



Mains Practice Question

Q. What are “orphan crops”? How are they significant for ensuring food security globally? (150 words)

29 Jan, 2020 GS Paper 3 Science & Technology

Approach

- Define Orphan Crops
- Mention the significance of Orphan Crops in ensuring global food security.
- Give conclusion

Introduction

- Orphan crops are a diverse set of minor crops like tef, finger millet, yam, roots and tubers that tend to be regionally important but not traded around the world and receive no attention by research networks.
- They are largely grown and used locally by communities. They are not part of the main crops that are traded internationally and which have often been considered staple crops, such as rice or maize.
- Several pulses are considered orphan crops, along with certain types of cereals, fruits, nuts, vegetables, roots, tubers and oil seeds. For example, in Africa, several types of beans such as cowpeas are considered orphan crops.
- They get less research attention and so, the breeding technology for orphan crops is lagging way behind modern technology.

Significance of orphan crops in ensuring food security globally

- Orphan crops are incredibly important in the countries where they're grown. They provide income for the poorest farmers and serve as staples in the local diet.
- These “orphan” crops are an important component of diets in many countries and can help provide balanced nutrition and support resilience and sustainable agricultural practices.
- Developing countries rely on these crops more heavily than rice and wheat.
- Though lagging breeding technology has hurt their resilience, especially to pests and disease, **they are uniquely adapted to the environment in which they are grown.**
- They are Resilient, being both drought- and frost-tolerant as well as able to grow in harsher environments than many staple crops.
- The potential to increase productivity, diversity and nutritional outcomes through investments in orphan crops is tremendous.
- Orphan crops provides an option to increase productivity, diversity and nutritional outcomes in global food system.

Conclusion

Orphan crops require more attention and funding if they are to fully contribute to food security, nutrition and sustainability. Orphan crops should be prioritised more in agricultural research and production.

