

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

UNSTARRED QUESTION NO:2375

ANSWERED ON:21.07.2009

IMPACT OF CLIMATE CHANGE ON LIVESTOCK AND FISHERIES

Mahtab Shri Bhartruhari

Will the Minister of AGRICULTURE be pleased to state:

- (a) whether the Government has any proposal to conduct any study on the Impact of climate change on livestock, and fisheries; and
- (b) if so, the details thereof?

Answer

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

(a) Yes, Madam.

(b) The Indian Council of Agricultural Research (ICAR) has given the following details;

I Livestock

(i). Outreach programme on Methane Emission has already been launched in the year 2008-09 with 8 collaborative centres to assess the methane emission from livestock under different production systems and to develop a data base on methane production and to develop nutritional/ bio-technological strategies to mitigate methane production.

(ii). Network project on adaptation of livestock to impending climate changes through shelter management has already been launched in the year 2009-10 with 8 collaborative centres to develop model(s) for assessing the impact of climate changes on different livestock species and to develop strategies for adaptation of livestock through shelter management. The main aim of the project is to reduce thermal stress by providing cost effective shelters for enhancing animal production.

**II Fisheries
Marine Sector**

(i) Marine Fishes such as Oil Sardine and Indian Mackerel are seen to be able to adapt to rise in sea surface temperature by extending distribution toward northern latitude and by descending to depths. These fishes confined to Kerala and Karnataka previously now form the catch of Maharashtra and Gujarat also,

(ii) Fishes like Threadfin breams have shifted their spawning season to cooler months.

(iii) Plankton abundance has shifted towards cooler months.

(iv) Demographic details and infrastructure available in the fishing villages of maritime states are being collected. There are about 2643 fishing villages along the Indian coast, out of which 458 are within 100 m. distance from high tide, largest number in Kerala (about 200),

Inland Fisheries

(i) Assessment of impact of Climate change on Inland Fisheries resources in three river systems, Ganga, Mahanadi and Brahmani.

(ii) Breeding of Indian major carps which is during monsoon (June -July) and extend till September has been observed to be maturing and spawning as early as March in the state of West Bengal and Orissa.