



FACTSHEET RISK REDUCTION MEASURES	
<b>Planting and maintenance of a buffer strip - Korbitzer Straße, Kanonenweg, Korbitzbach</b>	
<b>Where was it implemented?</b>	
City of Meissen, Saxony, Germany	
<b>Fields of action</b>	
<ul style="list-style-type: none"> <li>• Farmland</li> <li>• Settlement area</li> </ul>	
<b>Related to measure from the catalogue of measures</b>	
<ul style="list-style-type: none"> <li>• Linear protection measures</li> <li>• Small elevation oriented dikes</li> <li>• Conversion of arable land into grassland/ deciduous forest or short rotation plantations</li> </ul>	
<b>Area characterisation</b>	<p><b>Planted dam and buffer strip to protect nearby buildings.</b> Source: Sabine Scharfe, LfULG</p>
<b>Area type:</b> rural/urban	
<b>Landscape type:</b> hilly	
<b>Problem</b>	
<p>On 27 May 2014, the district Meissen-Triebischtal was affected by a heavy rain event of 40-60 l/m<sup>2</sup> precipitation per hour in the catchment area of the Triebisch river and its tributaries. Resulting floodings and mud flows on and from farmlands passed the forested valleys, reached the settlement area of Triebischtal and caused damages of 6 mio. Euro. A residential area above the steep slope area (Korbitzer Schanzen) was also severely affected. There, water and mud flowing off the fields reached the built-up area, but the sewerage system of the road between them could not catch the water.</p>	
<b>Description and aim</b>	
<p>The measure is more a set of measures than just establishing a buffer strip along the streets “Kanonenweg” and “Korbitzer Straße”. Some results of terrain modelling were implemented to find a suitable spot for collecting runoff, mud and sludge from the field before it flows over the street into private building properties. A flat depression (still arable land) and a dam have been built (tree and bush planting area). A 5 m wide retention hollow combined with a drainage system ensure that the building area is now protected from flooding.</p>	
<b>Effect of measure</b>	
<p>The planted buffer stripe strengthens and stabilises the soil surface. The developing humus layer functions as a water reservoir. Runoff water is collected and controlled drain off is enhanced, whilst water and mud runoff through the residential area is being stopped.</p>	
<b>Description of implementation</b>	
<b>Effect horizon:</b> long-term	<b>Involved stakeholders:</b> City of Meissen, building administration department, urban planning department, local authority real estate office, contracted construction company
<b>Costs:</b> 120.000 € construction costs + 29.000 € for planting the buffer strip; budget of the City of Meissen	<b>Initiator / responsible:</b> City of Meissen

Lessons-learned	
<p><b>Main success factor:</b> The City of Meissen is property owner of the concerned area, which eased and fastened the modification of the agricultural area. A swift implementation of the project was possible.</p> <p>The combination of different measures allows for an optimal setup for protecting the nearby infrastructure and especially private buildings.</p>	
<p><b>Main challenge:</b> None, the project received broad approval.</p>	
<p><b>Conflicts / constraints:</b> An incident occurred in which a tree crown was cut off over night.</p> <p>Prior to the measure, the agricultural area directly verged on the adjacent road “Kanonenweg.” The mutual agreement with owners of agricultural areas is essential. Owners have to be informed about consequences and limitations in case of a heavy rain event and has to deal with it.</p>	<p><b>Synergies / beneficial aspects:</b> The measure fits into the landscape and received in general very positive feedback from the residents. The planted buffer stripe improves microclimate, acts as a windbreaker, avoids snowdrift and offers a habitat for many species.</p> <p>During a heavy rain event, fertile soil from adjacent, higher lying agricultural areas is being washed away. Such fertile soil accumulates in the detention hollow and can be transported back and reused.</p>
Key message to others starting with a similar task	Contact
<p>This measure fulfills its function properly and is recommendable for other locations. Large detention areas can be created without a huge loss of agricultural land.</p> <p>Besides advantages of detention, the decision-making process and its cost-benefit calculation should also consider related synergy effects: reduction of soil erosion, revegetation, improvement of landscape quality as well as protection of nearby infrastructure.</p>	<p>City of Meissen, Municipal Building Office and Building Administration Office, Markt 1, 01662 Meissen</p> <p>E-Mail: <a href="mailto:stadtbauamt@stadt-meissen.de">stadtbauamt@stadt-meissen.de</a> <a href="mailto:bauverwaltungsamt@stadt-meissen.de">bauverwaltungsamt@stadt-meissen.de</a></p>
<p><b>Further information (in German)</b></p>	<p>Steffen Wackwitz (2015): Das Starkniederschlagsereignis in Meissen im Sommer 2014, in: WasserWirtschaft 9/2015, URL: <a href="https://www.springerprofessional.de/das-starkniederschlagsereignis-in-Meissen-im-sommer-2014/6110106">https://www.springerprofessional.de/das-starkniederschlagsereignis-in-Meissen-im-sommer-2014/6110106</a>, 13.11.2019.</p> <p>Stadt Meissen (2015): Pressemitteilung - Naturnahe Instandsetzung des Kirchsteigbaches gelungen - Mehr Schutz vor Hochwasser und Starkregen, URL: <a href="https://www.stadt-meissen.de/8847.html">https://www.stadt-meissen.de/8847.html</a>, 13.11.2019.</p>