



Food and Agriculture
Organization of the
United Nations



SUSTAINABLE FOOD SYSTEMS PROGRAMME

WORKSHOP ON

SUSTAINABLE VALUE CHAINS FOR SUSTAINABLE FOOD SYSTEMS



8 JUNE (2:30PM-5:55PM) AND 9 JUNE 2016 (9:00AM-4:10PM)

IRAQ ROOM

[Or via webinar:

http://fao.adobeconnect.com/sustainable_value_chains_for_sustainable_food_systems/]

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SUSTAINABLE VALUE CHAINS FOR SUSTAINABLE FOOD SYSTEMS

8–9 June 2016
Iraq Room, FAO, Rome

AGENDA

Wednesday, 8 June 2016

14:30–14:45 OPENING REMARKS

Ren Wang, Assistant Director General, Agriculture and Consumer Protection
Adrian Aebi, Assistant Director General of FOAG

14:45–15:30 SESSION 1: RESOURCE USE EFFICIENCY, INCLUDING RECYCLING, REDUCING FOOD LOSSES AND WASTE

Chair: TBC

14:45–14:55 **The case study methodology to assess food loss and waste**

Bin Liu, FAO

14:55–15:05 **Food losses and wastage across the milk value chain in Pakistan**

Anne Roulin, Nestlé

15:05–15:15 **Towards zero-waste and sustainable food production using human inedible agro-products including food loss and waste as animal feed**

Harinder P.S. Makkar, FAO

15:15–15:30 **Discussion**

15:30–16:45 SESSION 2: BIODIVERSITY FROM PRODUCTION TO DIETS

Chair: TBC

15:30–15:40 **The LEAP principles for the assessment of livestock impacts on biodiversity**

Felix Teillard, FAO

15:40–15:50 **Biodiversity in standards and labels for the food industry**

Patrick Trötschler, Lake Constance Foundation

15:50–16:00 **Mountain products initiative**

Rosalaura Romeo, The Mountain Partnership Secretariat, FAO

16:00–16:10 **Slow Food Presidia: an opportunity for the future of the mountains**

Ludovico Roccattello, Slow Food Foundation for Biodiversity

16:10–16:30 **Discussion**

16:30–16:45 **Coffee Break**

16:45–17:55 SESSION 3: FOOD VALUE CHAINS AND RURAL/TERRITORIAL DEVELOPMENT

Chair: TBC

16:45–16:55 **Food self-provisioning – the role of non-market exchanges in sustainable food supply: experiences from Hungary**

Bálint Balázs, Environmental Social Science Research Group

16:55–17:05 **Regional Food Innovation Labs from farm to fork**

Frank Mechielsen, Hivos

17:05–17:15 **Innovative markets for sustainable agriculture: exploring how innovations in market institutions encourage sustainable agriculture in developing countries**

Allison Loconto and Anne Sophie Poisot, French National Institute for Agricultural Research and FAO

17:15–17:25 **Territorial food value chain for sustainable food systems: initiative from the French National Food Programme**

Vincent Gitz, Ministry of Agriculture of France

17:25–17:35 **The New Nordic Diet as prototype for regional sustainable diets**

Susanne Bügel, University of Copenhagen

17:35–17:55 **Discussion**

Thursday, 9 June 2016

9:00–10:45 SESSION 4: INCLUSIVE FOOD VALUE CHAINS: CREATING AND DISTRIBUTING VALUE, SOCIAL AND GENDERED ALONG THE CHAINS FOR SUSTAINABLE FOOD SYSTEMS

Chair: TBC

9:00–9:10 **FAO's approach on gender sensitive and sustainable food value chains**

Anna Lentink, FAO

9:10–9:20 **Building sustainable and inclusive small holder farming food value chains in Cameroon; Case of the North West Farmers' Organization**

Stephen Ngenchi, Community partners for sustainable development

9:20–9:30 **Geographical indications economic impacts: evidence from cases studies**

Catherine Teyssier and Emilie Vandecandelaere, FAO

9:30–9:45 **Discussion**

9:45–9:55 **Smallholder farmer participation in a modernizing food system - insights from the dairy value chain in Zambia**

David Neven, FAO

9:55–10:05 **Project: Rural competitiveness**

Ruth Xiomara Cubas Cantarero, National council for sustainable development of Honduras

10:05–10:15 **The World Banana Forum: a multistakeholder platform to develop practical guidance for sustainable banana value chains**

Victor Prada and Pascal Liu, FAO/The World Banana Forum

10:15–10:30 **Discussion**

10:30–10:45 **Coffee Break**

10:45–12:00 SESSION 5: INSTITUTIONS, MARKETS AND CONTRACTS FOR SFS ALONG FOOD VALUE CHAINS

Chair: TBC

10:45–10:55 **What might an "agro-ecological" value chain look like?**

Allison Loconto and Emilie Vandecandelaere, French National Institute for Agricultural Research and FAO

10:55–11:05 **What kinds of markets support agro-ecological production systems?**

Jimena Gomez and Maryam Rahmanian, FAO

11:05–11:15 **Campagna Amica Farmers' markets network: economic and social sustainability – is the community back on the market (places)?**

Toni De Amicis, Elisabetta Montesissa and Corrado Finardi, Institution Campagna Amica - Coldiretti Italian Farmers

11:15–11:25 **Towards a definition of short value chains**

Pilar Santacoloma, FAO

11:25–11:35 **Why a continental strategy for geographical indications (GIs)?**

Diana Akullo, African Union Commission

11:35–12:00 **Discussion**

12:00–12:40 SESSION 6: CATERING AND HOSPITALITY

Chair: TBC

12:00–12:10 **The role of sustainable horeca (hotels, restaurants and catering) for sustainable lifestyles. Identification of challenges and future work**

Carola Strassner, Muenster University of Applied Science

12:10–12:20 **The catering sector as Sustainable Value Chain**

Natascha Kooiman, Smaackmakers

12:20–12:30 **Local procurement for school feeding programmes**

Luana Swensson, Israel Klug, Siobhan Kelly, Florence Tartanac, FAO

12:30–12:40 **REDUCE: Research, Education and Communication for sustainable school catering**

Matteo Boschini, University of Bologna

12:40–13:00 **Discussion**
13:00–14:30 **Lunch Break**

14:30–15:30 SESSION 7: COORDINATION OF ACTORS ALONG FOOD VALUE CHAINS

Chair: TBC

14:30–14:40 **Learning from the organic food system as a model for sustainable food systems**
Johannes Kahl, Organic Food System Programme (OFSP)

14:40–14:50 **Voluntary certification system on good agricultural practices for fresh consumption products**
Roberto Azofeifa, Ministry of Agriculture and Livestock of Costa Rica

14:50–15:00 **Ireland's National Sustainability Programme Origin Green**
Cliodhnagh Conlon, Origin Green

15:00–15:15 **Discussion**

15:15–16:00 SESSION 8: COMMUNICATION TO CONSUMERS

Chair: TBC

15:15–15:25 **Consumer communications of product level sustainability information**
Jim Bracken, GS1 AISBL

15:25–15:35 **The Sustainability Consortium: theory of change and first results**
Koen Boone, Wageningen UR

15:35–15:45 **Discussion**

15:45–15:55 **Official launch of the knowledge platform: sustainable food value chains**

15:55–16:10 **Wrap up and closing remarks**
Alexandre Meybeck, FAO

ABSTRACTS

SESSION 1: RESOURCE USE EFFICIENCY, INCLUDING RECYCLING, REDUCING FOOD LOSSES AND WASTE

The case study methodology to assess food loss and waste

Bin Liu, FAO

The Global Initiative on Food Loss and Waste Reduction (SAVE FOOD) has designed a case study methodology aiming at analysing the causes of food losses and finding solutions in small-scale agriculture and fisheries subsectors. It has been tested in various food supply chains of several countries. In addition to post-harvest management, inputs to the methodology have been widely sought from experts in environmental, social and gender, and food safety and quality aspects inside and outside FAO. Lessons and experiences from the recent development and implementation of the methodology will be shared in the workshop.

Food losses and wastage across the milk value chain in Pakistan

Anne Roulin, Nestlé

This presentation will describe the results of a study on food losses and waste (FLW) in the milk value chain in Pakistan using the methodology in the recent protocol from UNEP and the World Resources Institute. Data were collected and analysed by Bio Deloitte. The scope of the study encompassed losses at the farm level for Nestlé's supply chain in Pakistan (ranging from small to large farms) and included collection, processing and distribution right through to wastage by the final consumer. The total FLW were found to be only 1.4 percent, which is significantly lower than other published figures. The main approaches that have led to these low numbers will be discussed as well as opportunities identified during the study to further increase productivity.

Towards zero-waste and sustainable food production using human inedible agroproducts including food loss and waste as animal feed

Harinder P.S. Makkar, FAO

Feed production is highly resource demanding. Most developing countries have extreme shortages of feed resources. Additional feed required for the projected increased demand of animal products, if met through food grains, will further exacerbate food insecurity in these countries. Livestock consume about 60 percent of the biomass used for food production. Most of the dry matter consumed by livestock is composed of grass (39 percent) and other non-humanly edible materials such as crop residues (26 percent) or agricultural by-products (bran, oilseed cakes etc., 8 percent). Technologies are available that enhance digestibility of crop residues and by-products and also increase their nutrient availability to animals, i.e. increase feed conversion efficiency. Increase in feed conversion efficiency enhances overall resource use efficiency. This presentation will address such technologies and illustrate synergies increase livestock productivity and income of farmers, decrease environmental pollutants and provide better social outcomes. Furthermore, approximately 1.3 Gtonnes of food are lost or wasted globally every year. A part of these losses can be converted to animal feed, through technologies such as ensiling, block making and raising insects, without compromising animal product safety and animal and human welfare. Novel human-inedible resources such as insect meals, leaf meals, protein isolates from agro-industrial by-products, single cell protein produced using waste streams, algae, co-products of the biofuel industry, etc. have potential to reduce grain use in the feed industry, further decreasing food-feed competition, and making the livestock sector more sustainable.

SESSION 2: BIODIVERSITY FROM PRODUCTION TO DIETS

The LEAP principles for the assessment of livestock impacts on biodiversity

Felix Teillard, FAO

Most environmental assessments in the livestock sector have focused on greenhouse gas emissions. Because of its intrinsic complexity, biodiversity has received less attention despite evidence of the considerable impact (positive and negative) of livestock on wild species and their habitats.

Within the FAO-hosted Livestock Environmental Assessment and Performance (LEAP) partnership, a group of international experts with various backgrounds (ecology, life cycle assessment, livestock production systems) shared their views and developed principles for the assessment of livestock impact on biodiversity. These principles are relevant to a variety of stakeholders and their objective is to guarantee a minimum level of soundness, transparency, scientific relevance, and completeness in biodiversity assessments.

Key principles include the recognition of the complex and multivariate nature of biodiversity. As a consequence, assessments should clearly state their objective and conduct a scoping analysis to identify key biodiversity issues (e.g. threatened species/ecosystems or other designation frameworks) in the context of the system under study. Assessments should be capable of reflecting the range of beneficial as well as detrimental impacts due to livestock systems. Off-farm impacts on biodiversity should also be included, such as those arising from the cultivation of imported feed.

Priorities for future methodological developments are discussed. In the absence of more comprehensive assessments of environmental criteria and their effect on biodiversity, unrecognized trade-offs will remain, with the possibility for decisions to shift the burden among different dimensions of agri-environmental sustainability.

Biodiversity in standards and labels for the food industry

Patrick Trötschler, Lake Constance Foundation

Food processing companies and retailers can increase biodiversity performance within their supply chains. Besides their own rules for the supply chain, companies are using standards and labels in order to assure a certain quality of the products. The approximately 600 standards and labels for the food sector in the EU can be powerful instruments to recover and enhance biodiversity at farm level and to harmonize productivity and conservation needs.

Lake Constance Foundation and Global Nature Fund conducted a first screening of standards for the food industry in Germany and have compiled recommendations (German/English) for more biodiversity criteria in standards and quality labels for the food industry.

Promoting mountain products

Rosalaura Romeo, The Mountain Partnership Secretariat, FAO

Mountain products have enormous potential to boost local mountain economies and improve the livelihoods of mountain communities, among the poorest and hungriest of the world. The Mountain Partnership Secretariat (MPS)/FAO is undertaking an initiative to create a voluntary certification scheme for mountain products. Worldwide demand is on the rise for quality, high-value foods and beverages produced in mountain areas. However, consumers cannot always distinguish mountain products from others when displayed in the marketplace. The voluntary label will communicate the values of a mountain product, enabling the consumers to make a more informed purchase, and the producers to receive fair compensation. The initiative will focus on farmers' cooperatives and women's groups to improve the whole mountain products value chain.

Slow Food Presidia: an opportunity for the future of the mountains

Ludovico Roccatello, Slow Food Foundation for Biodiversity

This paper examines the socio-cultural, agri-environmental and economic sustainability of Slow Food Presidia, projects promoting local food biodiversity, in the mountain areas. Forty-four Presidia representative of the various countries and product categories were analysed. The results show a general improvement on all three sustainability scales (socio-cultural, agri-environmental, economic) for the overwhelming majority of the Presidia studied. The most innovative elements concern the socio-cultural scale (social reinforcement of the producers, product visibility, growth of self-esteem). The main problems are often isolation, lack of information, inability to coordinate with other producers or other professionals of the food chain, lack of support from government and the scarcity of promotion and appreciation. In this regard a specific focus is dedicated to the tool of the “Narrative Label.”

SESSION 3: FOOD VALUE CHAINS AND RURAL/TERRITORIAL DEVELOPMENT

Food self-provisioning – the role of non-market exchanges in sustainable food supply: experiences from Hungary

Bálint Balázs, Environmental social science research group

Food self-provisioning (FSP), a non-market source of local foods, is often regarded as an important component of civic food systems. Recently FSP in post-socialist societies has been depicted as a socially inclusive practice compliant with principles of sustainability, unrelated to market transactions. Discourses on the political as well as the advocacy level about the benefits and potentials of food relocalization have been proliferating, while the economic significance of FSP has often been downplayed in the academic literature without presenting quantitative or qualitative evidence about the scope of and motivation for FSP activities. Based on a representative survey, this paper analyses the spatial and social extent of FSP practices in Hungary, a CEE country still in its post-socialist cultural transformation phase. It also explores the motivations for FSP as experienced by producer-consumers.

Regional Food Innovation Labs from farm to fork

Frank Mechielsen, Hivos

We need a transformation of our food system that will recognize ecosystems as the basic foundation of societies and economies with citizens at the centre. Vertical value chains need to be complemented with more horizontal territorial development. In cooperation with the research institute IIED, Hivos has been co-creating coalitions of those willing at local level in several countries. We engage with producers, governments, the private sector and civil society organizations to develop new business models and new public policies to enable more productive and resilient regions from farm to fork.

In the workshop we will explain the results of the Food Innovation Lab in Uganda and the Quinoa Platform in Bolivia. Together with our partners, we have created political momentum with the local and national policy-makers and private sector to address the future of food and nutrition security in these regions. In the workshop we will discuss the challenges and synergy between vertical value chain thinking and horizontal territorial development thinking with farmers and consumers at the centre.

Innovative markets for sustainable agriculture: exploring how innovations in market institutions encourage sustainable agriculture in developing countries

Allison Loconto and Anne Sophie Poisot, National Institute for Agronomic Research and FAO

Between 2013 and 2015 FAO and INRA undertook a survey of 15 innovative approaches that enable markets to act as incentives in the transition towards sustainable agriculture in developing

countries. The results are: (i) system innovations that allow new rules for marketing and assuring the sustainable qualities of products; (ii) new forms of organization that permit actors to play multiple roles in the system (e.g. farmer and auditor, farmer and researcher, consumer and auditor, consumer and intermediary); (iii) new forms of market exchange such as box schemes, university kiosks, public procurement or systems of seed exchanges; (iv) new technologies for sustainable agriculture (e.g. effective micro-organisms, bio-pesticides, low-cost soil analysis). The public sector plays a key role in providing legitimate political and physical spaces for innovations that build sustainable food systems.

Territorial food value chain for sustainable food systems: initiative from the French National Food Programme

Vincent Gitz, Ministry of Agriculture of France

The French National Food Programme is led by the French Ministry of Agriculture, Agrifood and Forestry and associates 10 other ministries. This public policy is defined operationally in the National Programme for Food, with four major axes: social justice, food education targeted to youth, the fight against food waste, and territorial anchorage. Deployment at territorial levels of the national food policy aims at operationalizing the social, economic and environmental dimensions and objectives, towards sustainable food value chains. This paper focuses on the subnational (regional) levels of the National Programme for Food and on an innovative disposition called “territorial food projects”, introduced in law for the future of agriculture, food and forests of 14 October 2014. The regional plans for food will be detailed: objectives, multistakeholder governance, tools and role of the state. A set of initiatives with a territorial approach will be presented, showing how they contribute to build sustainable food value chains.

The New Nordic Diet as prototype for regional sustainable diets

Susanne Bügel, University of Copenhagen

A main challenge in sustainable food systems is to link sustainable production to sustainable diets and consumption patterns. The New Nordic diet (NND) builds on and shares the Mediterranean diet (MD) thinking, but utilizes the ingredients and flavours of a northern climate. In both diets, variation in produce, organic, local production and seasonality are essential, all of which contribute to the preservation of the local landscape and sea, as well as to the health of the consumers. The agricultural biodiversity plays a huge role and provides food variety of plant and animal food products from both wild and domesticated sources. Both diets have been associated with health benefits. The NND is a prototype regional diet taking health, food culture, palatability and the environment into account. Thus, the principles and guidelines could be applied in any region of the world. There are currently activities for initiating, modeling and assessing these transformation processes.

SESSION 4: INCLUSIVE FOOD VALUE CHAINS: CREATING AND DISTRIBUTING VALUE, SOCIAL AND GENDERED ALONG THE CHAINS FOR SUSTAINABLE FOOD SYSTEMS

FAO’s approach on gender-sensitive and sustainable food value chains

Anna Lentink, FAO

Addressing gender in agricultural development programmes in general and value chain development in particular is an important theme for FAO, not only in view of achieving gender equality and women’s empowerment but also in view of achieving better functioning chains and being more effective in reaching the final goal of FAO – food security for all.

Value chain development has increasingly become the conceptual and operational framework for many agricultural development programmes. For this reason, FAO has developed an

approach towards gender-sensitive and sustainable food value chains. This approach includes a conceptual framework and a strategy for implementation, and it aims at providing women with equal opportunities to achieve a higher level of efficiency and competitiveness along the agri-food value chain.

The Gender Team will present FAO's approach on gender-sensitive and sustainable food value chains and will refer to the FAO Multi-Partner Programme Support Mechanism (FMM) "Enable women to benefit more equally from agri-food value chains", Component 2, which provides opportunities to test FAO's approach on gender-sensitive value chain development and to systematically learn and use good practices with promising impact as showcases for this approach. The FMM Sida Programme aims to provide technical assistance and policy support to address barriers that prevent rural women from accessing and benefiting from local, national and global markets in eight countries in Africa: Burkina Faso, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Morocco, Rwanda and Tunisia. By developing their capacities and fostering an enabling institutional environment, the Programme aims to expand women's economic opportunities and benefits from more efficient and inclusive agri-food chains, triggering multiplier effects on food and nutrition security, education and health.

Building sustainable and inclusive smallholder farming food value chains in Cameroon: case of the North West Farmers' Organization (NOWEFOR)

Stephen Ngenchi, Community partners for sustainable development (COPSUD)

Within the framework of the Batibo-Mezam innovative platform initiated by the Humid Tropics Programme, which seeks to transform the lives of the rural poor through integrated systems research for better impact on poverty and ecosystem integrity, a commodity or food value chain approach was introduced to farming groups of the area. With NOWEFOR and COPSUD partnering to facilitate, strengthen and build the capacities of these farmers, especially women, two important value chains are being developed in the areas of maize and tomatoes. In fact, we have worked to improve market linkages to more than ten producers' organizations based on an inclusive value chain placing emphasis on how small-scale farmers can be incorporated in existing value chains either by increasing efficiency or by carrying out activities further along the chain. Stakeholders include chain actors, facilitators, influencers, supporters, capacity builders, etc.

The economic impacts of geographical indications: evidence from case studies

Catherine Teyssier and Emilie Vandecandelaere, FAO

Geographical indications (GIs) can be used as tools for the development of sustainable food systems, and stakeholders at local and international levels often require economic data relating to the development of GIs, especially in terms of impact. With this in view, FAO has developed a collaboration with experts and Masters/PhD students to analyse the data collected from ten cases around the world. The analysis provides some clear evidence about the economic impact of GIs.

Smallholder farmer participation in a modernizing food system – insights from the dairy value chain in Zambia

David Neven, FAO

Market and foreign direct investment (FDI) liberalization in Zambia in the 1990s has led to the modernization of the dairy subsector in the 2000s. That modernization has taken place not only in dairy retail and second-stage processing, but also in the segment with which the small farmers directly interact – first stage processing and local milk collection. In this latter segment, the modern channel's rural entry point has emerged – the Milk Collection Center (MCC). The study describes the rapid growth of the MCC model in Zambia and then explores how farmers' duration as MCC suppliers affects their farm capital accumulation and technology.

The Com Rural Project

Ruth Xiomara Cubas Cantarero, National Council for Sustainable Development of Honduras

The COMRURAL project contributes to improving the productivity and competitiveness of producers/organized rural workers through the establishment of strategic alliances with commercial technicians, both financial and private, in the framework of agri-food value chains. The project is aimed at improving the competitiveness of the rural sector. Besides the principle of competitiveness, COMRURAL consider other principles: joint venture, mutual benefit, investment demand, associativity, social, environmental, economic and institutional sustainability. It consists of an organizational structure that allows operation, coordination and monitoring of its goals with the different actors involved in its implementation at national and local levels.

On this occasion we present the success story of Don José Inés Gómez, a producer from the west of the country, exactly in the area of Chiligatoro, who is a member of ECARAI. Don José successfully faced the challenge of producing safe, high-quality agricultural commercial products with different recognized supermarkets, with support from COMRURAL.

The World Banana Forum: a multistakeholder platform to develop practical guidance for sustainable banana value chains

Victor Prada and Pascal Liu, FAO/The World Banana Forum

The World Banana Forum (WBF) promotes the adoption of good practices for sustainable production and trade by the banana industry worldwide. It operates through specialized working groups where the stakeholders jointly develop practical guidance in various areas such as reduction of pesticide use, occupational health and safety, gender equity, costs of sustainable production and distribution of value.

In this regard, there is a business case for precompetitive cooperation, referring to innovation. The WBF gathers a critical mass of different partners, sufficient to facilitate business-enabling environments. There is a need to create win-win situations. In order to achieve this, the common factor to create effective public-private partnerships is the need for a neutral convener. This facilitates, for example, agreements between companies that are in real competition. The convener must be able to facilitate a decent debate where problems can be revealed, providing clear data in order to set priorities of common interests.

A common debate among different actors, including civil society organizations, can place company and government representatives outside their comfort zone. This situation requires strategies and relationships, which prove to be mutually beneficial and reinforcing to all parties involved. The convener must create individual agendas for every actor in order to facilitate an active contribution from members, and subsequently include these activities in the agenda of current working groups.

A good example of the above is the Banana Occupational Health and Safety Initiative.

SESSION 5: INSTITUTIONS, MARKETS AND CONTRACTS FOR SFS ALONG FOOD VALUE CHAINS

What might an "agro-ecological" value chain look like?

Allison Loconto and Emilie Vandecandelaere, National Institute for Agronomic Research and FAO

Through its international and regional symposia, FAO has recognized the important role of agro-ecological production systems in the development of sustainable food systems. However, there is little understanding of how agro-ecologically produced crops become marketable products that are recognized by consumers for their agro-ecological qualities. In 2015, FAO and INRA conducted a qualitative survey with producers, consumers and intermediaries from 12 countries (Benin, Bolivia, Brazil, Chile, China, Colombia, Ecuador, France, Kazakhstan,

Mozambique, Namibia and Uganda) to gain insights into this question. Through this study, we identified a typology of markets that are based on different levels of interaction among actors in a food system, the inclusiveness of the business model, the number of times the product changes hands, the fairness of prices, the means of quality communication and the identification of quality attributes themselves. In this presentation, we present the results of this study by explaining these typologies of "agro-ecological" markets in developing countries.

What kinds of markets support agro-ecological production systems?

Jimena Gomez and Maryam Rahmanian, FAO

The growing need for transition towards more sustainable food systems requires the promotion of innovative approaches to ensure social and economic prosperity, while preserving the environment, ecosystems and biodiversity. One such approach is agro-ecology, which is a scientific discipline, a set of practices and a social movement. As a science, it studies how different components of the agro-ecosystem interact. As a set of practices, it seeks sustainable farming systems that optimize and stabilize yields. As a social movement, it pursues multifunctional roles for agriculture, promotes social justice, nurtures identity and culture, and strengthens the economic viability of rural areas. This approach encompasses ecological, social and economic dimensions related to production systems, and considers their interaction across dimensions and scales. Such systemic approaches shift the scale of intervention from the individual farm to territorial and higher levels. The consideration of these multiple dimensions and scales of agro-ecology beyond the production dimension highlights the need for transformations across the entire food system, including governance, markets, research, culture and diets, among others. Recognizing the key role that agro-ecology can play in the transition towards inclusive and sustainable food systems, since 2014 FAO has organized international and regional multistakeholder symposia on Agro-ecology for Food Security and Nutrition. Through open dialogue and interactive discussions, participants highlighted agro-ecology's main benefits and opportunities, as well as main challenges and current gaps for its wider implementation and scaling up. Market conditions – and their interactions with the entire food system – are one of the main influential factors that enable or constrain farmers to implement sustainable agro-ecological practices. Based on the key findings of the symposia, this article addresses the key challenges to support and create market interactions that foster agro-ecological food systems. The influential factors to be considered include: (i) the role of producer, consumers and intermediaries in shaping food demand; (ii) the nutritional value inherent in agro-ecological products (iii) the concentration and globalization of commodity markets; (iv) the strengthening of social capital and equity; (v) the different trust-building mechanisms; and (vi) the co-existence and complementarity of emerging and traditional markets among others.

Campagna Amica farmers' markets network: economic and social sustainability – is the community back on the market (places)?

Toni De Amicis, Elisabetta Montesissa and Corrado Finardi, Institution Campagna Amica-Coldiretti Italian Farmers

The farmers' market network of Campagna Amica, a major Italian initiative, is steadily increasing its spread and relevance in the last 15 years, both in terms of producers' and of consumers' interest. While environmental benefits due to seasonality of the production and reduced transportation are clear, and received attention in literature, one still emerging and promising issue is about the delivered benefits in terms of economic and social aspects.

Restoring the sense of community and bridging the countryside to the city, the farmers' market recovers the ancient notion of the marketplace as a place in which interactions occur by the means of the persons involved and not by abstracted relationship mediated by money. The

“short food chain” aspect, allowing for the direct meeting of producers and consumers, while levelling the information asymmetries usually present in wider marketplaces, is furthermore a key aspect to rebalance the food chain market power of the producers.

Towards a definition of short value chains

Pilar Santacoloma, FAO

Proximity is a defining characteristic of short value chains (SVC). Proximity in geographical but also social or organizational terms enables the construction of a common vision in relation to food consumption. The organizational proximity generates new relationships between consumers and producers who abandon their usual passive attitude and acquire a more active role, generating innovative relationships with each other. This will support new forms of food citizenship, with active participation and conscious clarity about food and how it is produced. This concept is strongly linked to quality attributes beyond physical appearance and freshness, bringing about values such as tradition, origin and culinary, all related to identity. It implies ensuring quality by carrying out sustainable farming practices and considering geographical or regional characteristics. There is a process of change observed in the generation of governance mechanisms in agrifood systems as an alternative to global chains. This paper presents conceptual and practical elements of SVC in LA emphasizing on innovation applied in the interactions between producers and consumers. Examples from two of the most developed types of SSC in LA will be analysed: public procurement for school feeding (Colombia, Brazil) and the organic *tianguis* and fairs (Mexico and Chile). Lessons from the Colombia, Chile and Brazil experiences will serve to contrast and discuss ongoing work in Mexico City. There, FAO is working towards responding to the great challenge to design strategies for feeding the city from the surrounding areas’ supporting short supply chains. Nearly 59 percent of Mexico City is considered rural and concentrated in the southern part of the city, and reported annually 456 000 tonnes of agricultural production and 19 thousand tonnes of livestock products. However, 70 percent of what is produced in Mexico City goes to the wholesale market, the biggest in Latin America. Traditional flea markets (*tianguis*), local fairs, specialized stores and institutional procurement are to be promoted, allowing producers and consumers to exchange products and knowledge aiming to promote agro-ecology, biodiversity and fair trade relationships, with the support of social intermediaries.

A policy framework for geographical indications in Africa

Diana Akullo, African Union Commission

The African continent is blessed with rich natural resources and biocultural diversity that represent so many assets to preserve and promote, especially in a context of climate change and persistent food insecurity.

The main objective of the African Union Commission is to develop sound geographical indication (GI) promotion and protection strategies through institutional capacity building, development policies and programmes, legal and institutional frameworks, coordination and partnerships, built upon a coherent and shared vision. The objective also contributes to the implementation of 2014 Malabo Declaration of transforming African agriculture within the overall context of the Comprehensive Africa Agriculture Development Programme.

Two dimensions are to be considered within the strategy:

- GIs are a tool for rural and sustainable development (support policy).
- GI is an IPR defined in the TRIPS, and with different protection frames from one country to another (legal protection).

SESSION 6: CATERING AND HOSPITALITY

The role of sustainable *horeca* (hotels, restaurants and catering) for sustainable lifestyles.

Identification of challenges and future work

Carola Strassner, Muenster University of Applied Science

Internationally, there is increasing interest in short food supply chains, local and organic food as part of a wider concern with sustainability. This is strongly evident in both commercially oriented food service, where it is often associated with sustainable tourism endeavours, and in institutional catering, often in connection with sustainable public procurement initiatives. Proponents stress environmental benefits as well as the health and nutritional value of high-quality organic food and re-localized food production and consumption, plus the opportunity for food education, especially in school meal settings. This paper looks at changing policies and practices against a background of rising digitalization and the blurring between retail and food service channels. It will consider long-term strategies for developing sustainable *horeca*, cooperation between procurers and smaller suppliers, and community involvement.

The catering sector as a sustainable value chain

Natascha Kooiman, Smaackmakers

In Western countries, catering is one of the main supply channels of food. It also determines eating habits and culture because it provides a facility where people eat several times a week, mostly for their entire lives. Influencing the catering value chain is a great opportunity to influence eating habits and culture towards a more healthy and sustainable diet with, for example, less animal-based products and more plant-based products (i.e. fruits and vegetables) (the protein transition is a very impactful way of value creation throughout the food chain).

In this workshop we explain different chances of the value creation of catering. For example, considering the value chain of catering, canteens almost always form the concern of the facility and are almost never a shared concern of also the human resources or sustainability departments. While health and sustainability directly relate to the eating habits of employees, productivity, absenteeism and sustainability goals are all connected to the (offerings in) canteens. Moreover, CO₂ reduction, as well as being a more healthy offering, can easily be accomplished by diminishing animal-based products in the offering. Striving to a more sustainable offering and stimulating sustainable choices are a great opportunity for this.

In this workshop we explain the how and why of working towards new standards for catering and how this stimulates a more sustainable chain that brings value to all chain actors – for consumers, companies, caterers, suppliers, producers, and eventually to a new food culture.

Local procurement for school feeding programmes

Luana Swensson, Israel Klug, Siobhan Kelly, Florence Tartanac, FAO

Institutional procurement programmes (IPPs) for the procurement of food from local smallholder farmers have a great potential to create, stimulate and support transformative development of food supply systems. They can contribute not only to food insecurity strategies through the distribution of food for people under food and nutrition insecurity, but also for the achievement of other development aims including environmental, social and economic ones. In particular, IPPs for school programmes can be an important instrument to support smallholder production and their integration into formal markets.

Being aware of the potential, but as well of the challenges of IPPs, supporting governments to design and implement local food procurement for school programmes has become an important part of FAO's work. Within this context, this paper aims at presenting findings from FAO experience in the field (i.e. through PAA-Africa) and on normative case studies on IPPs.

REDUCE: Research, Education and Communication for sustainable school catering

Matteo Boschini, University of Bologna

REDUCE (*Ricerca, Educazione, Comunicazione*) is a project promoted by the Italian Ministry of Environment and Protection of Land and Sea to collect national data on the amount of food waste produced in the last parts of the food supply chain and suggest a set of prevention and reduction interventions. One of the major research activities consists of the development of a reliable and replicable methodology for determining food waste in school canteens and its application on a sample of approximately 70 primary schools. Based on the results obtained by the quantitative and qualitative analysis, the project will provide guidelines for policy-makers at regional level and prepare educational kits for students.

The intervention in this part of the food chain allows not only a direct reduction in the inefficiencies in the school catering service, but also sensitizes students on more sustainable food consumption habits.

SESSION 7: COORDINATION OF ACTORS ALONG FOOD VALUE CHAINS

Learning from the organic food system as a model for sustainable food systems

Johannes Kahl, the Organic Food System Programme (OFSP)

Today's understanding of food systems includes product-specific values (e.g. palatability, taste, nutritional and safety values, health promotion) and process-oriented values (e.g. environmental impact, animal welfare and social fairness). These values are currently challenged and changing. Food habits, cultural, social, ethical, economic and political criteria play an increasingly important role as values. An organic values-based supply chain links food production to values such as partnership, cooperation and trust. Within a values-based supply chain, all actors should be connected through a shared vision. Visions, indicators and parameters have been developed for the organic food system (OFS). In order to identify and leverage values within the OFS, it has to be critically analysed and documented. This makes the OFS a "living laboratory" for sustainable food systems, linking organic production and consumption within one system, thus creating and distributing value along the chains for sustainable food systems.

Voluntary certification system on good agricultural practices for fresh consumption products

Roberto Azofoifa, Ministry of agriculture and livestock of Costa Rica

In the frame of the REPCar project in Costa Rica, the Ministries of Agriculture and Environment agreed on the need to create a system of voluntary certification in good agricultural practices for fresh consumption agrifood. The system considers three parts of agricultural chains: production, processing and marketing. For each phase a set of criteria are applied – control points – which can either be mandatory, critical or recommended.

It is a multi-objective system that is focused on the certification of agricultural products free of agro-chemicals and on production processes that apply good agricultural practices concerning natural resources and inputs. The system is audited annually by trained technicians from the Ministry of Agriculture. Producers who meet the mandatory control points get a certificate issued by the Ministry.

Ireland's National Sustainability Programme Origin Green

Cliodhnagh Conlon, Origin Green

In 2012, Ireland became the first country in the world to launch a nationwide sustainability programme for its food and drink industry. Entitled Origin Green, the programme aims to engage all farms and food companies on a journey of continuous improvement in the sustainability of

food production. Today, over 85 percent of Irish food exports come from Origin Green-verified members and over 100 000 farms have been carbon assessed. The presentation will share Ireland's experiences, the lessons relevant for other sustainability programmes and the challenges ahead.

SESSION 8: COMMUNICATION TO CONSUMERS

Consumer communications of product level sustainability information

Jim Bracken, GS1 AISBL

Extensive research suggests that consumers are neither willing nor able to deal with the full complexity of sustainability when making a purchase decision. They are seeking highly aggregated yet easy to understand product information that includes guidance on what to look for within product categories. The provision of standardized digital hotspot KPIs lays the ground for testing various consumer information options. GS1's B2C Standards and Solutions can be an effective way to communicate such product level sustainability information to consumers. This will support the move to more sustainable consumption and production consistent with SDG 12.

The Sustainability Consortium: theory of change and first results

Koen Boone, Wageningen UR

The Sustainability Consortium (TSC) has brought together nearly 100 global consumer good companies and non-governmental organizations to develop a globally harmonized monitoring and reporting system for consumer products. Seven years after the start the tool is ready for 117 product categories covering nearly 90 percent of global sustainability impact of consumer products. The tool is mainly used to support buyers of retailers to measure sustainability of all the products they buy and based on that develop improvement plans with the partners in the supply chain. The paper will introduce the tools and share experiences on implementation with large global retailers. It will also report on the current state of sustainability of nearly 50 different food categories based on the nearly 2 000 suppliers that have reported into the system.

