett T, Tilman D, DeClerck F, Wood A, Jonell M, Clark M, Gordon LJ, Fanzo J, Hawkes C, Zurayk R, Rivera JA, De Vries W, Majele Sibanda L, Afshin A, Chaudhary A, Herrero M, Agustina R, Branca F, Lartey A, Fan S, Crona B, Fox E, Bignet V, Troell M, Lindahl T, Singh S, Cornell SE, Srinath Reddy K, Narain S, Nishtar S, Murray CJL. 2019. Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems. Lancet Feb 2;393(10170):447-492. doi: 10.1016/S0140-6736(18)31788-4.
- 13. UNFSS compendium of Food systems coalitions. https://www.unfoodsystemshub.org/docs/unfoodsystemslibraries/defaultdocument-library/Compendium-of-Food-Systems-Coalitions.pdf
- 14. DeClerck FA, Izabella Koziell, Tim Benton, Lucas A. Garibaldi, Claire Kremen, Martine Maron, Cristina Rumbaitis Del Rio, Aman Sidhu, Jonathan Wirths, Michael Clark, Chris Dickens, Natalia Estrada Carmona, Alexander K. Fremier, Sarah K. Jones, Colin K. Khoury, Rattan Lal, Michael Obersteiner, Roseline Remans, Adrien Rusch, Lisa A. Schulte, Jeremy Simmonds, Lindsay C. Stringer, Christopher Weber and Leigh Winowiecki. A Whole Earth Approach to Nature Positive Food: Biodiversity and Agriculture. <u>doi.org/10.48565/scfss2021-h174</u>
- 15. Caleffi S, Hawkes C, Walton S. 2023. 45 actions to orient food systems towards environmental sustainability: co-benefits and trade-offs Centre for Food Policy Research Brief February 2023
- 16. Fanzo, J. et al. Viewpoint: rigorous monitoring is necessary to guide food system transformation in the countdown to the 2030 global goals. Food Pol.(2021)

- 17. UNFSS country pathways https://www.unfoodsystemshub.org/member-statedialogue/national-pathways-analysis-dashboard/en
- 18. Climate Investment Fund (CIF) 2020. Signals of Transformative Change. https://www.itad.com/wp-content/uploads/2020/02/tc_signals_brief-1.pdf
- Fanzo, J., Haddad, L., McLaren, R. et al. The Food Systems Dashboard is a new tool to inform better food policy. Nat Food 1, 243–246 (2020). https://doi.org/10.1038/s43016-020-0077-y
- 20. Zurek M, John Ingram, Andrea Zimmermann, Maria Garrone, Martine Rutten, Inge Tetens, Adrian Leip, Pieter van't Veer, Muriel Verain, Emily Bouwman, Stephan Marette, Chiaoya Chang, Catharina Latka, Sara Hornborg, Friederike Seville Ziegler, Joost Vervoort, Thom Achterbosch, Ida Terluin, Petr Havlik, Andre Deppermann. A Framework for Assessing and Devising Policy for Sustainable Food and Nutrition Security in EU: The SUSFANS conceptual framework
- 21. Accenture Development Partners. 2021. GAIN Environmental guidelines : Findings from Literature and Interviews with Programme Managers.