

IMPACT OF DROUGHT ON HEIGHT OF ADULT MEN IN INDIA

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ABSTRACT

Background

Indian Meteorological Department official data shows that drought is a permanent disaster that affects around 50 million people each year. One-third of country is chronically drought affected and about 68% of the area is drought prone. A point to be noted is that for the period of 25 years (1974-1998) over 80% of drought belonged to intensity lesser than 1 (Appendix, Graph1). Often the researchers have found negative effects of drought on health of a child under 5 even so the long lasting effect of drought is barely researched. This paper lays focus on the impact of drought event in the birth year on the health outcomes of adult men. The focal point is to study if drought has abiding impact on the height of adult men.

Methods

This study explores the impact of drought on the adult male height. Howsoever adult's heights is determined by various circumstances faced by an individual in his childhood. In order to account for those conditions this study includes socio economic control of education, wealth, religion, caste in the cross-sectional analysis. Evaluation also involves perceiving the impact of different intensity of droughts on different quartiles of adult male height.

Findings

Socio-economic characteristics shows significant impact on adult male height. Beta Coefficient of drought index on male height when regression controls for socio-economic characteristics is (-.0317 cm(s)). Similar Coefficient of drought in birth year on first 25 percentile of male height is -.1924 cm(s) with a t-value of -1.83. Also the impact of higher intensity drought on first 25 percentile of male height is (-1.130 cm(s)) with t value of -1.84.

Interpretation

Impact of drought in the birth year of male height in later years is insignificant which also means boys catch up on their height if they are born in the year which had drought in their district. Howsoever the male who appertain to lowest 25% height in their adulthood had significant impact of drought on their health which happened to occur in their birth year. And the impact of higher intensity drought in the birth year is larger for the male who belongs to lowest 25% height which also means that a drought of intensity greater than 1 in the birth year could have led to smaller height in their adult years. A point worth noting is that socio-economic characteristics showed significant impact on height of an adult.