GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY

LOK SABHA
UNSTARRED QUESTION NO. 2747
TO BE ANSWERED ON 03/01/2018

FORTIFYING RICE WITH IRON

2747. SHRI MALLIKARJUN KHARGE:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

विज्ञान और प्रौद्योगिकी मंत्री

a) whether the Department of Biotechnology has developed an innovative way to fortify rice with iron and other nutrients and if so, the details thereof; and

b) the steps taken by the Government to take forward the rice fortification model to all parts of the country to deal with nutritional deficiency among the women and children?

ANSWER

MINISTER OF STATE FOR SCIENCE & TECHNOLOGY AND EARTH SCIENCES
(Y.S. Chowdary)

विज्ञान और प्रौद्योगिकी तथा पृथ्वी विज्ञान राज्य मंत्री
(**वाई. एस. चौधरी**)

a). Yes, Madam. The Department of Biotechnology (DBT) through R&D support to IIT-Kharagpur has developed the requisite technology on rice fortification with Iron for addressing the incidence of anaemia. This involves production of Iron fortified rice premix through extrusion process using broken rice kernels. This iron fortified rice kernel premix matches with the normal rice kernel in shape and size, and when mixed with normal rice in the ratio of 1:100 provides 50% of recommended daily allowance (RDA) of Iron. This technology can also be used to fortify rice with other micro nutrients, as well. The incremental cost of fortification has been estimated by IIT-Kharagpur to be upto 80 paise per kg. of rice.

b). The steps taken by Government to take forward the rice fortification model to all parts of the country to deal with nutritional deficiency among the women and children are as follows:

A Pilot Scale Unit with a capacity of 100 kg/hr/shift has been commissioned at IIT-Kharagpur and the technology is ready for demonstration. Subsequently, the available iron content in the iron fortified rice after employing different methods of cooking was evaluated by National Institute of Nutrition, Hyderabad and the studies pertaining to iron bioavailability, acceptability, efficacy, impact of storage on iron fortified rice, and cooking losses are being worked out.

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