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Organisation de Coopération et de Développement Économiques  
Organisation for Economic Co-operation and Development

27-Mar-2014

English - Or. English

TRADE AND AGRICULTURE DIRECTORATE  
COMMITTEE FOR AGRICULTURE

Working Party on Agricultural Policies and Markets

FOOD CHAIN ANALYSIS NETWORK: SUMMARY REPORT OF THE 4th MEETING

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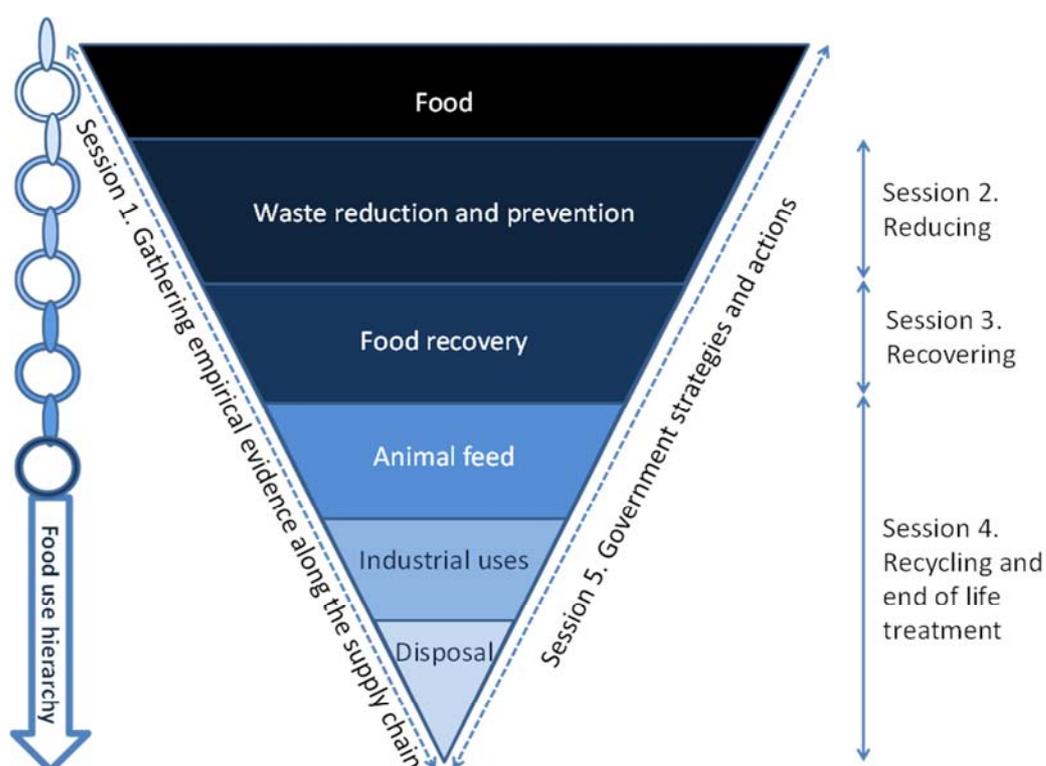
**Note by the Secretariat**

The Working Party on Agricultural Policies and Markets at its 61st session held on 19-21 November 2013 agreed to declassify this summary of the 4th session of the Food Chain Analysis Network that took place on 20 and 21 June 2013 on the theme "Food waste along the supply chain". This summary is also available on the meeting website (<http://www.oecd.org/site/agrfcn/4thmeeting20-21june2013.htm>) together with all material presented at the meeting and the list of participants.

## SUMMARY REPORT OF THE 4<sup>TH</sup> MEETING OF THE FOOD CHAIN ANALYSIS NETWORK PARIS, 20-21 JUNE 2013

1. The Fourth OECD Food Chain Analysis Network Meeting took place on 20 and 21 June 2013 on the theme "Food waste along the supply chain"<sup>1</sup>. It brought together more than 80 stakeholders from the food sector, and offered a platform for dialogue between policy communities, business, academia and others with an interest in reducing food waste. Views were solicited to help improve the understanding of definitional boundaries of food waste, validate data, identify policy issues relevant to food waste and exchange experience on end-of-life treatment of food waste.

2. The meeting was organised to mirror the food use hierarchy. Following an introductory session that set the scene from the different viewpoints of stakeholder, the first session attempted to establish evidence and share information on methods and definitions, the second session looked at reducing food waste, the third session presented initiatives and obstacles to recover food waste, the fourth session exposed experience on recycling and end of life treatment, the fifth session looked at government strategies and actions. Chair summaries are provided in Box 1. This document gives account of presentations made at the meeting with one short paragraph that attempts to summarise each presentation; the detailed agenda and list of participants are provided as Annexes.



<sup>1</sup> The programme of the 4<sup>th</sup> Meeting of the Food Chain Analysis Network is attached as an annex to this document, together with the list of participants. All material presented at the meeting is available on the meeting's website (<http://www.oecd.org/site/agrfcn/4thmeeting20-21june2013.htm>).

### Box 1. Chair Summaries

*Session 1.* Although reference to data is present throughout the sessions, a standard definition does not exist. Encouraging evidence exists on progress made on food waste data, this illustrates that we are at the beginning of a learning curve. System boundaries must be defined; therefore it is necessary to decide whether the focus is on food chain efficiency or on the legal definitions of waste. It is important to accept the statistical uncertainties that make benchmarks and targets hard to monitor.

*Session 2.* Business and government reported on international and national based initiatives illustrating how they work together and independently to reduce food waste. Measurable and concrete successes are reported from the United Kingdom and from Flanders. Business success in reducing waste is positive for sustainability and financially. Social innovation and volunteer led community actions testify of public mobilisation, this motivates governments and businesses to keep voters and customers happy. There is an opportunity to harness this mobilization to reduce food waste.

*Session 3.* Examples of recovering food for industrial use and for human consumption illustrate the incentives and obstacles to food recovery. Incentives include corporate social responsibility, environmental good will of the private sector, tax benefits when they exist. While, to the contrary, the lack of logistical capacity, the difficulty to raise capital and legislative obligations, for example the EU waste legislation, inhibit food re-use. Information on all parts of the waste hierarchy are necessary, hence the importance of reliable data on re-use, recovery for energy, composting and disposals.

*Session 4.* Food waste recycling was the focus of this session. Speakers identified the major routes for food waste treatment; feed, fertiliser and energy production or composting, which are preferable to landfill or incineration. Constraints and issues related to these methods include the reliance on separate waste collection. Different approaches exist to the sanitary issues associated to feed production. These routes can only be economically viable if feed-in tariffs are in place. The policies guiding the development of such markets need careful planning across different policy areas in order to achieve a balanced treatment.

*Session 5.* Although initiated by different drivers, commonalities exist across government initiatives. Collaboration with all actors of the food chain is important. All initiatives, with the exception of Japan, are too young to draw lessons on what works and governments have a harder time working with consumers than with industry. Differences exist in the role of government and the way strategies are implemented, whether loose and soft or restrictive and mandatory. One important aspect for industry is that policy makers coordinate and collaborate internationally to accompany the business community's growing international integration.

### Introductory Session: Sustainability of the food value chain: Setting the scene, issues and challenges

3. The introductory session helped set the scene on issues and challenges related to food waste in a sustainable food value chain.

4. The FAO provided an overview on food loss and waste, noting that 1/3<sup>rd</sup> of world food produced for human consumption ends up not eaten by humans, contributing thus to food and nutrition insecurity and depletion of natural resources. Details were provided on (i) the Zero Hunger Challenge, which includes addressing sustainability of all food systems and the aim of zero food loss and waste, (ii) the SAVE FOOD initiative and FAO regional implementation (e.g. Near East) that aims to evidence based policies and improved awareness through improved analytical data (e.g. impacts on micro-nutrients) and statistics; and (iii) its Think.Eat.Save Campaign that contributes also to the FAO-UNEP Sustainable Food Systems Programme.<sup>2</sup>

<sup>2</sup> The Committee on World Food Security (CFS)'s request to its High Level Panel of Experts on food security and nutrition (HLPE) to prepare a report on *Food losses and waste in the context of sustainable food systems* to inform the 2014 Plenary discussions was mentioned.

5. The European Commission provided a policy maker's take of food waste and made the case for reducing food waste without compromising consumer safety. The importance of achieving a shared understanding of the boundaries of the food supply chain and definitions was underlined on one hand while, on the other hand, the necessity to act without delay was stressed. A number of easy wins for food waste prevention and reduction were identified, pointing to public regulators, private sector practices and standards, and also innovation. Economic instruments that raise the cost of food waste were mentioned and, finally, discussing best ways to valorise waste when it happens, reference was made to the production of bioenergy as foreseen by the EU directive on renewable energy.

6. Presenting the European industry's perspective on food waste reduction, the representative of FoodDrinkEurope shared the results of a stakeholder survey that identified raising awareness of reducing food waste along the food chain as a priority environmental challenge for the food and drink industry. The "Every Crumb Counts" campaign aims to provide guidance on food wastage reduction through a life-cycle approach, the campaign also aims at influencing policy makers. Further to prevention actions targeted to the food supply chain and consumers, unused food can be redirected to charities or new markets. Innovation and product development, including in the area of packaging, are also key to preventing food waste as they can improve shelf life. Food waste, at its end-of-life, can be used as feed or input to other industrial processes when it is allowed by the regulatory framework.

7. The introductory session was concluded by the presentation of civil society initiatives to reduce food waste. The "Pig idea" builds on current practice in Japan and other countries and advocates to authorise the use of catering waste for animal feed in the European Union. Other initiatives include campaigns against aesthetic standards imposed by distribution that results in the reject of "wonky fruits and vegetables" on the assumption of consumer expectations, the organisation of participatory public events where large numbers of servings are prepared using food that would otherwise be wasted and the promotion of on farm gleaning of fruits and vegetables that would not have been harvested otherwise.

### **Session 1: Empirical evidence on levels and trends of food waste and loss in OECD member economies and China**

8. The next session offered an opportunity to take stock of existing empirical evidence on levels and trends of food waste and loss.

9. Recent improvements to the "loss adjusted food availability" estimates and food loss data at the retail and consumer levels in the United States were presented. In this context, the estimates are made to evaluate how much food is available for consumption, therefore, food loss is defined as "the edible amount of food, postharvest, available for human consumption but is not consumed" and food waste is defined as a component of food loss. Results show that dairy products have the largest share of food loss in weight base, while meat and poultry and fish account for the largest share in value. Among limitations to existing data mentioned, there are no estimates of total food loss at the farm level and from farm to retail, the coverage of some commodities has been discontinued or suspended and the conversion factors used apply to the complete date span.

10. Several stages of the supply and consumption stage are covered in the "Food waste and related climate impacts in the Finnish food chain" presentation, including the food industry, retail, hospitality services and households. The analysis, excludes the primary production and it is mainly based on fact finding research. Results are analysed with the aim of identifying possible causes and feasible solutions. Despite limitations, the studies show that households are the main contributors to food waste, while the food industry has a large yet smaller share. The research finds that the quality of data is insufficient to provide a reliable estimate of food waste and of its climate change impacts, and makes the case to improve the methodology that allows calculating the climate change footprint of food waste.

11. The results of a "Preparatory study on food waste in Europe" carried out for the European Commission were presented. The study aims to quantify food waste in Europe, identifies the main causes, assesses the environmental impacts, takes stock of existing initiatives, forecasts food waste in 2020 and offers a selection of policy options. The study does not cover the agriculture sector and brings together heterogeneous data both from definition and calculation method points of views with many data gaps. The study shows that households produce the largest fraction of food waste and manufacturing produce a significant though smaller share. Using a whole life cycle approach, the study estimates that 3% of EU emissions result from food waste. The study notes that better data and a better understanding of food waste composition would be necessary for a more robust estimation of the environmental impacts of food waste. Five policy options are put forward, some of which are already in place in some EU member states, these include coherent data reporting, clarification of date labelling, setting targets for food waste reduction, the separate collection of food waste and awareness raising campaigns targeted to households and general public at large. The report also summarises the positions of the European Institutions relevant to food waste. These include the European Parliament's resolution of January 2012, the 2011 Resource Efficiency Roadmap and the Commission's forthcoming communication on sustainable food waste expected end 2013. The Eurostat voluntary food waste data collection as well as the FUSIONS initiative<sup>3</sup> were noted as important developments. With regards to definition, the legal bindings under the EU waste regulation were seen as a strong incentive to use the term wastage.

12. The presentation of the OECD project on food waste covered two distinct studies, one on food waste data and legal frameworks in OECD member countries, and a second one on food waste and food loss in China. The stocktaking of available data on food waste in OECD member countries shows that differences in coverage and measurement are major obstacles to comparability of food waste data and that data gaps on the food chain prior to the consumer must be filled. The study argues that the lack of information on other areas of the supply chain is the reason why households are generally identified as main contributors to food waste. In OECD member countries, legal frameworks are generally developed to address waste management rather than food waste, although cases exist where policy makers aim at food waste prevention and facilitate tax and liability exemptions on food donation. The study finds that collaboration among all stakeholders is necessary to identify efficient ways to prevent and reduce food waste. According to the report on China, available evidence points to inadequate storage as the main cause of agricultural postharvest losses. Consumer level food waste occurs mostly in the catering and restaurant services, and is expected to increase as a result of urbanisation and a growing middle class. The legal framework in China relates to waste in general and no coordinated action from governmental institutions targets food waste reduction *per se*.

## **Session 2: Reducing food waste and loss**

13. This session aimed at sharing experience in reducing food waste and loss from a government, industry and academic perspective.

14. In 2011 the government of Flanders adopted a food chain perspective to reducing food losses bringing together stakeholders from the food supply chain in a food chain platform and different areas of the government in an Interdepartmental Working Group on Food losses with a view to contribute to a Food Waste Policy. Building on case studies the food chain platform covered a wide range of issues such as shelf life information, innovative packaging, social food distribution and improvements in the production chains. The government identified seven priority areas. Several lessons can be learnt from this experience. Consensus is necessary on definitions, framework and data; the food chain has a constructive role and should be approached accordingly; the lack of data should not delay action. The exchange of knowledge and best practices works, all stakeholders should be involved and governments can stimulate and support

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<sup>3</sup> Both these elements are further developed during specific presentations.

their initiatives. Work is still on-going to identify which policy actions have the most impact and also on ways to get consumers on board.

15. The FUSIONS initiative was launched in 2012 to contribute to harmonising food waste monitoring, to identify social innovative measures to optimise food use in the food chain and to provide input to a Common Food Waste Policy for the European Union. This four-year programme receives EUR 4 million from the European Commission's FP7 on research and innovation. FUSIONS is structured in five work packages covering data, policies, social innovation and dissemination and a multi stakeholder platform, divided in 4 regional platforms. Further to the platforms, it uses internet consultations and surveys to engage with stakeholders and civil society, to collect input to the process and to validate results.

16. Nestlé initiatives avoiding food wastage along the food value chain include research and development towards new crop varieties, shelf stable products and novel packaging. With regards to supply management, actions have been taken to support improved cooling and storage facilities on-farm; to reduce waste in manufacturing processes, to divert waste from disposal to energy production and recycling; to improve distribution capacity and demand planning. Consumer level actions have been carried out from adapting portion size and providing preparation instructions to corporate awareness raising campaigns targeted towards Company employees to reduce food waste in corporate catering services.

17. UK's WRAP experience in "Preventing waste from farm to fork" in a more general context of "a world without waste where resources are used sustainably" was presented. WRAP evaluates the impact of food waste in the UK to GBP 12 billion for households and GBP 2 billion for food and drink supply chain; 20 and 10 million tonnes of CO<sub>2</sub> equivalent per year (respectively). Engagement with the food and drink supply chain on reducing all waste started in 2005 with the first Courtauld Commitment. It is now in its third phase and has expanded to a greater number of businesses and sectors. Results of monitoring progress show achievements beyond targets. A separate agreement to reduce waste was signed with the hospitality and food services sector, for which food represents over 40% of waste. With regards to the household sector, prevention strategies are developed and implemented, including awareness raising campaigns and influencing the retail sector to change products and practices to help consumers waste less. WRAP also contributes to international initiatives including a toolkit to pilot food waste for the Think.Eat.Save campaign, illustrating the improved international coordination. Partnership with business and NGOs are important for success.

### **Session 3. Food re-use and recovery**

18. The third session of the meeting covered the valorisation by industry of food industry rejects, by-products and surplus and the role of food banks in preventing food to be wasted.

19. Process innovation is the starting point of Provalor, a food manufacturer that profitably recovers ingredients from vegetal rejects of agriculture and the food industry for use as inputs to the food industry, in other words "Making money from vegetable remnants (waste)". Provalor has patented processes since 2004 and its experience shows that food waste recovery is not only an environmental necessity but also a profitable business.

20. Food banks play an important role in fighting hunger and ensuring that food can reach vulnerable communities. They are also an efficient actor of the food chain in that they facilitate food "re-use" and redistribution of safe, nutrition surplus food before it is turned into waste. This is the message conveyed by The Global FoodBanking Network (GFN). GFN is active in developed and developing countries, advocating for and enabling a regulatory environment where food donors are protected from liability (Good Samaritan Act) and tax policies support food donation. GFN mobilises resources globally (food,

grants and volunteers) while also providing support locally to Food Banks to identify food recovery sources and adopt best practices with regards to governance but also to storing and distributing food.

21. Food waste management through social innovation is the core business of AllWin, a business operating in Sweden on private funds, as was explained in "How to turn food waste into a win-win-win for society, businesses and the environment". AllWin is contracted by retailers and the food industry to collect food that would otherwise be discarded and provides it to non-profit organisations that distribute food to the needy. The benefits are environmental as well as social, but most importantly it offers a viable business model.

#### **Session 4. Recycling food waste and loss**

22. Existing practices in recycling food waste were presented in this session.

23. The presentation of "Treatment and recycling of food waste" described strategies in place in the United Kingdom to meet commitments and targets set in several EU regulations; the EU Landfill Directive, the Climate Change Act and the EU Renewable Energy Directive. Anaerobic digestion (AD) is an efficient response that has been put forward to meet these commitments. It diverts waste from landfill, avoids CO<sub>2</sub> emissions and contributes to the renewable energy targets. The AD process generates gas (biomethane) and biofertiliser from food waste. Since the early 2000s, organic recycling volumes have increased and constitute an adequate input to AD. Government policies support separate food waste collection in Scotland and Wales while England has implemented an action plan for AD including financial incentives leading to a sustained increase in the number of AD facilities that have reached more than one hundred in 2013, with more than 60 plants being waste fed. However for the process to be economically viable markets must be developed for power, heat and nutrients.

24. The food recycling law sets the framework for food waste in Japan. Its boundaries include food waste and by-product with commercial value generated by businesses. More than 60% of food waste generated by businesses is directly sold as input to produce feed or fertiliser. The remaining industrial food waste is transformed into feed, fertiliser or energy, an equivalent volume is sent to incineration or landfill. Household food waste is excluded from the law boundary and more than 90% is sent to incineration or landfill. Feed in tariffs have shaped inputs to the process and, through time, methane fermentation is expected to increase.

#### **Session 5. Government strategies and actions on food waste**

25. The last session discussed government strategies.

26. In Sweden, a collaborative group for food waste prevention organises communication and collaboration throughout the food supply chain, bringing together government agencies, universities and stakeholders to define joint actions. The national target for food waste sorting and biological treatment is set to 50%, of which 40% goes to energy recovery. More than half of the municipalities ensure separate collection, a number that will be expanded. Most of the waste is used to produce biogas. Further to this, Sweden's National Food Agency is currently running a three year project (2013-15) for food waste reduction with a budget of EUR 1.3 million, to which the Nordic Council of Ministers provided an additional EUR 0.7 million to expand to all Nordic countries. The project brings together the Environmental Protection Agency and the Board of Agriculture to carry out studies on the whole food supply chain; to analyse causes of food waste; develop measures to reduce food waste; develop campaigns towards households; and to promote the use of unavoidable food waste for biogas.

27. The Spanish strategy "more food less waste" targets transparency, dialogue and coordination on food waste reduction over a three-year period. Five action axes are foreseen; improving the understanding

of the causes of food waste; promoting the uptake of good practices; reviewing the regulatory framework; collaborating with stakeholders; and promoting the design and development of new technologies.

28. Japan has a longstanding history in government-led food waste reduction. The food recycling law has been in place for more than ten years (2001) and the legislative framework has been consolidated through time, with the latest addition being the biomass industrialisation strategy that was adopted in 2012. The law defines a priority hierarchy for food use and food waste encouraging waste prevention, then recycling to feed, heat recovery and finally reduction in weight. Recycling target rates are set for each sector of the food supply chain and the responsibilities of stakeholders are identified. The law also imposes mandatory reporting of food waste on business operators which generate no less than 100 ton a year of food waste; while it provides guidance and advice to all food related business operators. The law also has the "recycling business plan approval system" to formulate good practices where the activities of waste recycling circulation are monitored. Soft accompanying measures target food manufacturers, and distribution services to trigger and facilitate changes in business practices, such as unsold product returns to manufacturers. A consultation group bringing together stakeholders from manufacturing, retail, wholesale and experts has been setup to this purpose. Food banks ensure the redistribution of safe food. Awareness raising actions jointly defined by the Cabinet office, the Ministries of Agriculture, of Environment and of Education and the Consumer Affairs Agency target specific groups or public at large in the spirit of "*Mottainai*"<sup>4</sup>. All these actions have had a measurable impact on food waste reduction and on recycling rates.

29. The French national pact against food waste, launched in June 2013, results from a six months' consultative process. The pact aims to engage stakeholders to the food chain to commit to halve food waste by 2025, through eleven actions ranging from seeking support for food waste reduction from industry, to implementing and monitoring a web platform for food donation or specific training in agricultural education and hospitality services, clearer date labelling on food products etc. The pact also identifies actions relevant to each segment of the food supply chain, from farmers to catering and involving local governments, consumers, charity organisations, and others. These actions not only aim to raise awareness but also to organise actions to reduce and quantify food waste.

30. The planned EU data collection on "waste containing food waste" responds to a demand for comparable data at EU level and aims at harmonising national projects. The collection aims to identify where in the food chain, food waste is generated and how it is managed. In 2013, Eurostat developed a food waste "plug-in" with the participation of Member States to collect additional, more focused, food waste data in a timely manner and within the legal framework on waste statistics. The plug-in provides a finer break down of waste into items and by economic activities, covering households as an additional activity. The collection exercise is voluntary and results on reference year 2012 to be available in 2014. As part of this exercise, Eurostat organised a workshop with data providers to discuss methodological issues and help identify current practice and possible difficulties. A second workshop is planned when results are available to evaluate this exercise.

31. A pilot research on food waste in Portugal estimates that 20% of food is wasted throughout the food supply chain, from fish discards to vegetables left in the field un-harvested for economic reasons and including consumer behaviour, lack of cooling or poor shelf management in distribution. The research finds that generally processes are optimised in the food industry. While multiple causes of food waste at household level exist that include confusion on date labelling, over purchasing, cooking capacity and food storage. The study identifies priority agricultural products with regard to amounts wasted and stage of the food chain where waste occurs. Proposals to reduce food waste include a better data on food waste, support

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<sup>4</sup> *Mottainai*, in Japan, is the spirit of using things with care, using them to the full and reusing things whenever possible and also contains the meaning of reduction, reuse and recycling.

to farmers and closer links between producers and consumers, improved package size and improved awareness.

### **Special workshop on quantifying the impacts of food waste**

32. This workshop was organised to serve as input to the reflection on future work on food waste at the OECD. It brought together modelling experts to discuss existing models and identify adequate tools to quantify the impacts of food waste to inform policy makers. And to investigate the capacity of the different models to take into account multiple commodities and the different stages of the food chain. The Aglink-Cosimo model was presented and its possible use to run simulations to estimate food waste reduction impacts was described. The importance of better data collection to serve modelling work was underlined. Modelling agriculture and linking economic and environmental forecasting was discussed. The specific features of ENV-Linkages model and the IMAGE suite of models were compared. The results of the OECD Environmental Outlook 2050 and the main policy recommendations were presented. Results of the applications of the Magnet model for modelling the impacts of reducing food losses and waste were presented, using the 2011 FAO data on food waste and testing different levels of food waste reduction. A simulation of the effect of agricultural food waste reduction in cushioning costs associated with different strategies to compensate global food price hikes on Middle East and North African countries shows that reducing agricultural food waste has greater impact on enhancing food security, and decreasing vulnerability to food price volatility as well as rural poverty. Preliminary results of a model estimation of the environmental footprint of food waste were presented, based on FAO figures for food waste. The carbon footprint, the water footprint and the land occupation were analysed by region and agricultural commodities.

**FOOD WASTE ALONG THE SUPPLY CHAIN  
OECD FOOD CHAIN ANALYSIS NETWORK – 4<sup>TH</sup> MEETING**

**20-21 June 2013**

**OECD Conference Centre, Paris, France**

**DRAFT AGENDA**

**THURSDAY 20 JUNE**

**9:30-10:00** Participants registration

**10:00-10:15** Welcome by the OECD Secretariat

**Introductory Session: Sustainability of the food value chain: Setting the scene, issues and challenges**

*Chair: Ken Ash, OECD*

**10:15-11:15**

**Speakers:**

- *Elhadi Yahia and Camelia Bucatariu, FAO*
- *Chantal Bruetschy, European Commission*
- *Joop Kleibeuker, FoodDrinkEurope/European Dairy Association*
- *Tristram Stuart, Feeding the 5000*

**Session 1: Empirical evidence on levels and trends of food waste and loss in OECD member economies and China**

*Chair: Julian Parfitt, Oakdene Hollins*

**11:15-13:00**

**Presentations:**

- *Data collection at the regional and national levels*

**Discussions:**

- *Different definitions and measurements*
- *Data validation, sources of data and alternative sources for filling gaps*

**Speakers:**

- *Jean Buzby, Economic Research Service, USDA, United States*
- *Juha-Matti Katajajuuri, MTT Agrifood Research, Finland*
- *Clementine O'Connor, BIO Intelligence Service*
- *Morvarid Bagherzadeh, OECD, and Gang Liu, Norwegian University of Science and Technology*

**13:00-14:30**

**Lunch Break\***

*\*Tristram Stuart will present a lunch-time seminar on “Tackling the Global Food Scandal”, from 13:15 to 14:00 in the Auditorium of the OECD Conference Centre. Please note that the presentation will be made in English.*

## Session 2: Reducing food waste and loss

*Chair: Tristram Stuart, Feeding the 5000*

**14:30-16:15**

**Presentations:**

- *National policies and initiatives on reducing food waste and loss*
- *Private initiatives and responses*

**Discussions:**

- *Incentives and obstacles*
- *Product date labelling*

**Speakers:**

- *Kris Roels, Flemish Government*
- *Toine Timmermans, FUSIONS/Wageningen UR*
- *Javiera Charad, Nestle*
- *Andy Dawe, WRAP*

## Session 3. Food reuse and recovery

*Chair: Chantal Bruetschy, European Commission*

**16:15-18:00**

**Presentations:**

- *National policies on reusing food waste and loss*
- *Private initiatives and responses*

**Discussions:**

- *Innovation and technology improvement*
- *Food aid and food banks*
- *Best practices and communications*

**Speakers:**

- *Piet Nell, Provalor BV*
- *Jeffrey Klein, The Global FoodBanking Network*
- *Simon Eisner, Allwin Ltd, Sweden*

## FRIDAY 21 JUNE

## Session 4. Recycling food waste and loss

*Chair: Peter Börkey, OECD*

**09:30-10:30**

**Presentations:**

- *National policies on recycling food waste and loss*
- *Business initiatives and responses*
- *Innovation and technology improvement to produce animal feed, fertilizer and energy recovery*

**Discussions:**

- *End of life treatment of food waste and loss*
- *Best practices and communications*

**Speakers:**

- *Nina Sweet, WRAP*
- *Akikuni Ushikubo, Tokyo University of Information Sciences*

## Session 5. Government strategies and actions on food waste

*Chair: Carla Boonstra, Delegation of the Netherlands*

**10:30-11:45**

**Speakers:**

- *Ulrika Franke, Swedish Board of Agriculture*
- *Alicia Crespo, Ministry of Agriculture, Food and Environment, Spain*
- *Asako Nagano, Ministry of Agriculture, Forestry and Fisheries, Japan*
- *Perrine Coulomb, Ministry of Agriculture, Agro food and Forestry, France*
- *Hartmut Schrör, European Commission - Eurostat*
- *Iva Miranda Pires, FCSH-Universidade Nova de Lisboa/CESTRAS, Portugal*

## Concluding session

*Chair: Frank van Tongeren, OECD*

**12:00-12:30**

**Presentations:**

- *Chair reports on session outcomes*

**Discussion:**

- *Identifying possible areas for future work*

**Speakers:**

- *Session Chairs*

**Special workshop on quantifying the impacts of food waste**

*Chair: Frank van Tongeren, OECD*

**14:30-17:00**

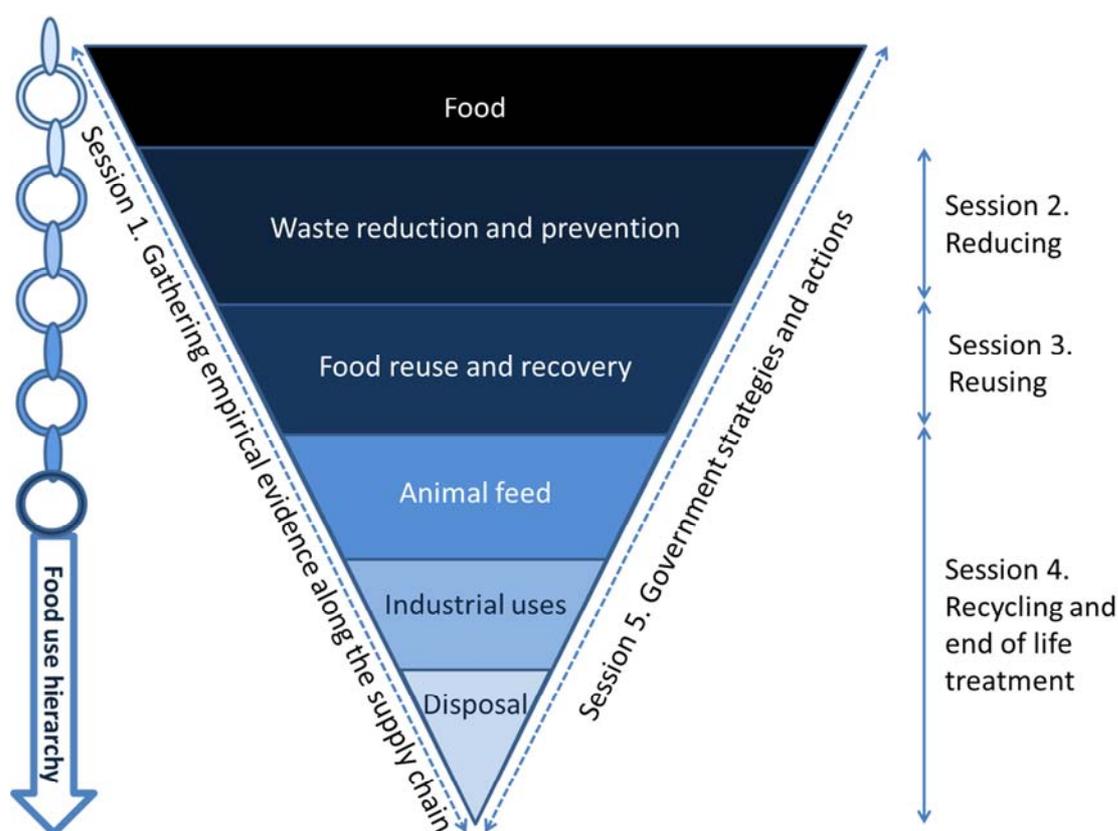
**Presentations:**

- *Models best adapted to scenario analysis of the impact of variations of food waste on markets and trade.*
- *Models best adapted to scenario analysis of the impact of policy change on food waste generation.*

**Speakers:**

- **Koki Okawa**, *Agricultural Trade and Markets, OECD*
- **Roger Martini**, *Fisheries, OECD*
- **Rob Dellink**, *Environmental Modelling and Outlooks, OECD*
- **Martine Rutten**, *Wageningen UR*
- **Clément Tostivint**, *BIO Intelligence Service*

**Diagram showing the relationship between the food use hierarchy and sessions of the meeting**



**Participants list for OECD Food Chain Analysis Network – 4th Meeting  
Food Waste Along the Supply Chain**

**20/6/2013 - 21/6/2013**

**Speakers and Chairs**

UN Food and Agricultural Organization (UNFAO)/Organisation des Nations Unies pour l'Alimentation et l'Agriculture (ONUFAO)	Ms. Camelia BUCATARIU Policy development Consultant Agriculture and Consumer Protection Department Food and Agriculture Organization of the United Nations SAVE FOOD/FUSIONS	Email: <a href="mailto:camelia.bucatariu@fao.org">camelia.bucatariu@fao.org</a>
UN Food and Agricultural Organization (UNFAO)/Organisation des Nations Unies pour l'Alimentation et l'Agriculture (ONUFAO)	Mr. Elhadi YAHIA Agro-Industry Officer Food and Agriculture Organization (FAO) FAO Regional Office for the Near-East Cairo	Email: <a href="mailto:Elhadi.Yahia@fao.org">Elhadi.Yahia@fao.org</a>
EU/UE	Ms. Chantal BRUETSCHY Head of Unit B3 Biotechnology, Pesticides and Health European Union	Tel: +(32) 2 29 62362 Fax: +(32) 2 29 91067 Email: <a href="mailto:chantal.bruetschy@ec.europa.eu">chantal.bruetschy@ec.europa.eu</a>
European Dairy Association (EDA)	Mr. Joop KLEIBEUKER Secretary General European Dairy Association (EDA)	Tel: +32 2 5495041 Email: <a href="mailto:jkleibeuker@euromilk.org">jkleibeuker@euromilk.org</a>
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