

Threat to the bio-diversity of the river

1951. SHRIMATI RENUKA CHOWDHURY: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

(a) whether Government is aware that the deadly fish Piranhas landed in Godavari river and also in coastal Andhra Pradesh;

(b) if so, whether Government has made any assessment about the threat this species poses to the bio-diversity of the river due to its aggressive and predatory nature; and

(c) the steps taken by Government to check further spread of this species by initiating measures to eradicate it from the Godavari River System?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI PRAKASH JAVADEKAR): (a) to (c) An advisory was issued by the Department of Animal Husbandry, Dairying and Fisheries (DAHDF) *vide* letter No.31035/25/96-Fy(3) dated 20th July, 1998 to all the State Governments regarding reported unauthorized introduction of exotic red Piranha (*Pygocentrus natterii*) in the country. The State Governments were also advised to take necessary action in order to destroy the said species if reported from their States and to check their introduction. Since then, no information has been received from the State Governments about the presence of Piranhas fish in India.

The fish reported by the Wildlife Institute of India (WII) in Godavari river in 2012 as Piranhas (*Pygocentrus natterii*), was later confirmed to be Piranha-like Pacu fish (*Piractus brachypomus*) belonging to the same family. The Pacu fish which got introduced in India possibly for aquarium purposes, was later reported in Krishna river also. According to WII, Pacu being an omnivorous fish, is capable of thriving in various aquatic environments and compete with native species for food and other resources.

The DAHDF has sanctioned a project entitled 'Risk and Benefit assessment of an illegally introduced fish species namely: *Piractus brachypomus*, Pacu in India' through National Fisheries Development Board to National Bureau of Fish Genetic Resources.

Rise in earth's temperature

1952. SHRI DILIP KUMAR TIRKEY: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

(a) whether the Ministry is aware of the fact that some scientific reports have

claimed that the growing tendency of rise in earth's temperature will make summers unlivable in India in the near future;

(b) whether the Ministry has done any independent study or assessment in this regard; and

(c) the steps that are proposed by Government to combat the threat of rising temperature of the earth?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI PRAKASH JAVADEKAR): (a) Fifth Assessment Report of the Intergovernmental Panel on Climate Change's published in 2014 highlights that mean surface temperature of the globe has risen by 0.85° C over the period 1880 to 2012. In line with rising temperature across the globe, all India mean temperature has risen by nearly around 0.6° C over the last 110 years. Further, a report entitled 'Climate Change: A Risk Assessment' released by the UK Foreign and Commonwealth Office States that the probability of exposed individuals experiencing such conditions in a given year starts to become significant for a global temperature rise of around 5° C, and could exceed 50% for a global temperature rise of around 7° C, in hot areas such as Northern India, Southeastern China and Southeastern USA.

(b) A scientific study to assess the impact of climate change has been undertaken and a report titled "Climate Change and India: 4X4 Assessment - A Sectoral and Regional Analysis for 2030s" was published in 2010 by the Government of India. The report has assessed impacts of climate change on four key sectors of Indian economy, namely Agriculture, Water, Natural Ecosystems and Biodiversity and Health in four climate sensitive regions of India, namely, the Himalayan region, the Western Ghats, the Coastal Area and the North-East Region. As per the Report, the annual mean surface air temperature is projected to rise by 1.7° C and 2° C in 2030s.

(c) Government has released the National Action Plan on Climate Change (NAPCC) which has eight national missions. National Water Mission, National Mission for Sustaining the Himalayan Ecosystem, Green India Mission, National Mission on Sustainable Agriculture focus on adaptation measures for reducing and managing the risk of climate change, including rise in temperatures. State Governments have also prepared State Action Plans on Climate Change in line with the objectives of NAPCC and State specific issues.

Deteriorating condition of seashore and beaches

1953. SHRIMATI JAYA BACHCHAN: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state: