### National Workshop on

## Environmental Hazards, Livelihood Issues & Resilience in Agrarian Societies: A Cross Disciplinary Analysis 2<sup>nd</sup> to 3<sup>rd</sup> February 2018

## Department of Geography, D.D.U. Gorakhpur University



Experts addressing the august gathering: from left 1) Prof. V.K.Singh, V.C., DDU Gorakhpur University, 2) prof. Noor Mohammed, 3) Prof. K.N. Singh, V.C., UPRTOU, 4) Prof. Jagdish Singh 5) Prof. S.K.Singh, HOD 6) Prof. S.K. Dikshit, &7) Prof. N.K.Rana

# **Detailed Summary of the Proceedings**

The National Workshop was organized by the Department of Geography, Deen Dayal Upadhyay Gorakhpur University, Gorakhpur, with financial assistance from ICSSR, Northern Regional Centre, New Delhi, and Deen Dayal Upadhyay Gorakhpur University, Gorakhpur, Uttar Pradesh, on 2<sup>nd</sup> and 3<sup>rd</sup> of February 2019.

The theme of the workshop was "Environmental Hazards, Livelihood Issues & Resilience in Agrarian Societies: A Cross Disciplinary Analysis". The workshop was intended to discuss three things:

- 1. understanding the very concept of the hazard paradigm
- 2. why so much distress in agrarian societies after a disaster event? and

3. to explore the possibilities of the social scientist to identify those causes and remedies.

The workshop concluded that our understanding of hazards and disaster has changed through history. A concern for earthquakes and famine began in the earliest times. Great catastrophes were seen as acts of god- a divine punishment for moral misbehavior. However, later more organized attempts were made to limit the damaging effects of hazards. This approach led to the development of the four hazard paradigm. The engineering paradigm dominated the thinking of the scientific community till 1950. The behavioral approach emerged in1970s followed by the developmental approach in the 90s and the complexity of the ecological approach of the late 90s. The behavioral, development, and complexity paradigm gives much weightage to the contribution of social sciences in reducing the impact of the disaster. These paradigms emphasized that low economic development, dependency, vulnerability, risk, and resilience determine the quantum of disaster impact. Variations in these factors make individuals in terms of age, gender, and community in terms of different socio-economic and cultural groups suffer differently in case of a disaster event. All these three paradigms encouraged social scientists to view hazards within a political and socio-economic system.

With this conceptual background, the present workshop discussed the



agrarian society. Agriculture is the main source of livelihood in India. In recent times the agrarian society has been severely affected by environmental hazards, notably flood, drought. unseasonal rainfall, fire, heat, and cold waves, causing unprecedented damages to crops and associated farm-based activities. The frequency, intensity, and impact of these hazards vary across the geographical area and different socio-economic segments of the society. In recent times impact of these recurring hazards on the agriculture sector and society is known to all. The basic sources of livelihood derived from the agriculture sector often shrinking which leads to financial and other distress in rural as well as urban areas. The average size of the landholding decreased, creating immense pressure on land with about 43% of the population dependent on it. Most of the farmers are shifting to cash crops and other allied activities to survive. This trend is further complicated by higher input cost, high risk of marketing, volatile price of agricultural produce, and uncertainty in climatic conditions and natural hazards.

The societal impact of a disaster on the agricultural sector is often reflected in interpersonal, family, and group conflicts. Gender selected violence, increase in responsibility of female members in the household, delay and sometimes difficulties in marriage, inadequate healthcare and education facilities to family members are common problems aftermath a disaster. Besides, the psychosocial consequences of disaster include exacerbation in pre-existing social problems like poverty, marginalization, discrimination or deprivation; disaster-induced social problems (e.g. family separation, disruption of social networks, destruction of community structure, unemployment, homelessness, etc.).

Thus, the present workshop provided a cross-disciplinary platform to discuss the factors that lead to the rapid erosion of livelihoods due to emerging environmental hazards and their possible socio-economic, environmental and socio-psychological impact on agrarian societies. Besides, the workshop discussed possible resilience measures to be adopted by different communities and roles to be assigned to different stack holders.

The themes and subthemes were discussed in the inaugural session, and three technical sessions each followed by a special lecture.

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The inaugural session is chaired by Prof. V. K. Singh, our honorable Vice-Chancellor as the chair. Prof. Noor Mohammed, former Head of the Department, Delhi School of Economics, University of Delhi as a special guest has delivered a keynote address related to the workshop theme. Prof. K.N. Singh. Vice-Chancellor, UPRTOU, graced the occasion as chief guest, and Prof. Jagdish Singh, former Head and Dean Department of Geography, DDU Gorakhpur University as a guest of honor.

The inaugural session was followed by a special lecture by Prof. Nandeshwar Sharma and Dr. A.N. Tiwari. In the post-lunch session, panel discussions on regional context were held and participants shared their views.

The evening is enjoyed by the vibrant cultural program organized by our students. On the second day of the workshop; session began with a special lecture by Dr. Keshav Singh, Dept. of Zoology, DDU Gorakhpur University on vermin composting as livelihood options, followed by a Special lecture by Prof. V.N. Sharma on grey culture.

In the multi-disciplinary theme discussion session, Prof. Manvendra Singh, HOD, Dept. of Sociology, Prof. Sushma Pandey HOD, Dept. of Psychology, Prof. Dhananjay Kumar Dept. of Psychology, Dr. Alok Kumar Goyal Dept. of Economics, Dr. Rajeev Dept. of Economics, Mahatma Gandhi Kashi Vidyapeeth, Prof. S.N. Pandey, Bhagalpur University, shared their valuable findings.

About 75 abstracts were received and 60 abstracts were invited to participate from different states of India including Madhya Pradesh, Chhattisgarh, Bihar, and Uttarakhand.

In the poster presentation session, our M.A. II and IV semester students participated, and about 28 posters were displayed related to the workshop theme.

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## Major findings/recommendations of the Workshop

- incidences of environmental hazards have increased in terms of frequency and intensity,
- tangible and non-tangible losses due to environmental hazards are increasing,
- society has been severely affected by environmental hazards, notably flood, drought, unseasonal rainfall, fire, heat and cold waves, and climatic changes,
- The decreasing average size of the landholding due to population pressure is making cultivation less profitable
- shifting to cash crops and other allied activities becoming risky due to higher input cost, high risk of marketing, volatile price of agricultural produce, and uncertainty in climatic conditions and natural hazards.
- The societal impact of the disaster on agrarian society is often reflected in inter-personal, family, and group conflicts. Gender selected violence, increase in responsibility of female members in the household, delay and sometimes difficulties in marriage, inadequate healthcare, and education facilities to family members
- The psychological impact includes suicide, depression, alcoholism, crime, and abuse
- the psychosocial consequences of disaster include exacerbation in pre-existing social problems like poverty, marginalization, discrimination, or deprivation;
- disaster-induced social problems include family separation, disruption of social networks, destruction of community structure, unemployment, homelessness, etc.

- there is an urgent need to strengthen non-structural measures to diversify livelihood options in the agrarian society,
- insurance coverage should be widespread and claims should be hassle-free.
- Community participation should be ensured in every step of policy design and implementation,
- Social and psychological problems are complicated ones, they must be given policy priorities.

#### **List of Resource Persons**

- Prof. Jagdish Singh, Former Head, Dept. of Geography, DDU Gorakhpur University, New Colony, Lucknow.
- 2. Prof. V.K. Shrivastava, Emeritus Fellow, Dept. of Geog., Rani Durgawati University, Jabalpur- M.P.
- Prof. K. N. Singh, Vice-Chancellor, Uttar Pradesh Rajarshi Tandon Open University, Prayagraj.
- 4. Prof. V.N. Sharma, Department of Geography, B.H.U., Varanasi (U.P.).
- 5. Prof. S.K. Shukla, Former Head, Department of Geography, Dr. H.S. Gour University, Sagar (M.P.).
- 6. Prof. Noor Mohamad, Former Head, Department of Geography, Delhi School of Economics, University of Delhi, Delhi.
- 7. Prof. Nandeshwar Sharma, Former Head, Dept. of Geog., L. N. Mithila Univ., Darbhanga, Bihar.
- 8. Prof. B.C. Vaidya, SIS, CPOD, JNU, New Delhi.
- 9. Prof. Farasat Ali Siddiqui, Head, Dept. of Geog., Aligarh Muslim University, Aligarh.
- 10. Prof. S.N. Pandey, Department of Geography, T.M. University Bhagalpur (Bihar).

- Dr. Alok Goyal, Professor, Dept. of Economics, DDU Gorakhpur University, Gorakhpur.
- Prof. Manvendra Pratap Singh, Professor & HOD, Dept. of Sociology, DDU Gorakhpur University, Gorakhpur
- Prof. Sushma Pandey, Professor & HOD, Dept. of Psychology, DDU Gorakhpur University, Gorakhpur.
- 14. Prof. Dhananjay Kumar, Dept. of Sociology, DDU Gorakhpur University, Gorakhpur.
- Prof. J. N. Pandey, Former Head, Former Head, Dept. of Geography, DDU Gorakhpur University, Gorakhpur.
- 16. Prof. S. K. Dikshit, Former Head, Dept. of Geography, DDU Gorakhpur University, Gorakhpur.
- 17. Prof. Nutan Tyagi, Former Head, Dept. of Geography, DDU Gorakhpur University, Gorakhpur.
- Dr. Rajiv, Associate Professor, Department of Economics, M.G.Kashi Vidya Pith, Varanasi.
- 19. Prof. J.N. Pandey, Former HOD, Dept. of Geography, DDU Gorakhpur University.
- 20. Prof. P. R. Chauhan, Former HOD, Dept. of Geography, DDU Gorakhpur University.

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