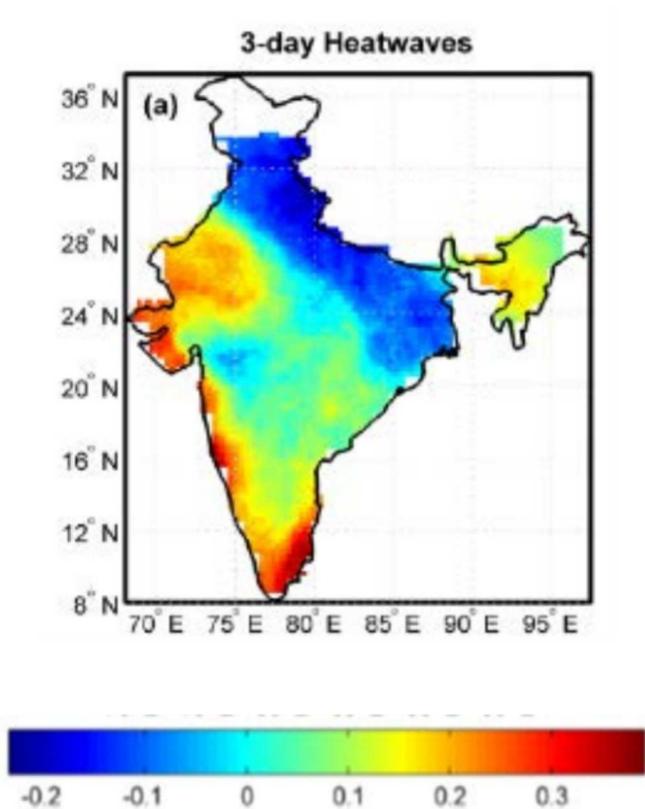


CONCURRENT HEAT WAVES AND DROUGHTS

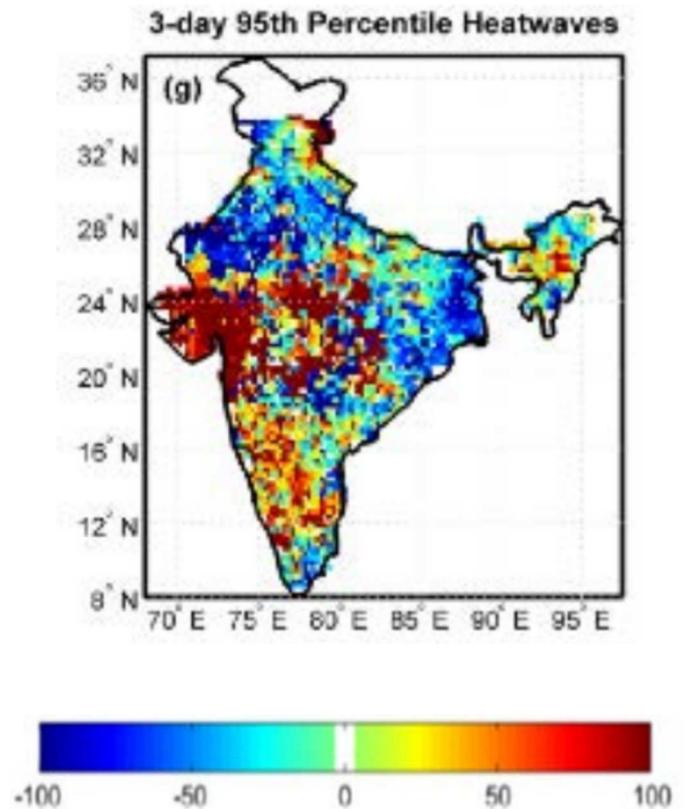
A combination of low rainfall and high temperature has a more serious impact on society than when these occur separately. The yield of wheat crops decreases substantially when high temperature and low rainfall occur together. In a recent paper published in the journal *Scientific Reports*, Shialza Sharma and Pradeep Majumdar have examined the concurrent occurrence of heat waves and droughts during the period May to October in India. They used a heat wave magnitude index that combines the duration and magnitude of the heat waves. They have shown that during the period 1951-2010, heat waves with a duration of 3 days have increased in North West, North East, coastal and south India but decreased

in the Indo-Gangetic plains. They used the Standardized Precipitation Index to define a meteorological drought. During this period the spatial extent of drought has increased in Central India. The number of concurrent heat waves and droughts increased during 1981-2010 compared to 1951-1980.

Reference: S.Sharma and P.Mujumdar, Increasing frequency and spatial extent of concurrent meteorological droughts and heat waves in India, *Scientific reports*, 17 November 2017



Trends in the frequency of 85 percentile heat waves in India



Percentage change in concurrent occurrence of heat waves and moderate droughts in 1981-2010 compared to 1951-1980