

Exploring Possibilities for the Utilization of Indigenous Knowledge in Disaster Education in Gujarat, India

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1. Background and Objectives

There are lots of indigenous knowledge all over the world. All of them have been handed down from generation to generation in each region, and some of them have scientific evidence and certainty. It means that Indigenous knowledge is very important for community itself hence it is so close to local people not only physically but also emotionally. Recently, hydro-meteorological disasters are increasing year by year because of increased global warming, and the impacts are prominent especially in developing countries including India. Objective of the research is clarifying the possibilities for the utilization of traditional wisdom in disaster education in Gujarat, India.

2. Study area and Methodology

Gujarat state and Kutch district is one of disaster prone area in India. Kutch district is north-west part of Gujarat state and is surrounded by Arabian Sea in the south and the harsh Rann in the north and eastern boundary. Therefore it has been affected by cyclone, flood and also earthquake for a long time. Detailed structured interviews and semi-structured interviews are conducted and consequently thirty four indigenous knowledge are collected from farmer, fisherman and animal breeder in Kutch district and got responses of interview from government, academia, NGO, community and school teacher in Gujarat state. Through the analysis, it is realized that some indigenous knowledge have scientific evidence and also, the relationship between indigenous knowledge and disaster education in Gujarat state is represented. Knowing interaction among government, academia, NGO, community and school teacher on disaster education and information including indigenous knowledge flow is crucial for making discussion to improve current situation. In fact, two problems about information flow are pointed out in the thesis. First one is indigenous knowledge related information from government to school is limited therefore information from teacher to student is also inadequate even community member gives many indigenous knowledge through daily life. Moreover, NGO do not get indigenous knowledge related information from school due to same reason as mentioned earlier even NGO gives school the list of indigenous knowledge if needed. Second one is also related to information flow that among different communities, there is an information transmission channel from one community to another. Although, generally, it is not systematic one but personally information exchange through informal meeting or general conversation among people hence dissemination is not well managed.

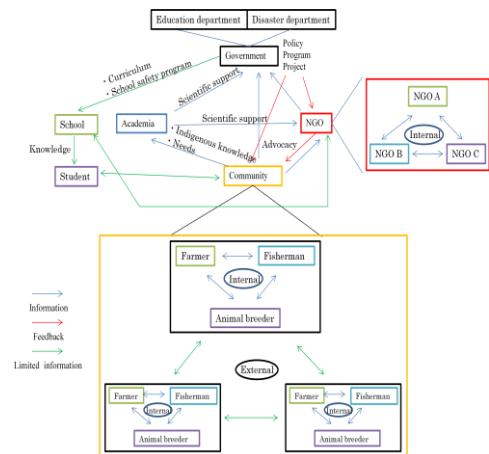


Figure 1 Interaction among stakeholders on disaster education and indigenous knowledge

3. Result of research

Through the research, it is realized that many of meteorological phenomena related indigenous knowledge have scientific evidence while indigenous knowledge related to plant and animal has difficulty to explain the relationship between animal or plant behavior and meteorological phenomena. Every indigenous knowledge consist of accumulation of people's experiences or trials to improve quality of life therefore even if the knowledge does not have scientific proof it is also important and in this case, long term observation of phenomena is the only way to make sure the usefulness of this kind of indigenous knowledge. It seems that, this trial contributes new finding in science or enhances scientific and technological progress.