# Specifications - Research Study

**ANNEX I**

**Modelling the Cost of Inaction in UK Food System under extreme weather and nature loss scenarios**

Summary of the BAFR-UK Project and Previous Work

The BAFR project runs from September 2024 to August 2027 and it's a consortium of 5 Universities, 13 ENGOS and DEFRA; funded by UKRI. Using a backcasting approach, the BAFR-UK team define a future societal event as their endpoint. This event is civil unrest leading to 1 in 2,000 people in the UK being injured (20 times the scale of the London Riots in 2011). The BAFR Project is building on a previous study by some members of the same team entitled "Scoping Potential Routes to UK Civil Unrest via the Food System: Results of a Structured Expert Elicitation" where at least 40% of the consulted experts rate the scenario as "possible" or "very likely" within the next decade, identifying food distribution failure and total lack of food as main divers for civil unrest.

The project is also based on another previous study by some members of the same team entitled "Results of a Survey of UK Farmers on Food System Vulnerability over the Short and Long Term". Findings from this study show that 60% of farmers think a Societal Event in which 1 in 2,000 people are injured in the UK is at least 20% likely to occur over the coming decade. Over a timeframe of 50 years, this increased to almost 90% of farmers. These results show that farmers and landowners are considerably more concerned about the vulnerability of the food system in the UK than the wider group of food system experts are.

*Other key findings include:*

- Food insecurity is both a cause and consequence of catastrophic scenarios.
- Extreme weather may lead to major crop failures across production regions.
- Disruptions to global supply chain "chokepoints"—such as trade routes, pandemics, land degradation, wars, or local crises—can intensify food shortages and trigger unrest.

A unique insight from the UK context is the prominence of trade restrictions and protectionism as a likely cause of insufficient food, especially over the 50-year timeframe. This reflects the UK's reliance on food imports and vulnerability to geopolitical instability or international food scares.

Based on this risk mapping, the BAFR-UK team are focusing on three key threats in the project which is ongoing until 2027: cyber disruption, extreme weather, and geopolitics. These were examined through the lens of chronic risks (e.g. poverty, soil degradation) and acute shocks (e.g. war, extreme weather), and how they interact. WWF-UK will mainly focus on extreme weather disruptions.

Two Business-as-Usual (BaU) scenarios were developed:

 

**By 2030 - “Neglected Action”:**

- Households rely more on cheap, less nutritious food amid inflation and energy volatility.
- Food bank use grows; increasingly seen as part of everyday life.
- Warmer, drier summers and wetter winters now the seasonal norm.
- Local floods disrupt farmland and roads but are treated as isolated events.
- Retailers run lean inventories; resilience planning remains minimal.
- Digital logistics expand, but infrastructure remains vulnerable.
- Farmer protests persist, driven by supply chain and policy pressures.
- Civil society calls for reform grow louder but gain little policy traction.

**By 2040 - “Installed Crisis”:**

- Heavy reliance on ultra-processed foods; food banks now a permanent fixture.
- Drier summers, wetter winters—no major investment in water infrastructure.
- Highly efficient but fragile food system; logistics and storage lack protection.
- Deepening mistrust between farmers and government; protests target urban spending.

 