

LOWINFOOD

**Multi-actor design of low-waste food value chains
through the demonstration of innovative solutions to
reduce food loss and waste**

GA No. 101000439

D4.6 – Program WP4 final stakeholder conference - Germany

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Subtask 4.1.3 - Final stakeholder events (M36-M48)

<i>HISTORY OF CHANGES after the first submission of the deliverable on 31/08/2024</i>		
<i>Date</i>	<i>Change description</i>	<i>Reference to the EC request</i>
17/06/2025	Section 5 added	Following remarks of the reviewers, a new section 5 has been added, reporting the numbers of the final conference.

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Lowinfood Consortium

N.	Full name of the organisation	Short name	Country
1	Università degli Studi della Tuscia	UNITUS	Italy
2	Alma Mater Studiorum Università di Bologna	UNIBO	Italy
3	Sveriges Lantbruksuniversitet	SLU	Sweden
4	FH Munster University of Applied Sciences	ISUN	Germany
5	The James Hutton Institute	JHI	United Kingdom
6	Universitaet Fuer Bodenkultur Wien	BOKU	Austria
7	Tampereen Korkeakoulusaatio SR	TAU	Finland
8	Charokopeio Panepistimio	HUA	Greece
9	Osterreichisches Okologieinstitut	AIE	Austria
10	Elhuyar Fundazioa	ELH	Spain
11	Matomatic AB	MATO	Sweden
12	Unverschwendet GmbH	UNV	Austria
13	Akademie Deutsches Baeckerhandwerknord GGmbH	ADB	Germany
14	Foresightee	FOR	Belgium
15	Leroma GmbH	LER	Germany
16	Mitakus Analytics UG	MITA	Germany
17	Kitro SA	KITRO	Switzerland
18	Regione Emilia Romagna	RER	Italy
19	Pianeta Cospea srl	PICO	Italy
20	Cogzum Bulgaria OOD	COZ	Bulgaria
21	Uppsala Kommun	UPP	Sweden
22	Recuperiamo srl	REG	Italy
23	Antegon GmbH	FT	Germany
24	Confederazione Nazionale dell'Artigianato e della piccola e media impresa Associazione di Viterbo e Civitavecchia	CNA	Italy
25	Assemblée des Regions Europeennes Fruitières Legumieres et Horticoles	ARE	France
26	L.V.L Anonymi Emporiki Toyristiki Kksenodoxeiaki Kataskevastiki Etaireia	BLU	Greece
27	Iridanos-Inabelos Anonymi Etaireiatouristikis Ksenodoxeiakes Kai Agrotikes Epixeiriseis	THA	Greece
28	Luonnonvarakeskus (started on 01/11/2023)	LUKE	Finland



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Summary

The deliverable D4.6 contains the programme of the upcoming final event of the Lowinfood seafood stakeholder dialogue in Germany, titled "*Thementag Fisch*" / "*A Day For Fish*". The dialogue aimed to provide an in-depth overview of the dynamics of loss and waste generation along German seafood value chain, promote coordination between actors at different levels of the chain, and facilitate adoption of innovative solutions. Deliverable D4.6 provides the agenda for the final event. In this final event, a range of stakeholders, including some of those who have contributed to the stakeholder dialogue, but also actors beyond, especially multipliers, will be brought together for critical discussion of the research findings and implications, for gaining practical know-how on the most efficient and low-loss processing of fish, and for networking across value chain stages.

In addition to ISUN's input on the results of the stakeholder workshop, experts will give presentations on topics from the fish value chain in order to enrich the discussion with their perspectives. In addition, with the help of our laboratory chef and our sensory professor, participants will learn techniques to use fish resources sustainably by using fish as completely as possible and by showing possibilities for using plant-based alternatives.



1. Primary Objectives and Findings of Stakeholder Dialogue

The purpose of the stakeholder dialogue was to provide an in-depth overview of the fish supply chain in Germany, to promote coordination between actors at different levels of the supply chain and to adopt innovative solutions with a potential to reduce loss and waste of fish.

A large quantity of food loss and waste results from poor coordination along supply chains causing perishable products not to be consumed before the end of their shelf life. Fish is perishable and not all its by-products are suitable for human consumption, suggesting that fish supply chain has a high waste potential if ineffective collaboration among stakeholders. Besides, there is a lack of alternative chains for specific by-products, so that their nutrient is lost or used in unprofitable or ecologically non-efficient ways. For these reasons, to achieve a more efficient use of seafood products, it was essential to provide a platform for stakeholders to engage in a comprehensive discussion about the challenges and issues related to loss and waste flows in various supply chains. Moreover, facilitate the sharing of innovative solutions and best practices that have proven effective in reducing fish waste and enhancing efficiency in supply chains.

As concrete reasons for food losses and waste in the German fish value chain, the participants in our stakeholder dialogue mentioned, alongside profitability and technical considerations, the shortage of (skilled) workers, which can lead to cold chains being interrupted or goods in retail and catering not being sold on time or not being fully consumed. We discuss the results of the dialogue in much more detail in our public report on fish supply chain dialogue.

The German LOWINFOOD final stakeholder event will be used to strengthen the contacts between supply chain stakeholders, ensuring the sustainability of the dialogue beyond the LOWINFOOD project. The event will help raise awareness about the importance of sustainability in supply chains and encourage stakeholders to adopt sustainable practices that minimise waste and promote environmental responsibility.

2. Final Conference Details

The final conference event, *"Thementag Fisch" / "A Day For Fish"*, will take place on 3rd September 2024 in Münster, Germany. The event is planned as a full day event and will begin with registration at 09:45 and conclude around 17:00. The date avoids public or school holidays as well as the lecture period at the FH Münster with its teaching obligations and space requirements, ensuring the highest possible attendance from stakeholders and the best possibilities for practical work. Save the date emails have been sent out three months in advance, invitation emails followed, and various channels were used to spread the word about the event (various newsletters and social media channels of the FH Münster and the ISUN).

The event will be held at the FH Münster in seminar rooms, the sensory laboratory and the Foodlab (our research kitchen). The practical part of the day will take place exclusively in person, but the presentations and discussions will be organized hybrid to increase the number of possible participants.



3. Agenda

The event has been designed to include discussion of fish waste hotspots, where significant amounts of fish by-products, leftovers or other kind of losses and waste are generated, and opportunities for adding value by converting these by-products into useful products. In particular, the aspect of waste-free utilization of fish is not only discussed theoretically, but above all is put into practice under professional guidance in a workshop. In addition, we show which alternatives to fish can be used to protect this overexploited resource. We plan a relatively large amount of time for this. These workshops and the shared lunch also provide plenty of opportunities for networking.

The invited speakers and participants represent a diverse range of stakeholders with a focus on practitioners, especially those from the catering sector. This is entirely appropriate given the structure of the value chain in Germany, as the first stages (fishing, primary processing) hardly play a role in Germany anymore, while at the end of the value chain there is considerable potential for an even more efficient use of fish.

Table 1. Final conference agenda

Time	Session	
09:45-10:15	Registration and coffee/fruit on arrival	
10:15-10:20	Welcome, schedule of the day	Tobias Engelmann, ISUN / FH Münster
10:20-10:45	Short theoretical input on fish, algae and other fish substitutes; context of the activities planned for this day with the LOWINFOOD project, in particular the stakeholder dialogue	Tobias Engelmann Prof. Dr. Guido Ritter, ISUN / FH Münster
Practical demonstration		
10:45-11:15	Methods for residue-free processing of fish	Albrecht Fleischer, FH Münster
Parallel workshops 1		
11:15-12:15	Group 1: Workshop on how to process fish with as little waste as possible (incl. preparing crispy chips from the skins, stock/broth and garum/ fish sauce from the cutoffs, innards and carcasses)	Albrecht Fleischer and Wieland Buschmann, FH Münster



11:15-12:15	Group 2: Sensory exercises that help participants get to know fish and products from fish “waste” better and enable them to use it more efficiently	Prof. Dr. Guido Ritter
12:15-12:20	Small break, groups change rooms	
Parallel workshops 2		
12:20-13:20	Group 1: Sensory exercises that help participants get to know fish and products from fish “waste” better and enable them to use it more efficiently	Prof. Dr. Guido Ritter
12:20-13:20	Group 2: Workshop on the use of (taste and nutritionally adequate) alternatives to fish	Albrecht Fleischer and Wieland Buschmann
13:20-13:25	Small break, groups change rooms	
13:25-14:15	Lunch (made from fish and fish alternatives, previously prepared by the two groups)	
14:15-14:30	Break, participants chance room	
Presentation and discussion on challenges along the fish value chain, taking into account the results of the stakeholder dialogue		
14:30-16:00	Participants of the “Day For Fish” plus experts and other participants online discuss about opportunities and limits of using fish sustainably. Speaker 1: Dr. Sarah Simons, Research Unit Leader, Thuenen Institute of Sea Fisheries Speaker 2: Kai Wiegler, Sector Economist Marine Biodiversity and Sustainable Fisheries, KfW Development Bank	Tobias Engelmann Dr. Sarah Simons Kai Wiegler
16:00-16:50	In-depth discussion of results of T4.1 stakeholder dialogue based on the inputs and discussions previously held as well as the workshops	Tobias Engelmann
16:50-17:00	Closing remarks/next steps	Tobias Engelmann

Program is subject to change.



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4. Communication

To ensure that all participants are well-informed, a comprehensive communication plan is being implemented. Initial save-the-date and invitation emails were sent to participants, providing them with details about the conference theme, objectives, and logistics. Extensive preparatory discussions were held with the speakers and workshop leaders so that the event could achieve maximum benefit in terms of the project objectives.

Public relations work by the FH Münster took place beforehand and will also take place afterwards. Small giveaways (a glass of fish stock made from carcasses, produced during the workshop; a bottle of fish sauce made from supposed waste) strengthen the memory and the emotional connection to the content learned.

5. Post-event update on dissemination and participation

The processing and catering sector members in the stakeholder dialogue were targeted for the final event as industry stakeholders with high influence on the creation of FLW in the seafood supply chain. In this respect, high influence corresponds to having the power to reduce the FLW through company activities as well as having significant volume of FLW. The smart management, responsible planning and efficient utilization of seafood resources and their side streams by such stakeholders offer significant potential for reducing FLW in the supply chain. In addition, ISUN team approached high influence stakeholders from their own networks outside the dialogue.

In total 27 stakeholders were invited to the event via email with a personal approach. Save the date emails were sent out three months in advance, invitation emails followed closer to the event date. Beyond the personal approach, the event was advertised in newsletters and social media channels of the FH Münster and the ISUN, as well as at an event organized by another ISUN project. These wider outreach efforts are expected to result in the event being promoted to several hundreds of additional recipients that are relevant to the theme.

The practical part of the event took place exclusively in person with more than 20 participants in present, but the presentations and discussions were organized in hybrid form to facilitate participation of five stakeholders that were unable to attend the event in person on the day. Most of the event participants were from the previous contacts establishing in the stakeholder dialogue. However, few additional participants from the processing companies, predominantly managers for sustainability or product development, also took part in the event.

