

The Role of Disasters for Policy Change in the Alpine Hazard Management

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INTRODUCTION

„Changes in the alpine hazard management (AHM) are triggered by disasters.“ This conventional wisdom will be questioned within this paper. The historical examination of past changes helps to shed new light on this argument and to implement future policy changes. From a theoretical standpoint, two types of windows of opportunity for fundamental policy change can be distinguished (Kingdon 1984).

1. A natural disaster can help to open a problem window. After a catastrophe different societal actors can formulate their problem definition (problem stream) or propose possible solutions (policy stream). Due to the high attention of the media and society after such a „focusing event“ (Birkland, 2006), it is more likely that the political system implements some of these new ideas (politics stream).
2. Climate change adaptation plans are a good example for politics windows. To fulfill its international climate change commitments, every country has to formulate such a plan (politics stream). Again, different actors can try to formulate their ideas (problem and policy stream), which might be incorporated in these plans and therefore would be implemented in practice.

METHOD

In the project „Alpine Hazards in the Times of Climate Change“ (Grant 01UV1004B, German Ministry of Education and Research), the development of the AHM in Germany, Austria and Switzerland were analyzed using primary sources (e.g. legislation, annual reports of administrations) and secondary literature.

RESULTS

As displayed in Table 1, a common policy development pattern can be observed in the analyzed countries. In the second half of the 19th century a series of severe floods triggered the institutionaliza-

tion of the state torrent control system. The established (forestry and engineering) organizations together with scientific actors formed a policy monopoly with a shared understanding that you primarily have to understand the natural side (and not the social side) of the hazards and interfere with it.

This partly explains why the implementation of spatial planning instruments took such a long time, although the first ideas date back to the 18th century. In 1790, the idea of the designation of flood zones was invented by A. v. Riedl in Bavaria. This idea was transferred to torrent control by G. v. Aretin in 1808: Every house to be built in the proximity of a torrent should be approved by a responsible authority. Nevertheless, this idea was not implemented in Bavaria before 2007. In 2007, torrent danger zones were included in the water law. In Switzerland, building in risky places was seen as a major reason for the huge damage during the avalanche winter of 1951. Since it was not the national level jurisdiction, the development of avalanche zone maps was only recommended in national financial regulations in 1952. This recommendation was implemented only in few communities due to the lack of expert knowledge, personnel and funding. In 1979, a politics window opened, and the idea of danger zone mapping could be included into the national spatial planning law. In Austria, a completely different dynamic of the process can be observed. The policy-entrepreneur H. Aulitzky, leader of the Austrian Service for Torrent and Avalanche Control in Tyrol started to develop a concept for danger zone mapping in 1971. In 1975, a politics-window opened. In the already long discussed amendment of the forest law, this new concept was implemented. In the case of spatial planning, actors of the AHM initiated policy change in all countries.

In the case of the greening of torrent control, environmental organizations (ENGOS) played a

major role. Ideas and several examples for natural hydraulic engineering could be found in all countries since the 1930s. Nevertheless, the power of the ENGOS was necessary for these ideas to become more dominant, to be implemented in legislation and sufficiently financed.

In both cases, problem windows due to disasters played only a minor role. Birkland (2006) has shown for the United States that the socio-political discourse after disasters is mainly concerned with recovering from the disaster. Here, mainly technical protection measures are considered. This analysis also applies to the Alpine countries. For example, the budget of the AHM was regularly increased after disasters as a sign of political action. Long-term change is caused by changes in problem interpretations within the expert community and especially the preceding development of new strategies that can be implemented as a policy window opens.

The size of disaster plays only a minor role. Although a certain minimum size is required for these events to be discussed at the political level (Birkland 2006; Voss and Wagner 2010), the established problem definitions and possible solutions are crucial. For example, the previously developed steel snow bridges and rakes revolutionized the avalanche protection concepts after the avalanche winters in 1951 and 1954. After the avalanche winter of 1999, however, only minor changes to

the existing integral concept of avalanche protection have been made because it was considered as sophisticated.

CONCLUSION

In the analyzed countries, major disasters were studied within (bigger) research projects (e.g. Flood risk (II) in Austria, event analysis of major events since 1987 in Switzerland) with the goal to evaluate the existing policies and programs. This approach has the shortcoming that the projects reports propose recommendations when the problem window on the political level has already closed. Thus, policy entrepreneurs which want to change an existing political program should be prepared by

- implementing new solutions for an existing or a proposed new problem in some regional case studies and
- proposing the solution in the direct aftermath of a „fitting“ disaster.

LITERATURE:

- Birkland T.A. (2006). Lessons of Disaster: Policy Change after catastrophic Events. Washington, D.C.
- Kingdon J.W. (1984). Agendas, alternatives, and public policies. Boston.
- Voss M, Wagner K (2010): Learning from (small) disasters. Natural Hazards 55/3: 657-669.

Table 1: Development phases of the AHM in Bavaria, Austria and Switzerland. The mentioned years refer to changes in legislation or the strict implementation of practices.

	Bavaria	Austria	Switzerland
Establishment of the national alpine hazard management with focus on technical protection and reforestation	1852-1902	1852-1897	1871-1902
Dominance of the technical protection approach	1902-1969	1897-1971	1902-1972
Establishment of spatial planning approaches (e.g. danger zone mapping)	since 2007	1971-1983	1952-1997
Focus again on protection forest management / integrated meliorations of catchments of torrents	1950-1986	1950-1985	1984-1991
Greening of torrent control and flood protection	1976-1995	1973-1994	1970-1998
From the security towards the risk approach	since 2007	since 2007	since 1994

KEYWORDS

policy change; history; multiple streams framework

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