**附件1 征集领域：**

* **Sustainable and safe food from agriculture and aquaculture**

**Research areas covered**

Food production and supply addresses one of the most important and basic human needs and has developed in parallel with humanity to ensure steady provision, safety and variety of food as well as improved nutritional composition. Food safety is the absence, or safe, acceptable levels, of hazards in food that may harm the health of consumers. Food borne hazards can be biological, chemical or physical in nature, e.g. bacteria, viruses, agricultural-, aquacultural- and industrial chemicals, heavy metals, radionuclide and pesticide residues. Food safety has a critical role in assuring that food stays safe at every stage of the food chain from production to harvest, processing, storage, distribution, all the way to preparation and consumption.

Under this call for proposals, funding is available for projects that address challenges related to the two topics below, either separately or combined. **We also encourage transdisciplinary projects when relevant for the proposal objectives**.

* **Basic research on food safety in optimized value chains**

Many food and feed value chains are optimized to ensure food safety and quality, but production, processing, storage, distribution and preparation may still cause food safety issues for consumers or farmed animals. In particular, the bioavailability, bioaccessibility, bioaccumulation and biomagnification of contaminants are important to understand risks to human or animal health, thus providing a scientific basis for optimizing food safety control.

* **Basic research on emerging food safety issues in sustainable food production**

Increasing sustainability and resource-efficient circular economy principles of food production may introduce untraditional or cross-sector raw material applications and circular use of resources. This may pose new risks to food safety, e.g. by using aquaculture biological waste in agriculture. This generates a need for new knowledge about interactions between nutrients and different hazards throughout the value chain from production to consumption.

The thematic area of this call is food safety as defined in the two topics above. Applications addressing other topics without food safety as an integral part of the application will not be prioritized for funding. E.g. applications addressing solely breeding, genetics, production biology, physiology, nutrition, food security or societal aspects will not be prioritized for funding (the list is not exhaustive).