Golden rice will not solve malnutrition or biodiversity loss

Golden rice is a product of genetically modified technology that is offered as a solution to vitamin D deficiency for poor people in Africa and South Asia.

Vitamin A deficiency is devastating among people who depend on rice as their only major food source. The deficiency leads to night blindness, delayed development, total blindness and eventually death.

True, making rice more nutritious might prevent specific deficiencies, but how much more appropriate would it be to reduce these people's dependence on rice as their only food. Many vegetables and fruits provide vitamin A or its precursors.

Moving from high-input monoculture rice to organic, diverse holdings could better address the "rice issue," and do it more healthfully than tinkering with rice itself. Eliminating herbicides and pesticides in rice paddies may reduce rice yields but would allow farmers to harvest a more diverse range of products.

Diversity has a number of benefits. A diverse diet is considered ideal for maintaining optimal health. This is true for people, and it is true in ecosystems.

The more relevant cause of malnutrition is the loss of agricultural and ecosystem biodiversity. This results from the increasing dominance of large-scale monoculture agriculture and from the widespread use of herbicides.

Increasing the vitamin A potential of rice is not going to solve these problems. Malnutrition needs to be addressed as an ecosystem process, which considers our first world influence and its intended and unintended consequences.

Read full, original article: GM rice doesn't address poverty, lack of biodiversity – Organic Matters Column