

MACS-G20 Collaboration Initiative Food Loss and Waste

Annual update on deduced activities



December 20th, 2018

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1. Introduction

The MACS¹ Collaboration Initiative on Food Losses and Waste (in the following mentioned as MACS-G20 FLW Initiative) was launched in 2015 at the MACS-G20 in Izmir, Turkey. Germany took leadership of the Initiative and finances the position of a coordinator for four years from June 2017 until June 2021 on own expenses.

The coordinator is located at the Federal Research Institute for Rural Areas, Forestry and Fisheries (Thünen Institute) located in Brunswick (Germany). The position was filled in June 2017 by Felicitas Schneider². From 2015 until mid of 2017, Stefan Lange who is research coordinator of Thünen Institute and part of German MACS-G20 delegation, was responsible for the German contribution to MACS-G20 FLW Initiative. Since mid of 2017 he supervises the coordinator and takes part in selected activities.

The aim of this report is to summarise already finished and ongoing activities derived from the MACS-G20 initiative, to foster the sharing of knowledge and experience and to invite interested MACS-G20 members and guests to participate in joint activities. The present report provides a brief update and summarises the activities from 2018.

This report is published online³ and in addition sent out per mail to a selected group of interested people dealing with the issue of food loss and waste. Most of them participated in the kick-off workshop held from June 20th to 22nd, 2017 in Berlin where participants from 17 countries as well as from FAO, OECD and EU-Commission were present. If you are also interested to receive information on the activities, please do not hesitate to contact the coordinator by writing an e-mail to felicitas.schneider@thuenen.de. You are welcome!

Besides the annual report (the first one was published in 2017), there is also a newsletter which is sent out at irregular intervals after the MACS-G20 of the respective year (mostly in spring) as a brief summary of the main outcomes from the MACS-G20.

Activities, to which (further) cooperation partners are welcomed, are marked within the present report with the following blue star:



If you are interested to learn more about it and if you wish to contribute, please do not hesitate to contact the coordinator. Furthermore, if you have additional ideas or wish to cooperate with other members of the MACS-G20 FLW Initiative, to host a FLW workshop or contribute to the prevention of FLW with any other approach, please contact us, too!

The activities derived from the MACS-G20 FLW Initiative are focusing on G20 members but are not restricted to them. As the food supply chain is global, also our activities should be global and include also

¹ MACS means Meeting of Agricultural Chief Scientists, more details see <https://www.macs-g20.org/>.

² <https://www.thuenen.de/en/ma/staff/scientific-staff/schneider-felicitas-dr/>

³ <https://www.thuenen.de/index.php?id=7196&L=1>

non-G20 members in order to consider inter- and transdisciplinary issues, interactions between different levels of the food supply chain and the corresponding actors as well as the impact of local framework conditions.

2. Overview of past and ongoing activities

Our activities - finished within this year as well as ongoing - are briefly described according to the main topics of the MACS-G20 FLW Initiative (Figure 1).

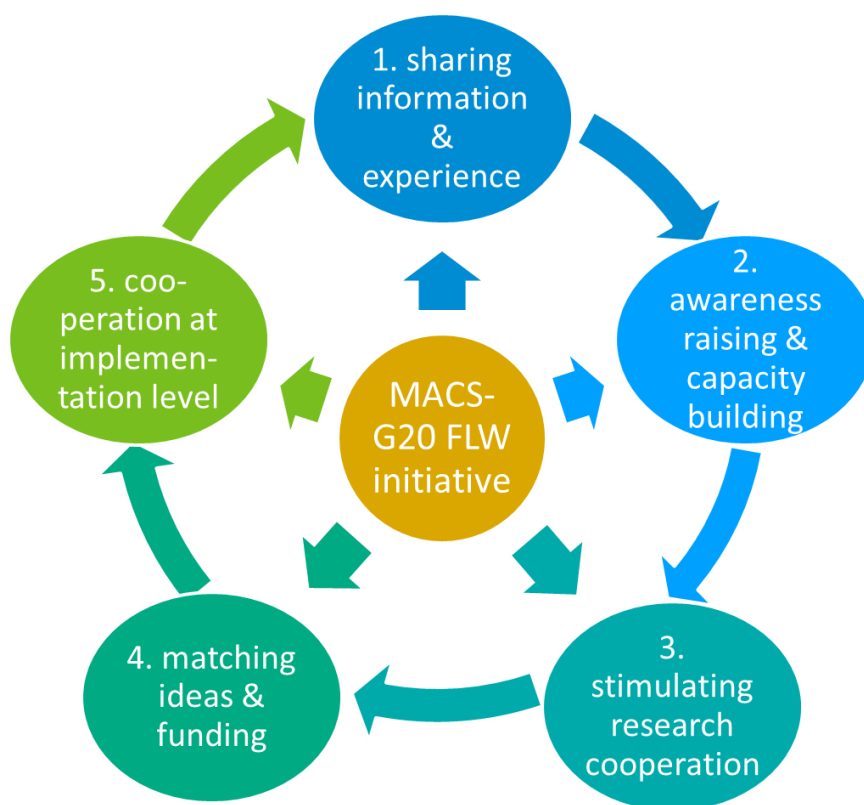


Figure 1 Scheme of the structure of main topics derived from MACS-G20 FLW initiative

Topic 1: Sharing information & experience

Global Food Loss and Waste Research Platform



The Global Food Loss and Waste Research Platform is an online data base⁴ where experts register in order to make their contact information and their FLW projects more visible on a global level. Aim of the Platform is to offer easy accessible and focused information to policy decision makers, companies and researchers to facilitate networks building, knowledge sharing and corresponding action.

⁴ <https://www.global-flw-research.org>

In order to have a consistent data base, the entries of the platform were manually checked and revised in 2018, e.g. in case the same project was listed twice or the country relation was missing. The Global FLW Research Platform was mentioned at several meetings to which the coordinator was invited to give a presentation in 2018. This led to an increase in the number of registered researchers by 44 % in comparison to November 2017.

Since its launch in spring 2016, 108 researchers from 20 countries entered their contact data into the data base and provided information on 87 projects related to FLW (see Figure 2). Most projects (53) deal with the question on how to reduce food waste by quantity. The most targeted food product groups are vegetables (63), fruits (60) as well as cereal products (58).

All interested colleagues are welcome to contribute further knowledge to the database by inviting additional experts also from non-G20 countries to register and by using the content for own investigations and network establishment.

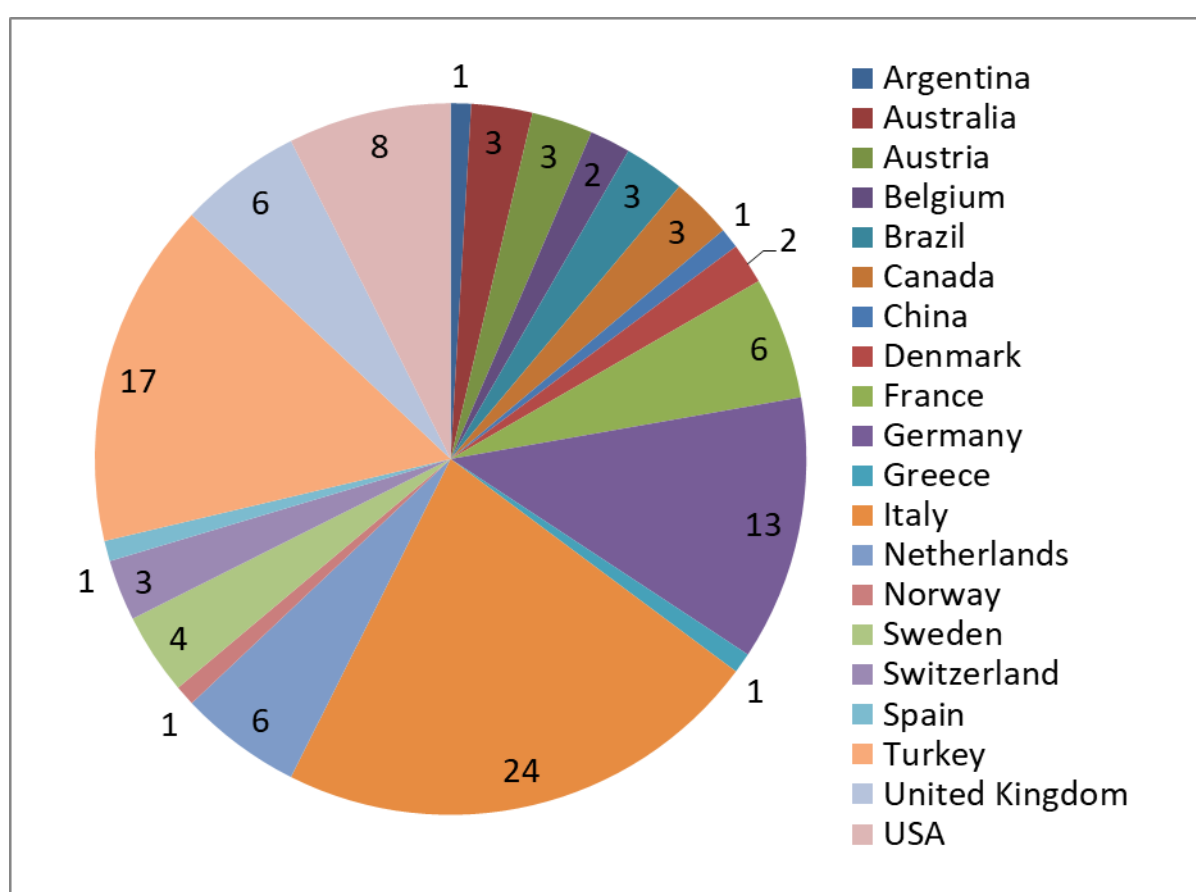


Figure 2 Distribution of researcher's profile in the Global Food Loss and Waste research Platform (as of December 13th, 2018).

In order to obtain evidence of the Platform's recognition at global level, a set of facts were assessed in relation to the website's access rates. In 2018, 828 accesses were counted for the website in total which is a very similar access rate compared to 2017. Figure 3 shows the visitors' countries of origin. The majority of the visitors came from USA, Canada, Spain, UK, Italy, Germany and Japan. But also visitors from Brazil, Russia, Greece, China and Turkey showed more interest in the website as those from other countries. These figures only serve to draw a general picture on the interest in the data base because due to technical reasons, the countries of origin shown in Figure 3 may not correspond to the real geographical location of the individual visitor.

About 454 (54.8 %) visitors arrived directly on the website while 294 visitors (35.5 %) were redirected from other websites. Only 80 visitors were directed to the website by using search engines (9.7 %). Of these, 119 visitors found the information interesting and used in the embedded links from our website for further reading at the corresponding experts' or projects' websites. Forty documents were downloaded directly from the platform website. In order to increase the number of visits coming from search engines, a search engine optimisation (SEO) by using specific keywords and a description was introduced by the end of November 2018. In the coming next months it will be documented, if the number of visits has increased due to this modification.

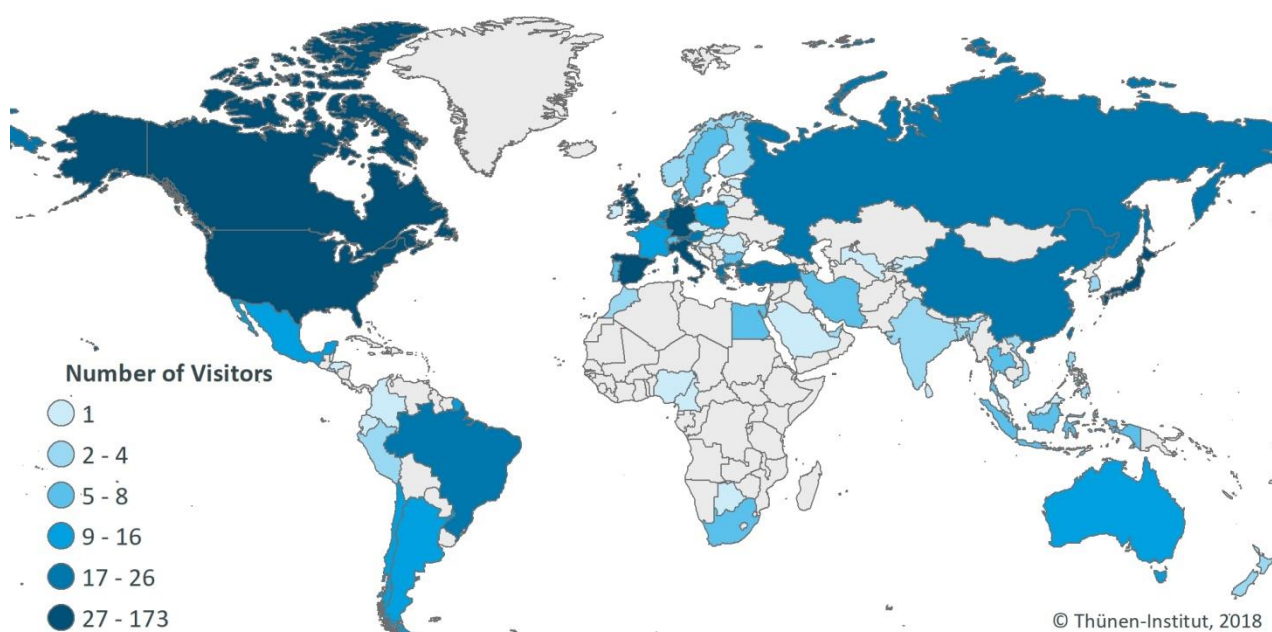


Figure 3 Numbers of visitors at the Global Food Loss and Waste Research Platform in 2018.

MACS-G20 2018 under presidency of Argentina

This year's MACS-G20 was held in the very north of Argentina in San Salvador de Jujuy from May 28th to 30th. The coordinator presented the derived FLW activities and presented, among other things, the idea of holding regular regional FLW workshops, which will to be organised by Thünen Institute in cooperation with the respective G20 presidency (see also next bullet point). The delegates' response to the reporting was positive. The statement *„We support continuing the collaborative work on the reduction of food losses and waste (FLW) conducted by Germany in 2017. For this purpose, Argentina with the support of Germany, will host a FLW workshop in October 2018 at Buenos Aires in order to tackle identified regional FLW challenges in Latin American and Caribbean countries.“* was included in the communiqué. First contacts to the upcoming presidencies of Japan (2019) and Saudi Arabia (2020) were already established to eventually plan the coming workshops.

In addition to the meetings and discussions, a field trip was part of the programme. It included a visit to the salt lake Salinas Grandes by crossing 4,170 m altitude twice, a walk through the centre of Purmamarca municipality with the well-known colourful mountains as well as a technical excursion to the Research Institute for Family Farmers (IPAG-INTA) at Posta de Hornillos. There, the participants learned a lot about the harsh conditions faced by smallholder farmers in Andes region. Difficulties include insufficient rainfall,

impact of the high altitude conditions and lacking financial resources for mechanisation of agricultural practices. A set of agricultural machinery adjusted to the environmental and working conditions is available at the Research Institute for the regional family farmers. The machines shall support efficient harvesting and processing of grain to increase the yield and to guarantee marketable products as well as reducing losses.

All documents related to that MACS-G20 are provided online⁵. The next MACS-G20 will take place in Tokyo, Japan from April 24th to 26th, 2019.

After the official MACS-G20, Mr. Lange, and the coordinator, Ms. Schneider, took the opportunity to visit two food banks, Fundación Banco de Alimentos de Santiago del Estero⁶ as well as Fundación Banco de Alimentos de Tucumán⁷, located near the meeting venue in the North of Argentina. Food banks collect surplus food which is donated by farmers, producers, wholesalers and retailers and/or restaurants and redistribute it to social organisations or directly to people in need (see Figure 4 and Figure 5 below).

The colleagues in both locations conduct very valuable work to save surplus food for people in need, mostly for children. Although these activities are mostly performed by volunteers and under a very restricted budget, the activities are very well organised. There is a thorough reporting system for all donations from the entrance gate until the handover to client organisations. In cooperation with the Global Foodbanking Network (GFN), additional activities such as drying surplus fruits and vegetables to preserve them were implemented in Tucumán. The food bank in Santiago del Estero financed a vacuum packaging machine with support of GFN which is used to pack egg powder into small portions. This approach ensures regular intake of eggs by the juvenile clients. Both food banks work at the wholesale market in the respective city, which is a real challenge. There is a need for experienced and motivated volunteers to receive donations from vendors before the products are wasted. The visit of a soup kitchen in Banda del Rio Sali, a deprived neighbourhood of Tucumán, illustrated the positive effect of food security for people mostly affected by the economic crisis in Argentina.

⁵ <http://www.macs-g20.org/annual-meetings/current-meetings/argentina-2018/>

⁶ <https://bancodealimentossde.org>

⁷ <http://bancodealimentostuc.org.ar/>



Figure 4 Volunteers sort and clean food donated by vendors from wholesale market in Santiago del Estero. (© F. Schneider).



Figure 5 Part of the daily donations from wholesale market in San Miguel de Tucumán ready for sorting. (© Felicitas Schneider).

FLW Workshop November 20th to 21st, 2018 in Buenos Aires, Argentina

One aim of our activities is to organise an international FLW workshop annually. The workshop series started with the kick-off workshop in Berlin⁸ in 2017 and was followed by a regional FLW workshop that was organised for Latin America and the Caribbean countries (LAC) in November 2018 in Buenos Aires. The Argentinian Secretary of Agroindustry, FAO Latin America and the Caribbean, FAO Argentina, Instituto Nacional de Tecnología Agropecuaria (INTA) and Thünen Institute organised the side event “Regional

⁸ More details can be found at <https://www.macs-g20-flw-workshop.de/>.

Dialogue on Food Loss and Waste: Latin American solutions and initiatives”⁹ that was embedded within the FAO event “Week of Food and Agriculture”¹⁰. We thank the whole team for the fruitful cooperation! Figure 6 shows participants of the “Regional Dialogue on Food Loss and Waste: Latin American solutions and initiatives”.



Figure 6 Participants from eleven LAC countries at the Regional Dialogue in Buenos Aires, Argentina (© FAOALC).

In plenary and working group sessions several issues of food loss and waste were presented and discussed among the approx. 50 participants from eleven Latin American and Caribbean countries. The participants represented a very good mix of policy decision makers (ministries, FAO), food producers (e.g. Unilever), NGOs¹¹ (e.g. Nilus, Gastromotiva Brazil, Global Foodbanking Network, Save Food Costa Rica), international associations (e.g. Consumer Goods Forum, Unidad Alimentaria de Montevideo, Interamerican Development Bank) and researchers (e.g. EMBRAPA/Brazil, National Institute of Statistics and Geography INEGI/México).

Ministries and organisations shared information on the situation in their countries, on project results and experiences related to food loss and waste prevention activities. In working groups, the topics of “challenges and opportunities for cooperation and investments between countries and stakeholders” as well as “from losses to solutions, addressing the impacts of FLW” were discussed. Within the working groups, next steps for joint activities and ideas for new approaches were elaborated and at the end of the sessions introduced to the plenary by the group facilitators. Figure 7 gives an impression of the group discussions at the “Regional Dialogue on Food Loss and Waste: Latin American solutions and initiatives”.

⁹ More details can be found in Spanish at <http://www.fao.org/argentina/noticias/detail-events/en/c/1171830/>.

¹⁰ More details can be found at <http://www.fao.org/americas/eventos/ver/en/c/1146949/>.

¹¹ NGOs means non-governmental organisations.

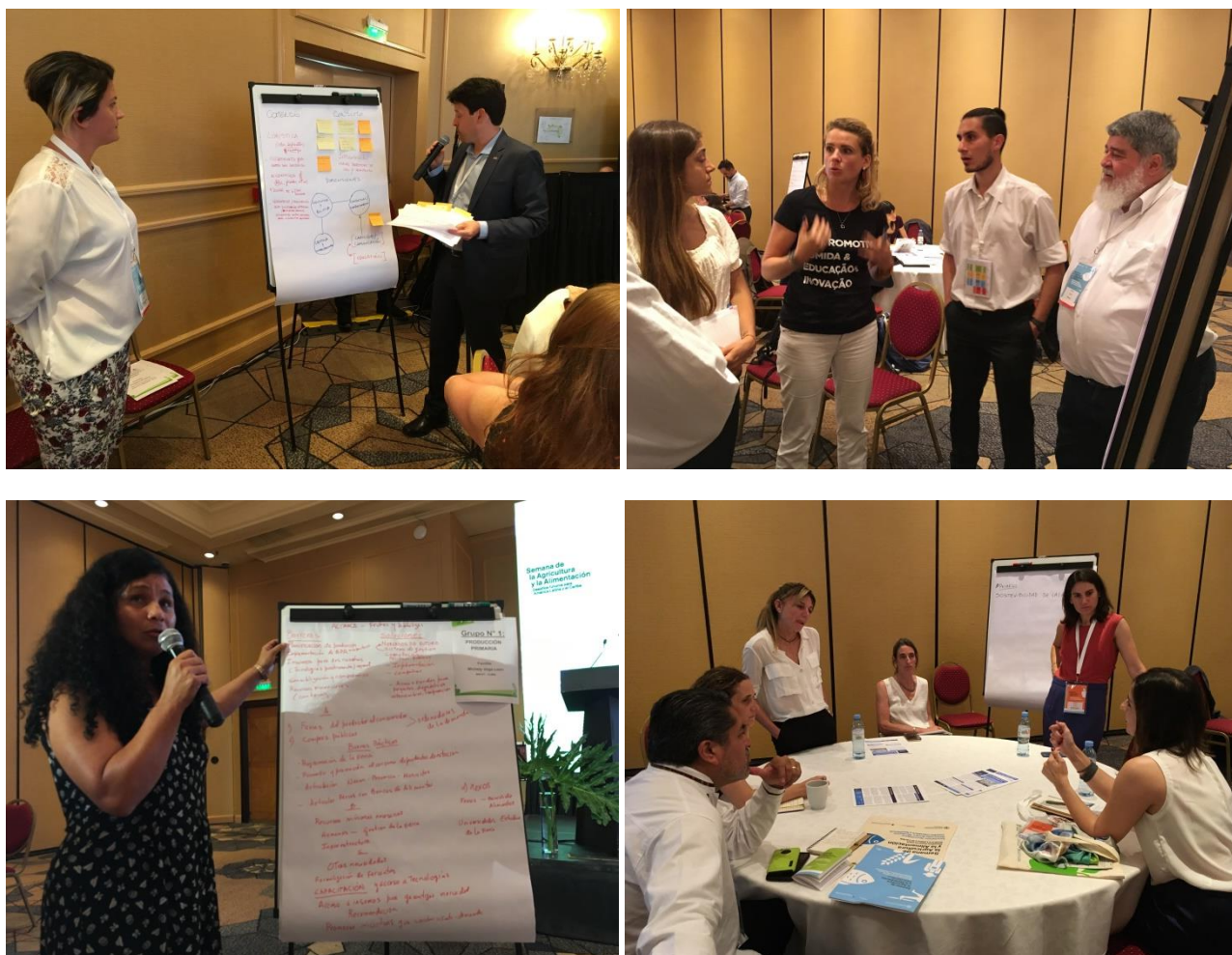


Figure 7 Snap shots from the working group sessions at the Regional Dialogue in Buenos Aires, Argentina (© Felicitas Schneider)

At the end of the workshop, the “Call to Buenos Aires Action on Food Loss and Waste” was signed by all organisers and by representatives from the Interamerican Development Bank, the Consumer Goods Forum as well as the Global Food Banking Network (see chapter 4). By signing this Call the participants underlined their strong commitment for future joint cooperation and support of food waste prevention activities in the region.

The next FLW workshop of this series will take place in Japan in 2019. The target group are stakeholders along the entire food supply chain including political stakeholders from the South East Asian region. The workshop organisation has just started and interested cooperation partners from South East Asia are very welcome to contact the coordinator with any ideas.



Annual Eurasian Food Security Conference, Moscow

Following the kind invitation of Dr. Pavel Krasilnikov of the Eurasian Center for Food Security at the Lomonosov Moscow State University, the coordinator presented selected activities of the MACS-G20 FLW Initiative at the 3rd Annual Eurasian Food Security Conference in Moscow on October 2nd, 2018. In her presentation she highlighted the global, European and German approaches towards the monitoring of FLW together with the challenge of non-harmonised FLW definitions, units and accounting methodologies. More than 170 experts from Russia, Central Asia, the South Caucasus, Europe and the United States discussed issues such as transformation processes of Food Security and Nutrition in Eurasia, impact of climate change and other challenges on Food Security, specific country case studies and nutrition-sensitive social protection programs at regional and country level. With respect to food loss and waste, there were very interesting presentations from The All-Russian Charity Foundation Foodbank Rus (see below a more detailed description), Uzbekistan, Kyrgyz Republic, Armenia and other participants. All presentations, photos, posters and audio recordings of the conference can be found online.¹²

In addition to these sessions, the organisers offered field trips to different locations such as Lenin state farm, a Russian parmesan producer, Danilovsky Food Market or the Charity “Foodbank Rus”. In contrast to other food banks (e.g. such as the Argentinian ones described above), the Foodbank Rus operates with a virtual warehouse only. The food bank acts as a facilitator between the donors of surplus food and social organisations which redistribute the food donations to people in need. At the moment, the food bank operates in 300 cities in Russia by using mostly volunteers for their activities. So far, there is only one NGO in Russia dealing with the redistribution of surplus food to people in need. The 200 cooperating donors may be categorised as huge food production companies or retailers. Mainly three food product categories are donated: Dairy products, bread as well as fruits and vegetables. Related to dairy products, a good cooperation could be established with companies where weekly donations are usual. Bread is mostly donated by each retail outlets. Tax obligation is a major barrier for the donation of fresh fruits and vegetables from stores. This means that companies have to pay taxes for the donated products which makes disposal of edible food cheaper than donation to humans. Some of the companies donate on a regular basis which may summarize to 80 t of surplus food per week. Foodbank Rus is also participating in the Russian food stamps system.

In addition to the redistribution of surplus food, which otherwise would be wasted, also durable staple food is bought in bulk by using donated money from companies or private people. That staple food (e.g. noodles, buckwheat, rice, lentils) is repacked into 500 g portions by volunteers and given to the poorest by using the distribution network of cooperating social organisations. The different packages of staple food are arranged to a “basic basket” including cooking oil. This approach should support the use of donated surplus food in the households to complement a balance diet. Thus, poor families can cook complete dishes by using items from the basic set as well as occasionally redistributed surplus food. Figure 8 shows the involved volunteers wearing diverse hygiene protecting equipment (e.g. hairnets, gloves, aprons) and scales to ensure the proper hygienic packaging of the staple food. Each packaging is sealed by heat-sealing in order to achieve a long shelf-life.

¹² https://drive.google.com/drive/folders/1xmM3YKP5LhrOeSp8rs5hTM_kT02c0wQQ



Figure 8 Repacking and sealing of staple food at Foodbank Rus in Moscow to support poorest families (© Felicitas Schneider).

Topic 2: Awareness and Capacity Building

The German Chancellor Fellowship for Prospective Leaders (Alexander von Humboldt Foundation)

A young Russian fellow, Ms. Patsko, successfully submitted an application to the German Alexander von Humboldt Foundation in the area of transferring innovative German FLW prevention solutions and practices to the Russian market. In spring 2018, her project “Zero Food Waste Lab” was selected as one of the winners of the German Chancellor Fellowship for Prospective Leaders. The coordinator acts as host for the Russian fellow and offers access to the coordinator’s German and European FLW related professional network. After a German language course in late summer and a joint welcome excursion through parts of Germany for all winners, Ms. Patsko started her project in November 2018, which will last for one year. Since November, she already developed a detailed project plan and got in contact with the first organisations and businesses dealing with the prevention of food loss and waste. The project plan includes gaining experience with FLW prevention measures, companies and strategies, to further develop them further by using design thinking approach and to implement the results into the Russian environment. A special focus of Ms. Patsko’s work is laid on developing awareness and education materials and tools for kids as well as the founding of companies.

Both, the Russian MACS-G20 representative, Dr. Krasilnikov, as well as the Russian FAO office support her project and will help with the implementation of ideas in future.

International Food Waste Awareness Day

According to its proposal mentioned at MACS-G20 2018, the Government of Argentina submitted an application to the Food and Agriculture Organisation (FAO) to create an International Food Waste Awareness Day on September 29th each year. The proposal (see chapter 4) was introduced at the 26th session of the Committee on Agriculture on October 1st to 5th 2018 in Rome. The next steps include recommendations by the Committee on Agriculture on the proposal as well as forwarding it to further FAO councils and conferences. We will keep you updated on the outcome of the proposal.

Knowledge exchange with Brazil

After the workshop in Berlin in 2017, Brazilian FLW experts and the coordinator continued to stay in close contact with regard to the developments in both countries. The Brazilian Technical Committee on Food Loss and Waste is composed by representatives from eleven different ministries as well as national agencies, the Brazilian Agricultural Research Corporation (Embrapa) and a number of associations and NGOs. One of the first achievements of the Committee was the elaboration of the Inter-Sectoral Strategy for the Reduction of Food Loss and Waste¹³ which was published by the Inter-ministerial Chamber for Food and Nutrition Security (CAISAN) in November 2017. The work is continued with more detailed thematic meetings where further approaches to FLW measurement and monitoring along the entire food supply chain are discussed besides other topics.

In early August 2018, the Technical Committee scheduled an internal meeting in Brasilia. The coordinator was invited to join one of the meetings and to share her knowledge and experiences as well as to introduce the European approach to monitor FLW. An interesting discussion came up on how to explore the hot spots of FLW along the Brazilian food supply chain, on how to prioritise them for the effective use of available resources and furthermore on how legal aspects could be introduced to practice. Also the latest findings from the national FLW awareness campaign “#Sem Desperdicio” (#ZeroWaste)¹⁴ were introduced and commented. This campaign is dedicated to the Brazilian public with the aim to raise awareness and to generate a positive adaption of food consumption habits related to FLW. The campaign, which was launched in 2016, is a cooperation project of Embrapa, WWF Brazil and the FAO. In parts of the campaign, social media were used to influence people’s food habits. This was done by including celebrities into the campaign who encouraged their followers to report on their individual food habits before the campaign was introduced. Some of the issues mentioned by the followers were picked up and addressed within the context of the following FLW awareness campaign.

The cooperation between Embrapa and Thünen Institute will continue in future.

Knowledge exchange with Russia

Within the framework of the signed Memorandum of Understanding¹⁵ between Thünen Institute and Lomonosov Moscow State University, the visit of a Russian colleague, Mr. Rykalin, at Thünen Institute is planned for two weeks in February 2019. Besides the topic of Food Loss and Waste Prevention also issues related to organic agricultural production, farmers’ cooperatives, complementary currency systems, agricultural marketing strategies and rural development will be discussed during his stay in Germany. Mr.

¹³ The report is available at <http://mds.gov.br/caisan-mds/publicacoes> in English and Portuguese.

¹⁴ More information can be found here: semdesperdicio.org

¹⁵ see Annual Report 2017

Rykalin, a Russian expert from the Eurasian Center for Food Security, will hold a presentation on the subject of "Transition from Soviet Kolkhozes to cooperatives, example of an organic farm in Russia" at Thünen Institute. In addition to meetings with German farmers' organisations, NGOs and businesses also some excursions in the area of Berlin-Brandenburg and Lower Saxony are included in the program. At the end of his stay, Mr. Rykalin and Mr. Lange will visit the World's Leading Trade Fair for Organic Food, BioFach, in Nuremberg/Germany.

Starting a Food Loss and Waste network with Saudi Arabia

A first contact between the MACS-G20 representatives from Saudi Arabia and Thünen Institute was established during MACS-G20 2018. The representatives were updated on the preparation and implementation of the FLW workshop in Argentina as that workshop served as a model for the follow-up in 2019 and 2020. It was therefore a great honour to welcome one participant from Saudi Arabia, Mr. Aljabr, in Buenos Aires. The above mentioned excursion to the food bank in Buenos Aires was also a joint activity. Furthermore, future steps for the planning of the FLW workshop in 2020 in Saudi Arabia were discussed. There will be also further communication related to the upcoming FLW workshop in Japan in 2019. In the meantime, the Ms. Schneider supports the establishment of a FLW network among different stakeholders located in Saudi Arabia and neighbouring countries.

Webinar on European Union actions to prevent food waste

In the course of G7 activities, an Alliance on Resource Efficiency was launched in 2016. Among other activities, members of the Alliance exchange best practices and lessons learned related to Food Loss and Waste. In this respect, the European Commission, Directorate-General for Health and Food Safety hosted a webinar on EU actions carried out to achieve the UN SDG 12.3¹⁶ on November 28th, 2018. Following an overview by the EU Commission on initiatives on EU level undertaken as part of the Circular Economy Action Plan, Wageningen University & Research and the European Food Banks Federation provided an overview over major initiatives on EU level that are related to research and innovation (mainly the two EU-funded projects FUSIONS and Refresh) and the facilitation of food donation. After the presentations the participants could ask questions to the speakers. The coordinator participated in the webinar out of interest to be updated.

The webinar was recorded and the documents should be accessible also for later use. At the time of finishing the present report, there was no further information provided on the material. We will keep you informed!

Webinar Food Waste: cities to the rescue! From diagnosis to strategy

Another webinar was hosted by FoodWIN, EUROCITIES and the Milan Urban Food Policy Act on June 19th, 2018. It was dedicated to the development of a strategy to tackle the problem of food waste in European cities. The recording of the webinar (in English) can be accessed online¹⁷.

¹⁶ Information on the agenda of the webinar can be found at <http://www.fao.org/platform-food-loss-waste/news-events/events/detail/en/c/1170427/>.

¹⁷ <https://www.youtube.com/watch?v=YfMCpcb9x-c>

Topic 3: Stimulating research cooperation

Cooperation with TempAg

TempAg is an international collaborative research network established to increase the impact of agricultural research in the world's temperate regions. In 2017, the idea to cooperate came up and a project was elaborated. The aim of that pilot activity is to identify further need for interdisciplinary research and policy on food loss and waste at global level in order to facilitate appropriate national and international funding programmes and government support. The financial support for this joint activity comes from TempAg. The expected results are useful for further TempAg activities as well as for facilitating aspired collaboration with the MACS-G20 Food Loss and Waste initiative.

After the initial phase, Thünen Institute (Germany, as leader), INRA (France), LUKE (Finland), the Swedish University of Agricultural Sciences (SLU), Wageningen University & Research (The Netherlands) and the Norwegian Institute of Bioeconomy Research (NIBIO) agreed to join the project. As methodology, a literature research was chosen and conducted by the coordinator during summer 2018. By using Scopus and Web of Science, the coordinator searched review papers dealing with issues of food loss and waste, prevention, food supply chain, post-harvest losses and other selected key words. She selected a total of 265 review papers published from 2010 to date for a detailed assessment of identified needs for further action in policy or gaps in research. The detailed assessment was conducted by a student during August and September 2018. At present, the results are summarised and structured. The report will be finalised by the beginning of 2019 and published online.

In parallel of the above mentioned pilot project, Sheffield University sent out a questionnaire with a research question similar to that to renowned FLW experts on a global scale independently. After collecting the FLW research needs raised by the experts, a workshop was conducted to structure the questions and implement a ranking. The coordinator is in contact with Mr. Reynolds from Sheffield University to achieve a coordinated publication of the results in order to make the best of both approaches.

Cooperation with Canada

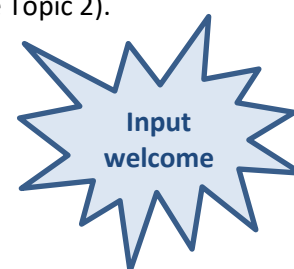
The Saint-Hyacinthe Research and Development Centre in Quebec asked Thünen Institute to be a partner in a project application. If the project is selected for financing, an exchange between the two organisations will be facilitated. Keep fingers crossed!

Topic 4: Matching ideas and funding

German Chancellor Fellowship for Prospective Leaders

The Alexander von Humboldt Foundation launched the “German Chancellor Fellowship for Prospective Leaders” for applicants from Brazil, China, India, Russia and the US. Each year, up to ten winners from each country are selected to carry out their individual projects in Germany for one year. The subjects of the projects are not restricted to a special topic but they should have societal relevance with respect to politics, economy, media, society, culture or administration. The fellows act as link between Germany and their home country. The Alexander von Humboldt Foundation pays a monthly grant, helps with administrative issues during their stay and offers additional excursions and courses for the selected “prospective leaders” of the program. The next round of application starts on March 15th, 2019. More information on the program is provided online¹⁸.

Thünen Institute hosts already a Russian fellow under this fellowship, Ms. Patsko (see Topic 2).



Topic 5: Fostering cooperation at implementation level

EIP-AGRI focus group „Reducing food loss on the farm“

As mentioned in the Newsletter 01/2018, the coordinator was selected as one of twenty experts for the agricultural European Innovation Partnership (EIP-AGRI) Focus Groups. At its first meeting in Ireland from September 12th to 13th, 2018, the focus group discussed in length the topic of „Reducing food loss on the farm“. More information can be found online¹⁹.

As a result of the meeting, four different mini-papers are elaborated by the group members, which will serve as recommendation for the practical implementations and further work of the so-called Operational Groups within EIP-AGRI.

Cooperation with Food and Agriculture Organisation (FAO) Latin America and the Caribbean

The successful cooperation with the Regional Office of FAO in Chile, which is responsible for Latin America and the Caribbean, in the preparation and implementation of the FLW dialogue in Argentina and Thünen Institute will continue. The regional director, Mr. Berdegúe, invited Mr. Lange and the coordinator to participate in a bilateral meeting during their stay in Buenos Aires. Mr. Berdegúe appreciated the MACS-G20 FLW Initiative and the resulting activities, and highlighted the demand for further cooperation within the Latin American and the Caribbean region. Thus, some related topics were discussed and in the following months, ideas for concrete implementation will be developed at both organisations. Figure 9 shows the participants of this discussion.

¹⁸ <https://www.humboldt-foundation.de/web/german-chancellor-fellowship.html>

¹⁹ <https://ec.europa.eu/eip/agriculture/en/focus-groups/reducing-food-loss-farm>



Figure 9 Sara Granados and regional director Julio Berdegue (both FAO Latin America and The Caribbean, left) met Thünen research coordinator Stefan Lange and Felicitas Schneider in Buenos Aires/Argentina (© FAOALC).

3. Upcoming FLW events

Until now there is no comprehensive calendar for FLW events on a global level. Therefore, in the present annual report a new chapter is introduced where you can post your FLW events or events which you think could be interested for others, too. If you plan a conference or have interesting links, please send the main features to the coordinator.

Brazil, April 1st to 5th, 2019: <http://www.foodloss2019.com> First Latin America/Caribbean Food Loss and Waste Reduction Congress in combination with the 3rd Brazilian Congress on Minimally Processed and Postharvest Fruits, Flowers and Vegetables (CBPMPC) and the 10th Ibero-American Congress on Postharvest Technology and Agro-exports takes place in Bento Gonçalves, Rio Grande do Sul, Brazil. The Congress theme is “A Sustainable Path for Substantially Reducing Food Loss and Waste in Latin America and the Caribbean” and targets scientists, technicians, students, consultants, producers, commerce and consumer organizations, politicians, and public agents, and all those interested. Abstract online submission is still available until January 15, 2019.

Japan, 2019: The FLW workshop conducted in the course of the present initiative will take place in Japan with focus on South East Asian countries. If you are interested to participate as co-organiser, please contact the coordinator.



4. Annex

Call to Buenos Aires Action on Food Loss and Waste (in English):

CALL TO BUENOS AIRES ACTION ON FOOD LOSS AND WASTE

Government delegates, private sector representatives, Cooperation and United Nations System Agencies, development banks, civil society representatives and the academia from the countries of Latin America and the Caribbean (hereinafter participants), gathered in Buenos Aires, from November 20 to 21, 2018, under the framework of the IV Regional Dialogue 'Latin American Solutions to Food Loss and Waste', held in the Week of Agriculture, these key actors express their support for this call on the prevention and reduction of food loss and waste (FLW), which has been born of the rapprochement between the public and private sectors, that has led to this instance.

Considering that:

- At a regional level, one of every three kilos of produced food – 127 million tons – is been lost or wasted somewhere in the production chain. More than half of the fruits and vegetables, a third of the seafood and one of every five kilos of dairy is been wasted.
- In Latin America and the Caribbean, most of the food waste (72% of the total volume), is produced before food reaches the consumer, causing monetary losses equivalent to US\$ 97 billion, generating 322 million tons of carbon dioxide, and consuming 250 km³ of water.
- Food loss and waste have important environmental, economic and social implications, and affect the sustainability of food systems.
- The reduction of food loss and waste represents a "triple victory": 1) increases the availability of healthy and quality food; 2) reduces greenhouse gas emissions and reduces the consequences linked to the inefficient use of natural resources, and; 3) improves the incomes of agricultural producers and companies, with positive impacts on national economies.
- A structural response to the problem must include, among others: the sustainable transformation of food systems; the management of natural resources; financing and investment in infrastructure; improvements in distribution, processing, availability and access to food; food education and consumer education; food safety; and the establishment of public-private partnerships that bring production closer to consumption.
- Faced with this challenge, all the actors of the food systems must act to reduce their loss and waste, first of all calling on responsibility of policy, followed by necessary contribution of economy, consumers and science.
- There are ongoing actions led by public and private actors that must be replicated on a larger scale to achieve a greater reduction of food loss and waste.

We agree and we call for action to:

- Join efforts and implement concrete actions in quantification, prevention and reduction from all areas to achieve the goal of halving food waste at the retail and household levels as well as reducing food loss at the entire value chain, such as indicated by the goal 12.3 of the Sustainable Development Goals (SDG) on responsible Production and Consumption for the Agenda 2030 for Sustainable Development.
- Manage, invest and implement action plans created with the participation of the different actors in the food systems (producers, companies, civil society, associations, academia, legislators, education and consumers, among others). All this will allow progress towards reduction of the food losses and waste and promoting greater food systems sustainability, with positive economic, social and environmental impacts on the planet, the Region and its inhabitants.

WITNESSES OF HONOR

 FAO

 SECRETARIAT OF AGROINDUSTRY

 INTER-AMERICAN DEVELOPMENT BANK

 THÜNEN INSTITUTE

 CONSUMER GOODS FORUM

 GLOBAL FOOD BANKING NETWORK

Buenos Aires, November 21, 2018

Proposal for an International Day of Awareness of Food Loss and Waste

September 2018

COAG/2018/16/Rev1


 联合国
粮食及
农业组织

 Food and Agriculture
Organization of the
United Nations

 Organisation des Nations
Unies pour l'alimentation
et l'agriculture

 Продовольственная и
сельскохозяйственная организации
Объединённых Наций

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Naciones Unidas para la
Alimentación y la Agricultura

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COMMITTEE ON AGRICULTURE

Twenty-sixth Session

Rome, 1 - 5 October 2018

Proposal for an International Day of Awareness of Food Loss and Waste

Executive Summary

Today, an estimated one third, or 1.3 billion tons, of all food annually produced for human consumption is lost or wasted, at a cost of more than USD 940 billion to the global economy.

The 2030 Agenda for Sustainable Development has set a global target for food loss and waste reduction. The Sustainable Development Goal 12, (SDG 12) seeks to "ensure sustainable consumption and production patterns." The third target under this goal (Target 12.3) *calls for halving per capita global food waste at the retail and consumer levels and reducing food losses along production and supply chains (including post-harvest losses) by 2030.*

Tackling the food loss and waste challenge, toward meeting the SDG 12.3 target, presents a unique opportunity to increase the efficiency and sustainability of food systems to better deliver on nutrition, food security as well as on environmental benefit.

The Government of Argentina has requested the possibility of establishing the observance by the United Nations system, of an *International Day of Awareness of Food Loss and Waste*, to be celebrated on 29 September each year.

The proposed *International Day of Awareness of Food Loss and Waste* would seek to raise awareness at all levels of the need for concerted attention to reduce FLW and promote global efforts and collective actions toward achieving SDG target 12.3.

FAO's support to this initiative is particularly important, bearing in mind that FAO is the UN specialized agency that leads international efforts to defeat hunger, food insecurity and malnutrition and is mandated to raise levels of nutrition and reduce food losses and food waste, taking into account sustainable production and consumption practices.

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Other documents can be consulted at www.fao.org



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Suggested action by the Committee

The Committee is invited to:

- 1) Review the proposal to establish the observance of the International Day of Awareness of Food Loss and Waste and provide guidance as deemed appropriate.
- 2) Make recommendations on the Draft Conference Resolution, as contained in Appendix A, and submit the proposal for the consideration of the 26th Session of COAG, 1-5 October, and 160th Session of the Council (3-7 December, 2018) and the 41st Session of the FAO Conference (22-29 June, 2019).

Queries on the substantive content of the document may be addressed to:

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I. Background

1. Today, an estimated one third, or 1.3 billion tons, of all food annually produced for human consumption is lost or wasted, at a cost of more than USD 940 billion to the global economy, while approximately 815 million people across the globe suffer from chronic malnutrition and more than 2 billion people (approximately 30 percent of the world's population suffer from micronutrient deficiencies).
2. FAO defines food loss as the decrease in quantity or quality of food, typically caused by failures in the food production and supply system or its institutional and legal framework¹.
3. Food loss is a major issue in developing countries and occurs every day in the real operations of farmers, traders, processors and retailers, owing to problems in harvesting, handling, storage, packaging, and transport.
4. Some of the underlying causes of food loss are the inadequacy and/or lack of infrastructure and technology, the limited knowledge of stakeholders in supply chains, limited access to markets, poor market/price mechanisms, limited access to infrastructure and inadequate financing.
5. Food waste refers to the discarding or alternative (non-food) use of food that is safe and nutritious for human consumption. Food waste predominates in middle and high-income countries, in retail and at the consumer level.

II. Food Systems

6. Food systems today are under pressure to produce more food to feed growing and rapidly urbanizing populations, with changing dietary habits. These increases in food production must draw on genetic resources as well as scarce natural resources, such as land and water as well as energy requirements to produce, process and transport food.
7. High levels of food losses and waste (FLW) at each step of the value chain, reduce efficiency, and thus the sustainability of food systems.
8. Tackling the FLW challenge, therefore, presents a unique opportunity to increase the efficiency and sustainability of food systems.

III. Food Security and Nutrition

9. High levels of food losses impact the availability of and access to food, particularly for poorer segments of society in middle- and low-income countries, and reduce the incomes of smallholders and family farmers who produce food. The scaling up of actions and innovations to reduce post-harvest losses is, therefore, critical to alleviating food insecurity, while contributing to the improvement of nutrition and income generation.
10. Education and awareness raising are critical to bringing about behaviour change of food supply chain actors, agribusinesses and particularly consumers, toward achieving the sustained reduction of FLW.
11. Developments in the policy agendas of countries and the provision of incentives designed to promote investments geared toward reducing FLW will contribute substantially to reducing the negative economic and social impacts of FLW.

¹ FAO 2011. Global Food Losses and Waste. <http://www.fao.org/docrep/014/mb060e/mb060e00.pdf>

IV. Climate and the Environment

12. Every activity within the food system withdraws from natural capital and generates greenhouse gas (GHG) emissions that contribute to climate change². The food supply chain contributes to over 20 percent of total annual greenhouse gas (GHG) emissions globally³. Food losses and waste are of particular concern as drivers of climate change and environmental degradation.

13. Food losses undermine the adaptive capacities of vulnerable populations to cope with climate change through decreased food availability and reduced income. Moreover, the magnitude of food losses could further increase with more frequent and intense climate variability and associated outbreaks of pests and diseases.

14. Implementing actions to reduce FLW will contribute greatly to climate adaptation and mitigation, reduce natural resource consumption and degradation, and contribute to the resilience of livelihoods and incomes.

V. The 2030 Agenda and the SDGs

15. The 2030 Agenda for Sustainable Development has set a global target for FLW reduction. The Sustainable Development Goal 12 seeks to “ensure sustainable consumption and production patterns.” The third target under this goal (Target 12.3) calls for halving per capita global food waste at the retail and consumer levels and reducing food losses along production and supply chains (including post-harvest losses) by 2030.

16. Reducing FLW will also directly impact other SDG Goals, for example under SDG1 reducing FLW will provide a step out of poverty for family farmers, while in the context of SDG2, reducing FLW will positively impact the food security and nutrition of the families of subsistence farmers; reducing FLW, will contribute to the sustainable use of water and land resources, (SDGs 6, 14 and 15) and reducing the greenhouse gas emissions resulting from FLW will contribute to combating climate change (SDG 13).

17. The measurement of FLW is important for SDG monitoring and cross-country comparison. Achieving SDG target 12.3 will necessitate target setting, measurement of FLW and the implementation of actions to stem the problem.

VI. Collaboration and Partnership

18. Collaboration and partnership should be strengthened to encourage policy dialogues, to promote SDG compliance, and to ensure coherence and alignment in the identification and implementation of solutions to FLW through the efficient and effective use of resources.

19. FLW issues are complex, and current efforts to address them are highly fragmented. There is increasing recognition of the need to develop alliances as well as to encourage open dialogues that integrate a broad spectrum of stakeholders, including civil society, academia, agribusinesses and the public and private sectors, to address the issues.

20. Private sector engagement in particular, is critical to realizing a reduction in FLW at the global level. Public-private sector collaboration is equally important, as better coordination between the

² FAO 2017. Save Food for a Better Climate. <http://www.fao.org/publications/card/en/c/4ca616af-0a4a-4232-bd3b-681b67471857/>

³ Adoption of Climate Technologies in the Agrifood Sector. Methodology. Directions in Investment. <http://www.fao.org/policy-support/resources/resources-details/en/c/897015/>

public and private sectors improves efficiency and ensures inclusiveness and sustainability in development processes.

21. By creating an enabling environment through the provision of infrastructure, policy support, legislation, regulation and research, public sector can facilitate and incentivise action by the private sector.

VII. Objectives of the International Day of Awareness of Food Loss and Waste

22. In an effort to promote actions toward achieving SDG target 12.3, the Government of Argentina proposes to establish the observance by the United Nations system, of an International Day of Awareness of Food Loss and Waste to be celebrated on 29 September each year and requests the Committee on Agriculture (COAG) to endorse this proposal (see Appendix A).

23. Activities such as the observance of the *International Day of Awareness of Food Loss and Waste* by Governments, international and national organizations, the private sector, and municipalities will contribute significantly to raising awareness at all levels of the need for concerted attention to reducing FLW and promote global efforts and collective actions toward achieving SDG target 12.3.

Appendix A

Draft Conference Resolution

Considering the urgent need to raise awareness of the economic, social and environmental impacts of FLW and of the need for actions to stem the problem of FLW;

Recalling that SDG target 12.3 *calls for halving per capita global food waste at the retail and consumer levels and reducing food losses along production and supply chains (including post-harvest losses) by 2030*;

Recognizing that high levels of FLW reduce the efficiency of the value chain, and thus the sustainability of food systems;

Recognizing that high levels of food losses, negatively impact the availability of and access to food, as well as incomes in poorer segments of society in middle- and low-income countries;

Noting that FLW are drivers of climate change and environmental degradation;

Noting that reducing FLW will also directly impact a number of other SDG Goals;

Cognizant of the urgent need to raise awareness and to educate food supply chain actors and consumers in particular, in order to bring about behaviour change toward achieving the sustained reduction of food losses and waste.

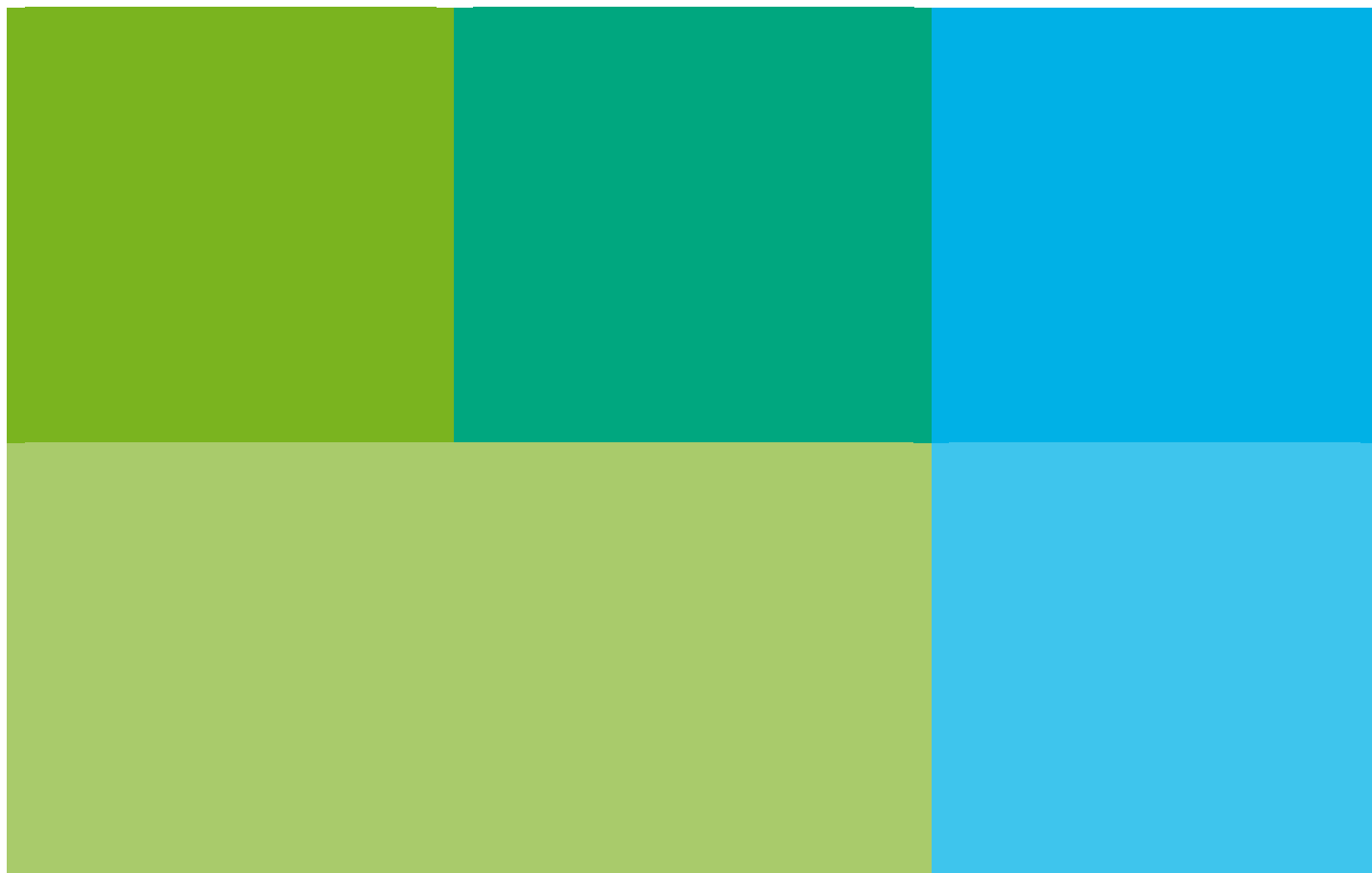
Expressing concern that current efforts to address FLW reduction are highly fragmented.

Cognizant of the critical role of the private sector in bringing about a reduction in FLW at the global level.

Recognizing that the observance of an International Day of Awareness of Food Loss and Waste would contribute significantly to raising awareness at all levels, of the need to reduce FLW and promote global efforts and collective actions toward achieving SDG *target 12.3*.

Stressing that costs arising from the implementation of the International Day of Awareness of Food Loss and Waste will be met by voluntary contributions, including from private sector partners.

Requests the Director General to transmit this Resolution to the Secretary-General of the United Nations with a view to having the General Assembly of the United Nations consider at its next session, declaring 29 September each year as the International Day of Awareness of Food Loss and Waste.



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