Food and Agriculture Organization of the United Nations

NEWS RELEASE

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Latin American and Caribbean countries shared methods and practices to address fertilizer shortages resulting from the war in Ukraine

FAO organized a seminar on the use of bio fertilizers in Brazil, Chile, Peru, and the Caribbean.

June 9 2022 - Santiago, Chile – The Food and Agriculture Organization of the United Nations (FAO) organized a seminar to disseminate techniques and methods that can help countries cope with fertilizer shortages resulting from the war in Ukraine.

Fertilizer prices remain high and have already surpassed the record level of the 2008 crisis. In addition, there are severe global stock problems, affecting practically all Latin American and Caribbean countries, especially those highly dependent on imports from Ukraine, Belarus, and the Russian Federation.

FAO organized a seminar to respond to this situation, where experts and authorities from Brazil, Chile, Peru, and Caribbean countries shared their experiences using bio fertilizers (organic fertilizers) and compost. They also discussed techniques such as crop rotation and leguminous plants to replace or complement chemical fertilizers.

“We need to innovate to address the shortage and high price of synthetic fertilizers. The diversification of plant nutrient sources is a strategy for a more resilient agriculture. In addition, bio fertilizers can contribute to making agriculture more sustainable,” said Julio Berdegué, FAO’s Regional Representative for Latin America and the Caribbean.

Berdegué highlighted that FAO also recommends a series of short-term measures to address the shortage and high price of fertilizers: prioritizing their use for agricultural purposes and improving the efficiency of their use; keeping international trade of these inputs open; monitoring stocks, import volumes, and prices; and sharing this information through transparent platforms.

Experiences in the region

In Brazil, studies by the Brazilian Agricultural Research Corporation (EMBRAPA) have shown that biological nitrogen fixation with bacteria has enabled the country to save US$ 14 billion annually on soybean cultivation, by completely replacing chemical nitrogen fertilizers without reducing productivity.

In Chile, the Instituto de Investigations Agropecuarias (INIA) has promoted the application of organic matter of animal and vegetable origin in crops and fruit trees, such as chicken and dairy manure, compost, and worm humus. These can reduce fertilization costs and increase production yields by 5 to 20 percent.

In Peru, the company BIOEM promotes the use of bio fertilizers created with a mixture of fungi, bacteria, and yeasts to improve soil fertility and reduce the use of agrochemicals.

In the Caribbean, countries have used native microbes to improve fertilizer use efficiency and have made their soils healthier and more productive by increasing their organic carbon content.

Crop rotation and public policy

Crop rotation with legumes was another experience shared in the webinar: these plants fix between 72 and 350 kg of nitrogen per hectare per year, depending on the species and climate, and can improve phosphorus availability in the soil, reducing dependence on synthetic fertilizers.

"Legumes fix more carbon than cereal crops such as maize or wheat, which helps combat global warming," explained Teodardo Calles, FAO Agriculture Officer, and Legume expert.

The event Bio fertilizers and other available technologies to face the Fertilizer Crisis in the Latin American and Caribbean was attended by the Vice Minister of Agricultural Affairs of the Ministry of Agriculture and Rural Development of Colombia, Juan Gonzalo Botero, high authorities, researchers, and experts.

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