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GENDER PERSPECTIVES IN VULNERABILITY ASSESSMENTS AND EBA SELECTION: A CASE STUDY IN SON HONG COMMUNE, HA TINH PROVINCE

“Gender equality is key to sustainable development and vital in assuring the quality of our work. We enhance the effectiveness of our measures by taking into account the different life situations of women and men and by making our work gender-sensitive” (Gender Pays Off – Gender Strategy 2012).

The importance of gender in climate change and climate change adaptation has been recognized by academics and practitioners alike (see for instance Djoudi and Brockhaus 2011; Nelson et al. 2002; UNDP 2013). How central gender dimensions in this field are becomes clear when looking at the IPCC’s Fourth Assessment Report, where it is explicitly stated that a changing climate will affect men and women differently (IPCC 2007). Women for instance are more likely to suffer from extreme weather events and disasters due to limited access to resources of all kinds (natural, financial, institutional or social) (UNDP 2013). Simultaneously, they often possess indigenous knowledge on climate change and adaptation mechanisms that is of great value when identifying and developing coping strategies for changing climatic conditions (Djoudi and Brockhaus 2011; Sen and Bond 2017; UNDP 2013). Exclusion from communication channels as well as confined access to other forms of knowledge however limits the incorporation and scope of impact of such information in and on ongoing adaptation debates (Sen and Bond 2017).

It is a recognized fact that gender aggregations are not sufficiently taken into consideration in the field of adaptation (Djoudi and Brockhaus 2011), and even where they are, the complexity of including gender in adaptation planning and implementation is hardly ever done justice to. Poor or entirely missing gender analyses can for instance “[...] mean that planners depend on women assuming a central role in coping strategies, without taking into account the increased burden that this imposes on women” (Nelson et al. 2002; see also Care 2015; Pham, Doneys and Doane 2016). Simultaneously, Care International (2015) argues that *[a]daptation interventions are often based on the belief*

that women’s role in the home makes them critical agents of change and, thus, a focus for adaptation interventions. But many women do not have decision-making power within the home or over all household resources, let alone over valued livelihood resources and may not be able to keep or manage their own earnings.

Deficiencies in gender assessments can profoundly impact and limit the sustainability and effectiveness of development projects and programs (Djoudi and Brockhaus 2011). It is thus crucial to pay more attention to and provide examples of the integration of gender in climate change-related analyses such as vulnerability assessments (Nelson et al. 2002; UNDP 2013). The fact sheet at hand shall contribute to such evidence base.

Ecosystem-Based Adaptation

A relatively new and promising approach to climate change adaptation is the so-called ecosystem-based adaptation (EbA). The Convention of Biological Diversity (2009) defines EbA as “[...] the use of biodiversity and ecosystem services as part of an overall adaptation strategy to help people to adapt to the adverse effects of climate change.” EbA thus acknowledges that healthy ecosystems play a fundamental role in sustaining and improving the resilience of both ecosystems in themselves and the people who live within them against climate change and the risks related to it (ISPONRE 2016). The project ‘Strategic Mainstreaming of Ecosystem-based Adaptation in Viet Nam’, implemented by the Vietnamese Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) has been working with the EbA approach since 2014. As part of the project activities, a

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vulnerability assessment for socio-ecological systems has been conducted in the provinces of Ha Tinh and Quang Binh in northern-central Vietnam. These were performed on both a provincial- and community level. During the community-level assessments, the research team paid particular attention to variations in climate change perceptions between men and women as well as gender-specific EbA responses in Village 1, Son Hong commune, Ha Tinh province.

Vietnamese culture remains male dominated until today, with a complex and partly contradictory discourse on gender that makes transformational change in this area challenging (Pham et al. 2016):

On the one hand, social discourse centres on the important role of females in the family, but on the other hand, the government also encourages women to take a more active role in office work and social development. This complex message has led to a double burden for Vietnamese women (Op. cit.). Simultaneously, gender equality is promoted in many Vietnamese policy documents, such as the Strategy and Plan of Action for the Advancement of Women and the Viet Nam Millennium Development Goals. What is missing however is concrete guidance on the implementation of such gender-sensitive strategies and legislation (Op. cit.). Research has furthermore pointed out that gender issues are majorly lacking in national adaptation and mitigation plans (Djoudi and Brockhaus 2011). Gathering gender-specific data in adaptation to fill these gaps and to create a more solid base for the effective implementation of gendered and climate-related strategies is thus highly important.

The study in Ha Tinh sourced data via two focus group discussions with 40 key informants - divided by gender - in the study area. Both groups confirmed that the livelihoods of people in the study area are ecosystem-based. Perceived changes in the local climate included an increase in the number of hot days; more and more intense droughts due to delays in the onset of rain and reduction in total annual rainfall; cold spells, typhoons and floods. The influences of these phenomena on livelihoods were interpreted differently by men and women. In the following paragraphs, a more detailed breakdown of the findings is provided.

The Role of Ecosystems

Both male and female community members described ecosystems in and around the village as diverse, and agreed that natural forests account for the majority of surrounding ecosystems. Women however identified paddy rice and annual crop areas as being bigger than men did, and estimated acacia-dominated areas to take up a smaller area than what male inhabitants of the commune pointed out. Figure 1 shows the ecosystems available in the area as estimated by men and women.

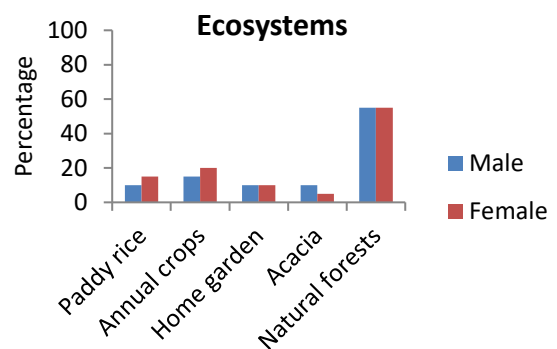


Figure 1: Gender perspectives on ecosystems in Village 1. Source: Focus group discussion (2016)

A potential explanation for these deviances can be found in the division of tasks and responsibilities women and men take on in household situations. Women, having to provide for the family's daily needs of food and often performing the major part of labor needed to produce the latter (Care 2015; Djoudi and Brockhaus 2011), perceive rice fields and annual crop areas as being more important and thus bigger in extent than men do. Pham, Doneys and Doane (2016) observed a similar tendency when discussing changes in weather phenomena with the male and female members of Vietnamese farming families.

Another line of reasoning is that women often get excluded from political and household decision making on various scales – village meetings and other public events are mainly attended by male inhabitants, who do not necessarily share their newly gained knowledge with their wives (Care 2015; Pham, Doneys and Doane 2016; UNDP 2013). Women in Village 1 confirmed that they often do not take part in meetings with cadastral contents, potentially limiting their capacity to estimate the size of an area.

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Livelihood Functions of Ecosystem Services

Both male and female inhabitants of Village 1 identified provisioning services as the main type of service they use. Annual crops (peanuts, green beans), paddy rice, non-timber forest products, livestock products and others constitute the most common services people use for their livelihood. Nevertheless, women estimated the degree of utilization of provisioning services to be even greater than men did, whilst they attached less cultural values to the surrounding ecosystems than the male inhabitants.

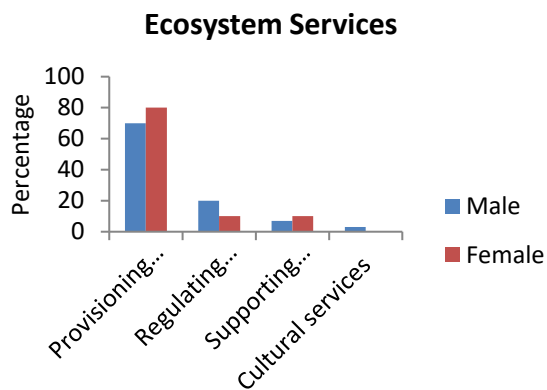


Figure 2: Gender perspectives on the roles of ecosystem services in Village 1. Source: Focus group discussion (2016)

These results again hint at the differences in gender roles assigned to men and women. The focus group discussions revealed that, due to their traditional role of working in home gardens with paddy rice and annual crop management, women value provisioning services more than men (Calvet-Mir et al. 2016). An additional explanation is that men may have extra time to enjoy their natural environments through hunting and collecting flowers, as they spend less time doing housework and taking care of children than women do. This tendency has been confirmed in a variety of studies. Pham, Doney and Doane (2016) for instance describe how conservation approaches have had a restricting influence on traditionally male activities, which in turn has led to male villagers having more time to spend on leisure activities, whilst the work load for women has increased. These developments added new degrees of complexity to hierarchies and power dimensions in households:

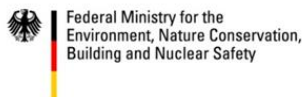
While men have stopped or reduced their contribution to the household's income, women gradually become more active in income-generating activities. As a result, men's status as head of household started conflicting with their reduced voice and interest in the family's livelihood. [...] [Yet] men are still considered head of the household, which gives them a key role in decision-making processes, including in principle the right to decide what their wives can and cannot do. [At the same time] [...], unlike the increase in the workload of women, a change in achievement that appears in the form of a cash income has made women more respected by the community in general and by men in particular. Moreover, because of changes in the gender division of labour, decisions related to livelihoods have been gradually transferred to the wives (Pham, Doney and Doane 2016; see also Care 2015; Djoudi and Brockhaus; (Sen and Bond 2017).

Exposure to hazards

Literature also proves that the different livelihood roles that men and women take on shape their experience and concern in regards to natural hazards (Care 2015). A study conducted by Care International (2015) for instance found that Mozambican women in the Angoche district have to walk long distances for the collection of water every day, and thus care more about hazards that affect water availability both positively and negatively. Similar tendencies can be found in the context of the Vietnamese case study in Ha Tinh province: Here, both men and women agreed that droughts, cold spells, typhoons and floods cause problems for annual crops, paddy rice, and home gardens. However, due to the afore described focus on food provisioning, female interviewees perceived nearly all hazards, particularly the effect of cold spells on paddy rice, to have a stronger negative impact on crops and ecosystems than their male counterparts did.

Hotter days, droughts, cold spells, typhoons and floods were ranked as serious natural hazards by men, while women excluded hotter days from this list. Both men and women experience nearly no beneficial impacts of the hazards, and cold spells were considered as having a strong negative impact on a variety of ecosystems by male and female interviewees alike.

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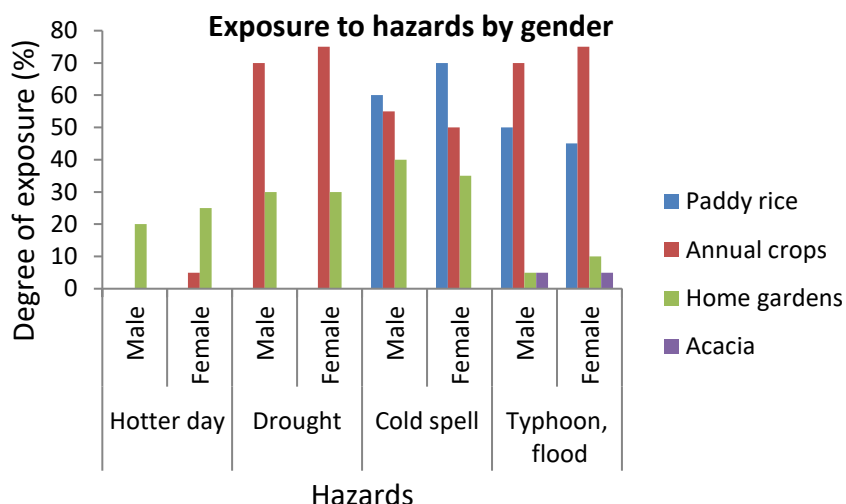


Figure 3: Gender perspectives on natural hazards in Village 1. Source: Focus group discussion (2016)

EbA Interventions

Due to the above named expansive negative impacts of cold spells, the latter were chosen as focal subject for the identification of EbA interventions in a final step of the study. The inhabitants of Village 1 were asked to point out EbA interventions addressing the impacts of cold spells on animals, which are severely affected by low temperatures. Table 1 depicts the preferences for EbA measures of both male and female interviewees.

Table 1: Preferred EbA interventions (n= number of informants). Source: Focus group discussion (2016)

EbA interventions	Men (%), n=20	Women (%), n=20
Planting fodder plants along garden boundaries	75	85
Applying techniques for processing and storing green fodder for animals during hazards	65	60
Efficient land use, conversion of infertile crop lands to fodder grass	80	70

Table 1 reveals that women in Village 1 perceived the plantation of fodder plants in their gardens as sources for animal food as the most effective EbA measure. Cold snaps often negatively affect fodder and grazing areas, as growth rates are slowed down and plants killed by

low temperatures. Furthermore, animals are kept in stables to avoid diseases related to low temperatures. Growing fodder plants close to the house thus both depicts an additional food source and an easier way for the household to take care of this fodder source due to its proximity to the house.

Meanwhile, men appear to be considering greater scales and less domestic solutions when they select land being converted from crop land to fodder grass for animals as their priority EbA intervention against cold spells. This measure would again increase stability and security of fodder provisioning during cold days. Once more, these trends are potentially connected to different livelihood roles of men and women: Female household members select measures that are highly domestic and immediate in their outputs, and that furthermore do not extensively increase the women's already large workload, since every family member (including children) can directly support this intervention due to its proximity to the house, and fodder delivery remains quick and easy as distances are short. In case cold spells occur, more fodder plants along garden boundaries would constitute a response that would not increase the work load of women who are in charge of supplying fodder to the animals, which in turn would make female household inhabitants less vulnerable to cold spells. Men, whose main tasks are less closely connected to the physical space of the house and direct food provisioning, take on the more long-term and large-scale perspective of creating additional

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fodder sources on infertile lands. Djoudi and Brockhaus (2011) point out a similar tendency in the preference and perception of forest products, where “[...] women often prefer trees with multiple uses because these trees offer more domestic and supplementary value”, whilst men pay more attention to timber productivity.

Conclusion

Women participated in the entire vulnerability assessment, and expressed their perspectives on which EbA measures were most suitable for implementation vividly. Male and female household members perceive their immediate environment and the hazards affecting it differently. This study shows that gender mainstreaming should be an important part of any adaptation process, as women contribute unique capabilities to assessments and adaptation selections. If women are overlooked and not consulted, interventions may not be successful and sustainable. The different perspectives presented above make clear once again how crucial it is to

- *Ensure the collection of sex-disaggregated qualitative and quantitative data in all assessments, stocktaking, monitoring and evaluation;*
- *Incorporate a female perspective when designing and implementing projects;*
- *Develop and apply gender-sensitive criteria and indicators for progress monitoring and evaluation of results (UNDP 2013).*

At the same time, this fact sheet proves that climate change and its impacts create shifts in responsibilities, but also possibilities for both men and women, and require household members to cooperate more closely to be able to manage the occurring changes (Care 2015). Doing adaptation successfully means that traditional dichotomies between typically ‘male’ and ‘female’ activities need to be reconsidered, and power relationships have to shift (Djoudi and Brockhaus 2011). All EbA responses are more effective if both women’s and men’s capabilities and strengths are incorporated (UNDP 2012) - a fact that makes clear once again that “[...] gender equality [is] not as an issue for women alone, but [...] an issue that is critical for the advancement of everyone in society” (Care 2015).

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