

Sites selected for studying climate impact on wheat by 2030

● IMPACT ON MAX TEMPERATURE (CELSIUS)

● IMPACT ON MIN TEMPERATURE

0.75	0.75	*NA	0.75	0.25	Steeply after 2030	*NA	0.20
LUDHIANA		DELHI		KANPUR		PATNA	
*NA	*NA	*NA	0.5	0.75	0.75	Minimal	Minimal
(significant post-2050)		INDORE		KOTA		(significant post-2080)	
RANCHI						AKOLA	

Climate change to impact wheat production in India, says study

EXPRESS NEWS SERVICE @ New Delhi

WHEAT cultivation in India will be affected by environmental changes after the year 2030, with the risk expected to increase further post-2050, although not uniformly across the country, says a study.

Future climate analogues of current wheat production zones in India, published in the journal *Current Science*, analysed the impact of climate change on wheat production in eight cities across four geographical zones — Ludhiana and Delhi in the north-western plains; Kanpur, Patna and Ranchi in the north-eastern

plains; Indore and Kota in central zone; and Akola in peninsular India.

“Most sites appeared to be at moderate risk due to temperature increase by the year 2030, and except for two sites, had significantly reduced yields. Comparisons were made specifically for the year 2030, keeping in mind changes in agricultural techniques and mechanisms that could potentially occur over a span,” says the study.

Delhi, according to its current climatic condition, has negligible risks while Patna has high risk for wheat production. Ludhiana and Ranchi

have moderate risks. “In the current situation, the high-risk regions would lose out on yields, as compared to the low-risk regions,” the study says.

Wheat is the second most common staple food crop in India and any negative impact on its growth and yield in the future would have significant repercussions on food supply.

Wheat grows in cooler temperatures, with early winter sowing and harvesting in early summer. Therefore, with temperatures rising towards the end of its growth, changes in temperature can potentially reduce productivity in certain regions of its cultivation.