



WWF Baltic Sea Farmer of the Year Award 2019



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THE RISING APPETITE FOR SUSTAINABLE FARMING

Our global food system is the single biggest threat to nature today. The way that it's currently operated is heavily reliant on natural resources and contributes to biodiversity loss, climate change, deforestation, erosion, and eutrophication. Sustainable farming is instrumental in driving the transformation that is needed. The global food system of the future needs to be more resilient, profitable, and beneficial for both people and nature – and support a collective shift towards a more sustainable diet.

The problem is clear: We all need to eat, but the way we produce and consume food is putting an impossible strain on the planet.

Earlier this year, the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) launched a landmark Global Assessment Report presenting strong evidence that the state of nature is in steep decline. A prognosis that was reinforced by the Intergovernmental Panel on Climate Change (IPCC) in August when they released a special report on the relationship between climate change and land use. Altogether, these findings paint an alarming picture of species extinction, habitat loss, and the depletion of the ecosystem services that are crucial to our sustenance and economic development. Many environmental systems and processes have already been pushed beyond safe boundaries by food production alone. To reverse this trend, a transformation of the global food system is needed.

However, there is hope. Farmers hold the key to combatting the impacts of climate change and other environmental consequences on people and nature.

When land is managed sustainably, farming can help combat environmental problems while ensuring food security well into the future. The global food production system must change to ensure this important shift and support farming measures that have a minimal impact on the environment.

While farmers are a vital part of the solution, they are not often in a position to influence a substantial part of the problem. Policies, such as the Common Agricultural Policy, are a major driver in reshaping the way our food system looks today. So too, are the choices made by consumers and the companies in the food production and retail sector – and this is where a collective movement towards a more sustainable production and diet becomes necessary.

As a global community, we can reduce our environmental footprint by increasing the proportion of plant-

“WHEN LAND IS MANAGED SUSTAINABLY, FARMING CAN HELP COMBAT ENVIRONMENTAL PROBLEMS WHILE ENSURING FOOD SECURITY WELL INTO THE FUTURE.”

based products in our diets and – when we do eat meat—by eating less and better meat. Many people in middle-income and developed countries, as well as wealthier people in developing countries, consume more animal proteins than what is required for nutrition alone with adverse impacts on the planet. Not only would such dietary and production changes be better for human health, but they would also benefit the climate, natural habitats, biodiversity, and the environment.

WWF is currently working to grow both the supply and demand of more sustainably sourced food. In the Baltic region, the consumer meat guide is a helpful tool for guiding consumers, producers, and retailers towards more sustainable meat choices.

In general, there is a strong need to connect production and consumption of food. Interest in sustainably produced food is growing, yet there is still a lot of work to be done to increase widespread consumer awareness of how food is produced. Farmers who are willing to share their experiences and tell the stories behind the food that they produce are extremely valuable to this mission to increase the sustainability of the food system.

The farmers who are part of the Baltic Sea Farmer of the Year Award represent an exciting wave of trailblazers who are seeking and implementing solutions that mobilize change in our dietary habits and push us towards more sustainable meat and crop production. Thanks to them, we are one step closer to a more sustainable food system in the Baltic region and beyond.



AN AWARD FOR FARMERS WHO MAKE A DIFFERENCE

Previous winner update: Krzysztof Kowalski, Poland

In 2018, Krzysztof Kowalski received the Regional Farmer of the Year Award for the impressive range of measures implemented on his farm to protect nearby waters, preserve biodiversity, and yield better products. One year later, Krzysztof is still sharing knowledge on his way of farming, and continues his mission to protect the Baltic Sea.



"I'm surprised by the amount of attention I got from the agricultural media, and the support I received from various institutions," says Krzysztof. "Thanks to the media, I'm able to promote marine-friendly practices that combat eutrophication to a wider public."

Recently, Krzysztof received additional recognition when he won the Rural Inspiration Award for "Environment and Climate Action." Organized by the European Network for Rural Development, the award was handed to him by Phil Hogan, the former European Commissioner for Agriculture and Rural Development.

Today, Mr. Kowalski continues to implement measures that reduce nutrient runoff. He plans to plant an extra 200 trees along the river and in the midfields on his property. Additionally, Krzysztof has begun working with the Mazovian Agriculture Advisory Center in a honey bee protection program. He has 30 hives so far.

Many farmers are prepared to go the extra mile in order to help save the Baltic Sea. The winners of the Baltic Sea Farmer of the Year Award have all taken measures on their own initiative to reduce nutrient runoff. With this award, WWF aims to highlight how important this work is and showcase good examples across the region.

A lesson learned from the Baltic Sea Farmer of the Year Award initiative over the years is that cooperation with farmers with open minds for new research-based methods and techniques, is a winning concept.

The competition was first introduced in 2009 as a way to inspire farmers and decision makers in the agricultural sector, by highlighting concrete examples of the positive measures farmers are applying to reduce nutrient runoff around the Baltic Sea. Each of the 11 jury-selected winners serve as a role model, both to other farmers and the agricultural sector at large.

This year's winning farms are diverse in size and type, ranging from a small organic crop collective to a mid-sized biodynamic dairy farm and a large con-

ventional agricultural cooperative. The socioeconomic and political situation for farming in the eleven Baltic countries varies widely and these farmers serve as great examples not only within their respective countries but for the region as a whole.

Each farmer has a unique story to tell about the methods they have tried and implemented to address nutrient runoff, as well as the benefits – both planned and unexpected – they have experienced as a result.

On the following pages you will have the chance to meet these farmers and learn more about the actions they are taking, and how they are collectively making a difference for the Baltic Sea – please read on and be inspired!

BALTIC SEA FARMER OF THE YEAR AWARD 2019 WINNERS

The Baltic Sea catchment area is four times the size of the Baltic Sea itself, as you can see from the darker blue area on this map. It encompasses around 90 million people, and 14 countries including the inland countries of Belarus and Ukraine. Considering the great diversity of the terrain, natural resources, and socioeconomic conditions within the catchment, it's critical that we join together to take united and adapted action to protect the Baltic Sea from eutrophication.



DENMARK Kristian and Maria Lundgaard-Karlshøj



THIS DIVERSE AND MODERNIZED FARM IS BRIDGING THE GAP BETWEEN AGRICULTURAL BUSINESS AND NATURE CONSERVATION.



Photos: Jens Bach

The history of Ausumgaard farm can be traced back to the year 1473. But Kristian and Maria Lundgaard-Karlshøj's ties to the farm began in 1942 when it was purchased by Kristian's great-grandfather. They took over in 2007, and have been guided ever since by the vision of creating something future generations will be proud to inherit.

"The overall vision for Ausumgaard is to create something worthy of continuing, so that someone will have the desire to continue after us," says Kristian. "For this reason, it's essential for us to focus on sustainability in everything we do."

Kristian first learned about the problem of eutrophication through his work as a chair member

"WE NEED TO SHOW THAT WE ARE PART OF THE SOLUTION AND THAT WE ARE WILLING TO STEP INTO THE BIG WORK OF CONFRONTING THE PROBLEMS."

of Denmark's Sektionen for Større Jordbrug ("Section for Greater Agriculture") during a discussion about farming with a longterm perspective. Loaded with inspiration, Kristian decided to take action on his own farm.

One of the key measures Kristian and Maria practice to prevent nutrient runoff is conducting farming activities at the right time – according to season and weather conditions – and with good machine capacity. They have also built small ponds on the farm to collect excess nutrient drainage. Additionally, all manure and plant waste are treated in an on-site biogas plant prior to field application to both ensure a higher nutrient uptake, as well as to produce fossil-free fuel. They started producing



their own biogas in 2017, a production which today is equivalent to the annual heat consumption of approximately 2,000 households per year.

“Implementing these solutions has greatly motivated us to do more,” says Kristian. “It also aids our dialogue with our surroundings because we’re able to explain to others what we are doing and how we are helping.”

Kristian and Maria have various plans in the works for future improvements. In 2018, they received approval to build a one-hectare constructed wetland which is expected to reduce runoff to the local fjord by 744 kilograms of nitrogen per year. They also have plans to begin climate reporting on their farm.

Making the transition to organic crop production has been another key improvement, and Kristian and Maria have also plans of switching over to organic pig and free-range broiler production in the future.

“It’s been a very big change in the practical day-to-day, but also in our mindsets... but I think more of our neighbors are now considering their own step, and maybe we have made it easier.”

Initiatives at Ausumgaard also lean towards the experimental. As part of a research project with the Danish Technological Institute, the farm is now producing mealworms for human and animal consumption. This will partially replace field-grown protein, thereby improving the efficiency of their nutrient use in the fields.

“We need to show that we are part of the solution and that we are willing to step into the big work of confronting the



problems,” says Kristian. “But, at the same time, we have to convince consumers that we have to do this together and that they have to buy products made in a sustainable way.”

As this year’s international winner of the Baltic Sea Farmer of the Year Award, Kristian and Maria prove that farmers are not only an important part of the solution, they can also lead the way.

“It is great to receive recognition for doing something that you believe in,” says Kristian. “Winning will definitely help us do more of what we are doing and reach our goals. It will also empower us with greater leadership as we steer our farm, our employees, and also our surroundings towards a more sustainable way of farming, doing business, and living.”

Kristian and Maria Lundgaard-Karlshøj, Ausumgaard I/S

Location: Hjern in northwest Denmark

Type of farm: Conventional livestock and organic crop farm (850 ha)

Main production: Broiler chickens, welfare pigs, mealworms, horse beans, rapeseed, grasses and cereals, biogas, energy from wind turbines

International jury motivation: “Kristian and Maria want their farm to be sustainable and future-proof, and for this reason they work in all fields of environment, including

climate, energy and nutrient management. They show that large-scale farming can also be sustainable through diversification, modernization, and technology. Organic crop production, animal husbandry, biogas plant for processing all agricultural residues, forestry, green energy, and engaging with the consumers all contribute to bridging the gap between agricultural business and nature conservation. The jury also acknowledges and applauds the forward momentum and continuous development of the farm, including future plans to switch to

free-range chicken production, participation in research projects, and the construction of a wetland.”

Key practices: Agricultural residue processed in biogas plant, buffer zones, catch crops, constructed catchment ponds, cover crops, crop rotation, fertilizer accounting and nutrient management plans, preservation of forest and other natural elements, processing of all agricultural residues in biogas plant

BELARUS

Vitaly Belooky



THIS FARM IS BUILT ON THE CONVICTION THAT HEALTHY PEOPLE AND HEALTHY FOOD CANNOT EXIST WITHOUT A HEALTHY ENVIRONMENT.

Photos: The Center of Environmental Solutions.



Zdorovaya Strana farm was founded in 2016, following a conversation between Vitaly Belooky and a businessman named Valentin Baiko, who was determined to realize his dream of a farm that could produce natural products in line with a healthier lifestyle and environment.

“Lots of questions appeared later, of course: How can it practically be realized, which methods and approaches should we choose?” recalls Vitaly.

As the first organic farm in Belarus of its size, a huge amount of labor, financial investment and experimentation were required.

“There are no textbooks on organic products, there are no flow sheets,” says Vitaly. “You need to constantly analyze, understand the biology of plants and pests, and look for methods and technologies yourself.”

With no national standards and few examples to guide organic farming in Belarus, Vitaly and his team learned through experimentation and cooperation with other organic farmers and environmental organizations across Europe. In 2018, the farm was certified as organic according to European Union standards.

Implementing measures that minimize nutrient runoff has been a natural part of operations at the farm from the beginning.

“We understand that there cannot be any healthy people or healthy food without a healthy environment,” says Vitaly. “So everything is important – clean water, biodiversity, climate. Everyone has at least seen one terrible picture of a eutrophic lake or river, and this is one of the reasons why we use organic standards at our farm.”

“WE’VE SHOWN OTHER FARMERS AND THE LOCAL COMMUNITY THAT AN ALTERNATIVE WAY OF PRODUCING FOOD REALLY WORKS.”

In addition to abstaining entirely from the use of pesticides and chemical fertilizers, Vitaly and his team use composted manure and biological preparations for soil nutrition, and have switched to subsoil tillage to promote optimal water exchange within the soil. They also actively promote biodiversity through polyculture, creating habitats for beneficial insects, and rotating in disease-resistant crops – in a seven-field crop rotation method – during transition periods to further reduce nutrient loads and activate healing processes in the soil.

Since implementing these measures, soil quality has significantly increased, while energy costs and the amount of required fieldwork has decreased.

“Once the living environment was formed, microorganisms appeared in it,” says Vitaly. “The ecosystem has been restored and now everything regulates itself.”

“There was also a big transformation in peoples’ minds,” he adds. “We’ve shown other farmers and the local community that the alternative way of producing food really works.”

Vitaly Belooky, Zdorovaya Strana Farm

Location: Liudvinava village in west Belarus

Type of farm: Organic crop farm (270 ha)

Main production: Grain, perennial grasses, berries, cherries, apples, garlic, phacelia, mustard, honey

National jury motivation: “Adhering to the rules of the organic standard, Zdorovaya Strana reduces greenhouse gas emissions. In addition, due to the technologies used, the pesticide load on the soil, water resources and the environment as a whole is reduced. Due to the rejection

of the use of chemically synthesized fertilizers, the migration of nutrients to groundwater and surface water is reduced. At the same time, water bodies are protected from eutrophication, and drinking water sources from pollution by nitrates. The activity of the farm also has a positive effect on the social aspects of the life of the region, since a significant number of additional jobs are created (for about 90-100 people), which is very important for rural areas in Belarus.”

Key practices: Organic production, composted manure, crop rotation, subsoil tillage

ESTONIA Ivar Baumann and Maarja Maksimov



HEALTHY SOIL, HAPPY ANIMALS AND A CLEAN SEASIDE ARE THE PRIORITIES ON THIS LARGE-SCALE ORGANIC FARM.



Photo: Saareõue

Located right next to the Baltic Sea, Saareõue OÜ is a family farm started by Ivar Baumann's parents in 1986 with 16 cattle and 40 hectares of land. Today, it has grown to 600 hectares upon which Ivar and his wife Maarja Maksimov tend to vast fields of organic grain, coastal meadows, and 170 Aberdeen Angus cows who spend their summers grazing seaside pastures.

"It's an old known truth that if you want something from the land, you have to give back," says Ivar.

Ivar and Maarja have been dedicated to organic farming since taking over the farm, and have maintained chemical-free production methods even as the farm has expanded. Ivar's experience as the founder of an organization that tests organic methods and fertilizers on farms across Estonia further contributes to the problem-solving mindset that is sometimes required on the farm.

"Our big problem was the manure," says Ivar. "There wasn't enough space for it, and we did not want to store it on the fields in a pile."

Since some of their fields are located far from the farm, Ivar and Maarja had decided to concentrate manure in one spot to reduce transportation costs. But storing it on the field took up too much space, increased the risk of nutrient leaching, and created swampy field conditions during spreading.

The solution was building a new, covered manure storage building. Today, its thick floor, walls, and angled roof keep manure sheltered and prevent nutrient runoff. Manure is composted in three stages together with algae or bacteria, then spread on mild spring days using a spreader with a precise weighing system according to soil sample insights.

Other measures used that keep nutrients in the soil include crop rotation, year-round soil cover, and

"IT'S AN OLD KNOWN TRUTH THAT IF YOU WANT SOMETHING FROM THE LAND, YOU HAVE TO GIVE BACK."

the maintenance of buffer zones and permanent grasslands. Ivar and Maarja also help maintain the openness and vitality of the native landscape by allowing their cows to graze the coastal meadowlands.

"The thing we hadn't considered with seaside pastures is the garbage the sea brings," says Ivar. "We have to clean the pastures once or twice a year, and the amounts are huge – bottles, plastic, paper, etcetera."

All of their sustained efforts have been well worth it, however.

"Local people and our neighbors are happy," reports Ivar. "The seaside is clean and maintained. Thanks to the new manure storage building 'the smell' is no longer spreading so intensively. Our local beekeepers are very happy. And business is on the rise."

Ivar Baumann and Maarja Maksimov, Saareõue OÜ

Location: Metsapoole Village in southwest Estonia

Type of farm: Organic crop and livestock farm (500 ha)

Main production: Grain, fabaceae plants, Aberdeen Angus cattle

National jury motivation: "Saareõue is a large-scale organic farm that has made healthy soil and healthy animals its priority, and has the curiosity to test new farming practices. The farm demonstrates that environmentally conscious cultivation and breeding can be used in larger farms. Furthermore, the family running the farm is a great example of the efforts a farmer can make to minimize the impact it

has on the environment, especially considering its location right next to the Baltic Sea. The farm keeps healthy soils in high regard: fertilizing is optimized by regularly taking soil and manure samples and using crop rotation and winter crops to keep the nutrients in the soil. The farm has also made notable investments in manure management: there is a new fully covered construction for storing and handling manure."

Key practices: Buffer zones, composting, crop cover year-round, crop rotation, manure management, minimal tillage, no chemical fertilizers or pesticides, nutrient recycling, permanent grasslands, soil analysis

FINLAND

Tage and Ulla Eriksson



IMPROVED NUTRIENT CIRCULATION AND PASTURE RESTORATION WAS THE KEY TO TRANSFORMATION AT HAMMARUDDA FARM.



Photos: Paula Kallio / WWF

Tage and Ulla Eriksson are reminded of their relationship with the Baltic Sea every time they step out their door. Established in 1726, Hammarudda Farm, with its long shoreline and barren cliffs, is surrounded by the sea in three directions. A unique location that also means signs of the sea's health are hard to ignore.

The problem of eutrophication first became obvious to Tage and Ulla years ago, when they spotted blue-green algae blooms in the sea. Since their cattle often drink from the sea, they were afraid they might be harmed.

"Husbandry is always challenging when it comes to balancing nutrient cycles," says Tage. "You have to have very good manure management and be sure you have the right amounts of nutrients at the right time and in the right places."

Compounding the problem was the state of the soil – a nutrient-poor composition of light sand, moraine, and stones. By the time Tage and Ulla had



"... OUR FARMING SYSTEM IS NOW FULLY ADAPTED TO OUR NATURAL CONDITIONS."

taken over the farm in 1980, it had earned the nickname, "Hammarudda dirty sand." Also, the pastureland was nearly nonexistent.

The work they have put in since then, however, has resulted in a complete transformation.

Efforts to reduce nutrient runoff consist of two main methods: Manure management and constructed ponds and wetlands. Manure is only spread during the growing season for maximum water protection. Two wetlands, and five ponds along the farm's largest stream capture excess nutrients and sediments from the farm and forest, provide vital water reserves during droughts, and create habitats for wildlife.

Additional measures taken include soil mapping and almost year-round soil coverage. Nutrient-rich bladderwrack collected from the seashore is also added to the soil for fertilization and improvement.

Another significant change is the restoration of the farm's natural grazing areas, which have grown from only 10 hectares in the 80s to over 90 hectares today of natural, permanent, biodiversity-rich pastures. Since the naturally thin soil is unsuitable for farming, to keep the grasslands open, continuous grazing is critical.

"We can now farm in a way where the animals mostly rely on pastures and we can have more cows than our fields would otherwise allow," says Tage. "For half the year, the cows graze themselves... This way is more climate-friendly and our farming system is now fully adapted to our natural conditions."

Tage and Ulla Eriksson, Hammarudda Farm

Location: Åland island near south-west Finland

Type of farm: Organic/conventional livestock farm with forestry (350 ha)

Main production: Nurse cows, Heifer breeding, fodder for own use, forest services and products, hunting and recreational activities

National jury motivation: "The water protection measures at Hammarudda Farm are exceptionally comprehensive. The fields have plant cover for the greater part of the year. The farm aims to treat all surface waters that flow through it in some way with numerous voluntarily built wetlands and ponds. The usage of nutrients

is kept to a minimum and nutrient circulation is advanced. Extra points from the jury were given for significant work, since the 80s, to restore natural grazing areas. The area of natural grazing areas has increased from 10 to 90 hectares. The farm is managed as an entity and the farm constantly develops its methods. In addition, Hammarudda spreads knowledge of environmentally friendly methods to other farmers and stakeholders."

Key practices: Buffer zones, catchment water bodies on property including constructed ponds and wetlands, cover crops year-round, manure management, no chemical fertilizers or pesticides, preservation of trees, soil mapping and analysis

GERMANY

Wilfried Lenschow



THIS COOPERATIVE DEMONSTRATES THAT AGRICULTURE AND ENVIRONMENTAL PROTECTION CAN GO HAND IN HAND.

Shortly after the fall of the German Democratic Republic, 26 people founded an agricultural cooperative in Bartelshagen 1. The manager, Wilfried Lenschow, has been there since the beginning and combines his commitment to agricultural excellence with a passion for the world of birds – which has inspired many ongoing conservation efforts on the farm.

“Nature conservation has been a fundamental concern for us since the founding of our cooperative,” says Wilfried. “We wanted to show that, in addition to food production, farmers also have a responsibility to preserve and protect the natural environment.”

The farmland is a popular breeding ground for birds, and cooperative members regularly care for and maintain nesting aids and habitats for storks, swallows, and rare sand martins.

Given the cooperative’s dedication to conservation, it was only natural that the problem of eutrophication would also enter their awareness.

“I had been following the subject for a long time and had already attended a number of lectures...” recalls Wilfried. “But the realization that I have it in my hands, as a farmer, to change something motivated me.”

Combining his 30 years of experience with support from an agricultural consultant, as well as state and EU programmes, Wilfried has since implemented several protective measures.

Experiments on integrated crop protection and fertilization have been a key part of developing a better fertilization strategy. The selection of catch crop varieties has now been adapted according to nutrient requirements. Liquid manure is spread using drag hoses on growing crops in good weather conditions and is immediately incorporated within two hours. Protective, 15–20 meter buffer zones have been added along all running water – subsequently reducing nutrient runoff by about 50%. Drainage system maintenance is also prioritized on the farm to further reduce nutrient leaching. Additionally, about 100 hectares of permanent grassland is maintained, free from fertilizers or chemicals.

“By keeping broad crop rotations and catch crops, we’ve observed good pre-harvest effects which, in turn, has reduced fertilizer and pesticide expenditures,” says Wilfried of the results.

Efforts have also been received well by the community, and cooperation with local environ-



Photo: Sonja Ritter / WWF

“...THE REALIZATION THAT I HAVE IT IN MY HANDS, AS A FARMER, TO CHANGE SOMETHING MOTIVATED ME.”

mental associations, schools, and institutions has increased as a result.

“By showing that we are serious about nature conservation, we are able to bridge the gap between environmental protection and agriculture,” says Wilfried.

Wilfried Lenschow, Bartelshagen 1 Agricultural Cooperative

Location: Marlow in northern Germany

Type of farm: Conventional crop and livestock (3,420 ha)

Main production: Crops, including winter rape, beets, maize, winter barely, winter wheat, grain lupines, potatoes, winter rye, oats, and grass seed. Dairy cows, suckler cows and offspring, geese, ducks guinea fowls, chickens and turkeys

National jury motivation: “Wilfried Lenschow is an extraordinary and very committed farmer. As a conventional farmer, he sets a good example and demonstrates that agriculture and environmental protection can go hand in hand. His voluntary commitment both to the Farmers’ Association of Mecklenburg-Vorpommern and as chairman of the NABU (Nature and Biodiversity Conservation Union) local group is a symbol of this compatibility. Thanks to his charismatic and enthusiastic man-

ner, he is able to get other farmers involved in environmental protection. His networking in the region, and also his local political work as a representative of the city of Marlow, make him an outstanding role model for his colleagues. At the management level, Lenschow shows that broad crop rotation, integrated crop protection, and the production of quality products with direct marketing are possible. The balanced choice of his arable crops, with malting barley, fodder and sugar beets, oats, lupines and grass seed propagation, the exclusively in-house production of fodder and the careful handling of farm fertilizer all suggest very good in-farm nutrient management.”

Key practices: Buffer zones, catch crops, catchment ponds, closed nutrient cycle, crop rotation, manure management, nutrient analysis, permanent grasslands, precision technology and timing, preservation of trees, shrubs and other natural elements

LATVIA

Rihards Kadirovs



RIHARDS TOOK A CHANCE ON FARMING AND BECAME ONE OF THE FIRST IN LATVIA TO ADOPT A STRIP-TILL SYSTEM.



Photos: Magda Jentgena

When Rihards Kadirovs got the opportunity to start his own farm in 2005, he didn't hesitate. He began working the land in parallel with his university studies and, after graduation, it became a full-time job. Today, the first-generation farmer combines his economics background with a love of farming and future-forward thinking.

It was anything but easy in the beginning, however. The farm's location on a hill and its naturally dense, 80% clay soil, which has been plowed heavily by previous farmers, made it highly vulnerable to erosion.

"I was using conventional methods and ploughing my land, which was already in poor condition..." says Rihards. "I quickly realized that I wasn't getting good results with traditional techniques and something had to change."

After researching various methods, Rihards came across the strip-till system and decided to give it a try. A hybrid between full-till and no-till, strip-till only disturbs the strip of soil that is sowed while leaving the rest intact.

"I've had nothing but positive results from the strip-till system," says Rihards, who is only the second farmer in Latvia to adopt the system. "It has increased my harvest, the quality of my soil, and the quality of life around the farm."

Since the system was adopted in 2015, fertilizer and pesticide requirements have significantly reduced. And, after four years, the harvest increased by 90%, while the soil's phosphorous and nitrogen levels dropped.

"I QUICKLY REALIZED THAT I WASN'T GETTING GOOD RESULTS WITH TRADITIONAL TECHNIQUES AND SOMETHING HAD TO CHANGE."



"Even the surface structure has radically changed," says Rihards. "After a couple more years of strip-till, when the soil has returned to a completely healthy state, I may even be able to start using the no-till system."

Using the strip-till system has additionally led to a more even distribution of moisture and more consistent crop quality across the hill-sloped fields. Rihards has also benefited from cost savings related to reduced machine and labor needs.

Well aware of the impact his farm has on the environment, Rihards also practices soil liming and uses buffer zones and catch crops to further prevent nutrient runoff.

Today, Rihards uses what he's learned to inspire others. He regularly organizes open farm days and facilitates a WhatsApp group to engage with other farmers interested in strip or no-till systems.

Rihards Kadirovs, Jaunuzoli Farm

Location: Sala Parish in central Latvia

Type of farm: Conventional crop farm (450 ha)

Main production: Various crops including winter wheat, beans, rye, and summer rapeseed

National jury motivation: "Rihards Kadirovs, who runs Jaunuzoli Farm, is nothing short of an inspiration. His enthusiasm and love for the environment are truly wonderful to witness. With strip-till he has reduced the amount of machinery, and therefore the amount of fuel and emissions. He is also studying and practicing crop

rotation and the relationship between different crops to increase the quality of his soil and harvest. On top of that, his soil is absorbing large amounts of CO₂, and he has created buffer zones that help reduce nutrient runoff and serve as important habitats. He's experimenting with killing the weeds using electricity so that he can stop using herbicides all together. He is also continuously attending seminars, participating in forums, and joining projects so that he can learn more, and improve further."

Key practices: Buffer zones, catch crops, minimum tillage, structural liming of soils