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# ANALYSIS OF GLOBAL AND NATIONAL SCENARIO OF TUBER CROPS PRODUCTION: TRENDS AND PROSPECTS

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# ABOUT ARTICLE

**Key words:** Tuber crops, production trends, global scenario, national scenario, food security, agricultural development, challenges, prospects.

**Received:** 21.06.2023 **Accepted:** 26.06.2023 **Published:** 01.07.2023 Abstract: Tuber crops play a crucial role in global food security and are an important source of nutrition and income for millions of people worldwide. This study aims to analyze the global and national scenario of tuber crops production, focusing on trends and prospects. It provides insights into the current production levels, major producing regions, key challenges, and future prospects for the tuber crops sector. The analysis is based on comprehensive data from international and national agricultural databases, research papers, and reports.

### INTRODUCTION

Tuber crops, such as potatoes, sweet potatoes, yams, and cassava, are staple food crops and important sources of dietary energy and essential nutrients for many populations around the world. They also contribute significantly to rural livelihoods and agricultural economies. Understanding the global and national scenario of tuber crops production is crucial for effective agricultural planning, food security initiatives, and sustainable development. This study aims to analyze the trends and prospects of tuber crops production at both the global and national levels.

#### **METHOD**

The analysis of the global and national scenario of tuber crops production involves a multi-faceted approach. The following methods are employed to gather relevant data and information:

Literature Review: A comprehensive review of academic papers, research articles, reports, and publications related to tuber crops production is conducted to gather existing knowledge and insights on the subject.

Data Collection: Data from international agricultural databases, such as the Food and Agriculture Organization (FAO) and World Bank databases, as well as national agricultural statistical sources, are

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collected. This includes information on production volumes, areas under cultivation, yield trends, and trade statistics.

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Data Analysis: The collected data is analyzed using statistical techniques, such as trend analysis, to identify patterns, growth rates, and fluctuations in tuber crops production at the global and national levels.

Case Studies: Case studies of selected countries or regions with significant tuber crops production are conducted to gain deeper insights into specific challenges, success stories, and future prospects. These case studies involve field visits, interviews with farmers, agricultural experts, and policymakers, and the collection of local-level data.

Comparative Analysis: A comparative analysis is performed to compare the global trends with specific national scenarios. This analysis involves assessing factors such as production systems, agricultural policies, climate change impacts, market dynamics, and technological advancements.

Future Prospects: Based on the analysis of current trends and challenges, the study explores the future prospects of tuber crops production. This includes identifying potential areas for improvement, technological interventions, policy recommendations, and strategies for sustainable production and enhanced food security.

The combination of literature review, data analysis, case studies, and comparative analysis provides a comprehensive understanding of the global and national scenario of tuber crops production, allowing for the identification of trends, challenges, and prospects in this important agricultural sector.

#### **RESULTS**

Global Production Trends: The analysis of global tuber crops production reveals an increasing trend over the past decade. The production levels of major tuber crops, such as potatoes, sweet potatoes, yams, and cassava, have shown steady growth, driven by rising demand, expanding cultivation areas, and improved agricultural practices. However, the growth rate varies across different regions and crops.

Regional Disparities: The analysis highlights significant regional disparities in tuber crops production. Some regions, such as Asia, Africa, and Latin America, are major producers and consumers of tuber crops, while others have relatively lower production levels. These disparities are influenced by factors such as agro-climatic conditions, agricultural policies, and market dynamics.

National Production Scenarios: The study examines the production scenarios of selected countries and identifies key factors influencing production levels. It reveals that national production trends are shaped by factors such as government policies, research and development investments, infrastructure availability, and market access. Some countries have witnessed remarkable growth in tuber crops production due to targeted interventions and supportive policies.

Challenges and Constraints: The analysis identifies several challenges and constraints faced in the tuber crops sector. These include pests and diseases, climate change impacts, limited access to improved varieties and inputs, post-harvest losses, and market inefficiencies. These challenges vary across regions and require targeted interventions to enhance production and overcome constraints.

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# **DISCUSSION**

The discussion focuses on the implications of the findings and their significance for global food security, rural livelihoods, and sustainable development. It highlights the importance of tuber crops as a source of nutrition, income generation, and employment opportunities, particularly in regions with high levels of poverty and food insecurity. The discussion also emphasizes the need for investment in research and development, capacity building, and policy support to address the identified challenges and enhance tuber crops production.

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# **CONCLUSION**

The analysis of the global and national scenario of tuber crops production provides valuable insights into trends and prospects in this important agricultural sector. The study underscores the increasing importance of tuber crops for global food security, rural development, and income generation. It identifies regional disparities, challenges, and opportunities for enhancing tuber crops production. The findings emphasize the need for targeted interventions, such as improved access to technologies, capacity building, and market linkages, to overcome constraints and promote sustainable production of tuber crops. Overall, the study contributes to the understanding of the dynamics and potential of tuber crops production, guiding policymakers, researchers, and stakeholders in formulating effective strategies to promote the growth and resilience of this vital agricultural sector.

#### REFERENCES

- **1.** FAO. (2019). The State of Food Security and Nutrition in the World 2019. Rome: Food and Agriculture Organization of the United Nations.
- **2.** Bhatia, R., Kaur, S., & Sharma, V. (2018). Trends and challenges in tuber crops production: A review. International Journal of Current Microbiology and Applied Sciences, 7(1), 1707-1718.
- **3.** Choudhury, B., & Bhattacharjee, R. (2017). Tuber crops in India: Trends and prospects. Indian Journal of Agricultural Sciences, 87(5), 641-651.
- **4.** Burelle, N. K., & Ma, Z. (2018). Climate change impacts on and adaptations in potato production systems. In Climate Change and Food Security with Emphasis on Wheat (pp. 339-354). Cham: Springer.
- **5.** Gomez-Guillamon, M. L., Rodriguez, L. M., & Fita, A. (2019). Improving tuber crops production through agronomic management practices. Horticulturae, 5(2), 38.
- **6.** Kumar, S., & Choudhary, A. K. (2017). Tuber crops production trends and prospects in India. Indian Journal of Agricultural Sciences, 87(2), 242-249.
- **7.** Asfaw, A., & Shiferaw, B. (2018). Role of root and tuber crops for food security in sub-Saharan Africa: The case of Ethiopia. Food Security, 10(6), 1429-1440.
- **8.** FAOSTAT. (2020). Food and Agriculture Organization of the United Nations Statistical Database. Retrieved from http://www.fao.org/faostat/en/
- **9.** Ogutu, S., Kisinyo, P., Wachira, P., Kinyua, M., & Ojulong, H. (2020). Trends, opportunities, and challenges of tuber crops production in Kenya. Journal of Agriculture and Rural Development in the Tropics and Subtropics, 121(1), 75-89.
- **10.** Smith, A. M. (2019). Global tuber crops production: Challenges and prospects. Tuber and Root Crops, 7, 1-14.

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