**TERMS OF REFERENCE**

**CREATING A GLOBAL FOOD LOSS METRIC - CONSOLIDATION AND HARMONISATION OF EXISTING METRICS AND REPORTING TOOLS FOR FARM STAGE**

**INTRODUCTION**

Following the [United Nations Food Systems Summit](https://wwfint.awsassets.panda.org/downloads/wwf_and_the_un_food_systems_summit___our_expectations_and_contributions.pdf) and a recent WWF-UK report, [*Driven to Waste*](https://wwf.panda.org/discover/our_focus/food_practice/food_loss_and_waste/driven_to_waste_global_food_loss_on_farms/), there’s overwhelming evidence of the need to address on-farm food loss with action. Agriculture is central to efforts to develop more sustainable and circular food systems globally and a core part of this work is targeting a reduction in the estimated 1.2 billion tonnes of food being wasted on farms globally each year. To reduce on-farm food loss, however, there must first be regular and widespread measurement of this loss in order to enable identification of hotpots of waste and track progress in reduction. Yet there is no global consensus on a measurement standard for growers and buyers to start taking action.

We are seeking an experienced consultancy, or consortium, to develop a uniform, global on-farm food loss metric that can be accessed by growers of all sizes and crop types in order to support measurement and reporting of food loss on farms. The work will focus on consolidating existing metrics for simplification of reporting whilst building on them to ensure the new tool meets the needs of the key stakeholders (e.g. farmers, FAO, retailers and national governments).

**Context**

In July 2021 WWF-UK released *Driven to Waste*, a report which estimates the scale and impact of farm stage food loss. The findings of this report suggest that 1.2billion tonnes of food is lost on farms globally each year, making it the largest contributor to food loss of all stages in the supply chain. The growing and disposal of food which never makes it past farm gates is responsible for 16% of all agricultural greenhouse gas (GHG) emissions and 4% of total GHGs, making reducing this figure pivotal to climate action, sustainable agriculture and the development of sustainable food systems. Despite this, progress towards measuring and reducing farm stage food loss has been minimal compared with other stages of the supply chain.

Through its [No Food Left Behind](https://www.worldwildlife.org/pages/reducing-food-waste-on-farms) research, WWF-US has worked with specialty crop growers and academics for the past five years to examine how loss of certain crops should be best measured and what drives that loss. This has culminated in a free [food loss metric for specialty crops](https://www.stewardshipindex.org/working-metrics) developed alongside academics and other partner organizations. Similar efforts have begun to shape metrics for various farm types such as Cool Farm Alliance and WRAPs Food Loss Metric. Each of these metrics has its own regional, crop, or sustainability focus, and there is a clear need to harmonize and consolidate these and other metrics to simplify uptake of on-farm measurement for growers of all sizes and all regions globally. Farmers are bombarded with sustainability requests and the current fragmented approach risks contributing to commitment fatigue and inaction. Furthermore, having a simplified and consolidated on-farm food loss metric will help governments, NGOs, and other food system actors to more effectively develop food loss benchmarks and identify food loss hotspots to inform food loss mitigation and policy solutions.

There are just nine harvests left until 2030, when we are due to deliver the sustainable development goals (SDGs). A key focus of the WWF’s Food Practice in its effort to develop a more sustainable system is to reduce food loss and waste (FLW) by 50% by 2030, in line with UN SDG 12.3. Helping growers of all sizes to first measure their on-farm loss via a single, uniform reporting standard is a critical first step in establishing a baseline to measure progress towards reduction targets and to develop collaboration between growers and buyers and policymakers to reduce this loss. This measurement can then guide conversations between growers, buyers and other food system actors to develop ways to reduce this loss and find new markets for surplus product (upcycling, value-added processing, secondary markets, donation, etc.). At a macro-level, a consistent and more widely adopted global food loss metric can help policymakers and organizations working on food loss reduction to more effectively develop benchmarks and data sets that can be used to identify food loss hotspots globally, loss drivers, and scalable solutions

**MAIN PURPOSE AND SCOPE**

We are seeking a highly experienced consultant or consortium to develop a global on-farm food loss metric that can be accessed by farmers for use on farms of all sizes and types. This will build on the existing metrics and measurement guidance published by WRAP, WWF-US, FAO and other organisations to consolidate the existing metrics into a simple to use tool, outputting information in a manner which is consistent with reporting requirements and standards but in a user friendly manner.

**Stage one: Review of existing metrics**

Analyse the underlying assumptions and inputs of existing on-farm food loss metrics, mapping the commonalities (in data inputs and requirements), differences to inform a consolidation strategy of these metrics and any gaps that prevent adequate assessment across commodity types. This will require assessments of measurement guidance, definitions of food loss, existing metrics and reporting tools.

This work will include but not be limited to:

* [WWF’s food loss metric](https://www.stewardshipindex.org/working-metrics)
* WRAPs [Food Loss Metric](https://wrap.org.uk/resources/guide/grower-guidance)
* [Cool Farm Tool](https://coolfarmtool.org/coolfarmtool/)
* [The FLW Value Calculator](https://www.flwprotocol.org/why-measure/food-loss-and-waste-value-calculator/)
* [FAOs Food Loss Measurement Methods](https://www.fao.org/platform-food-loss-waste/food-loss/food-loss-measurement/en/)
* [UNECE Food loss measurement methodology](https://unece.org/sites/default/files/2021-04/FoodLossMeasuringMethodology.pdf)
* [APHLIS (African Post Harvest Loss Information System)](https://www.aphlis.net/en)

**Stage two: Stakeholder interviews**

The metric should collect the necessary inputs to allow growers (and their partners/buyers) to seamlessly report their collected food loss data to organizations (such as the FAO, 10x20x30, Consumer Goods Forum, and their national food and agricultural agencies/ministries). This stage will be used to research input and output requirements from additional key stakeholders including (but not limited to) Farmers, DEFRA, WRAP, ReFED, FAO, WRI and Sustainable Food Trust to inform the design of a consolidated on-farm food loss metric, balancing such requests against the overall objective of making sure the tool is simple and easy to use on farms of all sizes and types. These inputs will vary depending on commodity type.

**Stage three: Build Metric**

As part of the effort to balance sophistication and usability, build in flexibility to the metric so that users will, depending on a grower’s profile (location, farm type, crop type/animal, food waste reporting initiatives involved with, etc.) be dynamically shown more or less input fields. For example, a small-scale coffee grower in Colombia may not require the same questions as a large-scale row-crop farmer in Europe or the United States. There will be common basic inputs, but the tool should be developed so that additional fields will be dynamically layered on or removed based on the grower’s profile.

Once these flexible and consolidated inputs have been created, the consultant should develop a series of output tabs to be determined within phases one and two, but which enables growers to meet global food loss and waste initiative reporting requirements. This will include (but not be limited to) the following reporting template output tabs:

* + - (1) a basic output tab for all crops that would apply to growers in line with FAO’s Food Loss Index reporting requirements (with estimates of their total crop loss, destinations of their loss, GHG emissions following CFT or Quantis guidance, etc.);
    - (2) an output tab for the [Global FLW reporting template](https://wrap.org.uk/resources/tool/food-loss-and-waste-data-capture-sheet) (to support businesses reporting into initiatives such as Courtauld 2025, 10x20x30, and Consumer Goods Forum’s Coalition of Action).
    - (3) potentially a tab that extracts the necessary information from the Global FLW reporting template and puts into a format that can be easily uploaded to the [Food Waste Atlas](https://thefoodwasteatlas.org/)
    - (4) a [Food Waste Reduction Roadmap](https://wrap.org.uk/taking-action/food-drink/initiatives/food-waste-reduction-roadmap) tab for growers supplying into the UK market to meet that country’s food waste reporting requirements;
    - (5) a farm opportunity output tab which summarises the information most pertinent and of interest to farmers, such as: the value of their recorded losses, largest drivers of loss, and market value of recovering the loss and selling it at current market prices (see example on Dashboard tab of US Food Loss metric [here](https://thefoodwasteatlas.org/))

The metric must be designed with data aggregation capabilities so that growers can report their data anonymously to help the steering committee members, partner organizations, and policymakers to identify waste hotspots and develop appropriate waste reduction strategies. This might include an opt-in option for growers (if there’s an online portal) to share their data anonymously or simply an output tab in the tool that could be easily shared while keeping the grower anonymous.

It is critical that the consolidated metric be accessible to users of the largest online sustainability reporting platforms for growers (such as CropTrak and Supply Shift). This will require either:

* + (1) ensuring existing food loss metric modules (such as the US food loss metric and Cool Farm Tool modules) are updated and harmonized; or
  + (2) new modules are developed specifically to mirror the new consolidated on-farm food loss metric

**Stage four: Consultation**

This stage should allow stakeholders who were involved in stage two to review the metric and feedback back on its proposed format.

**Stage five: Redevelopment based on consultation**

**Stage six: Pilot test**

This stage will require the development of methods to trial the metric and guidance developed, and gather meaningful feedback from the farmers within Tesco international supply chain and smallholder farmers. This will be used to discern reasonable adaptations to the metric to fulfill its objectives (user friendly and provides critical outputs).

**Stage seven: Redevelopment**

**KEY OUTPUTS TARGETED:**

* An analysis of existing on-farm loss metrics and consultation of key stakeholders on critical inputs and outputs.
* Development of a single, accessible tool which builds on existing metrics, harmonizes them, and that provides guidance for growers to measure and enables them to easily report food loss on farms to the standards of the various reporting initiatives.
* Pilot the use of this new global metric within Tesco supply chains

**PROPOSED TIMELINE**

Deadline for proposals: 14th Feb 2022

Kick off meeting: 21st Feb 2022

Stage one: Completed by End of March 2022

Stage two: Completed by End of April 2022

Stage three: Completed by End of June 2022

Stage four: Completed by End of July 2022

Stage five: Completed by End of August 2022

Stage six: Completed by End of November 2022

Stage seven: Completed by End of Jan 2023

**RESPONSES:**

Responses and questions should be sent to Dr Lilly Da Gama, Food Loss and Waste Programme Manager, WWF-UK at ldagama@wwf.org.uk.

We recommend that proposals are limited to four sides in length. In your proposal, please include the following:

· A method statement to explain your proposed approach to carrying out the work.

· A brief project plan, showing key milestones and any interdependencies.

· Details about similar projects you have undertaken or your relevant experience in this field.

· A fee proposal including resource allocations and charging rates for all individuals, their expertise and roles and any third party costs.

· Completion of the WWF-UK Sustainable Procurement Questionnaire

· Confirmation that you would be to accept the WWF Standard Terms and Conditions as the basis for contracting.

**BUDGET RANGE:**

We have approximately £79-99k including VAT to support this work.

Thank you for expressing an interest in working with and supporting WWF-UK with this important piece of work. We look forward to receiving your response.

**RELEVANT SUPPORTING MATERIAL**

WWF-UK (2021) Driven to waste: The Global Impact of Food Loss and Waste on Farms. Woking.

WRAP (2019) Food waste in primary production in the UK. Banbury.

**KEY STAKEHOLDERS**

**Vulnerable and Potentially Impacted Communities**

* + *Small-scale farmers that supply to co-operatives and/or large global buyers:* More than 90% of the 570 million farms worldwide are managed by an individual or a family. 84% of these farms are smaller than two hectares (ha) and that about 2.5 billion people depend on agricultural production for their livelihoods. This metric must be usable by them and not unintentionally create an undue burden. It should additionally be designed in a way that helps growers to save money (e.g., decreasing input costs) and find new opportunities (e.g., showing them the total surplus food that’s edible they could sell through secondary markets).