

## **BIOFORTIFICATION: HOPE FOR AFRICA'S MALNOURISHED**

Many people who live in Lira district in northern Uganda consider Perpetua Okao a farmer and a life saver and it is easy to know why. Her neighbour's son was malnourished and often sickly. But after feeding him a diet of vitamin A-rich orange fleshed sweet potato, a new variety of potatoes enriched with vitamin A through biofortification.

Biofortification is a process by which crops are bred in a way that increases their nutritional value. The idea behind biofortification is to breed nutritious plants, a process which experts consider much cheaper than adding micronutrients to already processed foods. It is a smart method to fight malnutrition, say agriculturists and nutritionists. The Food and Agriculture Organization (FAO), a UN food agency, considers malnutrition-caused a lack of essential micronutrients such as iodine, iron, zinc and vitamin A in diets- a threat to millions of African lives.

Biofortification can mitigate the effects of vitamin A deficiency (VAD) in people, reports Harvest Plus, a research centre committed to fighting global hunger. Microsoft cofounder and philanthropist Bill Gates provides financial support to Harvest Plus. The Organization further notes that VAD is a serious health problem in more than 90 countries but more acutely in Africa and Asia. The deficiency causes preventable blindness in children and increases the risk of disease and death from severe infections. It also causes night blindness in women and increases the risk of maternal mortality.

In Africa, Harvest Plus estimates that 42% of children under the age of five and women between 15 and 49 years of age suffer from VAD. Uganda, which is severely affected, is now extensively producing the orange-fleshed sweet potato variety rich in beta carotene, an organic compound that converts to vitamin A in the human body.

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### **GUIDED COMMENTARY**

1. In your own words define biofortification.
2. Why is Perpetua Okao considered as a life saver in the text?
3. Basing on the text, state the advantages and drawbacks of biofortification.
4. Referring to the text, what are the consequences of vitamin A deficiency?
5. Do you think that biofortification can be a sustainable solution to malnutrition in your country?