

ZiF-Research Group *Communicating Disaster***Closing Conference “Dealing with the Disasters of Others”**

26-28 January 2012

**Presentation:*****Will this flood be dangerous? Risk communication and the tension between expert systems and local knowledge in Mozambique and Germany***Elísio Macamo, University of Basel, Switzerland, and  
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Location: Center for Interdisciplinary Research, Bielefeld, Germany; Room 222 “Plenarsaal”

**Abstract:**

Typical river floods (not flashfloods) do not come as a complete surprise. Usually the flood rises continuously and the flood wave moves downstream. People who live in flood-prone areas usually have local knowledge about typical flood patterns and use local means to assess possible threats. Professional flood control as well as flood prevention and early warning is the task of special institutions that use data (weather forecasts, river levels) and scientific-technical knowledge to assess the risk of flood. In the event of danger they issue public flood warnings (risk communication). In Giddens' terminology these special institutions are expert systems. As far as expert systems are concerned, successful early warning, prevention and measures of mitigation are based on the quality of the measurements and prognosis, the ability to manage necessary precautions and the communication of the warning to the wider public. Local knowledge is at best seen as a kind of folkloristic supplement and not integrated into the expert system or judgments made by it.

Drawing from two different cases (Mozambique and Germany) we will explore how risk communication takes place and how successful it is. In Mozambique communication between the two systems is hindered by lack of trust. Thus it was that the flood warning of the state relief agency in the year 2000 was ignored by the people. As it turned out, the flood was quite severe. What the expert systems did not see, however, was that the flood was a minor problem compared to the problem of the unusual length the flood covered the fields. Therefore, the local communities could not cultivate their fields which led to a serious food-shortage. This came as a surprise to the relief agencies.

In the German case of the Oder flood in 1997 risk communication was complicated, too. While in the end both sides managed to come together to address the floods, communication was influenced by local expectations of security which exaggerated the extent of the disaster. These expectations gave relief action a sense of urgency that played an important role in coping with the extreme event. Therefore, while a degree of mutual trust and flexibility seems to have been crucial in the efficiency of flood mitigation, there is a sense in which these conditions were shaped by local knowledge as expressed in expectations on security.

The two cases show that the success of risk communication is not only based on communicating impending danger, but also on the terms under which local knowledge is integrated into the process of risk communication. Our paper will discuss the bearing of such factors on successful disaster mitigation.

For further questions on the conference or the research group,  
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