

Traditional Knowledge on Disaster Management: A preliminary study of the Lepcha Community of Sikkim, India

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Abstract

Traditional knowledge has only recently touched the scientific chord of western academic knowledge. More and more researchers today are turning towards it not only to fill gaps in existing societal knowledge but also to find novel knowledge concepts and viewpoints for application in a contemporary context. Since tribal groups have lived within their local environments since time immemorial it is obvious that they do possess a rich knowledge about nature. Hence, research on nature and environments is enriched by incorporating traditional knowledge of indigenous and tribal peoples. Such knowledge is a precious national resource that can facilitate the processes of disaster prevention, preparedness and response in cost-effective, participatory and sustainable ways. This paper explores the traditional knowledge on disaster management of the *Lepcha* tribal people of Sikkim. It establishes that in the guise of folklore, the *Lepcha* have developed an elaborate understanding of the nature and causes of disasters and have identified accurate and precise indicators to assist in predicting disasters, as well as ways and means of mitigating their effects. *Lepcha* traditional knowledge finds echoes in some of the current principles of disaster management. We conclude that traditional knowledge of tribal groups all over the world not only needs to be recognized, conserved and documented but also is to be incorporated into efforts to formulate effective disaster management strategies.

Keywords: Sikkim Himalayas, Disaster awareness, Disaster preparedness, Disaster indicators, Effect and response to disasters, Disaster mitigation

Traditional knowledge of natural disaster mitigation and ethno medicine practices in Himalaya with special reference to Sikkim

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Abstract

Indigenous knowledge refers to the age old refined methods and practices developed by previous numerous generations from an advanced understanding of the local environment, to save their belongings and lives from any future natural disaster. The local people observe signs in the environment which allow them to take precautions before a disaster occurs. This knowledge contains several other important characteristics which distinguish it from other types of knowledge. All such knowledge include evolved within the community, maintaining a non-formal means of dissemination, collectively owned, developed over several generations and subject to adaptation, and imbedded in a community's way of life as a means of survival. Survival strategy of the masses has led to the evolution of area specific, locally pertinent and effective ways of mitigating natural disasters. This vital knowledge base practices are however often ignored and due recognition and importance have not been given, hence being eroded with the time. This paper highlights the relevance of cost affective traditional practices and acceptable means of mitigating disasters by the local communities. The paper is based upon the extensive field studies, discussions held with local populace conducted in different phases for use of the traditional disaster mitigation and medicinal plants practices of the people during disaster in the remote study area. The paper discusses the relevance of the various traditional disaster mitigation practices of the region. Studies show that the understanding was fairly evolved in the respective areas of natural disaster like earthquake, landslide and drought mitigation. The major medical problems in disaster are massive causalities, bleeding, loss of consciousness, pain, swelling, Joint dislocation and bone fractures. Eight medicinal plants are indigenously used in these purposes in the remote area during disaster till they receive any modern medical aid.

Keywords: Natural Disaster, Ethno medicine, Sikkim, Uttarakhand, Traditional knowledge