

WEBINAR

SDG 2: Zero Hunger - End hunger, achieve food security and improved nutrition and promote sustainable agriculture

24 May 2018 | 10:00 ET | 15:00 GMT | 16:00 CET



Agenda:

16:00 – 16:10 (CET): Introduction

Marina Tomić (project manager, Croatian Institute for CSR)

16:10 – 16:30: How are companies implementing the SDGs? – Podravka

Zdravko Matotan, PhD (Director of Agricultural Development at Podravka)

16:30 – 16:50: The future of food production – Infarm

Marie Populus (Sustainability Lead at Infarm – The Urban Farming Company)

16:50 – 17:00: Q & A, Discussion

Housekeeping:

- This webinar is being recorded and it will be published on our YouTube channel afterwards
- Please use #sociSDG for social media
- Your voice will be automatically muted upon joining the webinar
- To ask questions or engage in discussion please use the chat window
- If you have any comments, please write us at sociSDGs@gmail.com

Introduction to the topic:





Marina Tomić (project manager, Croatian Institute for CSR)







END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE





Relation to other SDGs

 Since SDG 2 aims to end hunger, achieve food security and improved nutrition and promote sustainable agriculture, in order to achieve it, we must also address underlying structural problems tied with poverty, lack of access to education, employment and health care, climate change, water and resource scarcity and others.

Eliminating hunger is inextricably linked to eradicating poverty (SDG To end poverty, we must increase access to basic services and support people in disaster-stricken areas. We must also expand social protection schemes to the poor and vulnerable, including school feeding and food assistance.

 Programmes such as providing daily meals for schoolchildren in underdeveloped regions improve learning, attendance and enrolment in primary schools, which is essential in achieving inclusive quality education for all (SDG 4).

- Improving food security is also essential in reducing inequalities (SDG 10), because malnutrition disproportionately affects the most vulnerable, such as women, children, elderly, people with disabilities and the migrants.
- Only access to safe and nutritious food will ensure healthy lives and promote well-being for all (**SDG 3**). In developing countries in particular, hunger and malnutrition are linked to a number of illnesses, high levels of child mortality and long-term developmental impacts. On the other hand, obesity, diabetes and other diet-related conditions, have become epidemic in developed countries.

 More responsible use of resources in the agri-food industry would help protect life below water (SDG 14) and life on land (SDG 15), promote healthier ecosystems and halt biodiversity loss. Given the complexity of issues surrounding food and agriculture, a holistic and interdisciplinary approach seems to be the only way to achieve a truly sustainable and inclusive global food system.

Risks & Problems

- Population growth
- Climate change
- Food distribution & global supply chains
- Food waste
- Overconsumption & health risks
- Carbon footprint & resource consumption

Solutions & Opportunities

- Stimulating local production
- Introducing circularity (reusing waste and by-products)
- Promoting biodiversity
- Buying locally
- Reducing food waste
- Using less packaging
- Raising consumer awareness

Goal focus

SUSTAINABLE DEVELOPMENT GOAL 2

End hunger, achieve food security and improved nutrition and promote sustainable agriculture



TARGETS	INDICATORS
2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment	2.3.1Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size2.3.2Average income of small-scale food producers, by sex and indigenous status
2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain	2.4.1 Proportion of agricultural area under productive and sustainable agriculture

ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and

Goal focus

SUSTAINABLE DEVELOPMENT GOAL 2

End hunger, achieve food security and improved nutrition and promote sustainable agriculture



TARGETS	INDICATORS
2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed	 2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium or long-term conservation facilities 2.5.2 Proportion of local breeds classified as being at risk, not-atrisk or at unknown level of risk of extinction
2.A Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries	 2.A.1 The agriculture orientation index for government expenditures 2.A.2 Total official flows (official development assistance plus other official flows) to the agriculture sector

Number and proportion of undernourished people, 2000–2002 and 2014–2016 (millions and percentage)



Note: Vertical position of the bubbles represents the percentage of the population that is undernourished. The size of the bubbles represents the number of undernourished people. The proportion of undernourished people is less than 5 per cent for Northern Africa and Developed regions for both time periods.

Population growth

- UN estimates that 795 million people in the world today are undernourished and 98% of them live in developing countries.
- According to the 2013 UN report, the population of the world will reach 9.6 billion by 2050 and while the population of developed regions will remain mainly unchanged, the 49 least developed countries are projected to double in size = global demand for food will more than double.

Source: http://www.un.org/en/development/desa/news/population/un-report-world-population-projected-to-reach-9-6-billion-by-2050.html

- So how to produce enough food for the entire population in the future?
- According to FAO, the answer is not to produce more food, but to make better use of food already available because approximately one-third of all food produced for human consumption in the world is lost or wasted.

Reducing food waste

- Food loss in developing countries the unintentional wastage is high due to poor equipment, transportation and storage conditions.
- Food waste in developed countries, food is wasted mostly at retail and consumer level and is often connected with overconsumption.
- 70 % of the EU's food waste arises in the household, food service and retail sector, while 30 % arises in the production and processing sector out of which only 9 million tonnes (10%) comes from primary production and would fall in the category of food loss.

- Reduction of food waste would avoid putting additional pressure on scarce natural resources, decrease the need to raise food production, improve global food security and reduce environmental impacts generated by agriculture. The carbon footprint of wasted food is 3.3 gigatons.
- If food waste was a country, it would have the biggest greenhouse gas emissions after US and China.
- The production of wasted food uses around 1.4 billion hectares of land (28% of the world's agricultural area) and a huge amount of surface or groundwater, known as "blue water" (250km3), more than 38 times the blue-water footprint of US households.

- Tackling overconsumption and food waste is essential in ensuring sustainable consumption and production patterns (**SDG 12**).
- Goal 12 aims to by 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses (target 12.3)
- The progress will be measured by 12.3.1 Global food loss index, which would cover food loss: losses occurred on farm, during transport, in storage, and during processing. Food waste, i.e. losses in retail and households, is currently not covered. However, in developed countries, majority of food waste is generated at retail and household level.

Example: Creating consumer awareness



How are companies implementing the SDGs? – example of Podravka



Zdravko Matotan, PhD (Manager of Agricultural Development at Podravka d.d.)

Podravka Group

Headquarters: **Koprivnica**, Croatia

The most internationalized company with headquarters in Croatia



Leading culinary institution in the Adria region



Podravka Group

70 years of experience in food production

45 years of experience in pharmaceutics



More than **6500** employees

Of which **2200** employed in markets outside Croatia Revenues EUR



of which 67% from international markets 17factories in4 countries

Long business tradition



Long business tradition



Market presence



Market presence



presence and many loyal consumers

Present in over **500 000** points of sale worldwide

Reliable partners of leading European and international retailers

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Own distribution network from the Adriatic to the Baltic Sea

Own distribution network in 11 markets:

- Croatia
- Slovenia
- Bosnia and Herzegovina
- Russian Federation
- Poland
- Czech Republic
- Serbia
- Macedonia
- Slovakia
- Hungary
- Montenegro



Podravka Group factories

Podravka has **17 factories** in four countries of which **11 in Croatia**

- Vegeta and soups factory Koprivnica, Croatia
- Baby food and cream spreads factory Koprivnica, Croatia
- Fruit factory Koprivnica, Croatia
- Mill Koprivnica, Croatia
- Snacks factory Koprivnica, Croatia
- Danica production Koprivnica, Croatia
- Kalnik factory Varaždin, Croatia
- Vegetable factory Umag, Croatia
- Mirna fish factory Rovinj, Croatia
- Lagris factory Luhačovic, Czech Republic
- Belupo 2 factories- Koprivnica, Croatia
- Farmavita factory Sarajevo, BiH
- Žito 4 factories, 8 bakeries Slovenia





Main activities:

Development of production technologies and ensuring quality of agricultural products intended for processing in Podravka's factories

Developing our own agricultural production

plan of production
production and supervision of production technology implementation
creation and implementation new projects for our own agricultural production

Developing our raw material base

Education of food producers who are producing for PodravkaDesign and monitoring of the production technology implementation



Agrometeorological observation



- Collecting data for interpreting phenomena during production
- Predicting incidences of plant diseases and pests

Research and development projects

- Projects with external partners
- Projects of the Ministry of Science and the Ministry of Agriculture
- Podravka's Research and Development Team multidisciplinary projects

Activities of control and analysis

- expert monitoring of seed production
- quality and health control of seeds
- phytopathological analytics
- soil analytics

Breeding & Selection Projects

- creation of new pepper genotypes
- steady selection
- production of seeds

Agro-meteorological observation



<u>Developing our own agricultural production</u>



- Designing and developing technological maps
- Planning the production



Developing our own agricultural production



- Production and supervision of production technology implementation
- Based on data collected from technological maps, soil analysis and results of our own experiments and research we are choosing sortiment, determining fertilization and choice of plant protection products
- Preparing and implementing integrated agricultural production technology



Developing our own agricultural production



- Creation and implementation new projects for our own agricultural production
- Developing our own fruit production

Razvoj poljoprivrede



Developing our own agricultural production



- Creation and implementation new projects for our own agricultural production
- Developing our own vegetable production
- Vegetable production centre

Developing our raw material base

 Educating small farmers and food producers who are producing for Podravka



Developing our raw material base



- Design and monitoring of the production technology implementation
- Creation of technological guidelines
- Controlling implementation of production technology
- Monitoring the traceability of production
- Documenting production



Research & Development projects



- Projects with external partners
- Development of production of herbs and spices

Razvoj poljoprivrede

Research & Development projects



- Projects of the Ministry of Science and the Ministry of Agriculture
- Research & Development projects of the Ministry of Science
- Technological projects of the Ministry of Science
- Projects of the Agricultural research Council at the Ministry of Agriculture

Research & Development projects



- Podravka's Research and Development Team multidisciplinary projects
- Multiple teams' development projects



- Expert monitoring of seed production
- Variety control
- Health control
- Podravka's own production
- External users



- Control of quality and health of seeds
- Control of quality of seeds from our own production
- Control of quality of seeds organized for Podravka's needs
- Control of quality of seeds for external users



- Phytopathological analytics
- Phytopathological problems of our own production
- Determination of phytopathological problems and recommendations for protection of cooperative production





- Soil analysis
- Analysis for the needs for our own production
- Analyis for the needs of organized cooprative production
- External users

Breeding & Selection Projects



- Creating the new pepper genotypes / varieties
- Creating new high-quality, high-yield varieties for production needs
- Potential for commercial production
 on domestic market
- Possibility of ogranized seed
 production in all EU Member States



Breeding & Selection Projects



- Steady selection
- Preserving the purity of varieties and production of pre-basic seed

Razvoj poljoprivrede

Breeding & Selection Projects



- Seed production
- Production of seed varieties for vegetables that can be bought on the market
- Seeds for needs of organizing cooperative production of vegetables



- 1. Introducing INFARM
- 2. Our definition of sustainability
- 3. Our contribution to SDG 2 Sustainable Food Production
- 4. Our sustainability strategy

infarm

WE ARE THE NEW FARMERS AND THE CITY IS OUR FARM



INTRODUCING INFARM





interm

LOCAL URBAN FARMING





SUSTAINABILITY @ INFARM



infarm



The Doughnut: a twenty-first century compass Kate Raworth, Doughnut Economics - 7 ways to think like a 21st century economist

Provide people with fresh, healthy, local & affordable produce.



INFARM's IMPACTS



INFARM VALUE CHAIN



OUR CONTRIBUTION TO SDG 2



ALIGNED TO SDGs & SMART CITIES GOALS FOCUSSED ON END-PRODUCT RESEARCH-BASED AMBITIOUS - CARBON NEUTRALITY



CONDUCTING AN LCA DEVELOP SOCIAL IMPACTS KPIs FOCUS ON SUPPLY CHAIN AND PROCESSES

THANK YOU!

Questions? E-mail me! marie@infarm.com

Q & A, Discussion