Brief for GSDR 2015 Green Jobs in the Era of Changing Climate Saleh Ahmed, University of Arizona*

Introduction

"Socialism collapsed because it didn't allow prices to tell the economic truth. Capitalism may collapse because it doesn't allow prices to tell the ecological truth". - Oystein Dahle, Chairman, Worldwatch Institute

In many parts of the Global South, climate change will have substantial (negative) impacts on overall national development including country's efforts to reduce poverty (Olsson et al., 2014). However, current climate adaptation efforts can be criticized for their limited incorporation of or focus on the "poverty reduction" aspect. These two concepts - poverty reduction and climate change adaptation - are often treated as two different issues among many scholars, policy makers, and practitioners, even though issues like poverty and inequality are the "most salient of the conditions that shape climate-related vulnerability" (Ribot, 2010:50). Therefore, climate adaptation efforts in developing countries can be criticized for not making meaningful and lasting impacts among the poor and marginalized citizens. Since poor and marginalized citizens are most vulnerable to climate impacts, it is critical for the developing nations in the Global South to have means to reduce their poverty along with meaningful climate adaptation efforts.

Such issues are very critical for the countries like Bangladesh, which is according to the Climate Change and Environmental Change Atlas 2015 one of the most vulnerable countries in the world due to climate change (Maplecroft, 2015). Its geophysical location makes it heavily exposed to different climatic events, such as strong cyclonic storms and tidal waves (Climate Investment Funds, 2010; Huq and Ayers, 2007). In the Polynesian islands, the sea-level rise will likely to inundate the whole islands by forcing the local

people to leave their homeland forever. The challenges are different in other regions or countries, such as in the Andean nations of South America and Himalayan countries of Asia, glaciers are melting. In these areas, entire communities are based on traditional/indigenous agriculture and water supply from unending mountain snows, and the changes climate vulnerabilities can put them on a path to extinction.

It is important to understand that climate and societies are highly dependent. The magnitude and proportions of impacts of climate change on natural system and people are linked to their exposure to local and global vulnerabilities. Nevertheless, the climate impacts differ across regions, groups of populations even within the same region. The Stern Report (2007) provided the first comprehensive assessment of the economics of climate change. An UN High Level Event "the Future in our Hands: Addressing the Leadership Challenge of Climate Change" (2007) concluded with a key message as "Action is possible now and make economic sense".

Without any surprise, climate change will impact and alter substantially the world of works. People will be forced to change their traditional forms of occupations or have to adapt with the changing climate scenarios. This will particularly happen in the regions where people are linked to different resource-dependent occupations. If there are no restructuring in occupation or occupational patterns, it is likely that a majority of 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 people, poverty, inequality, unemployment will eventually reinforce climate vulnerability among the poor and marginalized citizens. Therefore, incorporating the climate-

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resilient employment under the large framework of local and regional climate adaptation efforts are critical for ensuring effective and lasting response to climate change impacts.

Unfortunately very little is known about the climate impacts on employment or employment opportunities. At least in the medium and short term, the socio-economic impacts of climate change are dependent more on the development paths of economics and societies than directly on the changes in natural systems.

Extreme climate events will also have direct impacts on the world of works; however, it is difficult to quantify the impacts. United States Department of Labor (USDoL) mentions that Hurricanes Katarina and Rita caused a net loss of at least 40,000 jobs (BLS, 2008). Till now, very little is known about the impacts of climate change on industry in the developing countries and most of the information are highly speculative (Munashinghe & Swart, 2005). IPCC suggest that the impacts prognoses aggregated market sector effects will be seriously negative for many developing countries (IPCC 2001). The most directly affected economic sectors would be agriculture, forestry and tourism (Munashinghe & Swart 2005). With more than a billions workers, agriculture continues to be the single largest sector in the world in terms of employment and most of these are in the developing countries (ILO, 2003).

In response to all these global discourses, the concept of "green jobs" came to the centre of global attention. Green jobs are defined as the direct employments created in economic sectors and activities that reduce environmental impacts and ultimately bring it down to levels that are sustainable (Poschen, 2008). In this context, this policy brief summarises the importance of green jobs in this era of changing climate. It is expected that this brief can initiate further discussions or insights on climate resilience employment visavis society, which can have lasting and meaningful impacts on human and nature.

Restructuring Local Employment

From broad conceptual perspective, employment might be affected in at least four ways: firstly, some additional employments can be created, such as in the manufacturing of pollution control devices; secondly, some existing employments will be substituted, such as in shifting from fossil fuels to renewable, or from truck manufacturing to rail car manufacturing, or from land filling and waste incineration to recycling; thirdly, certain types of jobs can be eliminated directly without any immediate replacement as when the packaging materials are discouraged or banned and their production is discontinued; and finally, it can also appear that many jobs will simply be redefined in terms of the day-to-day skills sets, working methodologies and profiles (UNEP, 2007).

In addition to this, there are also several questions that to what extent any specific community, region, or country could benefit from green employment or green jobs. Currently, different local, national and international development agencies are initiating different locally-adopted development strategies response to different climate challenges. Those initiatives range from greening the economy through employment creation to peace building in the local and regional territories. The central theme of those initiatives are building climate resilient society, where citizens can be the part of climate-friendly development process in their communities as well as in their regions.

Organizational Responses to Climate Change

Climate change is not only an environmental issue, but has clear economic and social consequences and is inextricably linked to a broader sustainable development agenda. Therefore, the concept of climate change adaptation is now at the centre of different organizations' working mandates. That is now being promoted within the framework of social protection, enterprise development and employment generation, etc. Development at the

local level is something more than just economic growth. By greening the world of occupations, it is possible to promote local development by realising green jobs at local-level, which can gradually contribute to the goals of greening the economy (low-carbon economy or development) and re-structuring patterns of employment locally. This entire framework can adopt climate-resilient local economic development as an integrated development methodology at the local level, as it concerns with territorial development strategies by focussing different endogenous factors, such as local economic fabric, human resources and institutional setting.

In this context, experiences from different development initiatives show that there are many entry points and motivations to initiate green jobs. A wide range of interventions can promote green jobs, such as stimulating entrepreneurship

and business or cooperative development, improving local company competitiveness and exports, upgrading value chains that bring local benefits, attract inward investment and tourism, upgrade skills and improve access to local labour market information, reduce social exclusion, improve physical and financial infrastructure and strengthen the institutional framework and governance of the area.

These interventions can play instrumental roles by addressing to response, mitigation and adaptation strategies of climate change. In summary, green jobs is not just the restructuring of contemporary employment or the world of works, it is also an incentive that can help the citizens to better prepare to confront climate change with minimal damages.

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