

# Coping with Environmental Burdens in Disadvantaged Communities

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## Theoretical Background

Environmental hazards such as industrial pollution, emissions from waste dumps disproportionately affect particularly low-income and minority populations that lack political and economic influence etc. (Braubach et al., 2011; Brulle und Pellow, 2006; Pearce et al., 2011). At the same time, it has been illustrated that these groups generally do not engage in processes of environmental decision-making, and that they are often not aware of the possibilities to participate (Böhme und Reimann, 2012; Sinning, 2013).

Applying an environmental justice lens, it can be argued that environmental injustice occurs "[whenever] some individual or group bears disproportionate environmental risks [...] or has unequal access to environmental goods [...], or has less opportunity to participate in environmental decision-making" (Shrader-Frechette, 2002:3). At the same time, there has been increasing evidence that the different dimensions of justice are interrelated. Unequal patterns of distribution of environmental burdens or access to environmental goods, the lack of recognition and constrained participation all have a stake in constructing claims for injustice (Schlosberg, 2007).

Yet, discussions about environmental justice should not only deal with patterns of social differentiations in terms of burdens caused by environmental bads or access to environmental goods and the meaningful participation in environmentally relevant decision-making processes. Rather, the focus should be on the *ability* or the *agency* of people to cope with environmental risks and to participate in decision-making processes in the first place, since a constrained participation is often a result of the lack of capacities.

## Objective

This research seeks to assume the perspective of low-income and minority populations that are affected by environmental burdens in order to explore how perceptions of individual resources and social opportunities determine their capability to participate in environmental decision-making. Furthermore, it is considered that coping with environmental burdens must be understood as a process over time. Hence, a biographical perspective will be adopted in order to understand how self-perceptions of agency are shaped within a life-perspective and how past experiences have an influence on present perceptions of self-efficacy and thus on their coping-actions.

## Methodology

This research uses narrative biographical interviews to produce narratives of coping with environmental challenges. The narrative biographical interviewing method allows to actively engage community members into participatory story-telling and to give a voice to individuals from disadvantaged communities. Interviews were analyzed using qualitative content analysis (QCA).

The project furthermore draws on the "Model on Households' Vulnerability towards their local Environment" (Köckler, 2011) as a heuristic framework to analyze how vulnerable populations cope with environmental burdens. The model combines Hobfoll's Conservation of Resources Theory and Ajzen's Theory of Planned Behavior to understand how coping-capacity, perceived behavioral control, coping intentions and coping actions relate to each other. For the purpose of this research, the model was adapted to illustrate coping as a life-long process rather than a static present condition.

## Case Studies: Industrial Pollution

### PCB pollution – Dortmund harbor area (Germany)

### Waste incineration in cement kilns – Huichapan (Mexico)

Much of the environmental justice literature has analyzed the experiences in the global North in spite of numerous mobilizations for environmental justice in the global South. Nonetheless, environmental justice as an analytical concept offers a powerful lens through which to analyze environmental struggles worldwide and to make a link between Northern and Southern experiences (Sikor et al., 2014). These considerations have motivated the choice of two case studies from Germany and Mexico in order to understand how different cultural narratives shape the ways of coping with environmental risks (Furedi, 2007), and how individuals can be empowered to act as agents of change across different cultural, political, and institutional contexts.

#### Case Study 1

The PCB pollution of the harbor district in Dortmund, Germany, that was caused by the practices of a local recycling company has affected the environment and community health.

#### Case Study 2

Incineration of waste in a CEMEX cement factory in Huichapan, Mexico, has caused environmental pollution and health risks to the local community.

In both cases, local communities not only face waste-related environmental, social, and health impacts by one external polluter but furthermore they have struggled for a voice in environmental decision-making processes. Local protest groups emerged in both communities in order to leverage community empowerment and to achieve environmental justice. Yet, although some residents started to take action as agents of environmental justice, it can be observed that large parts of the population remained inactive in the face of the environmental health risks that threatened quality of life and well-being in the neighborhood.

## Results and Discussion

Since research is still in progress only preliminary results are discussed here for the German case study. Research has indicated that the self-perceptions of individual resources and of self-efficacy are key determinants of how residents have coped with the environmental burdens. Furthermore, coping was shaped by biographical experiences, such as prior experiences related to community action, upbringing, prior experiences with pollution, etc. Yet, despite the dimension of PCB pollution in the Dortmund harbor area many residents reported that they did not know much about the issue. This lack of perception was linked to the invisibility of PCB as a noxious agent. Furthermore, some residents did not consider themselves to be personally affected or they perceived other environmental issues as more relevant.

Additionally, residents' perception of personal resources such as energy (i.e. time, money, knowledge), skills and social support, conditions (i.e. age, health, language), and objects (i.e. a house) determined how they dealt with the issue once they perceived it as relevant to their health and well-being. Some respondents with a migration background reported constraints to participation as a result of insufficient language skills, perceptions of stigmatization, and a lack of interest in their communities. Furthermore, it can be stated that the perceived behavioral control changed over time. Some members of the local pressure group quit due to a growing feeling of powerlessness. However, some residents are still active, which is largely a result of their personal attitudes, perceived self-efficacy, resources such as personal skills, a pro-social orientation, and their willingness to make a change.

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