



Golden Rice

 drishtiias.com/printpdf/golden-rice-1

Why in News



Bangladesh is to be the **first country to approve golden rice planting** in the country.

- Golden rice is a **genetically modified variety** of rice.
- It is developed by the **Philippines-based International Rice Research Institute (IRRI)**.
- This **variety of rice** is claimed to be able to **fight vitamin A deficiency**.
 - Vitamin A deficiency is the leading cause of blindness among children and can also lead to death due to infectious diseases such as **measles**.
- This rice variety will **not be more expensive than the conventional variety**.
- The **presence of beta-carotene pigment** is the reason for its **golden colour**.
 - The **conventional rice** is naturally **low in the pigment beta-carotene**.
 - The beta-carotene is used by the human body to make vitamin A

Vitamin A Deficiency

- Vitamin A is a **fat-soluble** vitamin that maintains **healthy vision, skin, bones and other tissues** in the body.
- **Vitamin A Deficiency (VAD)** can lead to night blindness, a higher risk of the throat, chest, and abdomen infections, follicular hyperkeratosis (dry, bumpy skin), fertility issues and delayed growth in children, etc.
- Women and children are the most vulnerable to VAD which is the leading cause of childhood blindness and inability of the immune system to combat disease.

International Rice Research Institute (IRRI)

- IRRI is an **independent, non-profit**, research and educational institute, founded in 1960 by the Ford and Rockefeller Foundations with support from the Philippine government.
- The institute, headquartered in Los Baños, Philippines, has offices in 17 rice-growing countries in Asia and Africa.
- The **IRRI South Asia Regional Centre** is located at **Varanasi (Uttar Pradesh)**.
- It aims to improve the health and welfare of rice farmers and consumers; and protect the rice-growing environment for future generations.

Source: IE