

## Terms of Reference

### Mapping global food loss hotspots: identification, assessment and options for mitigation

#### 1. Background

WWF has formed a ground-breaking partnership with Tesco to deliver sustainable, healthy and affordable food for all. To achieve this, we'll be working together to reduce the environmental impact of the average shopping basket by half through championing sustainable diets, restoring nature in food production and eliminating loss and waste. Under this latter pillar, we are focused on working together to identify the levels and causes of food loss and waste in high risk commodities and food products in the supply chain and taking action to tackle these. We will also be partnering to use our collective voice and influence to engage with colleagues and customers on the linkages between food and nature and how they too can reduce food waste in their home. Together, and with peers in the sector, we will work towards achieving the Sustainable Development Goal (SDG) Target 12.3 to halve per capita food waste at retail and consumer levels and reduce post-harvest loss and waste along production supply chains by 2030.

According to the Food and Agriculture Organisation of the United Nations (FAO) it is estimated that every year around a third of all food is lost or wasted along the journey from farm to consumers (FAO 2011). Whilst our understanding of the levels and causes of food waste continue to improve there remains significant uncertainty around the levels of global on-farm losses. In many areas around the world including sub Saharan Africa, South and South East Asia and Latin American food losses near the farm are predominant. However, on-farm losses are also significant in areas such as North America and Europe. In the UK, the Waste and Resources Action Programme (WRAP) estimate that 1.6 million tonnes of food are wasted on farm every year – a figure comparable to total levels of waste in manufacturing and retail combined (WRAP 2019).

Setting targets and measuring on farm losses are essential first steps to tackling the problem. Measurement allows for the identification of hotspots and drivers of food waste and allows for the design of effective policies and interventions to tackle the issue. It also allows for policy makers to take a whole value chain approach to the issue and not make interventions in one part of the food chain which drive increases in waste elsewhere. Champions 12.3, a coalition of leaders tasked with driving progress towards SDG 12.3, advocates applying a 50% reduction target from farm to fork, including on farm losses. Whilst some progress is being made, many governments currently exclude on farm losses from the scope of their measurement and reporting guidelines.

Measurement and reporting alone, whilst crucial, won't deliver the change we seek across the supply chain. In many countries, there is a larger percentage of food lost in production, handling and storage because of a lack of investment in basic infrastructure for storage, transportation and the cold chain. Increasingly, small-scale innovations are being identified with the potential to reduce post-harvest losses and deliver improved returns to farmers. The WWF-Tesco partnership may provide the basis for helping to increase access to small-scale innovations in places such as Kenya and South Africa. However, the post-harvest system comprises a range of interconnected activities and the reduction of post-harvest losses depends on the simultaneous mobilization of the key actors. WWF and Tesco would like to develop further insights to reinforce and inform our current action plan and interventions.

## 2. Project Objectives

The overall aim is to understand the scale and significance of on-farm losses (in relation to other stages in the value chain) and what needs to be done to address these. We seek to understand the potential scale of food loss in different parts of the world and to better understand the environmental and social impacts resulting from those losses. We want to understand some of the key drivers for these losses in order to be able to identify and design a suite of possible interventions to mitigate them. Furthermore, we seek to better understand the perceptions of some key stakeholders along the food value chain for their views and understanding of food losses to ensure mitigations and interventions proposed are fit for purpose. This project should build on and add to the vast body of literature that exists as well as conduct new primary research (e.g. through stakeholder interviews) where necessary.

This aim will be met by the following four key objectives:

- Objective 1:** Collate food loss data from various regions across the globe to understand where these losses are occurring, and which crop and country hotspots exist across both developed and developing economies. Utilise existing literature to map out these hotspots, data availability and measurement/data collection tools being used.
- Objective 2:** Using the data gathered, analyse the environmental, social and economic impacts resulting from the losses. Where possible estimate environmental impacts e.g. GHG emissions, land use/land conversion, water use, excess agri-chemical use etc. at sub-national, national and global scales. Furthermore, seek to provide a sense of the scale of the social impacts in terms of potential lost livelihoods, economic burden and impacts on food security.
- Objective 3:** Conduct a series of interviews with key stakeholder groups (companies in different sectors, countries, NGOs, blocks like the EU, farmers, policy makers etc) to ascertain views on definitions of loss and waste, ground-truth some waste figures, understand the drivers for losses and identify possible solutions to minimise them (interviews to be co-developed with WWF).
- Objective 4:** Summarise the key reasons for the losses occurring e.g. product quality, strict specifications, poor management practices, market dynamics, etc. and provide an overview of the actions being taken by different countries/blocs.<sup>1</sup> Propose a range of mitigation actions (e.g. on farm management practices, technological fixes, supply chain interventions, including possible alternative supply chains/options, policy levers) that can be adopted by different actors (companies in different sectors, countries, NGOs, blocks like the EU, farmers, policy makers etc). Where possible, provide further detail on specific mitigation actions relevant to specific crop/country hotspots. Categorise some of these under the Target, Measure, Act framework where possible.

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<sup>1</sup> More information on this can be seen here: <https://champions123.org/wp-content/uploads/2019/09/champions-12-3-2019-progress-report.pdf>

### 3. Project Scope and anticipated methods

The project will help advance our understanding of the scale of food loss in different parts of the world and the environmental, social and economic impacts resulting from those losses. To achieve this, the project should seek to zoom in, where possible, on some specific crop-country-supply chain combinations that are relevant to UK product imports covering a range of different products.

Some examples include:

- Green beans from Kenya
- Tomatoes from Morocco
- Potatoes in UK
- Rice from India/ Pakistan
- Cereals crops in Europe

It is anticipated that this will largely be a desk-based project using a combination of government and industry source information, academic and grey literature. It may also involve some interviews with relevant stakeholders in the WWF network and/or Tesco supply chain (contacts will be provided to the consultant upon appointment). Experts from Tesco and WWF, as well as contacts in our respective networks, will be available to support the research and overall delivery of the project.

### 4. Project management and outputs

The consultant or consortia will be responsible for delivering the following:

- 1) A report written in English of no more than 50 pages including an executive summary. Additional/supplementary information may be contained in appendices. The final report should be submitted in digital form.
- 2) The report should contain the relevant information to fulfil the project objectives as described above.
- 3) Providing, within the final report, a full description of the data and as clear an explanation of an uncertainties surrounding the inaccuracies of the data.
- 4) Data that can be fed into the Food Loss and Waste Atlas and aligned with the Food Loss and Waste Accounting and Reporting Standard

A summary of the expected tasks within the project are detailed in Table 1 below.

**Table 1 Summary table of project deliverables**

Deliverable	Description
1. Project management	An initial (virtual) inception meeting will be held to agree details of the analysis and practical considerations such as project milestones and communication. Communication with WWF and Tesco will be regular and include email, Zoom and telephone communications as required. At a minimum, a bi-weekly verbal update will be anticipated.
2. Draft final report	The draft report will contain all elements set out in the deliverables section. It will be presented by the senior authors to a cross-disciplinary group of WWF-UK and Tesco staff as appropriate when can be mutually agreed.
3. Final report	The final report will incorporate feedback received in the face-to-face presentation of the draft report. It shall include clear presentation i.e. diagrams and explanations and be of high quality. The anticipated delivery of final report is the 7 <sup>th</sup> of September 2020.

## 5. Proposals and consultant selection

Proposals should be maximum 5 pages in length and include:

- Your approach and proposed method to address the Project Objectives and Outputs.
- Consideration of available data and collection methods
- A project plan detailing proposed scope and timeframes
- Details of relevant experience.
- A fee proposal including total days and day rates for each member of staff who will work on the project, and any non-staff/travel/ancillary costs.
- Names and CVs of all staff who will work on the project, and proposed roles (can be beyond the 5 pages).

We would be interested in consortia comprised of different experts, if relevant. Interested experts, institutions and or consortia should send their letter of intent with the relevant documents as detailed above to the contact below by email not later than Friday June 27th at 23.00 GMT. Applications received after that will not be considered.

WWF will consider proposals and appoint the successful third party through a mix of qualitative and quantitative assessment, to include:

- Quality of the submission and adherence to the brief
- Relevant organisational experience, expertise and skills of staff
- Cost and overall resource inputs
- Quality and effectiveness of the proposed methodology and ability to deliver the brief

The next Champions 12.3 meeting is on the 21<sup>st</sup> of September 2020. At a minimum we would want the preliminary findings of this project to be ready before this meeting.

**Deadline for submission: Friday 27<sup>th</sup> June 2020**

**Decision to be made/consultant appointed by: Friday 10th July 2020**

**Delivery of final report: 21<sup>st</sup> September 2020**

### Contract Particulars

WWF would prefer to contract this activity using the WWF Standard Terms and Conditions (attached and available on request). Should you wish to propose alternative terms then please include this information in your response.

## 6. Contacts

Please send a copy of your proposal for this research to:

Email: [procurement@wwf.org.uk](mailto:procurement@wwf.org.uk)

### WWF-UK

WWF-UK is the UK affiliate of the WWF Network, the global environment organisation founded in 1961. Our aim is to deliver a future in which people and nature thrive, addressing global threats to

people and nature such as climate change, the peril to endangered species and habitats, and the unsustainable consumption of the world's natural resources. We do this by influencing how governments, businesses and people think, learn and act in relation to the world around us, and by working with rural communities and smallholders and fishers to improve their livelihoods and the environment upon which we all depend. WWF uses its practical experience, knowledge and credibility to create long-term solutions for the planet's environment.

**TESCO**

Tesco plc, trading as Tesco, is a British multinational groceries and general merchandise retailer with headquarters in Welwyn Garden City, Hertfordshire, England, United Kingdom. It is the third-largest retailer in the world measured by gross revenues and the ninth-largest retailer in the world measured by revenues.