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Title :

Can "Nature-based Solutions" concept (NBS) help reduce inequalities in flood risk management policies? The case of La Bouillie, Blois (France)

Since the beginning of the 21st century, "Making space for water" constitutes a major paradigm shift in flood risk management (FRM) policies, moving away from a structural approach. However, it also proves to be challenging to implement in many cases as it leads to major changes in land use and allocation (Warner et van Buuren 2011).

In this context, our presentation questions whether the operationalisation of this transformation through the NBS concept can help reduce inequalities produced by FRM policies. It is linked to the second axe of the panel.

In order to illustrate, we focus on the case study of "La Bouillie" in Blois (France), on the Loire River. During the first part of the 20th century, "La Bouillie" district expanded, first informally, behind a spillway and within a discharge channel created in the 18th century. Since 2003 and the establishment of a Deferred Development Zone (*Zone d'Aménagement Différé*), housing and economic activities in "la Bouillie" have progressively been delocated in order to re-establish the flood retention area and improve protection level in neighbouring estates. In "La Bouillie", the risk has firstly been approached through a technical lens in a top-down approach, carried mainly by the State administration. This technocratic approach reinforced local conflicts (Doussin 2009). It also fed the social vulnerability of some inhabitants, mainly among the elderly, from the working class and strongly rooted in the area.

It is only in a second phase that new propositions about the future of the project have emerged. Several non-permanent uses have been proposed, in line with nature-based solutions (NBS): planners ambition to address flood risk issue and build synergies between agricultural, recreative and contemplative uses. Additional supporting measures have also been put in place towards the most vulnerable inhabitants.

NBSs appropriation by local inhabitants is fostered by participation modules. However, this transformation may not prevent the persistence or creation of forms of inequalities: unequal access to environmental amenities created by these new uses, to the deliberative arenas shaping the future of the are, etc. This case-study links NBS and theories of environmental Justice (Agyeman et Evans 2004) and analyses transformations in terms of distributional and procedural Justice.

This research is carried out within a PhD about socio-spatial inequalities induced by climate change adaptation policies in a context of flood risk management, and contributes to the JPI Climate SOLARIS project (*Solidarity in Climate change adaptation policies : towards more socio-spatial justice in the face of multiple risks*, SOLSTICE Call (2021-2024)).

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