

## Regional Sciences

# Climate Change - Regional Vulnerability Analysis for the Federal State of Brandenburg

## A sector-specific Perception of Adaptation Strategies and Action Recommendations

### Research Area

Nowadays, the federal state of Brandenburg is one of the most arid and vulnerable regions of Germany with a precipitation of less than 600 mm. Its mostly sandy soils with a very low water storage capacity contribute to this. Considering climate models, there is a high probability that this vulnerability will increase through climate change (s. fig. 1).

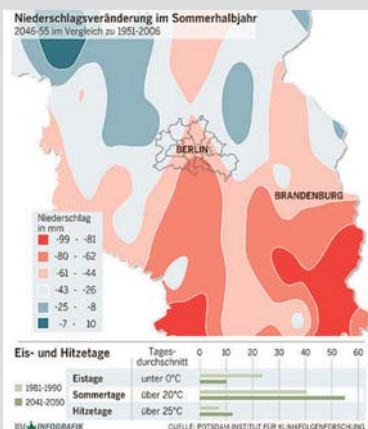


fig. 1

### Methodical Approach

The research approach is based on personal interviews with regional stakeholders from agriculture, forestry, tourism and health. The vulnerability analysis is used as a method to demonstrate climate change and its consequences for the state of Brandenburg. It consists of a "complex system" that considers numerous interdependencies between environment and society (s. fig. 2, cf. STOCK 2006: Klimaänderungen – Folgen und notwendige Konsequenzen, PIK).

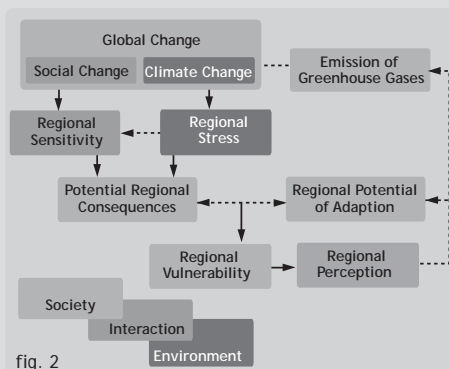


fig. 2

### Possible Consequences of Climate Change



### Main Results of the Empirical Study

The empirical study reveals that especially the sectors depending on water are perceived to be most susceptible to climate change. All in all, there is more risk than opportunity mentioned for the sectors that have been examined. Externally, wine-growing and tourism are perceived as the "winners" of climate change; though, the internal views of these sectors do not confirm that perception. To sum up, the majority of interviewed stakeholders notices the effects of climate change. Most experts expect this trend to continue in the years to come.

The assessment demonstrated that agriculture and forestry are "slightly to moderately" vulnerable, the health sector is "slightly" vulnerable and the tourism sector shows no vulnerability at all. The interviews made quite clear that networking and co-operations are important instruments for developing joint strategies for an effective response to climate change. The majority of institutions considers a regional, interdisciplinary climate project as a suitable adaptation strategy. Finding adequate financial resources is thereby regarded as the main challenge.

### Action Recommendations

By looking at the regional stakeholders' statements, potential "hot spots" or problems can be identified. They help to generate action recommendations and approaches to reduce vulnerability (s. tab. 1).

"Hot Spot"	Action Recommendations
partly absence of effective and affordable measures of adaptation insufficient studies about the effects of small-scale measures	promotion of R&D: - innovative measures - sustainable strategies - trend-setting concepts
insufficient problem awareness, especially in the tourism and health sectors	awareness-raising/ informing e.g. through workshops, climate projects
unobjective information and media coverage information deficit on local level	reasonable discussion and communication of research findings with local stakeholders
insufficient regional networks	establishment of a platform to support co-operations
risk perception of climate change	show up and clarify possible chances promote innovative potential

tab. 1

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