

Taste of things to come

The Food Security Bill must tackle micronutrient deficiencies

Sujata Kelkar Shetty

Food security is currently being much discussed in the context of the proposed National Food Security Bill. Food security is the consistent access to safe, sufficient and nutritious food so that the basic dietary needs are met to ensure an individual can lead a healthy life. Food activists justifiably argue that the proposed 25 kg rice per person per month is insufficient and that it be given only to families that fall below the poverty line (BPL) is inadequate.

Then there is the problem of legislation not being followed with efficient and cost-effective implementation. Our delivery systems need an overhaul. Each of these issues requires serious consideration. But there is a fundamental tenet of food security missing when it is defined simply in the context of availability of grain.



Adequate nutrition and adequate food are inextricably linked and considering food as a hunger-satiating agent doesn't make for an adequate definition. Food should be nutritious so that it promotes growth and development and maintains overall physical and mental health of people both young and old. In children, maximum development of cognitive, social, emotional and physical skills takes place during the first six years and a lack of sufficient nutrition can adversely affect the development of basic skills.

Insufficient nutrition is a combination of a macronutrient and a micronutrient deficit in the diet. Conceptually, the former refers to the total calories gleaned from carbohydrates, fats and proteins in the diet, while the latter refers to the essential vitamins and minerals such as vitamin A, zinc, iodine and iron. Deficiencies in both can permanently stunt overall development of the subject.

Currently, our rates of vitamin A deficiency in under-5 children are the worst in the world. Fifty-seven per cent of our children are deficient in vitamin A and our statistics for iron deficiency are 69 per cent. Thirty-three per cent of our children

suffer from iodine deficiency. The consequences of these numbers are profound with 330,000 children dying every year due to vitamin A deficiency. The growth of 42 per cent of children in India is stunted because of zinc deficiency. And more than 6 million children are born mentally impaired because of iodine deficiency.

The Micronutrient Initiative (MI) is an international non-profit organisation that has been working on cost-effective programmes to alleviate micronutrient deficiencies around the world. It has initiated projects of both supplementation and fortification in various states in India. Through such a programme in 2007, 70 million doses of vitamin A were administered to children in 12 states by a partnership between Unicef and MI. Vita Shakti TM, a supplemental powder containing folic acid, iron and vitamin A, is currently being used in school-feeding programmes in West Bengal.

The MI has also developed nutri-candy, a lozenge that contains 50 per cent of a child's daily requirement of vitamin A, vitamin C and iron. The candy has been tested in a pilot study in certain districts of Haryana and West Bengal and the results showed more than 15 per cent reduction in anaemia and vitamin A deficiency with a simultaneous and substantial increase in school attendance in both states.

India Micronutrient National Investment Plan for 2007-2011 (IMNIP) was developed by MI at the behest of the government to understand the financial and programmatic requirements of tackling micronutrient malnutrition on a large scale. The plan was prepared as a joint endeavour with various stakeholders including the government and the private sector. The plan took into account the infrastructure and government programmes that are already operational.

According to IMNIP, tackling micronutrition requires an additional investment of just Rs 5.40 per capita per year by the Centre. But if we take no initiative, the cost to our GDP from micronutrient deficiencies will shoot up by 50 times at Rs 284 per capita. So the maths and the science make obvious what needs to be done. Whether the government will follow up is the question.

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The views expressed by the author are personal