Innovation award for WOMEN farmers 2020

Organised by:

copa*cogeca

european farmers european agri-cooperatives

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INTRODUCTION

The Innovation Award for Women Farmers aims to highlight the contributions women make towards rural development, forestry and farming. It provides an opportunity to showcase the many innovative approaches women takes to finding new solutions to the challenges faced in rural areas.

The Women's Innovation Awards was first established in 2010 by Copa-Cogeca Women's Committee and is now in its sixth year. This year's edition is entitled **"Women Farmers in the driver's seat of climate innovation."**

With EU agriculture and forestry playing an important role in enhancing economic, environmental, and social challenges. The untapped potential of empowering rural women and women farmers can contribute to boost rural entrepreneurship, self-employment, and innovation in European agriculture. Whilst women farmers represent 35% of EU's agricultural workforce, only 30% assume the position of farm manager or owner whilst 80% of women are classified as the 'holder's spouse.' Through this year's award, we aim to demonstrate how women farmers foster the development of new business models and their active role in tackling the biggest challenges in agricultural climate action.

We received 42 eligible applications from across the EU member states. These applications were whittled down to five finalists by the Copa-Cogeca organising committee and are presented to you in this document. This year, thanks to our partnership with Corteva, the winner will receive a €10.000 cash prize. In addition, the jury may grant an award for special achievement with a cash prize of €5.000.

Within this document you will find the summary of the five finalists, and we ask you the jury to decide on one winner, and one runner up for the special achievement award.

CHECK LIST

The 5 finalists were chosen based on the fulfilment of the following criteria. This can be used as a guide in enabling you to choose the winner and runner up.

ARTICLE 4
THE USE OF INNOVATIVE SOLUTIONS IN ADAPTING TO AND/OR MITIGATING CLIMATE CHANGE

Innovation may include working methods, organisational approaches and new forms of technology that contribute to adaptation and/or mitigation of climate change.

Adaptation solutions may refer to the use of new strategies and adaptation tools in geographical areas where they were not previously used, aiming at making the sector more resilient to the impacts of climate change. This may involve the development of risk management tools, new forms of active land management and irrigation systems allowing for more efficient water management. Other examples may include the creation of new plant varieties able to withstand more extreme weather conditions and more resistant to pests and diseases.

Approaches focusing on mitigation should focus on reducing carbon emissions. This may include carbon sequestration and different ways in dealing with emissions from arable land, livestock management and the substitution of traditional fossil fuels by biofuels or renewable energy. Additionally, increasing efficiency in food production through circular economy should also be considered, creating added value with by-products allowing for the creation of more sustainable business models and new value-chains.

ARTICLE 5
INNOVATION TRANSFER

Innovation must not be limited to one single farm but should have a potential impact or effect on all holdings in the same production sector or region, or on the area's relations with the outside world.

In this context, innovation not only refers to those aspects which affect the farm itself, but also to the whole value chain, including machinery, the packaging of products, channels of distribution and export methods for agricultural or forestry products.

ARTICLE 6
SUSTAINABILITY OF THE INNOVATION

The innovation must be socially viable and promote green growth by tackling climate change, mitigating pollution and optimising resource efficiency.

It must also have a certain longevity and should stand the test of time in order to have an impact, instead of appearing and disappearing in a short space of time.

The innovation should also promote the maintenance and creation of jobs in rural areas, entrepreneurship and new business models.

ARTICLE 7
NEW COMMUNICATION METHODS AND TOOLS

New communication methods and tools are used to improve farm or forestry education for children and adults and/or improve consumers' knowledge of farm or forestry production methods, or of the nutritional value of agricultural products. Conveying how farmers are at the forefront of innovation regarding solutions to tackle climate change.

THE 5 FINALISTS

BOGLÁRKA BIRÓ

MARIJA CAFUK

NAZARET MATEOS ALVARES

IMMACOLATA MIGLIACCIO

INES THEUNIS

BOGLÁRKA BIRÓ

HUNGARY – NAK

Boglárka Biró has been working as a forest engineer for the last 21 years in one of the largest and leading state-owned forest companies in Hungary. She has applied the practice of sustainable agriculture and forestry management both in her job and on her farm. In 1999, after graduating she founded her own nursery producing forest seedling. Every year, 200-300 thousand seedlings are sold which are used mainly for reforestation and afforestation. Boglárka decided to extend her business activities to crop production and today manages a 36ha farm with diverse activities. The fields are also home to large red deer population.

Moreover, Boglárka tries to harmonise her land management approach with local conditions and thus diminish the conflict between crop production and wild game management. In order to do so, her crops are divided by grazing fields for the deer, and only protected by temporary fences which can be dismantled after harvest.

This means the habitats of the large herbivores are not reduced. In 2016 she took part in the AES programme, dividing her plots to a maximum of 5ha with pea strips and green fallows. Only bird-friendly reaping is applied, and a nutrient supply plan is elaborated every year by specialists based on soil samples. She uses biofertilizer and if needed, semi-deep soil loosening is carried out, with no machinery used on wet soil. With an increase of private forestry in Hungary during the early 2000's, Boglárka also started working as a forest consultant providing advice to new owners who often had no forestry education or experience. In 2005 she received her PhD in forestry, having written her thesis on the false heartwood beech, including an application of non-destructive timber test methods. With cutting-edge technology the research team managed to be the first in Europe to detect false heartwood using MR (magnetic resonance) technology.

She also taught forest ecology and management at the University of Kaposvar for 7 years. Boglárka uses her own experiences and management approach of continuous forestry cover, proving that forest management can be more secured by gradually reducing the area of final cuts and reforesting with mixed forests that are more resistant to damage. Through her management approaches Boglárka has been able to reduce the time of reforestation through a smaller harvest area, well thought-out species choices, application of propagation material of domestic origin, and carefully chosen nursing operations in the vegetation period. As a result, the loss of quality and quantity in over matured forests can be avoided.

Due to the small-parcel structure and the common efforts with the hunting association, for the first time, even the maize and sunflower remained totally free of wild game damage this year.

MARIJA CAFUK

CROATIA – HPK

Marija Cafuk has been actively involved in the production of vegetables and is a well-known producer of the Varazdin cabbage, maintaining the tradition of growing and pickling the cabbage. Marija has made major contribution to the Varazdin cabbage protection process at EU level leading to its Protected Designation of Origin status.

Furthermore, she has been involved in the preparation of a book and monography about the Varazdin cabbage as well as several other contributions to books on domestic products to promote the traditions within the rural environment. She is an active participant in the Varazdin County project Experimental - demonstration field which is aimed at demonstrating the numerous ways agrotechnical measure related to reducing carbon emissions, conserving biodiversity, and preserving resilient domestic cultivars adapted to climate change can be implemented.

This has led to improving the knowledge transfer and strengthening the connections between research and practical applications on farms. Through the project she demonstrates how the farm contributes to climate mitigation and reducing greenhouse gases through new tillage techniques and the sustainable management of the farm with the help of energy sources. The project included climate-smart agriculture and an approach that helps guide the activities needed to transform and reorientate agricultural systems to effectively support development and ensure food production and food supply security. She promotes the importance of soil preservation as an important natural resource, coupled with water, oxygen, and nutrients necessary for plant growth. She also presents the importance of preserving biodiversity and landscape together with importance of preserving domestic varieties and cultivars as important genetic resources. Through the project, the results of improving competitiveness and higher agricultural productivity in a sustainable way of management were achieved, enabling the effective response to the challenges associated with the growing demand for agricultural products with limited resources and increasingly pronounced climate change. As a model of a successful Farm, Marija receives groups of visitors from different countries as well as from students and children. She has been awarded several times for her contribution to the development of agriculture in the Varazdin County.

In addition, Marija is the secretary of the Association of Ploughman's as well as an active member of the Municipal Council Agriculture Committee, County Union of Agricultural Associations and Varazdin Pumpkin Seed Oil Association.

NAZARET MATEOS ALVAREZ

SPAIN - UPA

Nazaret Mateos Alvarez is the manger and owner of her farm and business EntreSetas which follows closely to the circular economy principle; starting with the selection of raw materials and ends with the generated waste being used as organic fertiliser against Nematode.

Nazaret owns the first ecological mushroom growing business in the Castilla and Leon region and the only one in Spain with environmentally friendly facilities taking a natural farming approach. The substratum is selected from the fields, from which Nazaret obtains the stalk and cereal that will later be used as a layer for the mushrooms. The mycelia are selected from the best Spanish seed banks and are always certified to be transgenic free. The plantation of the species is done by hand, which gives Nazaret additional information about the state of the layers at the time of cultivating. There is no forced heating or cooling to avoid the pollution by the gases in the products. She avoids using automatic watering in order to reduce water waste and the irrigation of the mushrooms mainly comes from rainfall. Thanks to the lower temperature at night, the condensation produced generates water drops on the ceiling of the greenhouse and creates natural rain by falling back to the ground.

The greenhouses have darkening nets and no artificial lights to promote natural cycles of mushroom growing and to reduce the environmental impact. The farm's consumption of energy comes from the self-sufficiency of the solar panels. These synergies have also led to collaborations such as supplying mushrooms for Las Fallas and providing workshops for children on growing and harvesting mushrooms. Nazaret often collaborates with different local institutions. She has collaborated with schools on environmental education to students, as well as mycology programmes that connects children and the older generation through workshops. Indirectly, she supports local employment through her various products relating to mushrooms, including bakeries, restaurants and sources her raw materials from local farmers. The business has a free of plastic policy as well as self-sustainability and zero waste policy. The plastic free waste generated on the farm is taken to a composting area that is also used by other farmers as organic fertiliser for its power against Nematode.

Due to this practice, the farm is in a state of zero waste. Nazaret actively tries to eradicate the use of unnecessary plastic and all containers used are made of paper, cardboard, glass-aluminium and wood. Nazaret also has permission to sell her products abroad, as there are no phytosanitary issues. She has also obtained permission from the Ministry of Agriculture of the United States to send her mushroom growing kits to America.

IMMACOLATA MIGLIACCIO

ITALY – CONFAGRICOLTURA

Immacolata Migliaccio manages a 4ha certified organic farm that consist of mainly greenhouses and is attentive to the theme of circular economy. The farm specialises in the cultivation of leaf vegetables, legumes, corn, and tubers with experimental fields cultivating ancient vegetables. The fields are equipped with sensors, irrigation system, agrometeorological station, and through a piped music system the crops receive sound wave and ultrasound system between 3 Hz and 5000 Hz.

A digital platform with 4.0 technologies connects the various sensors and the Agrometeorological station, with the main purpose of detecting and processing environmental data. This has allowed Immacolata to intervene with meticulousness timing, preventing the attack of harmful insects and plant diseases, as well as being able to irrigate with precision and managing the water resource more efficiently. For example, if the state of humidity is below the expected threshold, the irrigation system is activated during or immediately after the stimulation of the crops with the wire broadcasting of sound waves. This process of bio-stimulation with sound waves facilitates the opening of the stomata of the plants allowing them to absorb the highest percentage of water with lower costs in terms of time and quantity of water poured.

Moreover, it stimulates the development of plants in less time, accelerating their growth. The experience in the field through the combination of the methods applied have shown very satisfactory results in terms of a greater yield of product collection, with a correlated and significant reduction in company costs. There was also a marked improvement in plant resistance to plant diseases, as well as a reduction in attacks by harmful insects. Such practices also led to an optimisation of the use of water resources, greatly reducing the waste of water. Through the use of Artificial Intelligence algorithms, information from the plant and history from the field is stored making it possible to predict the necessary actions with a high degree of probability for the future events. The main goal of all the techniques and methods is to improve the quality and resistance of crops to climate change in the area they are grown, as well as reduce attacks by harmful insects and plant diseases. A renewable energy plant with 20 kW solar panels was also built on the farm to limit CO2 emissions and to save electricity cost. Immacolata has also created an eco-sustainable packaging project SAiCCHETTi-dO.

A shopping bag with 100% recycled fabric. The business is also connected with various local associations and non-profit organisations to carry out targeted training, inclusion, orientation, and educational activities through social farming courses aimed at disadvantaged groups of children.

INES THEUNIS

BELGIUM – BORENBOND

Ines Theunis took over running the family farm, which first started with a few Belgian white-blue cattle and now contributes to sustainable and circular production. She produces the basic rations for the cattle herself, applying a short-chain principle to the crops she grows. For example, the sugar beet goes to the sugar factory 10 km away whilst the remaining product (pressed pulp) is used in the cattle rations. She supplements the feed with sustainable concentrates according to the Euroclim principle and is one of the first farmers in Belgium to do so.

Most of the raw materials used are from Belgian and French origin and 100% European, this result in CO2 emissions that are 8 times lower than when using Brazilian or Argentina soya. The Euroclim principle of feed/ food ratio reduces the environmental footprint per litre of milk or kilogram of meat produced without any loss of performance. Ines combines this with her carefully selected breed which has a very high feed conversion rate. She uses a feed based on extruded linseed for fattening the cattle, which has a positive effect on reducing methane emissions from cattle by up to 30% during the fattening phase. Its use also improves feed efficiency and increases the omega 3 fatty acids in the meat. The Belgian white blue breed is an efficient breed of cattle with a low carbon footprint per kilogram of meat due to high carcass yield and good feed efficiency.

For every kilogram of feed, the Belgian white blue cattle produce more meat compared to other breeds, thus making it a more environmentally friendly breed. Furthermore, the rumen of the cow, which is, on the one hand, a producer of methane, can play just as much of a positive role in the eco-system, and Ines is trying to use it as efficiently as possible. Thanks to its specific rumen, the cattle can convert plant products that are unusable to humans via rumen bacteria into high-quality proteins for humans. With the help of new innovative techniques, animal welfare is optimised. The farm uses digital detection systems to closely monitor calves and ventilation systems. Ines tries to keep up with the trends with her goal being to be one step ahead. She has also established her own meat label called Fines which enables her to show the consumer the story behind the meat.

In addition to the farm, Ines along with her mother and sister have a play farm named RAVOT that allows them to share their passion for agriculture with others. They organise guided tours on the farm showing the cattle and explaining the workings of the farm. The motto being Discover, Experience & Enjoy.

The Women's Committee of COPA-COGECA represents at European and EU level Women in agriculture, whether they be farmers, rural entrepreneurs, farming families, agricultural cooperatives or associated with agricultural and other rural activities.
The Committee provides a platform to highlight the challenges faced by women in agriculture and rural areas, as well as ensuring a gender perspective to agricultural and rural policies.

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