

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

UNSTARRED QUESTION NO:2027
ANSWERED ON:09.03.2010
FOOD SECURITY TO INCREASING POPULATION
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Will the Minister of AGRICULTURE be pleased to state:

(a) whether in order to provide food security to huge population which is likely to reach 1.9 billion by 2050, farmers will have to resort to new bio-technological developments; and

(b) if so, the details thereof and the reaction of the Government in this regard?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND MINISTER OF STATE IN THE MINISTRY OF CONSUMER AFFAIRS, FOOD & PUBLIC DISTRIBUTION (PROF. K.V. THOMAS)

(a) Yes, Madam. Conventional technologies alone may prove inadequate to meet the challenge of increased food requirement from an almost constant area of cultivated land.

(b) The Indian Council of Agricultural Research (ICAR) has taken many initiatives on biotechnology, which inter-alia include programmes on:

(i) molecular breeding, transgenics and functional genomics;

(ii) bioprospecting of genes and allele mining for abiotic stress tolerance,

(iii) converting rice from C3 to C4 photosynthesis,

(iv) allele mining and expression profiling of resistance genes in rice-blast pathosystem for development of race non-specific disease resistance, and

(v) unraveling molecular processes involved in adventive polyembryony towards genetic engineering for fixation of heterosis. These efforts in conjunction with several other initiatives and efforts in agriculture and allied sectors are expected to assist in providing food security to the increased population.