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CROSS-SECTORAL ISSUES
SECTION 3.2. GENDER
FATIMA DENTON

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Gender, Climate Change and Development

Observations of the literature to date

Scant attention has been paid to the linkages between gender and climate change. A close look at both the Kyoto Protocol and the United Nations Framework Convention on Climate Change (UNFCCC) reveal that the word 'gender' is missing. Indeed the literature to date reflects the rather meagre flow of information on the issue. Earlier literature makes mention of the relevance of gender and climate change and the fact that more efforts need to be made to address the issues (Denton, 2000).ⁱ During the very first Conference of Parties in Bonn 1997, the climate debate was mainly scientific and the links with development rather peripheral. The association with gender, however, remained even more remote as the existing power differentials (usually an attribute of gender relations) became polarised mainly between two main axes i.e. the industrialised nations (Annex 1) and the developing countries (non Annex 1). At the Seventh Conference of Parties in Marrakech (COP7), the Samoan delegate requested that institutional changes within the UNFCCC bureaucratic machinery were needed to make allowances for what is largely perceived as heavily gender-imbalanced structure.ⁱⁱ

Perhaps the biggest contribution to the subject to date is reflected in the Oxfam publication "Gender, Development and Climate" (Masika, 2002) when an entire journal was dedicated to explore the linkages between gender, development and climate change. Nonetheless, the subject is gaining some interest as is demonstrated by two side events during the Eighth and Tenth Conference of Parties (COPs 8 and 10) in Delhi and Buenos Aires respectively. Gender analysts have displayed a militant approach and taken a pro-advocacy stance – arguing the need for visibility on an important subject that has to date been given peripheral attention. Prior to that, at COP 1 in Bonn in 1995, 'Solidarity in the Greenhouse' a women coalition, was set up advocating a special focus on women's energy needs (Skutch, 2002).ⁱⁱⁱ The literature has not just centred on visibility issues but explored the different levels of vulnerability vis-à-vis the gendered nature of environmental resource management analysed from a human security dimension (Dankelman, 2002, Denton, 2002 and Roy and Venema, 2002).^{iv} Others have sought to focus on environmental disasters through gendered lenses. True, hurricanes and floods do not choose their victims. They are oblivious to temporal, geographical and gender issues and tend to strike in an indiscriminate fashion. However, both the extent and the manner to which people

are affected and recover remains highly gendered. Crisis recovery, resolution and recovery tend to affect women and men differently (ILO, Gender in crisis response in focus Programme on Crisis Response and Reconstruction – Recovery and Reconstruction Department).

However, the poverty argument seems to be a continuing theme given that poorer and vulnerable people have a low adaptive capacity and would be most affected by the negative impacts of climate change and variability (IPCC, 2001a)^v. Indeed addressing poverty and equity are necessary to develop successful climate policies and reduce the harmful effects of greenhouse gas emissions.^{vi} Thus, whilst a few analysts have focussed on response strategy (T. Cannon, 2002 and R. Rivero Reyes 2002)^{vii} there has been an insufficient analysis of the current negotiation process to understand how gender issues can be mainstreamed into the negotiations. Some analysts have attempted to analyse issues relating to vulnerability, mitigation and adaptation from a gendered perspective (Wamukonya and Skutch http://www.energia.org/pubs/papers/cop8_gender.pdf),^{viii} as well as closely evaluating flexible mechanisms such as the Clean Development Mechanism and calling for more gender friendly CDM projects (Skutch, 2002).^{ix} Yet, in spite of the absence of gender in the Protocol, opportunities do exist *inter alia* within the framework of Article 2 (especially from a food security and sustainable development perspective) where gender issues could be exploited and incorporated. The opportunities for mitigation have not received much attention perhaps because vulnerability and adaptation are considered to be social phenomena, more rooted in local realities, whereas the links with gender are perceived as more natural.

Linkages between gender, climate change and development

Environmental management is not gender neutral. Crafting adaptation and climate related policies would be most effective if we are able to evaluate the affected groups and their level of vulnerability. Focusing on some of the impacts of climate change one notes that gender issues are in almost all cases a strong component of the way the environment is managed. For instance, the rise in sea levels remains problematic,^x and will lead to severe floods and population displacement which would affect the most vulnerable i.e. people living in poorer and unsustainable forms of shelter, facing security problems relating to land, tenure and rights. Problems relating to out-migration tend to have huge social and economic impacts on women. As witnessed with the Mozambican floods in 2001 and 2003, gender and child related vulnerability remained key characteristics of the magnitude and the devastating

consequences of the flood. Women, who often have little adaptive capacity, suffer reduced access to vital resources and tend to be among the worse hit. Such environmental crises as witnessed in Mozambique tend to affect women and men differently and their management should also be viewed from such power differentials and gender lenses. As household managers, women play a key role in rebuilding homes and infrastructures. In this respect their vulnerability is often matched by resilience to develop useful safety nets and organise themselves through a wide array of mobilisation strategies.

Climate change would also affect the availability of water. It is estimated that nearly 250 million people experience water scarcity relating either to forest or fresh water supplies. (See J. Siles)^{xi} Water shortages have huge gender implications as women and children often bear the responsibilities of water collection and also making sure that water is treated. Variation in precipitation levels affects food security. Women are very actively involved in agriculture and in the food chain where they constitute the bulk of the active labour force.

Another impact of climate change is a decline in human health. Women are often at the receiving end of respiratory illnesses as a result of exposure to toxic pollutants inherently associated with cooking and using poorer forms of energy such as biomass. Incidences of HIV related illness in the developing world among women's groups is a debilitating factor as it reduces their livelihood options. Therefore, in all these sectors and areas, while poor men are not immune to these problems it is undoubtedly the case that poor women, already faced with acute structural difficulties in terms of water shortages, agricultural productivity and loss of livelihood will have to contend with a greater share of climate related difficulties due to higher incidences of vulnerability.

Yet there is hardly any need to justify the gender, climate and development nexus given the obvious interrelations. Gender is one of the single biggest issues affecting human development. Gender is often wrongly perceived in a reductionist manner conflating the subject to women's issues when it is precisely power differentials and social relations between women and men that are at stake. There are many reasons why it makes sense to include and mainstream gender into climate policy and the current debate on adaptation and mitigation. First, the IPCC mentioned that the negative impacts of climate change would adversely affect poorer people with the least capacity to adapt. The term "feminization of poverty" has been used in the past

two decades, especially given the rise of female-headed households but the linkages between gender and poverty are often complex and blurred. Whilst it is naive to assume that women are poor because they are women, it is also true that women, as a result of socialisation, gendered divisions of labour and socially ascribed roles, and poorer access to vital resources, tend to have a higher incidence of poverty than their male counterparts. Second, women are involved and highly reliant on a number of climate sensitive sectors such as agriculture, energy, and forestry. Third, climate change could worsen the current socio-economic status of poorer communities. Fourth, developing and crafting skills that would enable poor women and men to adapt to climate change is perceived as crucial in the fight against poverty. Poor communities need to build their adaptive capacity and develop sufficient social capital through interest group and mobilisation strategies in order to withstand the several climate and human -induced stresses. Many advocates of pro-poor development policies believe that whilst climate change is deeply rooted in scientific empiricism, the Kyoto Protocol treaty will be threatened if efforts are not made to factor into the debate social issues such as poverty, gender and issues relating to equity and participation.

To date, the climate debate has revolved around market interests with greater emphasis on ways of attenuating the negative impacts of anthropogenic activities resulting in the proliferation of greenhouse gas emissions. Industrialised nations have mainly concentrated their efforts on prioritising emissions reductions in order to fulfil their Kyoto obligations and much time has been squandered on drawing recalcitrant countries fully committed to the negotiating process. The issue of leadership dominated the earlier negotiations to the extent that gender issues seemed relatively minor in comparison to such complex notions of emissions reductions.

Exploiting climate related opportunities to mainstream gender

Climate change is invariably analysed in terms of negative impacts and implications. Yet beyond the doom and gloom literature, climate change can augur a new dawn for gender relations.

Adaptation Opportunities - Adaptation is widely perceived as measures designed to reduce the vulnerability of poorer communities and increase their resilience to climate related stresses and extreme events. Within the wider context of poverty alleviation and the realisation of the Millennium Development Goals (MDGs), adaptation strategies, especially if enacted within a sustainable development

framework, can help vulnerable groups prepare for climate extremes and cope with short term constraints.^{xii} While it is true that poorer communities and women in particular are more concerned with survival issues, crafting adaptation skills would limit losses in income and create livelihood options. Although adaptation and mitigation are part of the same continuum necessary to combat the harmful effect of greenhouse gases (GHGs), it can be argued that poor women cannot be blamed for polluting the environment through productive activities that are themselves vital in granting them economic and social empowerment and thus severing ties with poverty.

Article 2 of the Kyoto Protocol, which makes specific reference to food security and sustainable development can be given wider interpretation and perceived as an opportunity to address gender imbalances and build capacity especially in the food chain and agriculture sector where women continue to play a major role. Devising adaptive strategies would mean drawing from examples using environmentally related incidents such as drought and desertification or, as Downing argues, learning from case-studies of food insecurity with reference to climate related disasters and long term climate change in order to determine baselines for both vulnerability and adaptation (Downing, 2003).^{xiii} Different resource management techniques, the cultivation of drought resistant crops, watershed management and the efficient use of water could help temper variations in precipitation and limit the dual effects of heat waves on crops and livestock. At the local level, cheaper options of limiting food insecurity would include using storage facilities to keep food and efficient energy systems to transform and conserve perishables fruit and vegetables. Women, who are often in need of such technological devices tend to lack access and often have to dump their agricultural produce or sell it off at auction prices

Implementing gender sensitive CDM Projects -The Clean Development Mechanism, in spite of its complex modalities, could initiate a number of projects where low quality polluting energy agents such as biomass can be substituted with solar dryers, improved cooking stoves and other more efficient decentralised energy systems. However, improving the flow of information amongst stakeholders is important especially for poorer women who due to their status and low literacy and numeracy rates, especially in developing countries, tend to be excluded from an information system that would build their adaptive capacity and increase market related potential. More efforts need to be made to make CDM projects more accessible and ensure that information for stakeholder participation is available both

at national and local levels. The criteria needed for eligible CDM projects and the process for accessing funds from the Global Environment Facility (GEF) need to be simplified. Project proposals could obey less stringent rules and conventional lines. Funding from the Special Climate Change Fund could help fund adaptation activities that help to foster gender equity. Climate change can signal new opportunities to take advantage of cleaner technologies and investment in adaptation and adaptive capacity.

Gender sensitive policies as an integral part of change – Policies are an essential part of social transformation. Poverty alleviation and gender equity will happen at a gradual pace in a conducive political environment where both institutional capacity, governance and leadership issues are considered important elements of development. Adaptation strategies can have optimal gains and benefit a wide range of sectors including health, energy, education and agriculture. Such combined and synergistic effects for rural development and potential for poverty alleviation would imperil any government that chooses to ignore its importance. Providing governments and policy makers with the relevant information to assess vulnerability among and across communities and sectors can help to lay the foundation for an adaptive policy framework. Equally the Adaptive Policy Framework (APF) which serves to explore linkages between climate change adaptation in relation to sustainable development on the one hand and global environmental issues on the other (for more details see Lim and Spanger-Siegfried 2005),^{xiv} should seek to factor in gender concerns right from the start when considering issues such as health, agriculture and disaster management.

Engendering knowledge management – The relationship between women and nature is often caricatured in the ecofeminism literature as far too simplistic. However, whilst the literature on vulnerability, gender and climate change may be relatively new; there is an impressive body of literature on disaster management, social capital and organisational strategies in the event of climate related catastrophe as well as in relation to drought and food insecurity. The term ‘indigenous knowledge’ is often used to mark the need to exploit local knowledge and skills; yet going beyond this concept and taking advantage of women’s experience in environmental resource management is often paid lip service. Women tend to have a wide range of knowledge on water issues ranging from availability to quality yet their knowledge is hardly used in water resource management and protection. Equally, experience from other disaster management can be used as exemplification to

understand how climate change and variability would affect gender roles and relations. Women's knowledge in crop and water management could be used as a baseline to implementing future adaptation projects. Honing and enhancing the adaptive capacity of vulnerable systems and people would mean using past experience and existing knowledge to build and manage a 'knowledge bank' which can be tapped into both for scoping future adaptation projects and for informed policy implementation. From a conceptual perspective there is a considerable need to expand the literature on gender and climate change. Little is known of the extent to which climate change or extreme events would affect women and men and how vulnerable groups would fair under difficult climatic conditions. The bulk of the current literature is not weighted on scientific empiricism but rather based on hypotheses drawn from the development and gender literature. Both adaptation and mitigation have strong human security and gender implications and adequate resources need to be given to research that would take into account such concerns. Concepts such as double exposure (climate change and globalisation) need to be explored through gendered lenses to ensure that poor women do not end up as "double" losers.

Exploring social capital and building safety nets – Climate change is not a new phenomenon and communities and individuals have been adapting to variations in climate for generations. Understanding social and societal implications of adaptation, particularly in relation to climate variability, would mean making forward and backward projections^{xv}. Adaptation would necessarily entail non-climate related options. Creating safety nets has the potential to reinforce a sense of preparedness and go a long way in building capacity in vulnerable societies. This is primarily because societies in general have the potential to adapt to change whether this is climate related or not. Adaptation measures and strategies would need to meet local needs and take into account social acceptability. There has been a proliferation of women's and associated interest groups mushrooming across the developing world, indicative of changing times and rural dynamics particularly with regard to the decentralisation of power and the self reliance mantra. Communities with more sophisticated use of social mobilisation strategies would stand a greater chance of withstanding the negative impacts of climate change. Attributes of what constitutes a good social mobilisation strategy, based on case-study examples, can be used to replicate such methods elsewhere and can serve as a learning tool for both development and environmentally related change.

Using development projects as part of the adaptive capacity learning curve –

The debate on climate change has consciously or unconsciously polarised two groups of researchers i.e. the development and climate group.^{xvi} However, climate change cannot be divorced from development as both have implications for human welfare and poverty alleviation. Thus, there is a need to learn from development research especially where adaptation activities are concerned since these are, in effect, an extension of rural development projects. Development agencies such as Oxfam, Action Aid and Care International have been involved in a number of projects that are related to water, food security and healthcare issues all of which are integral to climate change and extreme events. On the other hand, much has been written about gender and development. What the climate debate should do is to exploit the loopholes and not use this new arena to squander efforts made in other development projects or indeed replicate the same mistakes. Building gender adaptive capacity is about taking into account the response capacity of women and men and their degree of vulnerability and/or resilience. The adversarial culture which is almost integral to gender analysis should not be the prime factor for promoting change but rather used to demonstrate how gender inequities could negate and threaten development and poverty alleviation efforts. The problem of ever increasingly disgruntled men faced with growing poverty and inability to provide for their families is real and must be factored in within an overall gendered response strategy to avoid familiar problems of men 'muscling in' on profits largely accumulated as a result of women's hard labour.

Conclusions

Emerging priority research themes: Gender impacts of both climate change impacts and of measures to reduce emissions.

The impact of climate changes and climate variability on different sections of society, particularly women, has largely been overlooked. Evidence from diverse fields suggests that women may have distinct vulnerabilities to climate change in poor countries. Research on quantifying and alleviating this element of vulnerability is vital to designing both mitigation and adaptation policies which alleviate impacts on the most vulnerable.

Source: Katrina Brown and Neil Adger, Tyndall Centre

The main argument here is whether gender is an issue in overall climate policy. The answer is yes especially if this is seen from a poverty alleviation and sustainable development angle. The sub-question of who is vulnerable and who is able to adapt is also largely gendered. Women are still at the lowest end of the social hierarchy in spite of their enormous contribution both in the agriculture and forestry sectors yet they continue to subsidise development mainly through productive activities which are perceived as 'free'. Climate change is often presented as a negative chain of events with almost cataclysmic impacts but can also mean a set of positive events for food security, investment in energy technology, new research, capacity development etc. etc. The analogy of winners and losers can also apply to groups of individuals or communities most able to optimise these new opportunities.

However, the discussion on gender and climate change still takes place in the context of advocacy and, due to information deficit, particularly from an empirical perspective, there is little certainty on how and the extent to which poor women would be affected by climate change or indeed climate variability. Also, gender relations have invariably suffered from low development priority and this relative neglect is reflected in the climate policy where funding reflects the old order of development where gender relations are permanently relegated to secondary level in the face of seemingly high priority issues. It is likely that gender relations and the learning curve necessary to move the debate from rhetoric to action will occupy a longer timeframe as gender relations particularly in association with climate change is lifted from relative obscurity and given some visibility.

Authoritative research based on scientific empiricism on how gender issues can affect climate policy development is needed to address analytical gaps that exist in the literature. Closer attention should therefore be paid to adaptation as a tool in reducing structural constraints and militating against the harmful effects of climate change. The role of policy to address gender imbalances and environmental management is equally important to set the tone not just at the international level but at local and national level where implementation is often lacking. Gender related concerns have the potential to rock the very foundations of sustainable development and threaten the legitimacy of the climate regime. If policy makers and development analysts continue to ignore gender issues they do so at their peril.

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