



Food and Agriculture Organization
of the United Nations

Third FAO *private sector partnerships* forum

Rome, Italy
15 October 2014

Meeting Report



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EXECUTIVE SUMMARY

This report summarizes the third FAO private sector partnerships forum, which was organized by the Office for Partnership Advocacy and Capacity Development (OPC) and the Rural-Infrastructure and Agro-Industries division (AGS). The meeting took place at FAO headquarters in Rome, on October 15 2014.

Participants: The forum included more than 90 private sector representatives from an array of food and agribusiness companies, as well as financial sector enterprises and producer organizations. See Annex I for the complete list of participants.

Methodology: The meeting opened with a plenary session in which private representatives were welcomed by the Director General, Jose Graziano da Silva and participants discussed areas for further FAO-private sector collaboration. The plenary was followed by two parallel sessions on: i) food losses and waste ii) inclusive business models. See Annex II for the complete agenda.

Material: The following background papers were prepared for the forum:

- *Food Losses and Waste: The problem, causes and potential solutions: What the private sector can do* prepared by Per Pinstrup-Andersen, Graduate School Professor, Cornell University and Chair of the High Level Panel of Experts on Food Security and Nutrition Steering Committee. The complete paper is attached in Annex IV.
- *Private sector-FAO partnership on inclusive business models* prepared by Don Seville, Co-Director Sustainable Food Lab and Siobhan Kelly, Agribusiness Economist, FAO. The complete paper is attached in Annex V.

Main Findings

The meeting included a plenary session in which private representatives were welcomed by the Director-General of FAO, Mr. Jose Graziano da Silva. Participants were invited to discuss areas for further collaboration to accelerate results in the goals of ending poverty and reaching food security. Participants stressed that successful global agribusiness companies share the goals of FAO in reducing poverty and improving food security and nutrition. FAO and its neutral convening power can work beyond single companies to bring governments, civil society and the private sector together to further these goals.

The main conclusions of the respective parallel sessions are outlined hereunder:

Food Losses and Waste

1. Provision of good quality data is essential for designing interventions, developing industry wide approaches, making investments and developing assessment methodologies, that will lead to reducing Food Losses and Waste.
2. Awareness raising and multi-stakeholder dialogues are needed with the generation of potential solutions among consumers, farmers and other supply chain agents while enabling. A gender-sensitive approach should be also applied to both the awareness and potential solutions.
3. Collaboration on the development of good practices and models in FLW reduction to be shared with stakeholders.
4. The development and enhancement of technologies, innovations and approaches for FLW reduction (e.g., packaging, storage, infrastructure).
5. Promotion and facilitation of the fullest use of food for human consumption by supply chain actors including producers, processors, retail, markets and food service industries.
6. Assisting producers and their organizations to reduce production, harvesting and storage losses through enhanced market access (e.g., through contracts, credit and technical assistance).

7. Communicate to the public sector and other partners priority needs on the topic for government investments, incentives and regulations in the supply chain.
8. Working with Governments, regulators and consumers in harmonizing food date marking. This would facilitate a clearer consumer understanding and reduce food waste.

Inclusive Business Models

1. Technology and know-how can be transferred to SMEs that operate outside of lead firms' value chains. Also, smallholders and small companies can only do business with large companies if they are operating in the formal sector and are for instance registered. As a neutral player FAO can engage the public sector to strengthen regulatory frameworks that contribute to bringing more small actors into the formal sector.
2. Diversified market outlets are essential for sustainable livelihoods. Companies understandably cannot invest in crops or market development that fall outside its immediate value chain. But a partnership could contribute to developing spillover diversification opportunities for farmers and local communities.
3. Both partners work on strengthening business acumen at farm and farmer organization level. A partnership could accelerate the adoption of modern farm and management practices that complement traditional smallholder farming. A common concern is also on the need to ensure that young people view agriculture and agribusiness as a sector with potential for secure livelihoods.
4. A comparison, testing and validation of data generated by private companies and FAO can contribute to the availability of more robust public goods data. This process can also lead to the identification of knowledge gaps and discussions around the allocation of resources, public and private, to address these gaps.
5. The public sector can be supported to target its investments where the entire sector, including the private sector as a whole, can take most advantage – such as physical pre-competitive infrastructure (e.g laboratories testing).
6. Similar to FAO international companies also have a lot of field and technical experience. When planning value chain projects with the public sector FAO can tap into the knowledge base of private companies, identify gaps, opportunities and share best practices.

Suggestions to improve FAO-private collaboration

Company representatives offered the following suggestions for FAO to improve its collaboration with private companies:

- Have consistent points of contacts with technical expertise to engage with private companies and build relationships. The contact point can also be a bridge with other entry points with organizations on diverse topics.
- Partnerships should first focus on a few strategic pilots with a 'learn as you go' approach. Operational mechanisms would then develop in response to the partnerships' needs. The focus of these pilots should also be based on comparative advantage and 'what the other side' of the partnership cannot do. The first point of contact needs to be technical which can then inform partnership processes.
- Accelerate the learning curve by learning from other international organizations that have been active in collaborating with private companies. For instance the Swedish International Development Cooperation Agency (SIDA) and its programme "Business for Development", which is dedicated to interact with private companies and find concrete areas of collaboration.

- It is important that the message to increase the collaboration with the private sector does not stay at the corporate managerial/headquarters level, but that it trickles down country offices and field officers.
- Instead of building new fora, FAO could increase its presence in existing multi-stakeholder fora in which private companies are already active in discussing pressing issues, such as FAO's regular participation in Sustainable Food Laboratory meetings.

PLENARY SESSION

Welcome and Opening Remarks

Ms. Marcela Villarreal (*Director, Office for Partnerships, Advocacy and Capacity Development, FAO*) welcomed private sector representatives to the third private sector meeting with FAO. She expressed her appreciation for the increase in participation by the private sector, numbering 90 participants at the Committee on World Food Security (CFS).

To achieve FAO's goals, Ms Villarreal emphasized the importance of the private sector's role in development, which was the impetus for convening the meeting. Together FAO and the private sector need to coordinate actions to achieve greater and fastest results in the fight against poverty and achieving food security.

She reminded participants of the Paris declaration on aid effectiveness which called for greater coordination among donors to improve the quality of aid and its impact on development. She also recalled the Mexico high-level meeting on Global Partnership for Effective Development Co-operation which asked private companies for stronger financial contributions to development goals and stronger south-south cooperation.

In the past years, FAO has started developing frameworks to facilitate greater collaboration with the private sector. Concrete examples of how FAO is working with private companies to achieve shared goals include a partnership with Eataly in which smallholders commercialize their products through a top-level outlet, a project with the Bill and Mellinda Gates foundation on strengthening data analysis and statistics, and collaboration with Rabobank to improve smallholders' access to credit in Africa.

FAO understands private companies have their own comparative advantage including know-how and innovation. The role of FAO as a neutral convenor is to work with governments to strengthen the enabling environment so that companies can do their business and contribute to development goals, for instance with employment generation.

She concluded by highlighting the importance of the Principles for Responsible Investment in Agriculture and Food Systems promoted by the Committee on World Food Security (CFS)², which involved engaged contributions from private companies, governments and civil society. FAO believes that these types of principles are an important instrument for encouraging responsible behaviour by actors that have an influence on food security and encouraged companies to adhere and support the implementation of the principles. She then invited Eugenia Serova to explain in more detail the meeting agenda and introduce the two topics selected for the discussion.

Ms. Eugenia Serova (*Director, Rural Infrastructure and Agro-Industries Division, FAO*) explained how in this third private sector meeting FAO wanted to propose a different format to promote greater dialogue. FAO believes the private sector forum could be used as a platform to discuss priority issues on the development agenda, to strengthen efforts on areas of mutual consent and to find compromises on areas of disagreement. Disagreements between actors are natural, but should not be an impediment for greater communication. Since this was the first meeting with the new format, she encouraged participant's feedback and any type of suggestions for future events.

Two topics were proposed for discussion in parallel sessions: i) food losses and waste and ii) inclusive business models. These topics contribute to FAO's strategic framework, in particular

² The principles were endorsed on the 41st session of the CFS on October, 15 2014.

under strategic objective four on enabling inclusive and efficient agricultural and food systems. To achieve food security sustainable food systems are essential. Food systems must be economically sustainable; hence efficiency along the value chain, including the use of available resources without waste is fundamental. The inclusion of economic actors, regardless of their size is also critical. Therefore, FAO believes that these two topics are at the core of the food security agenda and looks to further collaboration with private companies to accelerate results.



To facilitate the discussion Ms Serova presented key findings from the two respective background papers on the topics prepared for the meeting.

On the **inclusive business models (IBM)** topic four areas for further discussion were presented:

i) How to contribute to professionalization of farmer organizations to integrate smallholders in value chains; ii) How to work with private companies to assist building diversified livelihoods; iii) How to facilitate coordination with the public sector for industry development; and iv) How to transfer technology and know-how for the development of Small and Medium Agro-Enterprises (SMAEs).

On the **topic of food losses and waste (FLW)** five issues for further discussion were suggested:

i) Identify opportunities for intervention and enhance awareness of the current FLW ii) How to initiate action to reduce inefficiencies in the supply chain that lead to food losses; iii) Invest in harvesting and on-farm storage and handling through contracts, credit and technical assistance and public private partnerships; iv) Inform and educate consumers; and v) Streamline food labelling; create secondary markets for multiple produce grades and facilitate the use of surplus foods for human consumption.

She again welcomed private companies to FAO and encouraged a productive dialogue on the areas proposed and any other pressing issue. A plenary discussion took place with the following comments:

Private sector perspectives

Mr. Bernd Jablonowski (*Project director of Interpack and responsible for SAVE FOOD at Messe Düsseldorf GmbH*) explained that private companies form part of the solution for addressing food losses and waste. He described how FAO, through the *Global Initiative on Food Loss and Waste Reduction* (also called SAVE FOOD), is carrying out a number of studies along value chains, which included private companies contributions to appropriate storage, labelling and packaging mechanisms.



Bernd Jablonowski, Messe Düsseldorf GmbH

Mr. Don Seville (*co-director Sustainable Food Lab*) described how in the last ten years the major food companies have set sustainability as a core goal of their businesses. Companies have begun to design business models that leverage a company's sourcing strategy to create better and more opportunities for smallholders. Companies in general know what they are doing on value chain development, however there are areas on the boundaries of their business where further collaboration with FAO could facilitate greater impact.

Mr. Keith Polo (*managing director of Takulla Farming Company in Malawi and representative of the Clinton Foundation*) explained how inclusive business models provide a framework for positive social, economic and environmental impact, which is rapidly becoming a trend and perhaps in the future a standard across the agro-industry. It is clear that partnerships on inclusive business models could add value and he offered some suggestions for greater collaboration:

- There needs to be change of language on the topic of inclusive business. Even if private companies are interested in making profit they are also interested in poverty reduction and hungry alleviation. This constitutes a common value that is not solely owned by governments or development organizations. Any successful food or agricultural enterprises has embedded these common values.
- There is a need for a more a holistic approach on what the private sector can do to develop inclusive business models. To achieve the goals of food security and poverty reduction it is important to consider elements i Arabica coffee manual for Lao-PDRn the support environment, including education, health, sanitation and infrastructure, which are beyond the scope of a single actor.
- It could be useful to explore opportunities to tap into blended funding stream. Instead of seeing FAO as a technical partner and other actors as funding partners, there is potential for FAO and private companies to jointly design solutions on the ground and then later figure out the fundraising as part of the partnership.
- Getting on the ground together with concrete projects is the best way to start a partnership. Private companies can offer FAO the opportunity to learn from actors that are leading the way in agribusiness development.
- Development of measurement mechanisms that combine business performance and social impact. There is a need to develop tools that measure performance, not only for maximization of profit, but also maximization of value for all stakeholders.



Don Seville, Sustainable Food Lab



Keith Polo, Takulla Farming Company

Mr. Arne Cartridge (*Responsible for Global partnership on the World Economic Forum and the Grow Africa partnership*) explained how one of the main current concerns is how to operationalize partnerships. Many actors have realized they share common goals but the critical issue is how to move from dialogue to implementation. In order to implement successful partnerships one of the main issues is identifying the business models that make procurement from smallholders economically sustainable. Greater support is needed to enable smallholders to produce in a cost efficient manner and sell at a price that enables profit, but is also right for urban consumers and international markets.

He raised the question what can FAO do for the private sector? He concluded highlighting the importance of the progress made in the last years, in which smallholder farming is recognized as a business.

Mr. JB Cordaro (*Consultant - Global Business Advisor Mars*) explained how any successful business requires efficient processes along the entire value chain including sourcing, processing, storage and transportation. The relevance of the topics being discussed in the meeting provides an opportunity for the private sector to open their toolbox and their expertise to other actors such as development organizations working directly with smallholders.

Inclusive business models need to focus not only on procurement and processing, but how to actually deliver the products to the people that need them most. Another critical issue is how to bring in all the relevant stakeholders to design and implement successful models for local procurement.



Mr. Jon Vandenheuvel (*CEO, Africa Atlantic Farms in Ghana*) proposed two topics for further discussions between private companies and FAO: i) the need for developing the legal framework

related to land titles and how to facilitate the bankability of small farm enterprises; ii) planning in rural contexts including agribusiness cluster areas and economic zones.

Mr. Christian Frutiger (*Deputy head public affairs, Nestle*) explained how there is a need for greater coordination among stakeholders. Nestle welcomes the Principles for Responsible Investment in Agriculture and Food Systems but believes there is a need of greater coordination between FAO, other UN agencies and the private sector. For example FAO can play a role in making sure these principles are aligned and complement the UN Global Compact', Food and Agriculture Business principles. He also argued for a change in the approach to address the issue of livelihoods. The private sector and international organizations tend to focus on particular sectors, but the reality on the ground is that farmers grow more than one crop and they require integral solutions that go beyond a company's commodity of interest. Therefore, there is a need for greater coordination on how to address livelihoods with a cross-sectorial approach.

Mr. Gaetano Corponi (*Mastercard*) explained how even if a company's core business is not directly related to agriculture and food, there is a role to play to promote food security. For example Mastercard has pilot tested in collaboration with the World Food Programme the use of cards to receive food aid in Lebanon for Syrian refugees.

Mr. Paddy Docherty (*chief executive, Phoenix Africa Development Company*) claimed there is a need to attract investments for early stage project development particularly for perceived high risk countries (e.g. Sierra Leone). FAO and other UN organizations could use their lobbying power and relations with other development organizations and donors to attract investments for early stage investments that could generate a spill over effect.



Mr. Marco Manssano (*World farmer organization*) argued for the need to increase learning from farmers, as in their own way they are constantly innovating. Development organizations and private companies could increase collaboration with academia and research institutes to work with farmers and learn from their best practices.

Mr. Charles Ogang (*Uganda National Farmers Federation*) raised the issue of how to attract youth in agriculture to ensure that young people view agriculture as a sector with potential for future generations.

Ms. Katrina Erikson (*senior project and partnership development manager, Tetra Pak*) suggested involving companies on project design and planning. Large companies can provide major inputs and knowledge on specific market sectors targeted by governments and donors.

FAO's enhanced cooperation with the private sector

Mr. Hakan Bahceci (*Chairperson of the Private Sector Mechanism - PSM at the CFS*), said he appreciated FAO's enhanced cooperation with the private sector since the FAO Director-General

took office in 2012. “The private sector wants to be considered not only as a donor but as a partner. Business and associations are eager to work with you,” he said.

Bahceci highlighted how this year’s private sector delegation to the CFS is “bigger than ever” including more than 90 delegates who represent stakeholders ranging from farmers to manufacturers - something that “reflects the positive development in our relationship,” the PSM Chairman said. Bahceci thanked the FAO Director General for the new Private Sector Workstation inaugurated at FAO headquarters yesterday. “It is helpful for our team and a symbol of your commitment in our long-term work”.

The International Fertilizers Association (IFA) supports the International Year of Soils

Ms. Charlotte Hebebrand (*Director General of the International Fertilizers Association - IFA*) announced a USD 50 000 donation to support the 2015 International Year of Soils. “We congratulate the United Nations for this initiative and reiterate the importance of soils for food security,” she said. “Soils need more interest and more attention. They are crucial to meet the challenge of feeding a growing population,” Hebebrand added.

Official FAO statement

Mr. Jose Graziano da Silva (*Director General, FAO*) welcomed private companies and expressed he was pleased that companies are responding to FAO’s invitation to increase dialogue and collaboration. He highlighted how FAO can provide a neutral forum for different stakeholders, including the private sector, to discuss pressing issues. He acknowledges that agreement on all the points is a challenge but this should not be an impediment for increased discussion. “Investment is a private decision. It’s your decision. You are the only ones responsible for investments, which however need an enabling environment,” the FAO Director-General said speaking to members of the Private Sector Mechanism partnership attending the Committee on World Food Security (CFS) in Rome.



Jose Graziano da Silva, FAO director General

The approval³ Principles for Responsible Investment in Agriculture and Food Systems are an example of how it is possible to reach consensus among diverse stakeholders. Companies must

³ The principles were endorsed later on October 15 during the 41th session of the Committee on World Food Security.

now carry out business in adherence to the Principles. If more companies integrate the Principles into their way of doing business they will soon become the norm. “Help these principles become part of the environment considered necessary for investment,” Graziano da Silva said, referring to the Principles for Responsible Investment in Agriculture and Food Systems (RAI). “We need more governance and the private sector cannot be left out,” Graziano da Silva said, noting how the private sector can help FAO’s work in achieving a world free of hunger and also assist in obtaining the necessary political support to do this. “Help us implement consensus achieved in the Voluntary Guidelines on the Responsible Governance of Tenure,” he asked the PSM representatives.

FAO is still learning on how to engage more effectively with private companies. In the past, the private sector was considered an additional source of funding. As a result of concrete collaboration over the years, the organization has learned that companies can bring much more than simply funding to the table. FAO is looking forward for increased dialogue and partnerships with private companies to accelerate the goals of eliminating poverty and achieving food security.

SESSION I: FOOD LOSSES AND WASTE

Fifteen private sector representatives and six FAO staff discussed in more detail the topic of food losses and waste (FLW) and potential areas of collaboration with private companies. The list of participants is included in Annex III.

Opening remarks

Mr. Divine Njie (*Deputy Director, Rural infrastructure and Agro-Industries, FAO*) welcomed all participants. He discussed how in recent years FAO has been trying to increase the collaboration with the private sector including the new FAO Strategy for partnerships with the Private Sector launched in 2012.

Mr. Njie informed those present that even before the launch of the strategy, the Organization has been convening a number of both high-level and regional technical meetings bringing face-to-face the public and private sectors to discuss how to promote inclusive and efficient agricultural and food systems in developing countries. For instance, between 2007-2010 in collaboration with IFAD and UNIDO, FAO organized a global agro-industries forum and a series of regional agro-industries forums in Africa, Asia and Latin America bringing together key players in agro-industry with representatives from government, academia, financial institutions and international development organizations.

He stated that FLW is now recognized as a major global issue. The global visibility on FLW started with the FAO report published in 2011, and the Organization has increasingly been putting resources and efforts into this high priority area. FLW is one of the five elements of the Zero Hunger Challenge and the topic of Food Losses is also one of the indicators in the Post 2015 Agenda.

FAO, he concluded, has also embarked on new relationships with the private sector, particularly under the *Global Initiative on Food Loss and Waste (also called SAVE FOOD Initiative)*, where there are currently over 250 companies and organizations which are members.

Mr. Njie introduced the meeting objectives:

- (i) To discuss the issue of FLW with the background provided by the paper on '*Food Losses and Waste: The problem, causes and potential solutions, with emphasis on what the private sector can do*' by Per Pinstrup-Andersen.
- (ii) To produce a set of conclusions on the areas of priority for the private sector interventions.

Presentation of the background paper

Discussion clarified that the session was organized to benefit from the presence of private sector companies attending CFS and to facilitate exchange with the private sector on potential lines of action from the private sector on what it could do to address FLW. Such commitments were not intended to be binding in a formal way but were considered important in structuring future collaboration between FAO and the private sector in FLW reduction.

Session discussions could for instance lead to concrete bilateral or multi-lateral partnerships and also inform the Organization's work on a daily basis at country level. As the Organization works within the post-2015 agenda and the Zero Hunger Challenge vision, discussions from the session would also eventually feed into these processes and platforms.

To guide the session Mr. Anthony Bennett (Livestock and Agro-Industry Officer, FAO) presented the recommendations from the paper by Mr. Pinstrup-Andersen. All participants had received a draft copy of the paper. He noted that the High Level Panel of Experts on Food Security and Nutrition (HLPE) report on *Food Losses and Waste in the context of sustainable*

food systems had supported the development of the background paper and the identification of six priority action areas. The background paper is in Annex IV.

Discussions on the paper addressed the meaning of a “gender-specific approach” referred to in the paper. Mr. Bennett noted that in many developing countries small family farms operate with the participation of both men and women. As such any approach addressing the topic of FLW needs to have a gender dimension. For example, in recent WFP projects in Uganda losses at storage were reduced and the role of women was acknowledged as essential in the management of the stored cereals and the income generated.



The role of the retail sector in FLW was also highlighted, given that each week retailers make decisions about their supplies that can lead to food waste or its prevention. To seek the inputs of the retail sector for the preparation process for the HLPE, the meeting was informed that extensive consultations were held with retailers.

Some private sector participants noted that in relation to food donations, a protocol for the retail and food industry would be welcome. Ms. Camelia Bucatariu (Policy Development Consultant, FAO) highlighted that the need for a protocol was also recommended by the HLPE. These recommendations also call upon FAO to develop universal protocols (e.g., development of international norms) as part of its mandate and this could be also through partnerships. She also informed those present that food banks were invited to the plenary session of the Committee on World Food Security (CFS), recognizing their role in the process.

Regarding investments to reduce the FLW, it was noted that investments need to take place at private sector level as well as public sector level. The private sector may make investments to ensure that, for example, there is a sustainable sourcing of raw materials thus the business itself is sustainable.

Discussions on interventions, approaches and roles of stakeholders

The role of local governments in sustainable solutions to reduce FLW was highlighted by Ms. Maria Cavit of the World Union of Wholesale Markets (WUWM). She explained that WUWM represents traditional markets (private and municipal markets), and underscored the need to involve local governments in the discussion on FLW. WUWM members include local markets and it is cognizant of the difficulties in informing government on the needs of food markets. WUWM has appraised local needs in both industrialised and developing countries, and education of decision makers at municipality level is needed. In Italy, the city of Florence’s wholesale market runs a market each week for end-of-life product sales and nearly all wholesale markets have food bank links. Thus, all of this happens at local level and the biggest challenge is to get the local governance level informed, educated and visible. Other challenges

include public education and identification of the opportunities for investment in infrastructure and employment generation.

Ms. Cavit noted that ways need to be identified on how to include food waste issues in the discussion. In addition, case studies on markets from all parts of the world are needed so that they can be replicated, e.g. those presented during the EC consultation on the Communication on Sustainable Food. In addition, local producers can be linked up with the catering and services sectors. Noting that private households represent the largest generators of waste, she indicated that markets can be public tools and they provide a good opportunity to convey messages on the issue of FLW. Local markets offer the possibility to purchase food daily and only what households need. WUWM will conduct a campaign in 2015 entitled '*Love your local market, don't waste*' which would highlight these advantages of local markets. She informed that their network extends to 42 countries and noted that a potential area to explore could be to develop a questionnaire for the Union to gather data. She also noted that there are opportunities for sharing best practices. With respect to Ms Cavit's remark on the importance and potential role played by wholesale markets in addressing FLW, Mr Njie noted that this is exactly why they had been included in the policy roundtable on FLW during CFS.

Private sector participants underscored the importance of looking at all investments already ongoing, noting that they face problems to access markets and that they still import technologies, and would appreciate FAO interventions going forward.

A range of solutions and potential areas of FAO support were mentioned by the International Fishmeal and Fish Oil Organisation (IFFO). FAO support is needed in collecting data to inform their activities. Support is also needed for technology that supports logistics and the management of food, which could potentially become waste, as a resource.

This is more difficult in the downstream parts of the chain, for example when consumers buy fish fillets, there could be incentives to collect co- and by-products at processing level. Monitoring market trends are also important. For example, fish waste was used some years ago for fuel but later was used as feed. Currently demand for animal feed particularly from fish is growing each year. Education on these possibilities is needed and the processing of waste needs to be facilitated. The industry is hungry for materials and support.

On the question of how the government can enable the private sector to reduce FLW, participants noted that taxes and regulatory procedures may prevent interventions from going to scale. Additionally, there is the need to align what happens in one country with what happens elsewhere.

Regarding the issue of consumers' education, e.g., on labelling, "best before" and "use by" dates, the private sector felt that education is a task for the government. The private sector can contribute and involve itself in providing education directly, but it should not be forgotten that all the money invested by the private sector will translate to higher prices for consumers thus the poor would be directly affected. The private sector can however play a role in developing tools for awareness and education. WRAP UK works on food labeling, but also on general awareness and consumer education. While agreeing that awareness-raising is a public sector responsibility, Mr. Njie noted that working on harmonizing labelling would benefit and require also the private sector contribution. Ms. Bucatariu made reference to the 42nd Session of Codex Committee on Food Labelling which was held in October 2014 and where the general standard for the labelling of pre-packaged foods addressed the issue of date marking, e.g. "best before" and "use by".

Ms. Bucatariu reminded participants of the statement by the former UN Rapporteur on the Right to Food. The statement had noted that food banks and their expansion are the expression of a deeper social problem, and that diverting to food banks food that is at risk to

be wasted does not address the economic and social problems that caused the people to be food insecure in the first place. Mr. Njie cautioned against considering food waste as an issue of concern only for the industrialized countries because it is being faced as well by developing countries and countries in transition as a result of such trends as rapid urbanization and rapid population growth.

Packaging waste and sustainable packaging solutions (e.g. bio-packaging) are also important. The example of the City of London and the contribution of the private sector with R&D highlighted the potential of bio-degradable packaging. The impacts (e.g., competition/pressure with food and nutrition security) of the raw materials used for bio-packaging also need to be assessed, both in industrialized, developing and emerging countries.

Mr. Jablonowski suggested that when addressing packaging needs it is necessary to focus on the countries' needs, for instance industrialized countries have different needs to developing countries. Similarly the type of packaging, whether primary as opposed to secondary packaging, needs to be considered.

The private sector also highlighted the need for collaboration on infrastructure mechanisms which facilitate maintaining the quality of food and collecting waste along the chain. There is also need for collaboration on developing innovative systems, e.g. aquaponics and vertical gardens.

Mr. Mikkel Vestergaard noted that technical solutions are already available and the challenges faced are taxes and regulatory aspects. He provided the example of storage bag technology which has been a key area for his company, noting that a study in Uganda with WFP assessed a reduction in loss to 2%.

The discussion also highlighted the role played by technology solutions related to primary production inputs such as fertilizers and seeds. Morgane Danielou from the International Fertilizer Industry Association explained that micro-nutrient enhanced fertilizers could increase the shelf life of crops such as tomatoes. She noted that the nutrient cycle was mentioned by the HLPE report, and informed that a key recommendation from the Association is that good agricultural practices could massively reduce PHL. A related issue to production is exemplified in the animal sector where losses occur due to animal illness, and anti-microbial agents can reduce loss. In this regard, the Codex discussion on the MRLs is relevant. Disease is a problem especially in aquaculture, e.g., 30% of shrimp in Asia is lost due to disease.

Mr. Jablonowski drew attention to studies which had been conducted on losses in the mango sector in Kenya by XCOM Africa for Messe Dusseldorf GmbH, indicating that the report of the findings from the study is available. As a follow-up action after the study, he explained, some members of Interpack had agreed to invest in providing secondary machinery with the agreement that at the end of the project they would be the ones to supply local operators with machinery. He underscored the need to communicate that there are success stories to tell.

Mr. Cuevas informed of AECOC (Asociación Española de Codificación Comercial) which was formed by the main retailers and food manufacturers in Spain. He indicated that AECOC organizes specific conferences and forums, e.g. on fisheries and how to assess sustainability (Marine Stewardship Council (MSC), GLOBALG.A.P.). Moreover, the private sector mentioned the possibility of developing standards and audits e.g. Association on Sustainable Restaurants that has developed a food waste audit application within their toolkit.

Ms. Yvette Diei Ouadi of the Fisheries Industry Division in FAO noted that from their experience working with small scale fisheries, training as well as storage and processing are needed and can have a very good impact in reducing post-harvest losses. She noted that the primary production step of the chain needs to be included, as do packaging, storage and marketing.

With regards to addressing the goodwill dimension, Mr. Bennett noted that Corporate Social Responsibility may be too low as a target to link to FLW. Moreover, in terms of waste it may be worthwhile to include the 3 Rs - Reduce, Reuse, Recycle.

SESSION II: INCLUSIVE BUSINESS MODELS

Ten private sector representatives and fifteen FAO staff discussed in more detail the topic of inclusive business models and potential areas of collaboration with private companies. The list of participants is included in Annex III.

Opening remarks

Ms. Florence Tartanac (*Senior Officer, Rural infrastructure and Agro-Industries Division, FAO*) welcomed all participants. She discussed how in recent years FAO has been trying to increase the collaboration with the private sector. These efforts have included the development of FAO's Strategy for partnerships with the Private Sector launched in 2012.

Even before the launch of the strategy, the Organization has been convening a number of both high-level and regional technical meetings bringing face to face the public and private sectors to discuss how to promote inclusive and efficient agroindustries and food systems in developing countries. For instance, between 2007-2010 in collaboration with IFAD and UNIDO, FAO organized a series of Global and Regional Agro-Industries Fora bringing together key players in agro-industry with representatives from government, academia, financial institutions and international development organizations.

As a direct follow-up to the Agro-Industries Fora, between 2010-2012 FAO convened regional "agribusiness roundtables" involving managers and owners of small and medium agricultural enterprises (SMAEs). The events focussed on identifying challenges faced by small and medium sized agro-enterprises as key players in inclusive and efficient food systems.

FAO has a long history in working at country, regional and global levels, contributing to knowledge, good practices and coordination mechanisms on several topics with the private sector. These topics include promoting inclusive and sustainable agrifood value chains, making contract farming more inclusive, providing knowledge on voluntary standards, fostering agribusiness public-private partnerships, supporting organizational reform in ministries of agriculture to create capacities for support to agribusiness and agro-industries and disseminating innovative financial mechanisms such as investment and guarantee funds.

To guide future actions, the findings from this meeting should shed light on practical steps that will inform the following questions: How can FAO explore further partnership opportunities with the private sector? How can FAO be a neutral platform for discussion on technical issues? How can FAO and private sector engage more effectively at both the corporate global level and the country level?

Mr. Don Seville (*Co-Director Sustainable Food Lab*) explained that the main purpose of the session was to explore possible areas of FAO-private sector collaboration.

He provided background on the concept of inclusive business models, describing how the development case for investment in agriculture is clear. On this basis there has been growing demand from civil society and the public sector to partner with private companies to address development goals. Inclusive business models provide an opportunity for development organizations and donors to work together with private companies for food security and poverty alleviation. Large food companies can play a major role in including smallholders in competitive value chains. Motivations for specific companies differ depending on the crop, market and the company's vision. They can include: product brand – developing products with a clear and compelling story for consumers; reputation – enhancing global and local reputation as a company with positive social impact; and/or supply – improving and expanding existing sources of supply.

However, inclusive business models imply more than simply sourcing from smallholders. They are intentionally designed to have greater poverty reduction impact and to be more financially sustainable by being: more accessible to more vulnerable groups and farmers; more stable; less volatile with long-term trading relationships and greater security of supply. Inclusive Business Models also involve reducing or sharing risks and helping farmers build assets and skills to invest in the future.

Consultations with a small number of global companies⁴ revealed that they can easily access expertise on value chain development but they find it difficult to support wider-scale development opportunities that take place on the boundaries of their immediate business activities. They therefore see partnering with the development community as an optimal solution to take advantage of these opportunities so that their operation can have an even greater impact on poverty reduction and improved food security. Areas for potential collaboration included:

1. Accelerating an uptake in modern farm practices by farmers and farmer organizations
2. Investing in diversification to improve livelihoods and reduce risk
3. Coordinating with the public sector to address barriers to upscaling and coordinate investments at the sector level
4. Transferring knowledge and technology to local SMEs

Panel presentation

The session objective was to listen to examples of how global companies are supporting inclusive business models and to identify the strengths that FAO can bring to a partnership on the topic.

Mr. Andrea Granier (*procurement operations manager sustainable sourcing, Unilever*) presented the Unilever Sustainability Living Plan launched in November 2010. The plan has three major goals: improving health and well-being, reducing environmental impact, and enhancing livelihoods⁵. Smallholders form an important footprint of the supply chain, estimates suggest around 1.5 million smallholders are engaged with Unilever. To engage efficiently with such a large number of smallholders Unilever believes in a multi-stakeholder approach.

To describe Unilever's work with smallholders he provided an example of a project in India in which the company, in collaboration with the government of Maharashtra in India, is supporting a local entrepreneur to set-up a facility for tomato processing. Unilever is the market leader of ketchup in India and had been trying for years to procure tomatoes locally, but due to unreliable supply it had been importing tomatoes from China. With the public-private partnership the processing plant was able to increase its engagement with smallholders. When the project began it worked with 650 farmers, after three years that number rose to 2 500.

The role of public sector was to provide the investment for the processing plant, subsidize some of the inputs to farmers and facilitate communication between actors. Unilever provided training to increase productivity and the quality of fresh produce. In order to work more efficiently with farmers Unilever engaged in several commercial partnerships. The most important partnership is with Bayer CropScience for the provision of inputs, protection equipment and training⁶.

⁴ Representatives from SAB Miller, Unilever, Nestle, OLAM, ACOS, SAI platform, Syngenta, Danone and Mars were interviewed.

⁵ For more information see Unilever sustainable living plan <http://www.unilever.com/sustainable-living-2014/>

⁶ For more information see The Indian tomato project.

http://www.foodchainpartnership.cropscience.bayer.com/Brochures/SearchResults/Asia/the_indian_tomato_project.aspx

Unilever also works with Syngenta for seed provision,⁷ and Yara for soil analysis and fertilization⁸.

The partnerships are successful due to a variety of reasons. The main one is that Unilever has the commercial motivation to develop the supply base and offer a reliable demand for a significant volume of tomato and other fruits. Unilever adjusted its payment mechanism to allow the processing plant to pay farmers within a short period of time. The price is pre-agreed with farmers. Unilever commits to buy a fixed amount (minimum of 75%) and pays the pre-agreed contract price. This gives farmers flexibility to sell the remaining 25% to the fresh market. Trust and commitment are also key elements. It is important to have a local team with technical expertise, but also with the social skills to engage with farmers. However there are still major challenges including how to engage with farmers with smaller plot sizes (current sizes are around 6 hectares), how to address labour issues on farms, and how to supervise other crops that farmers are growing during the rotation.

Ms. Katia Sambin (*assistant chief executive officer, ACOS*) explained how ACOS⁹ is a family owned business and part of the Pedon group. The company is the main European dry pulses supplier to both retail and industry, with production sites in China, Ethiopia, Argentina and in the near future Egypt.

She provided an example of their work in Ethiopia on how ACOS transformed the supply chain in order to supply pulses according to European standards. In Africa beans are traditionally cleaned by hand by women who do it on the floor with children close by. The first change the company introduced was to build a school so that the mothers could perform their work while their children were safe at school.

One of the main critical success factors has been involving local communities in the decision making process. The company only procures beans in areas that are agroecology suitable for bean production. A key criteria is also that the local population do not eat beans as part of their diet. This ensures that the trade in beans does not impact on local food prices and food security and that the company avoids problems related to side selling. As such the beans are primarily a cash crop for the farmers. ACOS does not own land in Ethiopia. Instead it procures from contracted smallholders all of their produce, which is transported to processing facilities for cleaning and drying. Currently the Ethiopian plant is exporting 50 thousand tonnes of pulses to Europe. The Ethiopian exchange has been a valuable asset in the marketing of pulses, especially through its role in stabilizing prices. Ethiopian farmers have benefited from an increase in prices at the farm gate from 7 USD/tonnes in 2005 to 49 USD/tonnes in 2012.

Ms. Siobhan Kelly (*agribusiness officer, rural infrastructure and agro-industries division, FAO*) described what FAO can bring to the table for partnerships with companies such as Unilever and ACOS on developing inclusive business models. The most important asset that FAO can offer is the Organization's position as a neutral broker. The Organization can bring together a variety of stakeholders, including government to discuss and address politically sensitive issues. In acting as an interlocutor however it is fundamental that stakeholders view FAO's position as neutral, with its goals focussed on poverty reduction and food security. Otherwise its value in such fora will be lost. The multinational nature of FAO is also a strength. Similar to global companies, FAO has offices in most countries in the world. This similarity in structure could for instance contribute to upscaling good practices by capitalizing on the presence of both organizations across a number of countries. FAO can also offer a range of technical expertise

⁷ For more information see Syngenta's good growth plan and commitments.

<http://www.syngenta.com/global/corporate/en/goodgrowthplan/home/Pages/homepage.aspx>

⁸ For more information see Yara's solutions for sustainable agriculture <http://www.yara.com/sustainability/>

⁹ <http://www.acosnet.it/en/home/company>

that spans the value chain and beyond, ranging from production, post-harvest losses, value chain development, statistics, voluntary standards, food safety and hygiene, contract farming and policy development among others. The Organization can therefore act as a broker for companies to access a range of expertise across different but interrelated technical areas.

Discussion points on the panel's presentations

Informal versus formal value chains: The challenges and requirements according to crops and commodities differ. For example, for multinational companies in high-value chains such as Tetrapak which is engaged in the packaging of milk, one of the major challenges is how to support smallholder operating informally. Formality is an important criteria as it is needed to control processing which is a major food safety issue. Other value chains such as staples have different dynamics and type of actors intervening but can still take best practices and learning from more organized high-value commodities chains.

The learning curve on side-selling: Companies are starting to learn how to manage side selling. Over the years they have developed more creative and sophisticated contractual mechanisms to provide more flexibility to farmers and allow them to sell a portion of their produce at the spot market while at the same time delivering the required quantities for a reliable value chain – examples of this include Unilever's contractual arrangements in India and ACOS strategy to target crops that are not staples. The critical factor for successful contractual agreements is trust, which requires time and in country presence.

Guiding investments in pre-competitive infrastructure: Additional investments on physical infrastructure such as testing laboratories is required in order to drive economies of scale and increase efficiency across the whole system. Guiding public investments on infrastructure that can reap benefits across value chains, sectors and for a wide section of the population is critical.

Supporting the enforcement of regulatory frameworks: Many countries have developed regulations for food safety, but there is still much work to do on the implementation and enforcement of policies and regulations.

Comparison and testing of data: FAO has a large repository of valuable data including FAOstat¹⁰ with statistics on agricultural production, prices, trade, use of inputs, among others. A good starting point for FAO and private companies, could be to compare and test data generated on particular issues. For example Nestle carried out a study with the Swiss Development Agency in Vietnam on the recommended use of water for robusta coffee. This information could be shared with FAO for validation and dissemination. Increased communication between private companies and FAO to share, compare and test data, could contribute to better and updated information for the use of a wide range of actors in the agricultural sector.

FAO strengths: When companies were asked about what they perceived as the major FAO strengths the following items were listed: compilation and updating of relevant agricultural data, developing knowledge including tools and best practices on an array of topics, close relationships with the ministries of agriculture across countries and improving farm practices through trainings at farm or farmer organization level.

FAO has officially received the mandate from its member countries to engage more directly with private companies at the corporate level only two years ago. Hence the Organization is still in the learning process of what that engagement could look like and how it will evolve. This meeting will contribute to facilitating that understanding. Past collaboration with private companies had been mainly ad-hoc and at country level related to a particular project. For example the agri-

¹⁰ <http://faostat3.fao.org/faostat-gateway/go/to/home/E>

value chain project in Central America has worked closely with the governments to promote a number of value chains in collaboration with large private buyers such as Wal-Mart.

Potential areas for collaboration

Moving on from the panel discussion, the rest of the session, based on inputs from the background paper, focussed on exchanges related to the following which were identified as potential areas for targeted collaboration between FAO and international companies:

1. Working with governments and other stakeholders

The public sector can be supported to target its investments where the entire sector, including diverse private companies, can take most advantage – such as physical pre-competitive infrastructure (e.g. testing laboratories to control for aflatoxins). FAO, the private sector and government can work together to ensure greater coordination. There is need for ensuring different projects and agricultural investments do not overlap and compete with each other in order to maximize impact.

Private companies are willing to invest in pioneer inclusive business models, however results can be reinforced and accelerated if there is more public sector action in areas such as sensitization and regulatory reforms; attracting patient capital - particularly in countries considered as high-risk for investments.

The multinational structures of FAO and the private sector can, for instance work with regional economic bodies, to promote the setting of standards that are consistent within and across regions.

FAO could also increase collaboration with the private sector and other development partners in order to understand gaps and challenges for creating enabling business environments. Issues such as the legal structure for land titles continue to be a major impediment for smallholder's which require public sector intervention. FAO does not have the mandate to support government on all enabling environment related issues, but can use its UN and civil society network to bring in partners that do.

2. Building diversified livelihoods

Diversified market outlets are essential for sustainable livelihoods. Companies understandably cannot invest in crops or market development, that fall within its immediate value chain. But a partnership can contribute to ensuring that spill-over diversification opportunities from private sector opportunities are followed up on.

For instance, in selected countries where access to affordable inputs is a challenge FAO could convene meetings with international private companies, local agro-dealer networks and the public sector to develop a strategy for increasing the accessibility and affordability of inputs and fertilizers.

A concern shared by the public and private sector is the need to ensure that young people view agriculture and agribusiness as a sector with potential for secure livelihoods. Agriculture and agribusiness has the potential to provide young people with employment opportunities from farm management to managing farmer organization or as consultants providing strategic agribusiness guidance and support to farmers and entrepreneurs in agriculture. With the facilitated support of FAO and the public sector, the private sector can work more with educational institutes to support the modernization of curricula related to the agricultural sector.

3. Farm practices and farmer organization capacity

Both FAO and the private sector have a history of working on strengthening business acumen at farm and farmer organization level. A partnership could accelerate the adoption of modern

farm and management practices that complement traditional smallholder farming in order to increase productivity and allow smallholders to sell at a competitive price for urban and local markets as well as international markets.

4. Small and Medium Size Enterprises (SMEs) knowledge transfer

Many international companies work through small and medium companies in developing countries either to source their supplies or to sell their products. These business linkages result in local companies benefiting from access to modern technology and know-how. Understandably a lead firm cannot invest in technology upgrading beyond its immediate value chain. However, FAO, the public sector and international companies can work together to support the dissemination of technology and know-how to SMEs across a given sector.

Also, smallholders and small companies can only do business with large companies if they are operating in the formal sector and are for instance registered. As a neutral player FAO can engage the public sector to strengthen regulatory frameworks that contribute to bringing more small actors into the formal sector.

5. Knowledge exchange and collaboration in project planning

Private companies and technical organizations such as FAO develop a wide variety of data. A comparison, testing and validation of data generated by private companies and FAO can contribute to the availability of more robust public goods data. This process can also lead to the identification of knowledge gaps and discussions around the allocation of resources, public and private, to address these gaps.

FAO also plays an important role as a knowledge repository assessing the types of business models that work best for integrating smallholders in value chains. It can expand its work in this area by tapping into data available from the success and failure stories of private companies working with smallholders.

Private companies are committed to integrating sustainable and inclusive goals into their business models. However, it is still not clear how to assess development goals. There is a need for greater collaboration for the development of measurement mechanisms that combine business performance with environmental and social impact, including tools that allow to measure performance not only as maximization of profit, but as maximization of value for all stakeholders.

To reinforce respective field activities, at the planning stage of value chain projects, FAO and the private sector can begin to build up a practice of consulting and exchanging data with one another on for instance market data, institutional strengths and weaknesses, government priorities and plans, gaps, opportunities and challenges. Sharing data early on in design phases can also help to identify leverage points for actors to contribute with their own comparative advantages

Suggestions to improve FAO-private collaboration

The session concluded with company representatives offered the following suggestions for FAO to improve its collaboration with private companies:

- Have consistent points of contacts with technical expertise to engage with private companies and build relationships. The contact point can also be a bridge with other entry points with organizations on diverse topics.
- Partnerships should first focus on a few strategic pilots with a 'learn as you go' approach. Operational mechanisms would then develop in response to the partnerships' needs. The focus of these pilots should also be based on comparative advantage and 'what the other side' of the partnership cannot do. The first point of contact needs to be technical which can then inform partnership processes.

- Accelerate the learning curve by learning from other international organizations that have been active in collaborating with private companies. Processes take time to be internalized. For instance the Swedish International Development Cooperation Agency (SIDA) and its programme “Business for Development”, which is dedicated to interact with private companies and find concrete areas of collaboration. USAID also carries out much of its development work in close collaboration with the private sector.
- It is important that the message to increase the collaboration with the private sector does not stay at the corporate managerial/headquarters level, but that it trickles down country offices and field officers.
- Instead of building new fora, FAO could increase its presence in existing multi-stakeholder fora in which private companies are already active in discussing pressing issues, such as FAO’s regular participation in Sustainable Food Laboratory meetings.

CONCLUSIONS

Main conclusions on food losses and waste

During the private sector partnerships meeting participants agreed that Food Losses and Waste (FLW) is a significant global issue that requires global action. They also agreed that the private sector has a key role to play in preventing and reducing FLW, along with the public sector and civil society.

The main conclusions of the session are outlined hereunder:

1. Provision of good quality data is considered essential to identify opportunities for interventions and making investments that will lead to reducing FLW, and developing better industry wide approaches and methodologies for FLW assessments.
2. Awareness raising is needed on FLW and potential solutions among consumers, farmers and other supply chain agents while enabling multi-stakeholder dialogue. A gender-sensitive approach should be applied to both the awareness and potential solutions.
3. Collaboration on the development of good practices and models in FLW reduction to be shared with stakeholders.
4. The development and enhancement of technologies, innovations and approaches for FLW reduction (e.g., packaging, storage, infrastructure).
5. Promotion and facilitation of the fullest use of food for human consumption by supply chain actors including producers, processors, retail, markets and food service industries.
6. Assisting producers and their organizations to reduce production, harvesting and storage losses through enhanced market access (e.g., through contracts, credit and technical assistance).
7. Identifying the specific needs for government investment, incentives and regulations in the supply chain, communicate these needs to governments and international organizations and lobby for appropriate and immediate public action.
8. Working with Governments, regulators and consumers in harmonizing food date marking. This would facilitate a clearer consumer understanding and reduce food waste.

Main conclusions on inclusive business models

The main conclusions on the next steps to increase dialogue and collaboration on the topic of inclusive business models are described below.

Development goals are shared by the public and private sector. International and national food and agricultural enterprises contribute to poverty reduction and improved food security daily by generating employment, procuring from smallholders, increasing household income and contributing to the local economy. Collaboration between the public sector, private sector and FAO on inclusive business models that integrate smallholders into competitive value chains can contribute to scaling up good practices and risk mitigation strategies. Ending hunger is not only in the interests of governments and development organizations but is also a goal shared by private companies.

There is potential for increased partnerships. Private companies have increased their partnerships with diverse types of organizations including development organizations, donors, academia and NGOs. There is consensus that increased collaboration with FAO can have significant benefits. However, partnerships need to have clear goals and develop according to each organization's comparative advantage.

Partnership needs to begin with technical points of convergence: Ideas on operationalizing partnerships urged that efforts start with a few strategic pilots with a 'learn as you go' approach.

Operational and process mechanisms would then develop in response to the partnerships' technical needs. Funding can be figured out together.

Partnership needs to move from one-off dialogues to ongoing collaboration: Reaching out to the private sector and organizing these types of events is a good starting point, but the communication cannot end here. These types of fora need to be followed by more in depth dialogues on concrete issues of interest to both parties. FAO and the international private sector have not had a habit of consulting or working with one another. This needs to be transformed into common practice throughout the respective systems from senior managers in headquarters down to technical officers in the field.

The session identified the following potential areas on which FAO could increase the collaboration with the private sector in the future; coordination role with government and other stakeholders; building diversified livelihoods; farm practices and farmer organization capacity; Small and Medium Size Enterprises (SMEs) knowledge transfer; knowledge exchange and collaboration in project planning.

ANNEXES

Annex I: Meeting agenda

Plenary session, King Faisal Room (D263)	
9:30 am to 9:40 am	Welcome and Introduction Marcela Villarreal, Director, Office for Partnerships, Advocacy and Capacity Development, FAO
9:40 am to 10:00 am	Overview of FAO's initiatives: Reduction of food waste and loss and, inclusive business models Eugenia Serova, Director, Rural Infrastructure and Agro-industries Division, FAO
10:00 am to 11:00 am	Private Sector Perspectives on Reduction of food waste and loss and Inclusive business models Private Sector Representatives
11:00 am to 11:10 am	Statement José Graziano da Silva, Director-General, FAO
11:10 am to 12:00 am	Greetings from the private sector delegation and commitment to FAO Private Sector Representatives
12:00 am to 13:00 am	Lunch Break
Parallel Session I: Reduction of food loss and food waste, Mexico Room (D211)	
1:00 pm to 1:30 pm	Presentation of background paper Per Pinstrup-Andersen, Professor, Cornell University, USA; Chair of the HLPE
1:30 pm to 4:30 pm	Facilitated discussion and drafting of the Session Conclusions
Parallel Session II: Inclusive Business Models King Faisal Room (D263)	
1:00 pm to 1:30 pm	Presentation of background paper Don Seville, Sustainable Food Laboratory
1:30 pm to 4:30 pm	Facilitated discussion and drafting of the Session Conclusions Don Seville co-director Sustainable Food Lab
Plenary session, King Faisal Room (D263)	
5:00 pm to 5:30 pm	Presentation of the sessions' Conclusions and discussion
5:30pm to 5:45pm	Closing remarks Eugenia Serova, Director, Rural Infrastructure and Agro-industries Division, FAO

Annex II: List of participants to plenary session

	Name	Entity	Title
1	Javier Montero	Acos	Strategic Development latin america, Acos
2	Remo Pedon	ACOS S.P.A. - PEDON S.P.A.	Managing Director
3	Katia Sambin	ACOS S.P.A. - PEDON S.P.A.	CFS Advisory Group
4	Jon Vandenheuvel	Africa Atlantic Franchise Farms Ghana Ltd.	CEO
5	Doug Beever	Agrium	Senior Director, Sustainability and Stakeholder Relations
6	David Green	American SoyBean Association	Consultant
7	Narciso Salvo	ASSOFERTILIZZANTI	President
8	Bashir Ayodele Ameen	Baameenfarms	CEO
9	Luca Ruini	Barilla	Health, Safety, Environment & Energy Director
10	Roberto Ciati	Barilla	Sustainability Director
11	Patricia Rice	BASF	State Regulatory Affairs Manager
12	Diana Caspers	Bayer CropScience	Global Key Relation Manager
13	Mike May	Brazilian Forestry Association	Vice President Public Affairs
14	Jan Dyer	Canadian Canola Growers Association	Director of Government Relations
15	Taryn Barclay	Cargill	Corporate Responsibility Manager
16	Cindy Brown	Chippewa Valley Bean	Chief Executive Officer
17	Marco Foschini	Coldiretti	GdL PAC Coordinator
18	Siang Hee Tan	CropLife Asia	Executive Director
19	Howard Minigh	Croplife International	President and CEO
20	Michael Michener	CropLife International	Sustainability Policy Director
21	Douglas Mallette	Cybernated Farm Systems	Chief Executive Officer
22	Dawn Rittenhouse	DuPont	Director, Sustainable Development
23	Desmond Sheehy	Duxton Asset Management	Managing Director
24	Angelika Christ	FEFCO	Secretary General
25	Charlotte Barberet	Flexico	Marketing & communication manager
26	June Arnold	Gafta	Head of Policy
27	Fadhel AlAnsari	GPIC	General Manager Manufacturing
28	Georgie Aley	Grains & Legumes Nutrition Council	Managing Director

	Name	Entity	Title
29	Alberto Solano	Grameen Foundation	Regional CEO, Latin America & Caribbean
30	Dr. Abdulrahman Jawahery	Gulf Petrochemical Industries Co. (GPIC)	President
31	Keith Polo	ImagineNations	Lead, Agribusiness
32	Barrie Bain	INFORMA	Founder and Director
33	Hakan Bahceci	International Agri Food Network and CICILS	President of CICILS, and CEO of Hakan Foods, Chairman
34	Katy Lee	International Agri-Food Network	Stakeholder Relations Director
35	Robynne Anderson	International Agri-Food Network (IAFN)	Main Representative to the UN
36	Louise Kantrow	International Chamber of Commerce (ICC)	Permanent Representative to the UN
37	Nico van Belzen	International Dairy Federation (IDF)	Director General
38	Carel Du Marchie Sarvaas	International Federation for Animal Health (IFAH)	Executive Director
39	Alexandra de Athayde	International Feed Industry Federation (IFIF)	Executive Director
40	Charlotte Hebebrand	International Fertilizer Industry Association (IFA)	Director General Designate
41	Morgane Danielou	International Fertilizer Industry Association (IFA)	Head of Information and Communications
42	Laura Mecagni	International Finance Corporation (IFC)	Head of Global Agriculture and Food Security Program
43	Andrew Mallison	International Fishmeal and Fish Oil Organization (IFFO)	Director-General
44	Carlo Nicolais	Maire Tecnimont SpA	Head of Public Affairs and Communication
45	JB Cordaro	Mars Inc.	Consultant - Global Business Advisor
46	Audrae Erickson	Mead Johnson Nutrition	Vice President, External & Public Affairs
47	Bernd Jablonowski	Messe Düsseldorf	Project Director of interpack and responsible for SAVE FOOD
48	Isabel Chanteaux	Messe Düsseldorf	
49	Jonathan Jacobs	MM (Operations) Limited	Joint Managing Director & Founder
50	Brian Lowry	Monsanto	Deputy General Counsel
51	John Connolley	National Fisheries Institute	President
52	Amine Maaouni	OCP Group	PA/PR Director
53	Stephanie Hanson	One Acre Fund	Director of Policy and Outreach
54	Lucy Muchoki	Pan African Agribusiness and Agroindustry Consortium	Chief Executive Officer

	Name	Entity	Title
55	Zoltan Reng	Pannonia Ethanol - ePURE	CEO
56	Paddy Docherty	Phoenix Africa Development Company	Chief Executive
57	Gavin Gibson	Pulse Australia	CEO
58	Gordon Bacon	Pulse Canada	CEO
59	Lubna Edwards	Sealed Air Corporation	Director, Sustainability and Global Partnerships
60	Rutger Bonsel	Stamicarbon	Innovation Marketing Manager at Maire Tecnimont, a subsidiary of Stamicarbon
61	Jonathan Tench	SUN Business Alliance	Scaling Up Nutrition, Manager
62	Don Seville	Sustainable Food Lab	Professor and Lecturer
63	Juan Gonzalez Valero	Syngenta and SC Chair	Head of Corporate Responsibility
64	Charles Ogang	Uganda National Farmers Federation (UNFFE)	President
65	KATARINA ERIKSSON	Tetra Laval AB	Senior Project and Partnership Development Manager
66	Giulia di Tommaso	Unilever	General Counsel at Unilever Italy
67	Andrea Granier	Unilever	Procurement Operations Manager, Sustainable Sourcing
68	Puvan J Selvanathan	United Nations Global Compact	Special Advisor, Agriculture
69	Nina Khangaldyan	URALCHEM	Head of the Market Research and Trade Policy Department, Foreign Affairs adviser
70	Tim McGreevy	USA Dry Pea & Lentil Council	CEO
71	Mikkel Frandsen	Vestergaard	CEO
72	Arne Cartridge	World Economic Forum (WEF)	Special Advisor, Global Partnerships for Food Security
73	Maria Cavit	World Union of Wholesale Markets	Secretary General
74	Carlo Dianzani	World Union of Wholesale Markets	WUWM Honorary Chairman and Vice President/Managing Director of Mercafir

Annex III: Participants on parallel sessions

Session I: Food Losses and Waste			
	Name	Company	Position
1	Maria Cavit	World Union of Wholesale Markets (WUWM)	Secretary General
2	Tim D. McGreevy	Global Pulse Confederation	Treasurer
3	Nico van Belzen	International Dairy Federation	Director General
4	Nacho Cuevas	Conxemar-Acomar	Board Member, President
5	Catau Della Stefano	IMA	Board Member
6	Lubna Edwards	Sealed Air	Director, Sustainability and Partnership
7	Bernd Jablonovsky	Messe Dusseldorf	Director
8	Angelika Christ	European Federation of Corrugated Board Manufacturers (FEFCO)	Secretary General
9	June Arnold	Gafra	Head of Policy
10	Morgane Danielou	International Fertilizer Industry Association (IFA)	Director of Communications
11	Mark Griffin	International Fishmeal and Fish Oil Organisation (IFFO)	Vice President
12	Andrew Mallison	International Fishmeal and Fish Oil Organisation (IFFO)	Director General
13	Mikkel Vestergaard	VESTERGAARD	CEO
14	Georgina Birghan	VESTERGAARD	Senior Technical Specialist
15	Douglas Mallette	Cybernated Farm Systems	CEO
16	Divine Njie	FAO/ AGS	Deputy Director
17	Anthony Bennett	FAO/AGS	Livestock and agro-industry Officer
18	Yvette Diei Ouadi	FAO/ FI	Fishery Industry Officer
19	Jorge Fonseca	FAO/ AGS	Agro-Industry Officer (Post-harvest Systems)
20	Valeria Khristolyubova	FAO/ FOE	Forest products Officer
21	Camelia Bucatariu	FAO / AGS	Policy Development Consultant

Session II: Inclusive Business Models			
	Name	Company	Position
1	Jon Vandenheuvel	Africa Atlantic Franchise Farms Ghana	CEO
2	Cristian Frutiger	Nestle	Deputy Head Public Affairs
3	Katarina Eriksson	Tetra Laval	Senior Project and Partnership Development Manager
4	Andrea Granier	Unilever	Procurement Operations Manager
5	Arne Catridge	World Economic Forum, Grow Africa	
6	World Economic Forum	ACOS	Assistant chief executive officer
7	Rutger Bonsel	Stamicarbon	Innovation marketing manager
8	Natalia Federighi	Yara International	Director of corporate affairs
9	Katia		
10	Lisa Paglietti	FAO	TCIA
11	Liu Pascal	FAO	EST
12	Guenter Hemrich	FAO	OSP
13	Eugenia Serova	FAO	AGS
14	Luana Swensson	FAO	AGS
15	Milica Petruljeskov	FAO	AGS
16	Giang Duong	FAO	AGS
17	Nomathemba Mhlanga	FAO	AGS
18	Carlos da Silva	FAO	AGS
19	Florence Tartanac	FAO	AGS
20	Siobhan Kelly	FAO	AGS
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Annex IV: Background paper on Food Losses and Waste

Food Losses and Waste: The problem, causes and potential solutions: What the private sector can do¹¹

Executive summary

Losses and waste occur throughout the food system from primary production of agricultural commodities and fish catch to food intake. These losses and waste may be caused by the practice and behavior of farmers¹², consumers, traders, processors and others in the food system or by existing socio-economic environments or frameworks within which the behavior takes place. Food losses and waste cause large economic losses to societies and individual agents in the food system. They place pressures on the ecology and amplify the gap between prices received by farmers and those paid by consumers. Thus, efforts to reduce losses and waste can be an effective way to achieve the triple goal of 1) assuring higher prices and incomes to farmers¹³, traders and other agents in the supply chain, 2) reducing consumer prices and food expenditures and 3) reducing negative impact on the environment. This, in turn, may enhance the access to food by low-income rural and urban households and thus improve sustainable household food security and nutrition.

This paper recommends six areas of action for the private sector to reduce food losses and waste. The evidence in support of these recommendations is shown in HLPE (2014).

1. Undertaking food loss and waste audits to identify promising opportunities for intervention.
2. Enhancing awareness of the current losses and wastes and potential solutions among consumers, farmers and other supply chain agents while enabling multi-stakeholder dialogue.
A gender-specific approach should be applied to both the awareness and potential solutions.
3. Investments in harvesting and on-farm storage and handling through contracts, credit and technical assistance.
4. Investments in infrastructure, markets and supply chain management through public-private partnerships.
5. Effective information and capacity development for consumers as well as services (restaurants and institutions) to adapt portion sizes to the needs and eliminate quantity discounts.
6. Streamlining food labeling, creating secondary markets for lower grade foods and facilitating the use of surplus foods for low-income people through food recovery and redistribution (e.g. food banks) and donations.

Since specific action should be tailored to each particular context, attempts to set priorities among the six areas should be considered only as general guidelines. With this in mind, five high priorities are suggested for immediate implementation.

First, action related to areas 1 and 2 is likely to be essential to pursue action in the other areas. Thus, it is recommended that private sector corporations initiate such action immediately either individually or collectively through partnerships or association.

¹¹ This background paper was prepared by Per Pinstrup-Andersen, Graduate School Professor, Cornell University and Chair of the High Level Panel of Experts on Food Security and Nutrition Steering Committee. As an internal document, it should not be cited or circulated without the consent of FAO.

¹² 'Farmers' is used throughout this paper to cover crop and livestock producers and fisher folk.

¹³ Although reduced losses and waste would increase the supply to consumers and might depress producer prices.

Second, in cases where the necessary information is available, it is recommended that private corporations initiate action to reduce inefficiencies in the supply chain that lead to food losses and waste, including nutrient losses, and that experience with such action be shared across all food system agents.

Third, supermarkets and other retail outlets that have not already established secondary markets for lower grade foods and foods close to the sell-by date, should do so as soon as feasible.

Fourth, the agri-business sector should explore ways to assist farmers to reduce harvesting and storage losses through contracts, flexible grading, credit to improve practices and on-farm storage facilities and technical assistance.

Fifth, the private sector should identify the specific needs for government investment, incentives and regulations in the supply chain, communicate these needs to governments and international organizations and lobby for appropriate and immediate public action.

The rest of the paper provides a brief summary of the problem and the causes, followed by a more detailed discussion of the above recommendations.

The problem

According to a recent FAO report (FAO 2011) approximately one-third of the quantity of food produced for direct human consumption is never consumed. This corresponds to approximately 24% of all the calories produced (Kummu *et al.*, 2012; Lipinski *et al.*, 2013) and an economic loss of roughly one trillion dollars, two-thirds of which occur in high-income countries. Adding the social costs of environmental degradation would further elevate the costs (FAO 2014). The losses and waste add to the pressures that food systems place on natural resources and the ecosystem overall because more food needs to be produced. More water, land, energy, labor and capital is needed and more greenhouse gas is emitted. More food could be produced with fewer resources. Searchinger *et al.* (2013) estimate that halving the current losses and wastes of calories would reduce the expansion of food production needed to meet the demand by 2050 by more than 20%. The food is either lost on farms or in the distribution and processing systems or it is wasted by consumers or the retail sector. While the losses and waste are approximately one-third of production in both high and low-income countries, the nature and causes of food losses and waste vary greatly between the two groups of countries and among countries in each group. On-farm losses are around one-third of total losses and waste in both high and low-income countries. But losses that occur between the farm and the processing sector are much higher in low-income countries. And waste by consumers and the retail sector are much higher in high-income countries. The per capita losses and waste in high-income countries are close to twice the per capita losses and waste in low-income countries.

The losses and waste vary among food commodities. Thus, the World Resources Institute (Lipinski *et al.*, 2013) estimated that about two-thirds of all the calories contained in the production of roots and tubers is lost or wasted compared to about 40% for fruits and vegetables and about a quarter of the calories in cereals. However, because of the much larger production of cereals, they account for more than half of all calorie losses. In view of the widespread micronutrient deficiencies and the need for a more diversified diet in most developing countries, the losses of fruit and vegetables, estimated to be almost half by weight, as well as losses and waste of fish, milk and meat, is particularly worrisome. Furthermore, in addition to the quantities and calories lost or wasted, deteriorations of the nutritional value of food due to inappropriate handling in the supply chain is an important component of the total food and nutrient loss. In addition to losses of dietary energy (calories), nutrient losses are large throughout the supply chain.

The causes

In order to help identify appropriate action to reduce losses and wastes it is useful to differentiate between the causes that relate to behavior of the agents that are part of or influence food systems such as consumers, governments, retailers, processors and others, and the causes related to the system environment within which the agents operate. One of the basic questions to be asked by policy-makers is whether policy recommendations should be directed at changing behavior or changing the environment within which decisions are made.

Both causes and effective solutions are context-specific. The main causes in most developing countries relate to the environment within which decisions are made rather than inappropriate behavior. These causes include lack of appropriate on-farm storage and drying facilities and lack of capital to acquire them, deficient infrastructure, including roads, transportation, processing and storage facilities and unreliable energy supply for cold chains and processing. Poorly functioning institutions and local markets and inadequate market information, as well as coordination among actors in the supply chain contribute significantly to food losses, primarily but not exclusively in developing countries. Poorly functioning local and national markets combined with underdeveloped rural infrastructure are particularly important contributors to food losses in the current era of large and increasing fluctuations in food production and prices due, in part, to extreme weather events. The movement of transitory food surpluses in one part of the country to locations with a deficit is hampered. Farmers with surplus production may have little access to markets or the cost of transportation of such surpluses to locations with deficit may be prohibitive. Surplus production is left rotting in one area while there is hunger in another¹⁴. Widespread discarding of fish during the fishing operation and in the value chain, death of livestock during transportation and rejection of animals at slaughterhouses are other important causes of food losses.

Losses resulting from deteriorations of the quality of food are closely related to food safety considerations. Inappropriate handling, packaging, storage and transportation may result in increasing health risks from a range of microbiological and chemical food safety hazards, including mycotoxins and pests. Thus, preventive practices need to be applied by food chain agents and consumers to limit or avoid increased risk of food loss and waste. In certain food insecure circumstances, countries may be confronted with an implicit or explicit trade-off between increasing health risk, increasing food losses and reduced incomes.

The main causes of waste in high-income countries relate to behavior. They include the discarding by supermarkets and other retailers of food that has passed its sell-by date, and rejection of food that does not meet standards for appearance and quality. Strict standardization by supermarkets and other retailers and rejection by either retail or consumers of food that does not meet the set standards contribute to waste. Contrary to more traditional marketing processes in which foods with less desirable appearance or other “sub-standards” are sold at a lower price, modern systems tend to reject all food that does not meet – often subjective – standards. Supermarket standards are usually set to accommodate consumer demand and efforts to make the standards more flexible would succeed only if combined with consumer information and education.

Non-poor consumers discard food because they buy more than they can consume as a result of poor purchase management or planning, partly because of quantity discounts and partly because food accounts for a small budget share. While quantity discounts offered by supermarkets may reduce the cost of food, it may also be conducive to higher food waste because the quantity exceeds what the household members wish to eat. Other causes of food

¹⁴ Lack of market access also reduce productivity-increasing investments by farmers. While this is not considered a loss by the definition used in this paper, it is production foregone.

waste among consumers include excessive serving sizes¹⁵, inappropriate in-home storage or simply a low level of awareness and value placed by certain consumers on food. Much food is being discarded because consumers are confused by the date-labels such as “sell by” “best before” “consume before”, etc. Food is discarded because of excessively large serving sizes in restaurants and homes and because an excessive amount of food is prepared. The latter is particularly important in cafeterias, hospitals, caterers and other institutions. Buffet tables are notorious for the large portion of the food being discarded.

Potential solutions, with emphasis on private sector action

In HLPE (2014) the Panel recommends four sets of actions: Improvement of data collection and knowledge sharing on food losses and waste, development of effective strategies to reduce food losses and waste at the appropriate levels, taking effective steps to reduce food losses and waste and improving coordination of policies and strategies in order to reduce food losses and waste.

In general terms, a multifaceted set of solutions which would include market incentives, regulations and their enforcement, enhanced knowledge; increased public awareness; changes in the behavior of consumers, and practices of farmers and supply chain operators and investments in the supply chain, should be pursued. Six areas for action by the private sector, which may contribute to such a coherent and comprehensive effort, are suggested below. Suggestions for immediate, high-priority action are presented in the executive summary.

1. Undertaking food loss and waste audits.

The design and implementation of action to reduce food losses and waste should be based on relevant, context-specific knowledge. Regular food loss and waste audits should be undertaken and targets should be established, in consultation with customers/clients and with due consideration to the critical nature (or significance) of the identified losses. A clear specification of the nature and scope of the problem and whether changes in behavior or the environment is likely to yield the greatest reduction in losses and waste relative to economic costs, should be the starting point for any effort to reduce losses and waste. Efforts should be made to identify food losses and waste caused by economic inefficiencies, the solution of which would result in win-wins. Estimates of the distribution of benefits and costs, associated with the reduction of specific food losses and waste, among stakeholder groups is important to facilitate action, design incentives and provide compensation to losers, if warranted.

The observed losses or waste and their causes need not be in the same place in the supply chain. For example, inappropriate handling by farmers or transporters may show up as losses in the retail sector. Similarly, a retailer's decision not to buy or to lower the price may cause the food crop to be left to rot in the field and fish to be discarded. Therefore, a food systems approach is needed to identify the most effective intervention points and information about best practices should be shared across firms and stakeholder groups.

Commodity-specific assessments may be the most appropriate ways to proceed in some cases. However, factors such as poor rural infrastructure may affect all commodities. The public and private sector and civil society all have important roles to play in efforts to reduce food losses and waste. Although this note emphasizes action by the private sector, it is important to point out that public investments are urgently needed in most low-income countries to create the public goods, such as reliable institutions and basic infrastructure, needed for the private sector to make profitable investments. It is recommended that the appropriate international organization such as FAO or the Committee on World Food Security

¹⁵ Consumers who are frequently faced with excessive serving sizes are confronted with the choice of either gaining weight and eventually becoming obese or discarding some of the food.

(CFS) continue to play an active role in bringing the various stakeholder groups together through conferences, workshops and information exchange.

2. Enhancing awareness of the current losses and wastes and potential solutions among consumers, farmers and other supply chain agents.

Efforts to make consumers and others in the food system aware of the food losses and waste that occur and how such losses and waste might be reduced, will require collaboration and partnerships among the private and public sector and civil society. Incentives, regulation or new knowledge will be necessary to promote participation by the various stakeholder groups. Combining efforts to achieve several related goals such as food losses and waste, obesity prevention, improved food safety and increased profits or reduced consumer expenditures, are more likely to succeed than single-minded efforts to reduce food losses and waste.

Campaigns aimed at the change of consumer behavior, such as the British “Love food hate waste” campaign, Save Food Initiative of FAO which has an awareness raising component, Think Eat Save Campaign by FAO and UNEP which also contribute to the Save Food Initiative, Food waste challenge by USDA, Stop food waste by the European Union and Food recovery challenge by the United States Environmental Protection Agency, appear to have succeeded in reducing food waste by consumers in some high-income countries. In addition to ad hoc campaigns, sustained efforts to reduce losses and waste through consumer education and education of school children should be pursued. Efforts to promote behavioral change by the retail sector, restaurants and institutions such as hospitals and caterers to change the socio-economic environments within which consumers obtain their food by offering packages of food and beverages and portion sizes adapted to their needs (e.g. smaller) might enhance the overall impact of such campaigns. Results from the above mentioned audits may be used to enhance awareness of opportunities for farmers and other agents in the food supply chain to reduce food losses and waste while increasing economic efficiency and earnings. The “Value chain waste” working group of the World Economic Forum is a private sector efforts with such a focus. FAO’s case study methodology for assessing the causes of food losses and waste should be considered as a way to proceed.

3. Investments in harvesting and on-farm storage and handling through contracts, credit and extension.

Better market access by smallholder farmers in many developing countries is of critical importance to avoid on-farm losses associated with seasonal and annual fluctuations in production. Improved local infrastructure, contracts with traders, access to credit to purchase inputs and construct on-farm storage facilities, and improved risk management tools are examples of factors that may reduce on-farm losses. Technical assistance and technology to improve harvesting and handling of food commodities may reduce losses both on the farm and elsewhere in the supply chain. FAO, WFP and IFAD recently agreed to collaborate on a project to reduce losses of grains and pulses, with emphasis on smallholder farmers.

4. Investment in infrastructure, markets and supply chain management.

A combination of public and private investment is urgently needed in many developing countries to improve roads and transportation, processing and storage, drying and handling facilities in the supply chain. Reliable access to electricity and information and communication technology is critically important for the food processing industry to avoid losses. Knowledge and capacity by food chain operators to apply appropriate preventive approaches including good agricultural practices, and good hygiene practices are essential. Market information, reliable forecasting and integration of local markets are needed in many parts of the developing countries to facilitate the movement of food from surplus to deficit areas. Large fluctuations in food production and food prices resulting from extreme weather events associated with climate change contribute to imbalances in local supply and demand and associated food losses.

Research and policy intervention are needed to improve the resilience of the food system and to stabilize food prices (Pinstrup-Andersen, 2014).

In most cases that means public investment in infrastructure such as improved roads and transportation facilities, more effective institutions to facilitate and guide market transactions, such as contract enforcement, followed by private investments in markets, transportation, storage and processing and civil society action to facilitate improved harvesting and handling processes on farms and by small-scale traders. Lobbying by the private sector may be required to promote the public investments needed. A clear differentiation between the required public (e.g. institutions and roads) and private goods (e.g. storage and transportation) is critically important to guide the total investment needed and the role and potential pay-off to the private sector.

The above mentioned food loss and waste audit may identify ways to reduce losses and waste through improved logistics and supply management without reducing the firm's net income. Taking food losses and waste into consideration in the procurement of food by restaurants, hospitals and other institutions offer potential win-wins. In view of the large losses of nutrients in the food supply chain and widespread nutrient deficiencies in many developing countries, it might be useful to view the food supply chain as a nutrient value chain and try to identify where in the chain, the largest nutrient losses occur.

A large number of specific interventions are available to reduce food losses and waste in the supply chain including cold storage and transportation, sealed plastic bags, small metal silos, plastic crates instead of bags for various food crops, etc.

5. Reduction of portion sizes and elimination of quantity discounts.

Recent research indicates that larger portion sizes in restaurants and cafeterias lead to higher prevalence of overweight and obesity (Wansink 2014). It is also likely to lead to more food wasted. Thus, reducing portion sizes in conjunction with public education on healthy eating could achieve the dual goal of reducing overweight and obesity and reducing food waste. Alternatively, restaurants could introduce "portion size on demand" for food order, and encourage customers to take uneaten food home for subsequent consumption (doggy bags). Solutions should be systemic, thus, effective information and capacity development for consumers as well as services (restaurants and institutions) to adapt portion sizes to the needs in parallel with the elimination of quantity discounts could be considered for further public-private reflection.

6. Streamline food labeling, create secondary markets for lower grade foods and facilitate the use of surplus foods for low-income people through recovery and redistribution (e.g. food banks) and donations.

Harmonization and standardization of food labeling may improve consumer understanding and reduce food waste. With reference to research in the United Kingdom, Gunders (2012) reports that "standardizing food date labeling and clarifying its meaning to the public could reduce household food losses by as much as 20%". Emphasis should be on labeling for food safety, e.g. safe to use until (date), and consumer information. Supermarkets should offer food which is close to that date at lower prices or donate the food for distribution to households and individuals without the necessary purchasing power through food banks and the like. Throughout the food system from farmers to consumers, quality standards unrelated to health risks and nutrition, e.g. appearance, should be implemented on a sliding price scale instead of a fixed grade below which food is rejected. Separate product lines, alternative outlets, discount shelves or secondary markets might be developed to sell aesthetically or cosmetically imperfect food (off-grade).

For more information see: HLPE (2014). Food losses and waste in the context of sustainable food systems. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome. Available at www.fao.org/cfs/cfs-hlpe

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Annex V: Background paper on Inclusive Business Models

Private Sector-FAO Partnership on Inclusive Business Models¹⁶

Executive summary

The private sector plays a central role in agri-food systems. To respond to the growing global demand for food and to ensure more sustainable production, international food companies are increasingly investing in smallholder agriculture in developing and emerging economies. Some are participating in public private partnerships that set explicit goals and increase investment. One example is the World Economic Forum's New Vision for Agriculture Program, which has set goals of increasing agricultural production by 20 percent while decreasing greenhouse gas emissions by 20 percent and reducing the prevalence of rural poverty by 20 percent each decade (WEF, 2011).

These goals illustrate the shared vision of both the public and private sectors to feed the world in an environmentally sustainable and socially beneficial manner. Where investments in agriculture can improve inclusion – small-scale producers having more and better opportunities – they can contribute further to reducing rural poverty and food insecurity while increasing production. However, wide-scale change will not take place if investments in inclusive value chains are limited to a few multinational companies focused on their own procurement practices and how they impact on the poor. Impact at scale requires coordinated industry and public sector-wide interventions, with action matching the rhetoric.

FAO is actively exploring with companies to better understand areas of potential high impact collaboration. This paper identifies areas for potential collaboration on the topic of inclusive business models (IBM) that integrate smallholders into national, regional and global supply chains. These ideas are based on a series of telephone interviews with international companies between July and September 2014 and a workshop on October 15th 2014, which raised opportunities and challenges that a partnership could potentially focus on, including:

1. Professionalization of farmer organizations

Farmer organizations continue to receive support from both public and private sectors to improve service provision to farmers. Initiatives have seen some improvements but generally the broad-based professionalization of these organizations remains slow. The document describes how the public and private sectors, in partnership with FAO, can address the lack of clear policy direction governing cooperatives and farmer organizations, which causes confusion over roles and structures and hampers growth.

2. Building diversified livelihoods

Large-scale smallholder procurement can improve livelihoods, but simply increasing the numbers of farmers in value chains does not result in improved food security and poverty reduction. The quality of that inclusion also needs to be considered. When procuring from smallholders the private sector often sees opportunities for diversification but is unable to justify investments outside of its immediate value chain. Collaboration between FAO and the private sector can follow-up on these opportunities.

¹⁶ This paper was prepared by Don Seville, Co-Director Sustainable Food Lab and Siobhan Kelly, Agribusiness Economist, FAO

3. Coordinating with the public sector

Companies argue that in order to have more sustainable and larger scale impact they require greater public sector engagement, whether through co-investment or policy change. A neutral broker such as FAO could, through its work with agriculture ministries, be an effective partner in achieving this goal.

4. Transferring technology and know-how to SMAEs

The role of national food companies in linking farmers to national and regional markets hold greater potential for increasing farmers' income and reducing rural poverty than linking farmers to global value chains through international companies. Many international firms work with SMAEs in developing countries, but the transfer of technology and know-how is limited to the lucky few integrated into these supply chains. The paper presents some ideas on how FAO in collaboration with international firms and the public sector can upscale the transfer of knowledge across SMAEs within sub-sectors.

5. Knowledge exchange and collaboration in project planning

A broader, comparison, testing and validation of data generated by private companies and FAO can contribute to the availability of more robust public goods data. Also, there is an opportunity to benefit through proactive consultation during the design phase of projects to share data, previous experiences, local market conditions, existing strengths, challenges and partnership opportunities.

The Private Sector and Inclusive Business Models

There has been increasing attention and investment by multinationals in working with smallholders. Fast growing emerging markets are priority growth areas for many major companies to expand sales and to secure supply. Large companies are also under increasing scrutiny to conduct business in developing countries in ways that drive positive environmental and social outcomes.

Many major multinational food and beverage companies have created goals around sustainable sourcing. These strategies often include aiming for positive social impact where they do business—often through both sourcing and selling. Some companies have even developed explicit targets for smallholder engagement. Examples include the following:

- Unilever's Sustainable Living Plan includes: "By 2020, we will have a positive impact on the lives of 5.5 million people. Our goal is to engage with at least 500,000 smallholder farmers in our supply network. We will help them improve their agricultural practices and thus enable them to become more competitive. By doing so we will improve the quality of their livelihoods."¹⁷
- SAB Miller's Shared Imperatives goals for 2020 includes an aim to: "Directly support over half a million small enterprises to enhance their business growth and family livelihoods"¹⁸
- Syngenta's Good Growth Plan includes a commitment by 2020 to: "Reach 20 million smallholders and enable them to increase productivity by 50%"¹⁹
- Danone's Social Innovation Platform is based on two funds, the Ecosystem Fund and the Livelihoods Fund, which have invested more than €133 million towards deepening their positive impact, of which one dimension is on sustainable agriculture by smallholder farmers.²⁰

¹⁷ <http://www.unilever.com/sustainable-living-2014/enhancing-livelihoods/inclusive-business/targets-and-performance/index.aspx> - 13-388745

¹⁸ <http://www.sabmiller.com/sustainability/shared-imperatives/growth-and-development>

¹⁹ <http://www.syngenta.com/global/corporate/en/goodgrowthplan/commitments>

²⁰ <http://www.danone.com/en/for-all/mission-strategy/our-way-of-doing-business/social-innovation-platforms/>

Making a context specific business case for smallholder sourcing is critical. Sourcing from diverse smallholders can run counter to the general trend towards the greater efficiency in working with fewer, larger-scale suppliers that provide assurance on traceability, food safety standards and compliance on social and sustainability codes. Motivations for specific investments for companies differ depending on the crop, market, and organizational vision. They can include— product brand - developing products with a clear and compelling story to consumers, reputation – enhancing global and local reputation as a company with positive social impact, and/or supply – improving and expanding existing supply sources or developing new ones.

Companies investing in more inclusive supply chains with smallholder producers face risks that include inefficiencies, side selling, and inconsistent quality and production volumes. In addition, there is a risk to companies in the public perception of sourcing from areas with high levels of poverty and food insecurity. Farmers face risks of buyer dependency, demanding production standards and high rejection rates. These farmers face the structural constraint that they often lack of economies of scale that would allow them to compete with global market prices. At the same time, most smallholder farmers lack access to the affordable credit, training, high quality inputs, and stable markets that would justify investment in their farms.

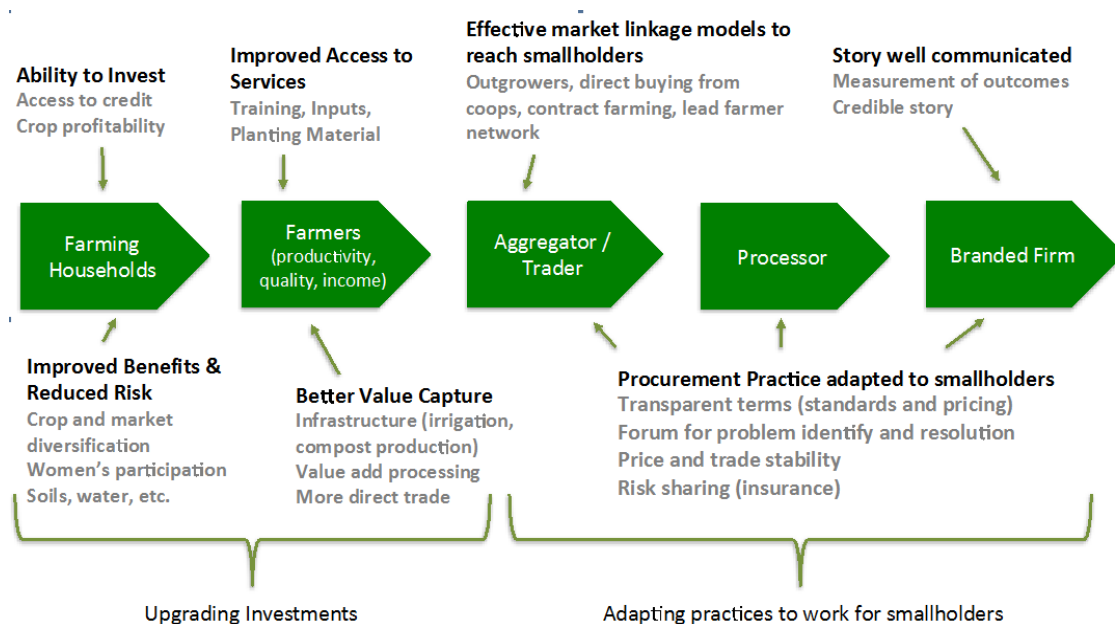
For this reason, many companies and their partners have learned that successful sourcing with smallholders in vulnerable areas—achieving the quality, volume, and consistency required—often means going “beyond the buy” to invest in improvements in the supply chain. Investments are often needed to support farmers in upgrading their production and processing practices in order to meet the standards of the supply chain and to be consistently profitable. Farmer groups often need support to improve their business skills to be capable trading partners. New or upgraded infrastructure might be needed to improve processing and storage. Beyond “upgrading” investments, specific trading practices can also be better adapted to smallholders—to improve stability and ensure that key services such as credit, training, and effective models of aggregation are in place in a reliable ways. Of course companies who invest in smallholder sourcing need to be supported by their customers, so building up consumer awareness – and doing this through stories from the field that are based on data – is critical to long term private sector engagement Figure 1 outlines some typical investment areas when improving the inclusivity of smallholder chains.²¹

Agribusinesses such as Syngenta who provide products and services to improve agricultural performance look at farmers as customers rather than as suppliers. Yet, inclusivity is also a critical challenge to these companies as they seek to expand to new markets, designing products and services that can reach and benefit small-scale producers. Here too there are challenges. These companies must support farmers by providing incentives for investments in the farm. These incentives can include access to reliable markets, access to credit and insurance, and access training. However, there are many different kinds of farmers, and segmentation— matching products with farmers’ ability to invest—is critical.

Deeper investment in capacity building and diversified livelihoods typically requires partnerships with the public sector and development experts to complement the commercial knowledge of the company, to attract public and private sector investments in the public good of inclusivity, and to influence the wider sector and policy environment. Rural communities often need more investment in their infrastructure, schools and health care system, which are clear public goods but usually outside the purview of a value chain initiative.

Figure 1: Typical Inclusive Business Model Investment Areas

²¹ Inclusive Business Model Framework Presentation, 2014 Seas of Change Amsterdam Workshop, <http://seasofchange.net/file/2014/02/5.-PPT-IBM-Supplier-Guidance-Framework.pdf>



Proposed Areas of Collaboration

1. Professionalization of farmer organizations

Farmer organizations are often critical intermediaries between small farmer members and buyers. Companies and public sector organizations actively invest in trying to improve farm level practices and build the capacity of farmer organizations. Support to farmer organizations is intended to build their capacity as a reliable business partner and to provide needed services to the farmers, offsetting supply risks such as side selling, and inconsistent quality and quantity of production.

Companies have found that the technical knowledge and project implementation capacity to improve value chains is available. But support to farmers to substantially change practices is still a challenge. Changing farming practices can involve changing deeply-rooted habits and cultural norms, and this typically requires more than farmer field school participation. It takes sustained support and a consistent message from technical assistance providers as a whole. Along with the right underlying incentives to invest in their business, of course. Essential in this is that farmers see their farm as a business driven by short and long-term investment, and the associated costs, benefits and risks of these investments.

The business skills and leadership capacity of farmer groups is critical. Effective training and long term coaching to build business and accounting skills for instance is essential for developing good trading partners with large companies. Leadership from the farming community is also critical for the interface between businesses and groups of diverse farmers. Yet, farmer organizations are often plagued by governance issues and a lack of capacity in agribusiness management skills.

The viability of farmer organizations is also constrained by a lack of clear policy direction on their role in the development of the agricultural sector.²² When policies do exist they often lack a complementary strategic framework and are not universally known or understood by entities that work with farmer organizations. As a result, activities on institutional strengthening

²²FAO 2012-Towards self-sustaining and market oriented producer organizations
<http://www.fao.org/docrep/016/ap100e/ap100e.pdf>.

of farmers' organizations can create confusion over the roles, structures and mandates of farmer organizations and cooperatives.²³

A concern shared by the public and private sector is on the need to ensure that young people view agriculture and agribusiness as a sector with potential for secure livelihoods. Agriculture and agribusiness has the potential to provide young people with employment opportunities from farm management to managing farmer organization or as consultants providing strategic agribusiness guidance to entrepreneurs in agriculture. With the facilitated support of FAO and the public sector, the private sector can work more with educational institutes to support the modernization of curricula related to the agricultural sector.

To address these challenges, possible areas of collaboration include:

- Informing the design of policies on cooperative development so that they match the realities and constraints facing farmer organizations and their buyers.
- Supporting the dissemination of knowledge on cooperative laws and procedures so that buyers' implementing partners design activities that complement governance and institutional set-ups.
- Working with secondary and tertiary technical colleges and universities to modernize agricultural economics and introduce agribusiness curricula. Guidance from national and international agribusiness firms is critical to ensure that graduates acquire the skills and knowledge required by the sector. This could include mentorship/apprenticeship opportunities for young farmers and entrepreneurs with agri-business firms.
- Building the business skills of FOs and promoting decision making based not only on costs but also on feasibility studies that include costs, benefits and risks analysis.

2. Building diversified livelihoods

In many cash crop value chains, companies recognize that while investments in one crop can improve productivity, quality, and crop income, it is insufficient to support resilient livelihoods and address seasonal food insecurity. Diversification of crops and markets is needed, for example, to reduce risks, generate regular income, improve food security, and support appropriate crop rotations. Yet it is difficult for companies to justify substantial investments outside the main value chain crop. Typical diversification options can include mushrooms, fish, honey, additional vegetable crops, pulses, etc.

There is a need to influence the wider sector and policy environment to stimulate and support the development of diversified market outlets building on experience gained from participation in modern value chains. Partnerships are needed to leverage capacity building through value chain improvement initiatives that support farmers and their organizations in diversified whole-farm planning. As one interviewed food company executive indicated: *"There is a huge opportunity to include a curriculum developed by the development community around complimentary crops and farm diversification as part of a holistic public/private approach to training and skills building."*

To address this challenge, possible areas of collaboration include:

- Provision of technical assistance to identify and develop diversified market outlet options for smallholders, complementing existing contract farming arrangements in targeted countries.
- Building on companies' commercial knowledge, apply lessons and approaches from FAO's work on rural investment to attract public and private sector investments for viable diversification options.
- Supporting risk management mechanisms such as crop insurance that can promote greater producer investment in new crops and markets.

²³ OCDC 2010 - http://www.ocdc.coop/pdf/coop_pathways_report.pdf

3. Coordinating with the public sector

While companies are certainly making effective investments in their value chains, they also often need greater public sector engagement, whether through co-investment or policy change, to have more sustainable and larger-scale impact. A neutral broker such as FAO could, through its work with agriculture ministries, be an effective partner in achieving a greater and more productive engagement with the public sector.

To address this challenge, possible areas of collaboration include:

- Leveraging value chain projects to promote sector improvements. Barriers to inclusivity are sometimes outside the power of a supply chain actor to address. A neutral broker and partner is sometimes needed to advocate to government for public investments and policy changes, that are needed for a value chain project to realize its full potential. An example of this would be facilitating investments in critical industry infrastructure such as storage and national testing labs if it within the development objectives of the country. Another would be in coordination planning for upgrading the fertilizer supply system within a sector complemented by training for farmers and farmer organizations. FAO could facilitate planning discussions for collaboration and scaling-up across a commodity value chain and/or landscape.
- Increasing investment in agriculture. Where governments are underinvesting in agriculture, companies have tried to fill in the gaps, e.g., in terms of extension and other services. There is a clear case for governments to invest more in agriculture—in better policies, infrastructure, access to finance, and extension, to name but a few areas. FAO could assist ministries in effectively and efficiently expanding services, improving access to finance, investing in strategic infrastructure and introducing new policies that provide synergies with the investments companies are making.
- Integrated sustainable development. While improvement in inclusivity and incomes can be made through value chain investments, companies are also increasingly aware that the longer term challenges of substantially improving livelihoods, addressing gender inequality, and attracting the next generation of farmers will take more fundamental changes and investments. Rural health systems, energy systems, transportation infrastructure, education systems, land tenure laws, secure water systems and so forth are all part of improving livelihoods in rural communities. FAO could play a part in facilitating such broader integrated rural development strategies in which agricultural investment provides an economic foundation. FAO could facilitate increased coordination between government and private sector forums such as the SAI platform, SFL and the Agrifood network in order to address contextual challenges and to identify common critical policy issues.
- Appropriate technology. Partnerships could support the development and spread of technologies that can be used at the sector level to ensure transparency of quality control and price mechanisms.

4. Transferring technology and know-how to SMAEs

National firms have a critical role to play in inclusive business models – as suppliers to the multinational food companies and as leaders in local and regional market development. While it can be easier to work with multinational enterprises on issues related to “inclusion” and “sustainability”, the role of national food firms in linking farmers to global value chains and to national and regional markets is potentially even more critical. The ‘home-grown’ nature of domestic firms means that they are more familiar with cultural nuances and the political structure. They are also more rooted in local economies. National firms also have a longer history procuring from smallholders, which is not considered by them as “inclusive” business, but just business as usual. Broad-based upgrading in value chains driven by national food firms therefore holds great potential for increasing farmer incomes and reducing rural poverty.

Evidence also shows that national and global businesses face common risks when sourcing from smallholders. Local companies however, given their more limited resources, have an even greater need for public private partnerships so that investments result in locally upgraded operations. Local companies are then more capable of including farmers in greater numbers and with greater developmental impact, in national commercially viable value chains²⁴.

Many multinationals involved in smallholder procurement work with local small and medium enterprises, from traders to processors, as part of their overall supply chain strategy. For example Syngenta's business model in developing countries includes a large number of local SMAEs as part of its distribution network. These linkages provide key opportunities for transfers of technology and know-how. They are, however, limited to a few companies lucky to be included in these supply chain relationships.

FAO's policy appraisal work on agro-industrial development has also shown that, in many countries, responsibilities for policies on small and medium sized food and agribusinesses enterprises tend to fall between the policy mandates of different ministries (e.g., agriculture, trade, industry, public infrastructure). Despite their important role as a link between smallholders and large national and multinational firms, there often is a lack of policy coordination that results in a shortage of support with issues such as: operational efficiency; product development; food quality and safety; and linkages back to primary production. In response to the policy and capacity gap facing SMAEs, FAO, under its current strategic framework, has included a focus on profiling the important role of SMAEs in inclusive business models, with activities that address capacity building needs and specific SMAE policy requirements.

To address these challenges possible areas of collaboration include:

- FAO could coordinate with the public sector, national agro-technology institutes, and multinational food companies to appraise and disseminate technology and know-how transfer strategies which could potentially be adopted by SMAEs within the same sub-sector.
- Aligning FAO's and targeted MNEs' ongoing engagement with SMAEs in specific countries. Efforts could for instance focus on supporting governments to identify weaknesses, and support the design of specific areas of policy on SMAEs that fall between different ministries, and which should be policy priorities for the upgrading needs of SMAEs and their buyers.

5. Knowledge exchange and collaboration in project planning

Beyond identifying specific countries and crops where FAO and the global private sector can partner, there is an opportunity to benefit through proactive consultation during the design phase. When the private sector is considering investment in a country, FAO data and experience can inform the private sector about local market conditions, existing strengths, challenges, and partnership opportunities. When FAO is planning a sector level partnership with an agricultural ministry, FAO could benefit from consultation with global private companies and industry associations with sector and country knowledge. Sharing data early on in design phases can also help to identify leverage points for actors to contribute with their own comparative advantages. This can be done independently of any specific collaboration.

To realize these opportunities, possible areas of collaboration include:

²⁴ Managing and upscaling an inclusive company: Lessons from the field, Sopov, Saavedra, et al. . 2014, Center for Development Innovation, Wageningen. <http://seasofchange.net/9603-2/>

- FAO and the private sector could begin to build up a practice of consulting and exchanging data with one another at the planning stage of value chain projects, on for instance market data, institutional strengths and weaknesses, government priorities and plans, gaps, opportunities and challenges. This takes relationships between key staff members and global companies and enabling structures so that consultation is top of mind when entering new projects.
- The private sector could share more data with FAO to build more thorough databases. A comparison, testing and validation of data generated by private companies and FAO can contribute to the availability of more robust public goods data. This process can also lead to the identification of knowledge gaps and discussions around the allocation of resources, public and private, to address these gaps.
- FAO could also play a larger role as a knowledge repository assessing the types of business models that work best for integrating smallholders in value chains. It can expand its work in this area by tapping into data available from the success and failure stories of private companies working with smallholders.

Conclusion

The round of interviews with companies, each of them a leader in investing in inclusive business models, highlighted the growing capacity inside the private sector to work through their supply chain to engage smallholders. At the same time, companies increasingly recognize the long-term challenge in substantially improving farming practices and building business skills. That deep improvement in livelihoods often requires more than a focus on a single cash crop, and more than certification and sustainable sourcing. That it takes investment in farming systems and multiple markets. That improved livelihoods and the interest of youth in becoming the next generation of farmers requires investments wider than agriculture – in schools, water systems, infrastructure, renewable energy, etc. That going to scale takes substantial investment and policy change beyond what a single company can bring to bear.

This is rich terrain for collaboration with agencies such as FAO. Collaboration can include informing policy, up-scaling good practices developed by the private sector, providing technical assistance to catalyse diversification opportunities emerging from value chain operations, working with schools and colleges on modernizing curricula on agriculture, and transferring technology and know-how to SMEs.

While the interviews with businesses revealed some challenges and hesitations about partnering with a complex organization such as FAO, there is no question that there is real potential for increased partnership on inclusive value chains to achieve a larger scale of impact. For partnerships to be practical in specific crops and countries, FAO and individual companies need to take the time to really understand where and how they could work. At the same time, FAO has the stature and convening ability to work beyond single companies and to develop partnerships between private and public sector that could look at a more holistic sector development. Clear entry points into the collaborating organizations, clear roles and responsibilities, and consistent contact points and messaging are some of the keys to success.

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