

Coping Strategies and Characterization of Vulnerability in the Perspective of Climate Change

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Abstract : Climate change is an arduous fact, which could not be unheeded easily. It is a phenomenon which has brought a collection of challenges for the mankind. Scientists have found many of its negative impacts on the life of human being and the resources on which the life of humanity is dependent. There are many issues which are associated with the factor of prime importance in this study, 'climate change'. Whenever changes happen in nature, they strike the whole globe. Effects of these changes vary from region to region. Climate of every region of this globe is different from the other. Even within a state, country or the province has different climatic conditions. So it is mandatory that the response in that specific region and the coping strategy of this specific region should be according to the prevailing risk. In the present study, the objective was to assess the coping strategies and vulnerability of small landholders. So that a professional suggestion could be made to cope with the vulnerability factor of small farmers. The cross-sectional research design was used with the intervention of quantitative approach. The study was conducted in the Khanewal district, of Punjab, Pakistan. 120 small farmers were interviewed after randomized sampling from the population of respective area. All respondents were above the age of 15 years. A questionnaire was developed after keen observation of facts in the respective area. Content and face validity of the instrument was assessed with SPSS and experts in the field. Data were analyzed through SPSS using descriptive statistics. From the sample of 120, 81.67% of the respondents claimed that the environment is getting warmer and not fit for their present agricultural practices. 84.17% of the sample expressed serious concern that they are disturbed due to change in rainfall pattern and vulnerability towards the climatic effects. On the other hand, they expressed that they are not good at tackling the effects of climate change. Adaptation of coping strategies like change in cropping pattern, use of resistant varieties, varieties with minimum water requirement, intercropping and tree planting was low by more than half of the sample. From the sample 63.33% small farmers said that the coping strategies they adopt are not effective enough. The present study showed that subsistence farming, lack of marketing and overall infrastructure, lack of access to social security networks, limited access to agriculture extension services, inappropriate access to agrometeorological system, unawareness and access to scientific development and low crop yield are the prominent factors which are responsible for the vulnerability of small farmers. A comprehensive study should be conducted at national level so that a national policy could be formulated to cope with the dilemma in future with relevance to climate change. Mainstreaming and collaboration among the researchers and academicians could prove beneficiary in this regard the interest of national leaders' does matter. Proper policies to avoid the vulnerability factors should be the top priority. The world is taking up this issue with full responsibility as should we, keeping in view the local situation.

Keywords : adaptation, coping strategies, climate change, Pakistan, small farmers, vulnerability

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