

and tidal waves (Climate Investment Funds, 2010; Huq and Ayers, 2007). In Bangladesh, the potential effects and capacity to cope with the impacts of climate change are significantly influenced by the sheer size of the national population and the scale of poverty that prevails in the country, which is often the reason for limited adaptive capacities (GoB, 2010). The country is likely to experience, if it has not already, adverse climate impacts such as an increasing rise in sea level, tropical cyclones, heavy monsoons, floods etc., which are perceived as being the consequences of contemporary climate change.

Despite the country's heightened exposure to climate-related impacts, Bangladesh is also at the forefront of climate change adaptation initiatives. Climate change will most likely have a negative impact on overall national development, including the country's efforts to reduce poverty. In most cases, climate-related disasters come with the associated cost of human and economic losses (Olsson et al., 2014).

However, it is important to note that current climate adaptation efforts can be criticized for their limited incorporation of or focus on "poverty reduction" vis-à-vis employment creation. These two concepts—poverty reduction (or employment creation) and climate change adaptation—are often treated as separate issues by many scholars, policy makers, and practitioners, even though issues such as poverty and inequality (or unemployment) are the 'most salient of the conditions that shape climate-related vulnerability' (Ribot, 2010:50).

Since poor and marginalized citizens are the most vulnerable to climate impacts, it is critical to have both policy and strategies to reduce poverty at the same time as making meaningful climate adaptation efforts. It is important to understand that climate change and natural disasters do not discriminate and affect everybody equally. Rather, the point is that some people or groups of persons have more capacity to confront climate risks and vulnerabilities. That is why people who are poor and marginalized are usually more vulnerable than others (Noble et al., 2014). They may not be able to afford to live in areas not prone to house flooding (if they have a house), they may not be able to protect themselves from the rain, they may have no income to buy food if crops fail and prices soar due to droughts, etc. Therefore, climate change has a very strong poverty dimension in its own discourse.

Addressing these interlinked issues, this poverty brief highlights the most-likely missing variable in these debates, namely: the "employment" component, and more specifically, climate-resilient employment. Climate change will impact on and alter substantially the world of work. People will be forced to change their traditional forms of occupation or have to adapt with the changing climate scenarios. This will happen particularly in regions where people are in resource-dependent occupations. If there is no restructuring in occupation or occupational patterns, it is likely that a majority of the world's poor will experience unemployment, which might force them to be entrapped in the poverty cycle. Since poor people are more vulnerable to

different climate impacts than the rich, poverty, inequality, and unemployment will eventually reinforce climate vulnerability among the poor and marginalized citizens. Therefore, incorporating climate-resilient employment within the framework of local and regional climate adaptation efforts is critical for ensuring an effective and lasting response to climate change impacts.

Contemporary Adaptation Efforts

It is globally recognized that adaptation involves complex systems of human initiatives. Some of the major initiatives involve reducing carbon dioxide emissions, building the capacities of nations, regions, cities, private sectors, communities, individuals, and natural systems to minimize or cope with adverse climate-related impacts, as well as mobilizing capacities and resources for the implementation of decisions and actions (Tompkins et al., 2010).

Since climate change is a paramount challenge for Bangladesh, the country developed the National Adaptation Programs of Action (NAPA) in 2005 (Islam et al., 2011) along with the Bangladesh Climate Change Strategy and Action Plan (BCCSAP). The BCCSAP has been one of the major contributions and developments from the Global South in terms of national/local efforts to respond to the need for climate change adaptation, where a country has, on its own, sought to address key climate challenges. It established two innovative financing arrangements: the Bangladesh Climate Change Resilience Fund and the Bangladesh Climate Change Trust Fund. These trust funds were largely prompted by the country's long history and exposure to climate-related natural disasters and they are used to finance a variety of national adaptation efforts (Islam et al., 2011).

Currently, Bangladesh's policies focus mostly on community-based adaptation for addressing location-specific adaptation needs. Often these community-based adaptations overlook the importance of climate-resilient employment opportunities within the larger framework of poverty reduction. People rarely understand that their vulnerability to climate change can be exacerbated by their disadvantaged socio-economic conditions. Employment opportunities can usually offer them better options for livelihoods and overall adaptive capacity, because reduction of income poverty can lead to a better environment and improved environmental conditions (Delamonica and Mehrotra, 2006). In addition, it is important to note that climate vulnerability can be the reason for increased poverty or a spiral of persistent poverty (Olsson et al., 2014).

The Missing "Variable"

Climate change adaptation is often associated with policies and strategies related to social and physical resilience (Ahmed, 2013). Poverty, human security, and climate adaptation are closely linked within the livelihood framework, since they can intensify/

complement one another. Therefore, any specific community should address these developmental challenges from a holistic perspective to have a meaningful and lasting impact on human society, such that both poverty reduction and climate change adaptation are addressed appropriately and jointly. In countries like Bangladesh, where people are predominantly poor, employment should be a major component of climate adaptation efforts, since people's vulnerability can be increased by poverty or unemployment. The "employment" component of climate adaptation is not explicitly discussed in the nation's climate change discourse and no-one should expect that poor and marginalized citizens will adopt more "climate-friendly" behavior while they are lacking their basic rights. Moreover, employment opportunities can help to develop a safety net in times of climate risks, resilience and adaptation stages.

National adaptation strategies, such as the BCCAP, provide a review of the country's adaptation needs according to different areas of priority. BCCAP seeks to promote the 'diversification of livelihoods' or employment opportunities (including both farm and non-farm employment) and introduce the importance of 'resilient cropping system', such that local people can survive even during climate-related hazards (MoEF, 2009). Climate-resilient employment should take climate variability and risks into consideration and have the social and natural mechanisms to adapt within the changing scenarios. Some efforts are being undertaken in an uncoordinated fashion, such as the recent development/innovation with floating vegetable gardens in the coastal areas of Bangladesh. This needs to be scaled up for higher levels of resilience and social adaptation. The national mandate for climate change adaptation is also illustrated by the National Adaptation Programme of Action (NAPA), which has addressed the importance of employment as part of the country's climate change adaptation efforts (GoB, 2005). This should be done more explicitly than it is at the moment. An explicit indication of the importance of climate-resilient employment in the policy agenda can help the government and other development partners or stakeholders to realize more climate-friendly approaches addressing both climate change and poverty.

It is thus important to reinforce and enhance NAPA's capacity to implement an 'employment' focused agenda in the country's climate adaptation efforts to tackle and minimize both the country's poverty and climate challenges. As soon as the state and other development stakeholders realize and incorporate these ideas and measures of employment into their climate adaptation initiatives, this will have a meaningful and lasting impact on the nation's efforts to manage climate change adaptation and poverty reduction.



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Conclusion

Since both climate change adaptation and poverty reduction efforts are at the core of any country's development agenda, it is necessary to explicitly mention and translate the employment component into actions of climate adaptation efforts, otherwise countries may end up introducing short-sighted initiatives which have no meaningful social impacts. In a country like Bangladesh, with limited adaptation capacities and enormous poverty, employment creation, diversification of livelihoods, and capacity building should be at the core of individual and community-level adaptation. Climate impacts can be made worse through the presence of poverty and inequality, and therefore addressing all these issues should be principal in a national agenda. With limited employment opportunities, people will remain poor and adaptation efforts might not have meaningful social acceptance or a lasting impact.

Acknowledgements: The Author would like to acknowledge the reviewers and editors of CROP poverty briefs for their useful comments to improve this brief.

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