

MODERN AGRICULTURE CHALLENGES

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Agriculture in the modern era encounters various defiances. Despite recent productivity advances, around one out of every seven individuals is food insecure or chronically malnourished as a result of persistent poverty and growing food prices [1]. Unfortunately, market speculation, the growth of bioenergy crops, and weather disruption might make the situation worse [2]. Even if these food access issues are resolved, a far larger harvest will be required in the future to assure food security. According to recent analyses, unless production patterns drastically alter, production will need to almost double to satisfy expected demand due to population expansion, dietary changes (especially meat consumption), and greater bioenergy usage. Many environmental risks, such as climate change, biodiversity loss, and land and freshwater degradation, are now mostly caused by agriculture. Particular land use, agricultural, and food system strategies must all be developed and implemented. Precision agriculture, drip irrigation, organic soil cures, buffer strips and wetland restoration, new crop types that use less water and fertilizer, perennial grains and tree-cropping systems, and compensating farmers for environmental services are all examples of such strategies. However, to properly deploy these strategies over the world, existent economic and governance problems must be solved. The difficulties facing agriculture today are unlike anything we have seen before, necessitating groundbreaking solutions to food production and sustainability issues.

References

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2. Naylor, R. *Expanding the boundaries of agricultural development. Food Security*. – Vol. 3. – No. 2. – 2011. – p. 233–251.