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The planner's role in a planning process for a cautious adaptation of housing in developing countries – examined through reconstruction projects in Indonesia after 2004

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From all that the scientific community knows today, one important subject in transformative planning is the adaptation of housing to natural hazards and the expected consequences triggered by climate change. These planning practices regard complex issues of climate change, natural resource management, sustainability and environmental justice. Natural hazards, including climatological, meteorological, hydrological and geophysical hazards can have a devastating impact on human life and the built environment. Whether loss or damage arises and a natural hazard turns into a disaster is determined by the vulnerability of a region depending on the socio-economic framework conditions as well as the coping and adaptive capacity of an affected society. People in developing countries are particularly vulnerable to the impacts of natural hazards for multiple reasons, such as a shortage of money & other resources, a lack of planning rules & regulations and not accounting for natural & climate change impacts in the design or planning process. Additionally, developing countries often lack information and knowledge on what can be done to adapt housing. This situation is likely to become more acute since some of these hazards are expected to be amplified due to the anticipated effects of climate change. According to Jha et al., housing is defined as the immediate physical environment, both within and outside of buildings, in which families and households live, and which serve as shelter. This built environment is the setting for the most fundamental of human relationships. It presents a social and cultural space in opposition to the natural environment and poses a fundamental element in global poverty reduction. Another special focus within this topic touches on the interlinkage between rural housing conditions and urbanization

indicating the adaptation of rural housing as a possible instrument to reduce urbanization, especially in developing countries.

Up until now, ninety percent of international aid money is spent only after disaster has struck, namely for emergency aid and reconstruction. Between 1991 and 2010, from the total official international assistance of $3.03 trillion, only $106.7 billion were funding for natural disasters and within this only 12.7% went to disaster risk reduction. The remaining money was spent on reconstruction & rehabilitation (21.8%) and emergency response (65.5%). One problem with reconstruction is that the new replacement houses are often even less adapted to the local conditions than the originals were. In some cases it even goes so far as slightly damaged but repairable traditional houses get demolished to make room for large-scale reconstruction. After a disaster there is often not enough time for precise planning which results in uncoordinated “help”, maladapted & unsuitable housing followed by long-term problems, such as difficulties in maintenance and repair work. Even though there have been countless research studies on these cases, it seems that we (the planning society and organisations involved in reconstruction projects) keep making the same mistakes. Therefore shifting the focus from reconstruction to adaptation on a sustained basis, without neglecting emergency aid, by cultivating a transformative spatial planning culture that cautiously adapts housing to current and expected natural impacts, can save lives as well as money, time and other resources. This in turn would require a redistribution of international aid money as well as a modified planning approach or planning process. Here the local stakeholders should be key actors in this planning process, particularly to integrate local knowledge.. A question that needs to be discussed in this context is the role of the planner. In any case the planner is the outsider within the group of actors, especially if they originate from a different planning culture, which is almost always the case. Nevertheless, in the role of the planner lies the ability to act as a technical advisor and catalyst in a planning process for cautious adaptation of rural housing, even in an unknown context. This situation is a large part of what makes up a planner’s occupational routine and therefore should also play a core role in the education.

Another important issue in this field is the question of knowledge sharing as mentioned above, not only to avoid mistakes but also, amongst other things, to develop a less time- and resource-consuming operation. Although every planning context and project is different and unique, there are still elements that are similar. “In some situations there are similarities between measures that can be used in different regions or countries. In this case it is an important opportunity to share experiences and knowledge, so common standards and guidelines can be developed” (Davida 2005 after Halsnaes and Laursen 2009,91). This not only applies to measures but can also be transferred to characteristics of the planning process. Even though the constellation of actors as well as the planning context varies, there are steps and elements that should be considered in each planning task.

In regard to cautious adaptation of housing, a lot can be learned from reconstruction projects that have been completed in the past in various places around the world. In a number of cases the local population has not been sufficiently spurred into action. Throughout the years and with growing experience it has become clear that the local stakeholders have an important role in the planning process. But what exactly is the role of the planner? What is the benefit of having planners playing an active role in the planning process for housing adaptation in developing countries? A big part of the answer to these questions lies in the utmost importance of knowledge transfer within this area of research and practice.

In the Asian-Pacific context there are a huge number of potential case studies regarding this topic. For example in Indonesia there are numerous reconstruction projects which were completed following the Tsunami in 2004. In recent years there have been a series of research projects dealing with the relations between architecture and society in the context of reconstruction programmes after natural disasters. Some of these research projects focus particularly on changes and interdependencies between the built environment (housing – individual houses and settlements) and local socio-cultural factors. This paper will analyse a number of these research projects that have been completed inter alia in Banda Aceh and Nias Island in order to identify and extract characteristics that have led to successful results based on social acceptance. These characteristics are then used as the core for the draft of a planning process for

a precautious adaptation of housing in order to withstand an inevitable changing climate.

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