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GENERATION HUMANITAIRE

Environmental Policy

Sommaire

General Information

Preamble

Triangle Génération Humanitaire's (TGH) Code of Conduct highlights the association's concern for environmental issues (commitment 11). As an association and a legal entity, TGH affirms its civic commitment to making the preservation of the environment and natural resources a central and constant concern and an integral part of its commitment to full accountability.

Since the creation of TGH, the issues of preserving the environment and managing natural resources have had to be addressed as part of its interventions. TGH is also a first-hand witness to the increasingly harmful consequences of damage to the environment - due to a variety of causes - in its intervention zones.

The main, most widely-document cause is, of course, the impact of climate change on natural resources (water, available land, etc.), on livelihoods (agriculture, forest products, etc.), and on the frequency of extreme weather events. According to a World Bank report,[1] the impacts of climate change will cause more than 143 million people to become climate refugees in the coming years as they seek to escape crop failure, water scarcity, or rising sea levels. The increased frequency of natural disasters, particularly in Asia, is another sign of accelerating climate change, and contributes to aggravating tensions and conflicts that lead to population displacements.

In this way, whilst TGH's core purpose remains reducing poverty and the suffering of populations in crisis, these environmental issues have a very clear impact on its work. However, rather paradoxically, TGH's activities have a high environmental cost. By its very nature, TGH's activity requires air transport and the consumption of goods including fossil fuels and plastics, which it indirectly imports despite its existing policy to prioritise local purchases. It also makes use of local natural resources which requires a responsible and sensitive approach. Moreover, the need for efficiency in emergency situations means the environmental impact is often considered as a secondary concern, and is not always taken as seriously as it should be, although TGH does make it a priority in the context of rehabilitation or development programmes.

1 - 2018. Groundswell: Preparing for Internal Climate Migration Washington, World Bank

This document aims to identify and promote the implementation of practical measures to better integrate environmental issues, in the broadest sense of the term, into the association's operating procedures and to better reconcile the need to both reach short- and medium-term programme objectives and address environmental issues.

Definitions

Before going any further, it is important to make the distinction between different environmental impacts in order to categorise them and think about how they can be limited. A distinction will be made between:

- Direct impacts, related to TGH interventions (e.g. the impacts of offices and programmes), and indirect impacts, from suppliers, operational partners and service providers, which relate to the consequences of the intervention.
- Local impacts, occurring on the site of the humanitarian intervention (e.g. the removal of natural resources for shelter or latrine construction) and global impacts (e.g. CO_2 emissions and deforestation due to unsustainable agricultural practices).
- Impacts that can be observed in the short term, during the project lifecycle (e.g. pollution from plastic packaging) and those that will be observed in the medium or long term, after the end of the crisis or the departure of the humanitarian actors.

Another distinction needs to be made within the programmes implemented by TGH. Amongst these we can identify three different types of actions based on how they take into account environmental issues, the extent to which they contribute to the environmental resilience of the populations supported, as well as their compliance with the principle of "do no harm":

- Actions aimed directly and primarily at contributing to mitigating environmental degradation and climate change. These actions aim to build the population's resilience to environmental shocks. Reforestation, disaster risk reduction and adapting agricultural practices to the climate, all come under this category.
- Actions which do not directly aim to mitigate environmental degradation but for which this objective is used as a guideline to determine the conditions in which they are implemented. The main objective of these actions is to provide services while building the population's resilience to environmental shocks. Environmental issues are in these cases cross-cutting issues taken into consideration from the start of the project design phase. For example, water supply programmes using renewable energy or food production using water-saving techniques fall into this category.

- Actions that do not include any environmental components but which integrate the optimised management of the resources required, regardless of whether these concern support activities (e.g. rationalising the transport of supplies) or the project activities directly (e.g. the packaging of distributed goods). The impact of these actions on the populations' environmental resilience is more general and indirect, but they are fully aligned with the "do no harm" principle.

The practical recommendations outlined in the following sections will voluntarily leave aside the technical aspects inherent to the first category of actions listed above, in order to focus on how environmental issues will be integrated across any programme, regardless of its nature and objectives.

Practical recommendations

The commitment made by TGH, and indeed the humanitarian community as a whole, to working towards more environmentally friendly interventions is a long-term process. It requires a profound change in the behaviour and practices of most stakeholders, whether local actors, suppliers or even donors, given the challenge of having them accept the costs involved in improving our environmental performance.

At TGH, committing to the environment requires undertaking in-depth work which in itself is a challenge. Although in theory it is easy to define more environmentally sound practices, integrating them into our projects in a practical way and managing them on a daily basis is a much more complex proposition. One issue, which is expected to become recurrent, concerns decision-making on the necessary trade-offs between the goal of responding to the humanitarian needs and that of limiting our environmental impact.

Any action will inevitably have an impact, some more than others due to the more or less urgent nature of the action in question and the room for manoeuvre it leaves to work on limiting our environmental footprint. As we move forward, this question of the trade-off between services rendered and environmental impacts will be better documented through practice and experience; nevertheless, it will initially have to be approached on a case-by-case basis, depending on the context and the conditions of the interventions, and this will no doubt continue in the future.

In parallel to this question which relates to its intervention principles, TGH is committed to identifying and promoting good practices, a set of practical actions, measures and provisions which can be used to limit our environmental footprint both as an organisation and specifically on each mission and programme. This work will be carried out on a continuous basis and will be accompanied by the gradual rollout of a set of documents and tools which will be regularly supplemented and enhanced.

Team information and awareness raising

Informing and raising awareness

- Internal survey to measure the level of knowledge and awareness of both expatriate and national teams.
- Demonstrate the limitations of the current situation (status report on current practices).
- Present the new climate challenges (brochure, desk e-mail).
- Raise awareness at weekly meetings.
- Allow all staff members to propose ideas for innovation.
- Send the staff memo on TGH's environmental approach (headquarters/mission) to all staff members (existing and new hires).
- Present the tools, resources and means available; initiate and lead group dialogue on the subject.
- Include an "environmental responsibility" component in the "our commitment" section of the TGH website.
- Encourage discussion and the sharing of experiences across missions.
- Lead a process to think about implementing environmental practices in the field prior to departure.

Training

- Identify accessible training and offer teams the opportunity to participate in specialised humanitarian sector training modules (MOOC, URD, Disaster Ready, etc.).
- Identify one or more driving forces within the team capable of disseminating environmental messages.

Ownership

- Involve staff members in working groups (“green teams”), including key point people who have been made aware of the issues and who are driving change towards increased environmental responsibility.
- Ensure staff members take responsibility by having them sign a commitment to comply with the principles set out in the TGH environmental Policy.
- Meet with staff members and ask them questions about their activities and discuss possible improvements with them.
- Conduct questionnaire surveys to assess staff members’ knowledge about the environment and involve them by asking for their ideas and suggestions.
- Encourage inter-NGO experience sharing.

Maintaining attention and mobilisation

- Publish articles on the actions implemented (social media posts, news section of the TGH website).
- Create a communication dedicated to the environment (e.g. a monthly e-mail, newsletter, etc.).
- Create an “environment” section on the TGH website.
- Implement an “improving environmental responsibility” approach via a dedicated “suggestions box” (headquarters/field/all).
- Develop a self-assessment tool and include this in the standard TGH toolkit.

Promotion

- Communicate on all the actions carried out, all the environmentally responsible practices implemented (quarterly/half-yearly or yearly publication on the website, e-mail to all the teams, a dedicated “Humanitarian Cafe.
- Highlight all the positive results achieved (reduction in electricity and water consumption, reduction and optimisation of the number of trips made, etc.).

Offices and operating principles

This section aims to promote environmentally responsible practices to ensure that overall operations on the missions impact the environment as little as possible. Although some measures have already been implemented at TGH headquarters and on some specific missions, the aim here is for each mission to conduct a systematic analysis, including a diagnosis and identification of corrective measures.

The recommendations set out below are examples of good practices, but the list is neither exhaustive nor universal and these measures will be more or less relevant and adaptable to the specific context in each field setting. These recommendations are set out under seven separate themes which are all equally relevant regardless of the context, and should all be analysed in the same way by each field operation:

1 - Water management

2 - Electricity consumption

3 - Thermal control of buildings

4 - Paper consumption

5 - Waste management

6 - Travel

7 - Purchases

1 - Water management

Examples of good practice

Knowing and monitoring consumption

- Assess your water consumption by taking regular readings to know your status in real time (inlet and outlet, water bills, meter readings).

Limiting consumption

- Check the taps are properly closed, that the flushes are working, report water leaks and ensure all installations are regularly maintained (seals, taps, flushes).
- Limit water consumption when doing household and hygiene tasks by not leaving the taps running.
- Rationalise the cleaning of vehicles and premises.

Preserving water quality

- Use environmentally-friendly cleaning products to limit the use of toxic household cleaning products.
- Prioritise the use of local and environmentally-friendly cleaning products where possible (e.g. black soap).

Involving staff and promoting good behaviour

- Communicate and raise awareness amongst the teams about how to save water when going about their daily tasks, raise awareness about limiting water consumption, and inform them of the procedure to follow in order to report a problem.
- Develop simple visuals adapted to the language and culture of the country and display them in key locations (e.g. near taps, toilets, etc.).

Re-using water

- Assess water consumption and study the possibilities for recovering water (closed circuit water systems or rainwater).
- Install rainwater collection systems and use the rainwater instead of drinking water to clean premises and vehicles.

Electricity consumption

Examples of good practice

General and building consumption

- Carry out a complete assessment of electricity consumption in the buildings by taking regular meter readings to understand the reality of consumption patterns (electricity bills, meter readings).
- Limit electricity consumption resulting from the thermal control of the building. In particular, ensure the air conditioning is used correctly (the temperature should not be set below 25°C) and prefer natural cooling where possible (opening windows at night and closing everything during the day, etc.).
- Ensure proper maintenance of the air conditioning systems.
- Improve building insulation.
- Rationalise the use of generators by adjusting their operating times to meet specific and collective needs (e.g. charging time).
- Ensure the provision of generators meets, but does not exceed, the need.
- Ensure that the generators are working properly by carrying out regular maintenance to avoid over-consumption.

- Rationalise the use of generators by adjusting their operating times to meet specific and collective needs (e.g. charging time).
- Limit the use of generators to the greatest possible extent by preferring alternative energy sources, particularly solar power, to supply equipment wherever and whenever possible.
- Ensure the air conditioning is used correctly: turn off the air conditioning and fans during the coolest periods of the day. Make sure all devices and systems are turned off when the room is empty.
- Whenever possible, use low-consumption fittings (light bulbs and small appliances).

Limiting the consumption of electrical and computer equipment

- Do not leave appliance chargers plugged in when not in use.
- Set standby settings on computers and appliances to minimise consumption in-between periods of use.
- Use multi-outlet sockets fitted with an on/off switch for printers and computers and turn them off when not in use.
- Check the energy consumption of office equipment before purchasing, change defective equipment and encourage the purchasing of energy-efficient equipment.
- Take care to turn off any devices which will not be used over the weekend (photocopiers, additional screens, printers etc.).

Limiting computer power consumption

- Use standby mode wisely: a computer in standby mode uses 20 to 40% of its power consumption when on, it is therefore important to turn it off as often as possible.
- Plug computers into a multi-outlet socket with an on/off switch as most computers continue to consume energy, even when switched off.
- Unplug the computer as soon as its battery is fully charged.
- Turn off computers when not in use.
- Reduce the brightness of the screen to reduce energy consumption.

Limiting electricity consumption due to e-mail and internet use

Simplify internet searches:

- Save frequently visited sites as favourites.
- Enter the URL of the website you are looking for directly into the address bar rather than systematically using a search engine.
- Use precise keywords and target your request when submitting a search request in order to solicit the search engines' servers as little as possible.

Manage your emails better:

- Limit the number of recipients of your emails.
- Limit the number of documents attached and their size (send compressed files, low resolution PDFs, hyperlink to a server instead of a document).
- Delete any attachments which remain attached to the message when replying to an e-mail.
- Manage your inbox by only keeping emails you need then deleting them when no longer needed, or filing them in a dedicated folder.
- Delete all spam e-mails immediately; if possible, install anti-spam software on your computers or e-mail system.
- Set your parameters to systematically delete unused e-mail addresses.

Limiting electricity consumption due to lighting

- Prefer natural light whenever possible.
- Replace conventional light bulbs with energy-efficient bulbs. Remove any halogen lamps, including low-voltage halogen lighting which consumes more energy and is more costly.
- Turn off the lights in any rooms not in use or when absent, and make sure you turn off all the lights at the end of the day.
- Install timer switches wherever possible (toilets, corridors, vestibules, etc.).

Alternative procurement

- Use renewable energies, especially solar power, wherever possible, including alongside a generator to limit its use.
- Whenever possible, prefer suppliers selling green, renewable energy; ensure the traceability of your supply chain and/or any other aspects leading to improved environmental performance.

Involving staff and promoting good behaviour

- Raise the teams' awareness around saving energy.
- Promote good practices (turning off lights, appliances), including through targeted signage.

3 – Thermal control of buildings

Examples of good practice

Knowing and monitoring buildings' thermal consumption

- Prefer to rent buildings which have been constructed sustainably using energy-efficient approaches (construction materials, insulation, orientation etc.).
- Carry out a complete assessment of electricity consumption in the buildings by taking regular meter readings to understand the reality of consumption and regularly collect data on consumption (electricity bills, meter readings).
- Limit electricity consumption resulting from the thermal control of the building. In particular, ensure the air conditioning is used correctly (the temperature should not be set below 25°C) and prefer natural cooling where possible (opening windows at night and closing everything during the day, etc.).

Making proper use of heating and cooling installations to ensure proper thermal control

- Know how to adapt the indoor and room temperatures to ensure compliance with standards for comfort using the heating, ventilation and air conditioning systems.
- Limit the use of heating (reducing the temperature from 20°C to 19°C results in a 7% saving on energy consumption) and programme the radiators based on the time of day, the outside temperature and the amount of sunshine.
- Regularly maintain heating installations and ensure all appliances comply with the relevant standards in force, change any defective or inefficient heating appliances, fit radiators with thermostatic valves.
- Keep the air cool to avoid the need to use the air conditioning: ventilate during the coolest hours of the day, keep doors, blinds and windows closed during the hottest periods.
- Fit offices with fans to minimise the use of the air conditioning.
- If it is absolutely necessary to use the air conditioning, set the temperature at 5°C below the outside temperature (if the difference between the inside and outside temperature is too great, there is a risk of causing thermal shock). The temperature should never be set below 25°C.
- Close the windows when the air conditioning is on.
- Regulate the temperature of the premises by turning the air conditioning off when the doors are open.

- Install thermostats in the different rooms.
- Turn off the heating or air conditioning completely at nights and weekends if the premises are not in use.

Ensuring the ventilation system is adapted to the building

- Prefer the use of efficient ventilation systems to regulate the air in the room (humidity levels, cooler air during hot weather).
- Regularly remove dust from the air vents.
- Prefer natural ventilation (windows).
- Use an appropriate ventilation system (air cycling, heat recovery etc.).
- The optimisation of ventilation should be considered from the outset of the initial phase to find premises for TGH on the mission.

Ensuring the proper insulation of the building

- Choose equipment that can adapt to the temperature (thermostatic valves, room temperature sensors).
- Progressively replace any poorly insulated windows.
- Improve building insulation to take advantage of its thermal inertia (wall insulation, partitions, ceilings).
- The proper insulation of the buildings should be considered from the outset of the initial phase to find premises for TGH on the mission.

4 -Paper consumption

Examples of good practice

Optimising paper consumption

- Prefer to communicate by internet and send documents in electronic format.
- Where possible have all administrative documents digitised.
- Choose a layout which is easy to read on screen to limit print outs.
- In order to limit the number of pages printed out, avoid any unnecessary blank spaces or pages and make the text as dense as possible without it becoming illegible.
- Make double-sided printing the default mode on all computers.
- Estimate the number of printed copies needed as accurately as possible.
- Do not print everything, select only what must be conserved or read when away from your workstation. E-mails should only be printed out in excep-

tional circumstances.
- Only print a minimal number of copies of large reports.
- Use re-useable envelopes for internal post.

Choosing and setting printers

- Prefer laser to inkjet printers and use low-cost ink solutions (refillable cartridges or toners) which have a reduced impact on the environment.
- Equip yourself with a multi-function device (printer / scanner / photocopier).
- Connect all computers to one single printer.
- Set the default print setting to black-and-white, double-sided.
- Use the two pages per sheet option.
- Train staff to use printers and photocopiers economically.

Making better choices when purchasing paper

- Buy recycled paper and, where possible, paper with an environmental label.
- Adapt purchases to actual needs.
- Define the weight needed for each type of paper: a lower weight (80 g/m^2 instead of 90) can be used for envelopes and general-purpose paper; the heavier the paper, the more energy and materials are to produce it, and conversely, the lighter the paper, the less expensive it is to send.
- Systematically provide staff with notebooks instead of loose sheets of paper which cause more waste.

Sorting and collecting paper for recycling

- Where there is a collection scheme in place, set up individual collection points (in each office) and collective collection points (open spaces, meeting rooms, near the printers, locations people pass through on a regular basis).
- Whenever possible (space, installations) arrange for paper to be composted rather than incinerated.
- If there is a recycling scheme in place at the field location in question, implement a simple and accessible system to make use of it (a container or bin for cardboard/paper).

Involving staff and raising user awareness

- Raise awareness of the importance of recycling in general, in a way that is adapted to the country in question.
- Display information on the issue.

5 - Travel-related consumption

Examples of good practice

Choosing and maintaining vehicles

- Build a “cleaner” fleet of vehicles: use fuel-efficient vehicles.
- Include CO2 emissions as a selection criterion when purchasing or leasing vehicles.
- Lease vehicles rather than buying them (especially if the frequency of travel and/or vehicle use is low).
- Pool the use of vehicles wherever possible.
- Ensure that vehicles are well maintained and in particular that they comply with anti-pollution standards.
- Use rainwater for cleaning when servicing vehicles.

Optimising / limiting travel

- Always question the necessity of a trip: for example, field visits should be decided on using clear ToRs capable of determining the need for the mission.
- Encourage the use of audio/video conferencing by purchasing the necessary equipment.
- Promote home working wherever possible.
- Walk, cycle, take public transport or car share when travelling to and from the office.
- For long distance travel in France (e.g. visits to embassies in Paris), take public transport, bus or train, rather than travelling by car or plane.
- Promote and advocate for carbon offsetting for unavoidable emissions.
- Increase the duration of employment contracts to reduce the number of round trips (field/headquarters).
- Prefer direct flights for expatriates travelling to a mission in the field, to avoid stopovers.
- For expatriate staff members at the beginning/end of their contract, prefer video/audio conferencing for their briefings/debriefings if they have a long commute.
- For expatriates visiting the headquarters, book accommodation close to the office.

Limiting purchase-related transport

- Question the environmental impact of the supply of goods, group and rationalise orders, use the means of transport which offers the best environmental value (train, number of trucks, etc.).
- Encourage local purchases to reduce the need for transport.
- Ensure there are procedures in place to identify the needs as precisely as possible in order to reduce errors in transport logistics.
- Prefer carriers which reduce waste from the packaging of goods and which have the least polluting fleet of vehicles.

6 – Adopt a responsible purchasing policy

Examples of good practice

General purchasing practices

- Prefer to purchase local rather than imported products.
- Make group purchases rather than multiple separate purchases.
- Include environmental criteria when making purchasing decisions.
- Include the total cost of ownership in the economic selection criteria (purchase price + operating costs for the amortisation period).
- Prefer products which are certified with an official eco-label or which are made from sustainable/ "green" materials.
- Prefer products which can be recharged or refilled, which have a long lifespan, and which are sold in bulk without packaging.
- Minimise packaging wherever possible, prefer biodegradable or reusable packaging.
- Make the provision of a waste disposal plan a contractual obligation for all suppliers.

Product characteristics

- Wherever possible prefer locally-produced goods.
- Focus on the durability of products: the most robust equipment possible, equipment or items which can be repaired, refilled, recharged dismantled, reused, recycled.
- Think about where materials come from (renewable resources, recycled materials) and products' end of life (e.g. used equipment which is taken back and recycled by the supplier).

- Encourage the use of goods with a long lifespan, prefer quality over quantity.
- Avoid using products which generate large amounts of waste.
- Optimise the number of devices purchased, avoid assigning devices to one single user.
- Assess whether it is more appropriate to purchase a service provision rather than owning an asset outright.
- Make sure the products purchased are durable by identifying the most robust models and brands.
- Prefer packaging with minimal plastic content: prefer packaging which can be recycled or is biodegradable or even zero waste products.

Taking into account the environmental impact of the entire product life cycle

- Prefer items which consume low levels of energy, including grey energy (required for manufacturing and disposal).
- Prefer non-toxic, non-chemical products which can be recycled in order to limit the environmental impact, even when there are no life cycle analyses or grey energy studies available.

Limiting transport / opting for the least polluting means of transport

- Regularly monitor and manage inventory with a view to grouping purchase requests.
- Limit transport/travel by opting for digital solutions.
- Prefer suppliers which use less polluting forms of transport.
- Prefer local, or regional, purchases.

Reducing packaging and encouraging the use of recycled and/or recyclable packaging

- Prefer products with little or no packaging.
- Prefer reusable packaging.
- Prefer packaging made from recycled and/or recyclable materials; avoid using plastic and PVC packaging where possible.
- In cases of contractual branding (NGO and funding body) use the least polluting solution possible (e.g. stencil rather than a plastic sticker).

Waste management

Examples of good practice

Implementing recycling practices

- Organize the collection of waste according to the types of waste.
- Where there are local collection or recycling schemes in place these should be used (e.g. glass or plastic bottle collection points, old tyres etc.).
- Prefer suppliers offering waste traceability.
- Make the provision of a waste disposal plan a contractual obligation for all suppliers.
- If there is a recycling scheme in place at the field location in question, implement a simple and accessible system to make use of it (household waste, glass, cardboard/paper).
- Where possible, set up a system for composting green waste.

Informing and raising awareness

- Explain the limitations of the current situation.
- Present the new challenges in terms of waste management.
- Hold information and awareness-raising meetings.
- Put up display boards, posters in offices (kitchen) and logos on the waste bins.
- Raise national staff members' awareness of recycling and why it is important.

Integration into the project cycle

Evaluation

Any evaluation carried out should obtain information on the environmental policies in force at national or regional level in the target intervention zone. Research should also be carried out upstream to determine if there is an Environmental and Social Commitment Plan in place.

Any activity planned and/or studied at the preliminary evaluation stage must be analysed not only as regards its effectiveness in meeting an identified need, but also in terms of any adverse effects it might have. In most cases, and although TGH's needs assessments have taken environmental issues into consideration for a long time, the main considerations taken into account to

date when assessing the relevance of a given activity have been its feasibility, effectiveness and cost. The question of its environmental impact, including in the medium and long term, should now be taken into consideration as a criterion in its own right.

As it is not yet equipped with its own in-house tool, TGH encourages the use of the NEAT+ tool, which identifies areas of concern, as well as certain "no go" situations which can be identified as early as the initial assessment phase.

If the initial assessment is based on questionnaires, questions on the environment (awareness-raising, existing measures, the impact of existing or planned activities, conservation measures in place) should be included.

Project proposals

In addition to calls for projects on environmental themes, funding bodies now almost systematically include an environmental component in their intervention policies. This component may also apply to a country or funding line.

All project proposals must therefore systematically include a chapter covering TGH's general environmental policy. If this is not the case, the environment should be included as a cross-cutting component in the projects.

Similarly, a specific section should be included, providing an exhaustive list of the environmental risks and impacts identified, as well as the mitigation measures put into place as part of the project, in connection with the planned activities. Depending on the specific case and the formats required by each funding body, this section will take the form of a narrative or matrix which can be included as an appendix.

A working summary of the environmental policies of the main funding bodies, along with specific examples of formal responses which meet their requirements is available on the TGH intranet.

Purchasing

Purchasing procedures must include a number of points relating to the environment:

- The administrative section of the purchasing procedure must specify the elements to be taken into consideration in the tender: short distribution channels, the sustainability of inputs, branding etc.
- Bids for tender will be assessed using a grid which includes environmental criteria: packaging, transport, supply areas, quality (lifespan) of the proposed products.

- The bidder will commit to these undertakings by signing an environmental charter when submitting their bid and on signature of the contract.

Examples are available on the TGH intranet.

Monitoring and reporting

Based on the proposal template and according to the required reporting format, the reminder of the general policy, and of any eventual changes to this since the start of the project, should be included systematically.

Here again, it is essential to update the paragraph on the risks and mitigation measures implemented as part of the project, relating to the activities implemented during the period covered by the report.

Depending on the importance the funding body places on environmental issues, they may require the inclusion of indicators which measure compliance with the environmental commitments undertaken. These indicators may be required as of the time of drafting/submitting the project proposal. Where appropriate, these indicators, which will be included in the reports drafted for a given project, should also be included in the project monitoring tool (Monthly Follow-Up or MFU).

Approach by sector

At TGH, environmental issues are systematically taken into account during the design phase of activities which fall within the scope of our different sectors of intervention.

Food Security and Livelihoods

General Information

Food security, livelihoods, agriculture and the environment: high levels of inter-dependency

In contexts where food security is dependent on agricultural production, and therefore on the overall state of the ecosystem, the environment and natural resource management are crucial issues.

A degraded environment, which has been polluted or subject to extreme climate events or to soil erosion due to the lack of tree cover, for example, severely impacts the mainly rainfed, low-input agricultural production systems, the resilience of which is closely linked to healthy and productive ecosystems.

TGH's food security, livelihoods and agricultural interventions must therefore take into account the characteristics of the ecosystem for which the interventions have been designed.

The Sphere Handbook 2018, which sets out the minimum standards for humanitarian and development action, highlights the clear link between the environment, food security, livelihoods and nutrition. This is reflected in the definitions of the standards and corresponding key actions:

Food security standard 5 General Food Security, Key Action 4
- Protect, preserve and restore the natural environment from further degradation.
- Consider the impact of cooking fuel on the environment.
- Consider livelihoods strategies that do not contribute to deforestation or soil erosion.

Livelihoods standard 7.2: Income and Employment, Key Action 6
- Choose environmentally sensitive options for income generation whenever possible.

The impacts of climate change, a factor which exacerbates food insecurity and environmental degradation

Amongst all the environmental issues and associated underlying factors, the impacts of climate change are a significant contributing factor to food insecurity, in particular through their effects on agricultural production systems (unpredictable rainfall patterns, loss of crops during extreme weather events etc.).

These harmful, and sometimes unexpected, impacts test the resilience of agricultural systems, in particular in contexts where social, political and security tensions already constitute a barrier to the proper functioning of the agricultural production system.

One of the key issues in the fight against these impacts is to increase the resilience of agricultural production systems in TGH's intervention zones to enable them to better resist these external events.

Practical integration into FSL programmes[2]

The mitigation measures set out in the tables below are examples and should be considered in the light of local operational constraints, the agro-ecological constraints in the intervention zone, and the development of the agricultural production systems.

Natural resource management

Prefer crops that do not require a lot of water, that do not deplete the soil of minerals or degrade the land, livelihoods that use natural or energy resources sparingly, and distributions of food items requiring little cooking and little water.

Examples of activities	Potential environmental impacts	Mitigation measures
Support for agricultural production systems	• High water consumption • • Soil mineral depletion	• Prefer varieties or species with low water consumption
Support for food processing IGAs[3]	• Fossil fuel consumption • High resource consumption	• When selecting the types of IGAs to be supported, include a criterion reflecting the efficiency or amount of resources used.
Food distributions	• Increased cooking fuel consumption • Increased water consumption	• Prefer the use of improved stoves that use less wood or coal • Select foodstuffs which require little cooking time and little additional water
Support for livestock farming	• Overuse of pasture land • Deterioration of vegetation	• Take into account the carrying capacity of range-lands or pastures • Prefer interventions aiming to improve the productivity of existing herds rather than increase the headcount.

2 - 2 FSL: Food Security and Livelihoods
3 - IGA: income generating activity

Land use and protection

Contribute as much as possible to the vegetation cover, take into account the impacts of agricultural activities on land use, estimate the risk of deforestation (land grabbing etc.).

Examples of activities	Potential environmental impacts	Mitigation measures
Support for agricultural production systems	• Soil depletion • Soil degradation by erosion	• Promote agro-ecological agri-cultural production systems • Provide a full curriculum of training for beneficiaries (crop rotation, cropping plan, plant cover etc.)
Promote ani-mal-drawn or mechanised farming	• Extension of cultivated land • Deforestation • Soil degradation by erosion	• Promote agricultural production systems that respect the forest estate. • Prefer intensification per unit area of production where appropriate • Promote agroforestry systems

Greenhouse gas (GHG) emissions

Take into account potential GHG emissions when choosing which activities to implement, e.g. livestock breeding (methane), fertilisers (nitrous oxide and carbon dioxide), motorised mechanisation (carbon dioxide), irrigated rice growing (methane), etc.

Examples of activities	Potential environmental impacts	Mitigation measures
Support for motorised mechanisation	• Fossil fuel consumption • GHG emissions and air pollution	• Determine whether moto-rised mechanisation is more appropriate than animal-drawn mechanisation • Ensure the power of the machines is adapted to their use (reduced and optimised fuel consumption)
Support for irrigated rice growing	• High global warming potential GHG emissions (methane)	• Implement agricultural tech-niques which limit these emis-sions (partial drying, SRI4)

4 - SRI: System of Rice Intensification

Fertility management	• GHG emissions with very high global warming potential (nitrous oxide)	• Step up training for beneficiaries on good practices in relation to spreading
Support for IGAs requiring machinery (peanut paste)	• Fossil fuel consumption • GHG emissions and air pollution	• Promote the use of manual machinery wherever possible and appropriate

Chemical pollution

Take into account pollution from livestock effluent (e.g. abattoirs) or spreading practices and the use of nitrogenous fertilisers etc.

Examples of activities	Potential environmental impacts	Mitigation measures
Construction of slaughter areas	• Risk of contamination of waterways or groundwater	• Select areas located downstream from villages or towns and well away from any waterways or sources of water • Ensure processes are in place for managing carcasses and biowaste
Support for animal health	• Pollution of waterways, water sources and land due to the use of pharmaceutical products (urine and faeces)	• Promote training on integrated pest control • Prefer hardy, disease-resistant varieties • Put into place systems for storing and recycling pharmaceutical products
Support for IGAs	• Pollution of waterways, sources of water and land from runoff or infiltration	• Include a criterion on the types of waste produced when selecting the types of IGAs to support
Fertility management	• Pollution of waterways, sources of water from runoff or infiltration	• Step up training for beneficiaries on good practices in relation to spreading and storage

Plastic and industrial waste

Take into account the quantities and type of packaging of inputs in programmes which include the provision of in-kind assistance.

Examples of activities	Potential environmental impacts	Mitigation measures
Seed distributions	• Increased quantity of non-biodegradable waste	• Prefer paper packaging • Provide facilities for collecting and sorting waste for recycling

Animal vaccinations	• Increased quantity of non-biodegradable waste	• Provide facilities for collecting and sorting waste for recycling
Support for IGAs	• Increased quantity of non-biodegradable waste • Increased quantity of industrial waste	• Include a criterion on the quantity of waste produced when selecting the types of IGAs to support • Include equipment for waste collection and recycling systems in the kits

The case of cash transfers

The use of cash in food security and livelihoods programmes has a number of different environmental implications. Potential benefits include the reduction in greenhouse gas emissions from food transport and storage, support for small-scale farmers, and reduced packaging. The disadvantages of using cash for local farmers, including the possibility that it may support unsustainable practices such as pesticide use, which can however be controlled by implementing voucher systems limiting the inputs made available as part of the project.

Water, Sanitation and Hygiene

General Information

Environmental issues in TGH's Water, Sanitation and Hygiene projects

WASH and the environment are co-dependent. Human activities consume water, and liquid and solid waste, which, if not properly managed, can have an immediate impact on the soil, ecosystems, surface and groundwater, causing an immediate public health hazard, environmental damage, and contaminating the food chain and water supply. Overconsumption and misuse of water can expose populations to significant risks and water shortages in the short to medium term.

This reduces societies' resilience and limits the opportunities for populations to come through the crisis. Implementing WASH projects that take into account the environment and climate conditions ensures the long-term sustainability of the actions, along with more sustainable food security and secure access to

water and energy. This is particularly important given the observed increasing pressure from climate change and natural hazards.

The **Sphere Handbook 2018**, which sets out the minimum standards for humanitarian and development action highlights the clear link between the environment and WASH.

This is reflected in the definitions of the standards and corresponding key actions:

Introduction to the WASH chapter:
"Essential concepts in water supply, sanitation and hygiene promotion"

WASH responses should enhance long-term community goals and minimise environmental impact. Integrated water and sanitation management should meet human needs and protect the ecosystem. This can influence the choice of technology, timing and phasing of activities, community engagement, private sector and market engagement, and financing options.

Water Supply Standard 2.1 key *action 1*

Identify the most appropriate groundwater or surface water sources, taking account of potential environmental impacts.

3. Excreta management: *general information*

Excreta containment should be integrated with collection, transport, treatment and disposal to minimise public health risks and environmental impact.

Excreta management standard 3.1, *key action 3*

Design and construct all excreta management facilities based on a risk assessment of potential contamination of any nearby surface water or groundwater source.

3. Excreta management: *guidance notes*

Ensure faecal material from containment facilities (trench latrines, pits, vaults, septic tanks, soakaway pits) does not contaminate water sources. Faecal contamination is not an immediate public health concern unless the water source is consumed, but environmental damage must be avoided.

5. Solid waste management: *all sections*

Section "5. Solid Waste Management" is entirely dedicated to environmental concerns.

Climate change, a factor which exacerbates WASH issues and environmental degradation

The main impact of climate change on WASH issues is the increase in water stress and reduced water quality: changes in precipitation patterns with more frequent extreme events (drought and flooding) which change the availability of water and causes a deterioration in quality (contamination of wells/boreholes, decrease in groundwater recharge, erratic availability of surface water with an increase in the amplitude of changes in microbiological and chemical parameters).

Practical integration into WASH programmes

The mitigation measures set out in the tables below are examples and should be considered in the light of local operational constraints, the hydrographic constraints in the intervention zone, and the development of water catchment systems.

Natural resource management

Prefer collection, drawing, transport and storage methods that save water and preserve its quality. Prefer waste water treatment systems that protect water resources and reduce dependency on inputs (fuel for pumps, agronomic recovery of the organic fractions of solid and liquid waste), reduce waste production, reduce the use of non-recyclable, non-renewable resources or high energy resources, and prefer energy-efficient distribution/disposal systems etc.

Examples of activities	Potential environmental impacts	Mitigation measures
Construction of new boreholes/wells	• Over-pumping causing the water table to dry up • Overconsumption of energy • Wasting water after pumping	• Carry out a hydrological study of the zone (well test, pumping test) • Monitor water table levels • Prefer solar-powered pumping systems • Install watering troughs at water supply outlets • Optimise the ergonomics of the water supply to make it compatible with users' collection equipment

Water trucking (WT)	• Fossil fuel consumption • Wasting water after pumping	• Minimise the duration of WT • Prefer pumping into a pipe if possible • Define a WT exit strategy as of the project design stage • Optimise the ergonomics of the equipment to make it compatible with users' collection equipment • Train operators
Building of latrines Implementation of a solid waste management system	• Use of resources requiring large amounts of grey energy • Visual, chemical and bacteriological pollution from the dispersion of solid and liquid waste	• Promote the use of local, renewable resources produced in ways which minimise grey energy consumption • Promote systems which transform organic matter from waste into resources (energy and fertilizer) • Design which limits the dispersal of solid and liquid materials • Choose sites which limit dispersal (sheltered from the wind, downstream of water resources, on impermeable ground making it possible to manage runoff)
Distribution of WASH-related NFI	• Increased quantity of non-biodegradable waste	• Prefer bulk products without packaging and paper packaging • Provide facilities for collecting and sorting waste for recycling

Land use and protection

Contribute as much as possible to the vegetation cover, take into account the impacts of water treatment activities on land use, estimate the risk of deforestation.

Examples of activities	Potential environmental impacts	Mitigation measures
Water trucking (WT)	• Heavy goods vehicles leading to a deterioration in the road surface and soil compaction	• Prefer pumping into a pipe if possible • Define a WT exit strategy as of the project design stage • Define streamlined routes
Build latrines Implement a solid waste management system	• Land consumption • Visual, chemical and bacteriological pollution from the dispersal of solid and liquid waste	• Promote systems which transform organic matter from waste into resources to improve the soil (energy and fertiliser)

Water analysis	• Production of toxic laboratory waste	• Ensure the strict confinement of the waste produced and dispose of it via the appropriate channels
Thermal water treatment	• Deforestation due to the use of wood fuel	• Promote the use of improved stoves and solar-powered heating systems

Greenhouse gas (GHG) emissions

Take into account potential GHG emissions when selecting which activities to implement, e.g. pumping (CO_2 and NOX), uncontrolled anaerobic digestion of solid and liquid waste (e.g. methane), etc.

Examples of activities	Potential environmental impacts	Mitigation measures
Motorised mechanical pumping and water trucking	• Fossil fuel consumption • GHG emissions and air pollution	• Determine whether motorised mechanisation is more appropriate than animal-drawn/human-activated/solar-powered mechanisation • Ensure the power of the pumps and trucks is adapted to their use (reduced and optimised fuel consumption) • Define a WT exit strategy as of the project design stage
Build latrines Implement solid waste management systems	• High global warming potential GHG emissions (methane)	• Implement aerobic techniques to limit these emissions (composting). • Optimise the design and use of anaerobic digestion systems
Water disinfection using boiling and reverse osmosis	• Fossil fuel consumption • GHG emissions and air pollution	• Limit the use of boiling and reverse osmosis • Prefer solar-powered systems and improved stoves • Prefer chlorination systems and promote the use of solar-powered chlorine production units (WATA)

Chemical pollution

Avoid pollution from human effluent (e.g. latrines).

Examples of activities	Potential environmental impacts	Mitigation measures
Build latrines Implement a solid waste management system	• Risk of contamination of waterways or groundwater	• Select areas located downstream from villages or towns and well away from any waterways • Ensure liquid effluent management processes are in place (limiting quantities and efficient disposal)
Water treatment	• Waterway and ground pollution due to treatment products (flocculants and chlorine)	• Promote training for operators • Prefer clear water requiring less treatment • Put into place systems for storing and recycling water treatment products
Water analysis	• Production of toxic laboratory waste	• Ensure the strict confinement of the waste produced and dispose of it via the appropriate channels

Plastic and industrial waste

Take into account the quantities and type of packaging of inputs during in-kind distributions etc.

Examples of activities	Potential environmental impacts	Mitigation measures
Distributions of NFI and building materials	*See Chapter 3.4 «Civil Engineering and Construction» and «NFI»*	*See Chapter 3.4 «Civil Engineering and Construction» and «NFI»*

Protection and education

General Information

The educational activities provide an opportunity to raise children and teenagers' awareness of environmental issues.

First of all, environmental awareness can be improved through educational programmes. Secondly, it is important to ensure that the educational activities proposed are implemented in an environmentally responsible manner. Specifically, school buildings must be built sustainably, to ensure a return on investment in the years to come.

The project design should also assess potential greenhouse gas emissions and environmental impacts, and implement strategies and actions to minimise these.

Practical integration into education programmes

Environmental education

Educational activities can provide a forum for:

- Raising awareness of the economic, social, political and ecological interdependencies in a given context
- Providing people with the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment
- Creating new patterns of behaviour amongst individuals, groups and society as a whole

Environmental education can be offered as part of the formal school curriculum, as an extracurricular activity (through clubs or events) and through non-formal educational activities. Environmental education activities can be undertaken as part of a more general education programme. These activities can be designed in close cooperation with environmental and educational specialists.

Environmental education activities include:

- Identifying the people and national structures that are (or could be) involved in environmental education (water and sanitation or water and forestry technicians, agronomists, public health officers etc.)
- Assessing the environmental education needs and developing training and activities to meet these

- Facilitating the development or improvement of environmental education tools
- For environmental actors: advising teachers on environmental education, providing resources and training
- In situations involving refugees or internally displaced persons where environmental education programmes are implemented in camps: developing programmes for the host population and/or conducting joint educational activities.

For more resources and educational tools on environmental education:

https://fr.unesco.org/themes/130905/publications/allls/priorites#paa4

Sustainable design and management of education establishments

The sustainable design and management of educational establishments facilitates learning, ensures student health and safety, reinforces essential hygiene for improved public health, and ensures the sustainability of school facilities. Failing to address environmental issues can turn schools into clusters of disease transmission or even make them physically dangerous for people. Moreover, this can lead to schools becoming unfit for purpose or requiring rehabilitation early on in their lifespan. To this end, it is important to:

- Design and select materials that are suited to local environmental conditions, and which are produced and/or sold locally;
- Manage the construction process in an environmentally friendly manner;
- Minimise environmental contamination thanks to well-designed and maintained waste management and sanitation facilities;
- Provide a safe and adequate water supply;
- Take into account the quantities and types of packaging when distributing school supplies to students and teachers, and purchases these locally where possible.

For more detail, please refer to the following chapters:

Examples of activities	Potential environmental impacts	Mitigation measures
Design and selection of building materials for schools	*See Chapter 3.4 «Civil Engineering and Construction»*	*See Chapter 3.4 «Civil Engineering and Construction»*

Water management and sanitation	*See Chapter 3.2 «Water, sanitation and hygiene»*	*See Chapter 3.2 «Water, sanitation and hygiene»*
Supplying schools with water	*See Chapter 3.2 «Water, sanitation and hygiene»*	*See Chapter 3.2 «Water, sanitation and hygiene»*
Distributions of NFI and school supplies	*See Chapter 3.4 « NFI «*	*See Chapter 3.4 « NFI «*

Disaster Risk Reduction (DRR)

Education projects should also include efforts to mitigate climate-related risks and vulnerabilities, thereby increasing their sustainability. Examples of adaptation measures include taking into account the increased risk of flooding in drainage plans and of severe heat waves when selecting the construction methods to be used.

Civil engineering and Construction

General Information

Civil engineering, construction and the environment: cross-cutting issues with a significant impact on numerous projects

Many projects incorporate activities including the construction or rehabilitation of civil engineering works (bridges, roads, etc.) and buildings (schools, hospitals, latrines, agricultural infrastructure, etc.), as well as the related technical works (electricity, heating, etc.). These activities have a significant environmental impact, during both the construction and the operating phases.

Whether in an emergency (shelters, emergency latrines, etc.), a rehabilitation or a development context, the environmental impact of building work must be taken into account from the start of the project in order to identify how it can be minimised.

The construction of shelter, infrastructure and buildings is the activity with the highest risk of generating harmful environmental impacts. An inadequate preliminary study, a poorly designed or executed programme can end up increasing deforestation, soil and land degradation, loss of biodiversity and have a long-term impact on waste management and social cohesion.

The **Sphere Handbook 2018**, which sets out the minimum standards for humanitarian and development action highlights the clear link between the environment and shelter and settlement, which can be extrapolated to all types of buildings.

This is reflected in the definitions of the standards and corresponding key actions:

Shelter and settlement standard 7: Environmental sustainability
Key actions:

1 - Integrate environmental impact assessment and management in all shelter and settlement planning
2 - Select the most sustainable materials and techniques among the viable options
3 - Manage solid waste in a safe, timely, culturally sensitive and environmentally sustainable way in all settlements
4 - Establish, restore and promote safe, reliable, affordable and environmentally sustainable energy supply systems
5 - Protect, restore and improve the ecological value of operational sites (such as temporary settlements) during and after use.

The impacts of climate change are an exacerbating factor in relation to construction and environmental degradation

Landslides, floods, sea level rise, the increased frequency of climate-related natural disasters: rebuilding housing and even simply relocating people has a direct impact in terms of environmental degradation and feeds the cycle of increasingly frequent and more severe natural risks.

One of the key challenges in fighting these impacts is to take into account the mitigation measures required to reduce these risks in our intervention zones.

Practical integration into construction activities

The mitigation measures set out in the tables below are examples and should be considered in the light of local operational constraints.

Natural resource management

Prefer to source supplies of local materials already used in traditional building practices for similar constructions, whilst taking care not to disrupt the local market by monopolising all the available resources in the intervention zone or encouraging the depletion of local resources (e.g. deforestation).

Examples of activities	Potential environmental impacts	Mitigation measures
Distributions of building materials and construction works	• Depletion of local resources (wood, sand etc.) • Importation of unsuitable materials or materials which are not durable	• Extend the area from which supplies are sourced • Recover and recycle materials • Prefer local materials implemented using techniques which are also used locally

Land use and protection

Wherever possible limit the development of artificial surfaces and take into account the risks resulting from the changes in the topography of the land (earth works, backfill etc.) whilst taking into account the land-related considerations

Examples of activities	Potential environmental impacts	Mitigation measures
Location and construction of buildings	• Environmental impacts of deforestation, artificial surfaces, and the social impact in relation to land-related considerations	• Take into account land-related considerations in any construction project • Prefer to build in existing areas (densification) rather than expanding the built-environment into new areas
Construction of civil engineering works	• Modification of the relief, impact on water flows, impact on the biotope	• Conduct a preliminary impact study to minimise or mitigate any negative impacts • Where required, compensate these negative impacts in other areas (reforestation, creation of protected areas etc.)

Greenhouse gas (GHG) emissions

Take into account potential GHG emissions when selecting materials and how these are supplied, as well as in the energy management of the buildings during the operating phase.

Examples of activities	Potential environmental impacts	Mitigation measures
Delivery of materials	• Fossil fuel consumption • GHG emissions and air pollution	• Prefer short distribution channels and recycling • Make grouped purchases to limit transport
Choice of materials	• GHG emissions and air pollution from the firing of bricks	• Instead of fired bricks, use compressed earth bricks (CEB)[5] or stabilized earth blocks (SEB[6])
Heating systems	• High global warming potential GHG emissions	• Install heating systems that limit GHG emissions (insulation, ventilation, solar-power, passive buildings, biomass etc.)

Chemical pollution

Take into account pollution resulting from the storage of materials, the use of machines and the management of effluent during the operating phase.

Examples of activities	Potential environmental impacts	Mitigation measures
Storage of materials	• Risk of contamination of land, waterways or groundwater	• Choose a storage area downstream of villages or towns and away from waterways and water supplies • Ensure there is a system in place to avoid soil contamination
Effluent management	• Pollution of waterways and land from runoff or infiltration	• Incorporate effluent treatment systems

5 - CEB : compressed earth block
6 - SEB : stabilized earth block

Plastic and industrial waste

Take into account the type of materials used, their life cycle, and the type of packaging.

Examples of activities	Potential environmental impacts	Mitigation measures
Distribution of materials for shelter	• Increased quantity of non-biodegradable waste	• Prefer local materials for shelters (bamboo / palm leaves) or good quality materials that are more resistant to the sun and bad weather
Distribution of NFI kits	• Increased quantity of non-biodegradable waste	• Prefer good quality items to avoid having to distribute new kits too often • Set up workshops to recycle and repair equipment
Distribution of equipment or materials	• Increased quantity of non-biodegradable waste	• Prefer biodegradable or reusable packaging • Provide facilities for collecting and sorting waste for recycling
Management of waste and excavated materials	• Increased quantity of non-biodegradable waste	• Provide facilities for collecting and sorting waste for recycling

International solidarity organisation

1 rue montribloud :: 69009 lyon :: france
T +33 (0)4 72 20 50 10 :: info@trianglegh.org :: **www.trianglegh.org**

Association loi 1901 créée en 1994, enregistrée à la Préfecture du Rhône N°W691052256