Climate-friendly smart food like millets the way forward for nutrition mission: Dr Arabinda Padhee of ICRISAT

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Along with ensuring food security, India should move towards Nutrition Security and also aim for Sustainable Diets -- foods that leave less ecological footprints, says Dr Arabinda K. Padhee, Director, Country Relations and Business Affairs, ICRISAT.

As part of its research, the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) has been developing crops that are climate friendly, help the farmers get more income and are nutritious, says Padhee, IAS, who has done his PhD from the Indian Agricultural Research Institute (IARI).

“Along with food security India should not only move into Nutrition Security but also aim for Sustainable Diets -- diets that have less ecological footprint. Our (ICRISAT) crops belong to that category. So, we call our research crops as Smart Food. They are good for you as the consumer, good for the planet, and good also for the farmer, as farmers earn more by investing less,” Padhee told Outlook in a chat. According to him, it is time that dryland crops like finger and pearl millet and sorghum are given a push in Indian diets, which are low glycemic-index crops which would benefit those with diabetes and also gluten free. “There is also a trend in urban markets of people turning to smart food, like multi-grain atta, in which millets are added,” he said.

He recalled that during his childhood he would be given ragi (finger millet) by his mother, which has “become fashionable now”. “It is a good sign, for consumers and for society,” Padhee observed.

Elaborating about ICRISAT’s research in dryland and semi-arid tropics farming, the official said that they specialise in six crops, like sorghum, finger millet, pearl millet, groundnut, chick pea and pigeon pea. “These crops require less water and are good for small holder farmers,” he added.

ICRISAT, which has a tie-up with the Indian Council of Agricultural Research (ICAR), in 2018 developed a biofortified sorghum (jowar) variety, which has significantly higher iron and zinc content. “India’s first bio-fortified sorghum variety ‘Parbhani Shakti’, which is high in iron and zinc, is one of the instruments to achieving Nutrition Security,” said Padhee. Parbhani Shakti, which is a cost-effective and sustainable solution to address micronutrient deficiency, was released for cultivation in Maharashtra.

ICRISAT scientists have also developed groundnuts that are free from Aflatoxin, a chemical produced by a kind of fungus. The Aspergillus fungi, which grows naturally on food crops, like groundnuts and maize, produces the deadly Aflatoxins, the daily intake of which can have serious implications on health. The toxin is known to suppress the immune system and impair children’s growth, and high levels could even cause cancer and liver cirrhosis.

Padhee said ICRISAT is working on introducing similar crop varieties. The institute is also doing a lot of work in the field of watershed activity. “So once there is good soil and water management practices, then you can grow... Read more..