

CRIDA : HYDERABAD

Reply to the admitted priority question for the Lok Sabha - starred Q.No. 5747 raised by Sri Rayapati Sambasiva Rao

a) Whether the government proposes to assess the impact of El Nino on the Agriculture production.

Yes

b) if so, the details thereof,

- CRIDA under ICAR has conducted a study on the impact of El Nino on rainfall pattern in different sub-divisions of the country. However, it has studied the impact of El Nino on agriculture in Andhra Pradesh and Gujarat.

Andhra Pradesh

- Generally, the monsoon rainfall is showing a negative deviation in most sub-divisions during El Nino years. Whereas in post monsoon period, the rainfall is showing an increasing trend.
- The detailed study on Andhra Pradesh state showed that during El Nino years, the south-west monsoon rainfall received was less compare to normal years. While the north-east monsoon is higher in coastal Andhra Pradesh during El Nino years.
- Except Nellore district, the total foodgrain production in the state tend to decline during El Nino years. The decrease in production was found to be more than 10% in several districts.
- The impact of rainfall deviation during El Nino years was not significant on rice, when the total annual production was considered. Because only the kharif rice production was affected marginally. However, the yields of dryland crops were significantly affected in most of the El Nino years.

Gujarat

- Paddy was highly influenced by El Niño episodes .Impact was more in Vadodara district may be due to more upland cultivation.
- Groundnut productivity appears to be more sensitive to El Niño in districts Jamnagar and Junagadh
- Maize yield was more sensitive during El Nino event in Panchmahal district
- Strong El Niño events exerted more negative impact on cotton yields especially in districts viz. Ahmedabad, Bharuch and Rajkot
- Strong El Niño events influenced sugarcane, bajra productivity.
- Castor & mustard productivity was largely influenced by moderate El Niño events.
- Wheat yields declined by about 25% in the El Niño years compared to non-El Niño years.

In Uttar Pradesh, paddy is impacted by El Nino in many of the districts

c) steps taking or being taken by the government to tide over the situation?

Under Ministry of Agriculture, Government of India, Department of Agriculture and ICAR along with IMD organized preparedness meetings with the help of State Agricultural Universities in several states since the onset of monsoon this year 2014. Where, the current monsoon rainfall situation, progress of monsoon as well as El Nino, weather forecast and contingency crop plans were discussed and passed on to the line department personnel for further actions at ground level.

Some of the suggestions made to minimize the impact of El Nino on agriculture production in the erstwhile AP state particularly on the rainfed crops grown during kharif season. These include: water saving rice cultivation methods like SRI, intercropping in drought prone regions, adoption of soil and water conservation techniques in rainfed crops and efficient irrigation methods to increase water use efficiency. Extensive efforts are needed to educate the farmers on adoption of better agronomic practices during El Nino years.