

In France, three bioenergy plants are opened every week. Serbia, even though it is small, according to agroeconomist Dr. Miladin Ševarlić, can open at least three bioenergy plants per year. This is supported by the fact that the European Union has decided to provide at least half of the needs for biogas from its own production by 2030.

“The total production of biogas in Serbia in 2019 was 1,179 terajoules (TJ), which is 1.29 percent of energy in Serbia, which means that it is a marginal participation”

, warned the professor at the round table “How to ensure gas independence of Serbia”, organized by the company Wabio investment Holding SR and the Energija Balkana portal. He emphasized that the Global seed company has combined organic agriculture, plant production and livestock production, 2,000 hectares of land, more than 1,000 dairy cows, and produces organic meat and milk, but also has bioenergy and it all works harmoniously, which, as he says, a good example of farming in Serbia.

“Unfortunately, in our country, all agricultural strategies remained a dead letter and were never implemented. **It takes between 1,000 and 10,000 years to form one centimeter of arable land, which includes 13 to 133 generations of people.** In plant production, it is used for field crops up to a plowing depth of 30 centimeters, which means that it takes between 30,000 and 300,000 years, that is between 400 and 4,000 generations,” Dr. Ševarlić explained.

He added that fruit growing and viticulture require 60 centimeters, which includes between 800 and 8,000 generations of people. **At the same time, at today’s level of technique and technology, a country is considered to be food secure if it has 0.25 hectares (25 ares) of arable land available per inhabitant.**

“How do we use the available agricultural land (this includes forest land and that which is in the process of recultivation)?” What is our goal in land use? Agronomists say that the most important thing is that the soil is constantly under crops. In our practice, unfortunately, we have one crop, and then a big break until winter or spring sowing”, said the panelist of the round table.

Dr. Ševarlić emphasized that in Serbia we have plants that are sown once and can be used as energy sources for up to 20 years.

“Looked at from the point of view of agrarian economy, when you make an analysis of costs and benefits, you have to take that into account, as it is done in fruit growing and viticulture, and that is unfortunately not done here.” **I am in favor of using planned production for these needs with long-term effects of one sowing, so not only by-products.** From an economic point of view, increasing the value of production per hectare and per year is a key issue,” the agro-economist pointed out.

Lost food security for 7.5 million inhabitants per year

From 1960 to 2020, one and a half million hectares of agricultural land was lost in Serbia, without data for Kosovo. When that is divided by five, it means that food security

is lost for 7.5 million inhabitants on an annual basis.

“What is a special qualitative problem is that, precisely through the production of by-products, the quality is getting worse, we have less and less humus content, and more and more pollution of agricultural land, not only with pesticides, but even with cross-border air pollution,” stressed Dr. Ševarlić.

He particularly pointed out that in Serbia there is an increasing number of permanent confiscations of agricultural land for non-agricultural purposes, without payment of compensation for changing the use of agricultural land.

“This is justified by some general social needs and priority goals.” There are countries that ran highways through wetlands and similar lands, just to change the routes of the roads, but they did not grab quality agricultural land. **We are now building a road from Preljina to Pojat, and in the Moravian corridor they found 13 meters of arable land, which is a wealth that is not even found in Ukraine, and the land around Sombor can only be measured with that ,**” warned the panelist.

The purchase price of milk is lower than the price of a bottle of water

The effects of climate change point us a lot towards single sowing, ten or twenty year use, drought resistance and maximum yield in rainfall deficit conditions. We can achieve that, as he says, with grasses that are used as an energy source, as a resource for biogas production.

“Reduction of manure and available water.” **Unfortunately, we went through the privatization of agribusiness, where the new owners of the former state agricultural combines first destroyed livestock farming and workers, and made the first savings on that, despite the fact that they got it all at favorable prices, including from 50 marks per hectare in the first phase of privatization, and today it is 30,000 euros.**

This is a large capital gain for which they have not paid any obligations to the state,” emphasized Dr. Ševarlić.

He reminded that Hungary reprivatized, and Slovenia changed the Constitution and ensured access to water supply sources for all citizens.

“We have sold 95 percent of water resources and now a bottle of water is more expensive than the purchase price of a liter of milk and we want to develop agriculture.” Therefore, knowledge, plus control and speed of adjustment are the solution” , the agro-economist pointed out.

By-products as biofuels

By-products in agriculture, by-products, or secondary products have their place and role, and should not be classified as waste. Traditional agricultural production, which today is called “organic”, if it is certified, according to Ševarlić, nowadays it has to be paid for with modern technologies like the one that the Wabio company has.

“In the production of corn 50 years ago, there was a so-called combined sowing: we sowed

corn, beans and pumpkins. Maize was the main agricultural product there, but the cob, i.e. the grain, was used from the corn, the stalk was used for animal feed, and the comusina was used as a replacement for bedding and pillows, so we had no environmental problems with the bedding because our hosts changed it twice a year. pads (the second time with straw)", explained the agro-economist.

Beans, as he explained, are nitrogen fixers and feed the corn with nitrogen, assimilating it from the air, and at the same time the corn serves as a stalk, so that the beans can be entwined and give a higher yield.

"In the end, we had gourds, which were used for feeding livestock (green gourds), and gourds for feeding livestock and people, and producing oil on stone mills," pointed out Dr. Ševarlić, reminding that in the past production was both organic and ecological, when it was done in a traditional way.