

FACTSHEET RISK REDUCTION MEASURES

Improving emergency response in Leutersdorf and Oderwitz with the RAINMAN toolkit

Where was it implemented?

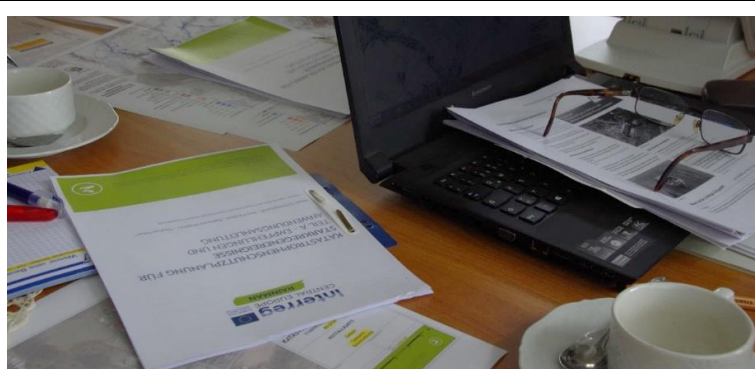
Municipalities Leutersdorf and Oderwitz, Saxony, Germany

Fields of action

- Early warning and disaster management
- Emergency response

Related to measure from the catalogue of measures

- Risk area identification, mapping and designation
- Ensure preconditions for the implementation of disaster control plans
- Development and implementation of effective emergency response plans, keeping them up-to-date
- Considering of pluvial flooding as disaster for precautionary measures of civil protection and whole crisis management system
- Interactive communication and participation formats
- Intra-communal cooperation
- Contact persons and consultation hours for citizens' consultation



On the basis of hazard warning maps, the municipalities work through the tasks of the toolkit step by step. Source: Sabine Scharfe, LfULG



Exchange on intermediate results - important for agreeing on measures to be taken. Source: Sabine Scharfe, LfULG

Area characterisation

Area type: rural

Landscape type: hilly, farmland, settlement area

Problem

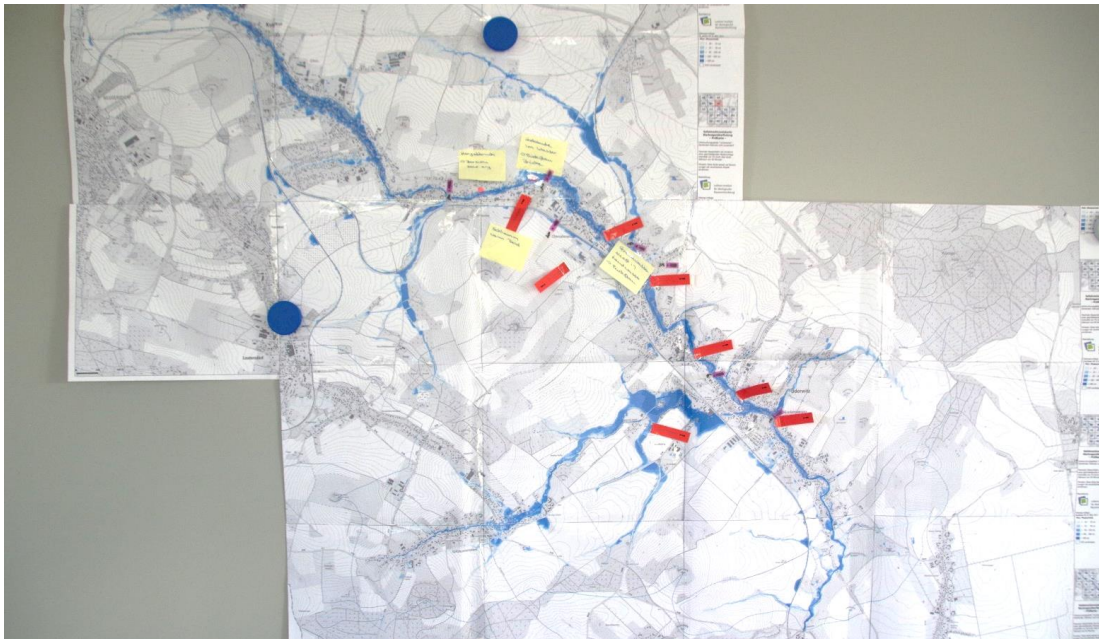
Oderwitz and Leutersdorf have been affected by heavy rain and flood events several times in the past. Therefore, there is a high level of risk awareness among the residents. A large number of management and precautionary measures have been implemented in both communities in the wake of the events. In addition to construction measures, water brigades were established, materials such as a flood patrol car were purchased and the emergency services were trained for the event of flooding.

However, the municipalities were aware that these efforts were not enough and that the existing documents for alarm and emergency response planning in the event of a sudden heavy rainfall event and the subsequent expected, immediately occurring emergency situations, as previously associated with a complex flood events, were not formulated precisely enough.

The municipalities therefore reported a need for guidance and support in the task of improving local security and asked RAINMAN for advice on appropriate means in 2018.

Description and aim

At the suggestion of the RAINMAN project, both municipalities tested the project product "Emergency Response Planning - Toolkit for heavy rain events" from mid 2019 (see Pilot Action Styria for further Information), which was still under development at that time. They were supported by the RAINMAN project managers at the LfULG during the process of developing the toolkit. In several meetings the participants exchanged their experiences of emergency situations in the past and of the measures already taken. The aim was to identify critical scenarios for which further measures must be planned. The municipality employees also discussed the → **hazard maps** provided by the project and, in exchange with experienced emergency personnel, identified → **risk areas** in their municipalities:



Risk areas in Oderwitz. The determination was carried out - similar to the toolkit - interactively in exchange with experts (especially experienced members of the local fire brigades). Source: Sabine Scharfe, LfULG

Furthermore, it was examined whether these areas can be a priority site in the event of an incident and, if so, how the local risk there must be reduced by suitable preventive measures.

Effect of measure

As a result of the work process, the municipalities agreed on numerous measures to improve hazard prevention. These covered two main areas of action: firstly, the improvement of communication in the event of a crisis. For example, it was ensured that the head of the municipal fire brigade can trigger a siren signal in case of a heavy rainfall event. The information to the residents and the calling of emergency personnel via the app BIWAPP were organized. This (commercial) app is recommended by the district as a regional warning and information system. It enables warnings of severe dangers, risks and local restrictions to be received via mobile phone. The information is also published on the municipality's website. Secondly, an → **interactive communication measure** (information event for citizens) was carried out in spring 2019. The → **direct dialogue with potentially affected citizens** provides information about the risk and the limited possibilities of hazard prevention and - where this is still insufficient - encourages for private self-provision (property protection measures and behavioural precautions).

Description of implementation

Implementation: ongoing; supported by the toolkit; since 07/2019

Effect horizon: short-/medium-term

Involved stakeholders: Public order offices of the municipalities Leutersdorf and Oderwitz, head of the municipal fire brigade and head of the local fire brigades, lower water authority County of Görlitz

Initiator / responsible: Municipalities Leutersdorf and Oderwitz, Saxon State Office for Environment, Agriculture and Geology, lower water authority County of Görlitz

Lessons-learned	
<p>Main success factor:</p> <ul style="list-style-type: none"> Improving hazard prevention in Leutersdorf and Oderwitz with the RAINMAN toolkit were relatively fresh and extensive experience to cope with them was helpful. When working with the toolkit, it was possible to build on existing structures and documents; hazard maps were available. The work was carried out on site with great personal commitment and was supported by the mayors. Advice from the responsible authority (lower water authority at the County of Görlitz) and staff members of the LFULG from the Saxon Flood Centre (projects RAINMAN, HoWa-innovativ, STRIMA II) was ensured. The treatment of the topic took place in close exchange between municipalities (exchange of experience, knowledge growth, agreements) 	<p>Main challenge:</p> <ul style="list-style-type: none"> Meteorological knowledge must be built up in order to be able to combine and evaluate weather information from different sources, because decisions (e.g. on alerting) must be based on probabilistic forecasts, warnings and observations. The effective alerting of affected citizens and downstream residents must be organised; this can only be done on a voluntary basis. Responsible authorities must communicate the danger and the risks accordingly. Their task is also to show the limits of hazard prevention and to encourage self-provision of potentially affected persons. The framework conditions for improving hazard prevention are completely different in rural areas than in big cities. This starts with the geographical and meteorological initial conditions, continues with the organisation of structures of disaster management (volunteers!), and ends with available resources for the organisational improvement of disaster management prior to events as well as in case of the event itself or afterwards.
<p>Synergies / beneficial aspects:</p> <ul style="list-style-type: none"> Existing, valuable knowledge about proper action in an emergency is written down, thus making it more independent of people and more future-proof. The limits of possibilities of emergency response will be defined by systematic investigation; this provides pro-arguments for preventive measures in other fields of action. Working with the toolkit provides security and orientation, thus increasing the courage to make a step towards interest groups (e.g. residents) and to clarify the limits of emergency response. Dealing with the topic keeps local risk awareness alive. As this was a model project, training and testing also served to improve the toolkit, which was further developed on application experiences. The tests were intensively promoted as a successful example of transnational cooperation by RAINMAN and were submitted to the highest state authority of the Free State of Saxony for the promotion of a nationwide implementation (training). 	<p>Conflicts / constraints:</p> <ul style="list-style-type: none"> It is to be expected that heavy rain events will always occur differently and under different conditions (season and soil cover, moisture of the soil, amount of rainfall, precipitation area and duration, ...). Most important for preparation is not to fix processes and measures too much, but to plan them flexibly. Due to the specific geographical situation, the possibilities for emergency response are often very limited. The focus on risk reduction measures must therefore be PRIOR to events, i.e. be preventive (e.g. behavioural precautions and object protection).

Key message to others starting with a similar task	Contact
<p>Plan for the emergency case of heavy rain events, because it can affect any municipality. Practical knowledge AND local observation (weather radar & water levels) are essential.</p>	<p>Municipality of Oderwitz, Straße der Republik 54, 02791 Oderwitz, E-Mail: gemeinde@oderwitz.de Municipality of Leutersdorf, Sachsenstraße 9, 02794 Leutersdorf, E-Mail: kommunalwesen@gv-leutersdorf.de</p>
<p>Further information (in German)</p>	<p>Altmann-Kuehr, R. (2019): Dieses Auto hilft beim Hochwasserschutz, in: Sächsische Zeitung - sächsische.de (online) vom 15.08.2019, URL: https://www.saechsische.de/plus/dieses-auto-hilft-beim-hochwasserschutz-5106093.html (26.02.2020)</p>