

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

UNSTARRED QUESTION NO:6268
ANSWERED ON:04.05.2010
LOSS OF FERTILE SOIL
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Will the Minister of AGRICULTURE be pleased to state:

- (a) whether as per a research conducted by the University of Sydney fertile soil may vanish in about 60 years;
- (b) if so, the details thereof;
- (c) whether any similar study has been conducted in the country;
- (d) if so, the details thereof; and
- (e) the details of the steps taken by various agricultural research institutes to conserve top soil in the country?

Answer

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

(a) to (d): Loss of top soil depends on prevailing erosion rates which differ from country to country. Erosion of top soil depends on soil depth and quality of soil attributes. Soil formation process over time is also an ongoing phenomenon.

Studies have been carried out by Central Soil and Water Conservation Research & Training Institute (CSWCRTI), Dehradun to assess the loss of soil. It is estimated that 5,334 million tonnes of soil is lost only due to water erosion which comes to an average figure of 16.35 tonnes per hectare per year. Soil erosion does not take place uniformly in all places. About 61% of the soil is displaced from one place to another place and within land surface and only 29% is deposited as permanent loss in oceans. The Indo-Gangetic plains have developed through transported material from higher elevations due to erosion.

(e): Soil and water conservation techniques have been developed, demonstrated in field and disseminated in the country. These techniques fall into two categories, viz. agronomic and mechanical measures. Agronomic measures include contour farming, manipulation of crop canopy, intercropping, strip cropping, tillage practices, mulching and vegetative barriers. Mechanical or land configuration measures include contour bunding, graded bunding, bench terracing and conservation ditching.