The control of agroecosystems for the provision of food and nutrition.

Georgios Hela*

Department of Agriculture, University of Patras, Greece

Introduction

In our contemporary society, where quick societal changes, globalization, urbanization, and changing dietary habits have profoundly affected how we eat and view food, the concept of nutrition transition has become more and more essential. The term "nutrition transition" describes the dynamic change in dietary practices and nutritional profiles through time within a population. A trend from traditional diets focused on naturally occurring, less processed foods to diets that are increasingly dominated by processed, calorically dense, and nutritionally unbalanced options marks this change [1].

Food and nutrition security are more important than ever in a world with expanding populations, climate change, and changing dietary choices. Agroecosystems, which encompass the intricate web of socioeconomic, environmental, and agricultural systems, are crucial in deciding our capacity to produce enough varied and wholesome food to sustain the world's population. Effective management of these agroecosystems is essential for solving the complicated problem of food and nutrition security [2].

According to the United Nations, food security is when all people have physical and financial access to enough food that is safe, nourishing, and meets their dietary needs and food choices in order to live an active and healthy life. In order to achieve food security, one must not only increase food production but also make sure that everyone has access to nutritious food that is affordable regardless of socioeconomic level [3].

A wider range of nutrients may be provided to the population through agroecosystems that value biodiversity by raising a variety of plant and animal species. The prevention of malnutrition and deficits in vital vitamins and minerals depends on consuming a variety of foods. Extreme weather events, protracted droughts, or excessive rains can be better handled by agroecosystems that are built to be climate change-resistant. In spite of a fluctuating climate, this guarantees that food production stays steady and reliable. Responsible water usage, soil protection, and agroecosystem management are encouraged [4].

The sustainability of natural resources, which form the basis of agriculture, depends on these methods. Agroecosystems and local and regional food systems are intertwined. Shorter supply chains are a common feature of these systems, which lower the carbon footprint of food production and increase local communities' access to fresh, wholesome foods. By encouraging variety of nutrient-dense meals, farmers will be encouraged to vary their crop offerings. Increased dietary variety and less reliance on a single crop are both benefits of diversification. Encourage the use of sustainable farming techniques like agroforestry, organic farming, and conservation agriculture. These techniques improve the nutritional value of crops while reducing their negative environmental effects [5].

Conclusion

In order to manage agroecosystems for food and nutrition security, food production must be increased in a sustainable, nutrient-dense, and inclusive manner. It entails recognizing the connections between agriculture, the environment, and society as well as aiming toward a time when nobody goes to bed hungry or undernourished. We can make sure that agro ecosystems are a positive force in the fight for world food and nutrition security by implementing intelligent and all-encompassing strategies.

Reference

1. Gogoi N, Baruah KK, Meena RS. Grain legumes: impact on soil health and agroecosystem. Legumes for soil health and sustainable management. 2018:511-39.
2. Majumder B, Mandal B, Bandyopadhyay PK. Soil organic carbon pools and productivity in relation to nutrient management in a 20-year-old rice-berseem agroecosystem. Biol Fertil Soils. 2008 Feb;44:451-61.
3. Reguera M, Conesa CM, Gil-Gómez A, et al. The impact of different agroecological conditions on the nutritional composition of quinoa seeds. PeerJ. 2018;6:e4442.
4. Kremen C, Iles A, Bacon C. Diversified farming systems: an agroecological, systems-based alternative to modern industrial agriculture. Ecol Soc. 2012;17(4).
5. Francis C, Lieblein G, Gliessman S, et al. Agroecology: The ecology of food systems. J. Sustain. Agric. 2003;22(3):99-118.

***Correspondence to:** Georgios Hela, Department of Agriculture, University of Patras, Greece. Email: georgios@hela.gr

***Received:** 26-Sept-2023, Manuscript No. AAJFSN-23- 117522; **Editor assigned:** 28-Sept-2023, PreQC No. AAJFSN -23- 117522(PQ); **Reviewed:** 12-Oct-2023, QC No AAJFSN-23-117522; **Revised:** 18-Oct-2023, Manuscript No. AAJFSN -23-117522 (R); **Published:** 25-Oct-2023, DOI:10.35841/ aajfsn -6.5.205*

***Citation:** Hela G. The control of agroecosystems for the provision of food and nutrition. J Food Sci Nutr. 2023;6(5):205*