"Climate Justice and Gender Justice: Building women's political agency in times of climate change"

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ABSTRACT: Socio-economically vulnerable people, and women in particular, are generally those most impacted by global climate change (because of their gendered/racialized socio-economic roles and often their geographic location). The same people tend to be the least-equipped to deal with those impacts (because of their weak economic and political position). Women, who are usually unpaid or underpaid for their work, have special contributions to make towards climate change adaptation because of gendered differences in positional knowledge of ecological and water-related conditions. Community-based education, organizing, and alliances with labour unions and civil society groups are fundamental to making it possible for this knowledge to be shared and utilized, through equitable democratic participation by marginalized people, especially women.

Civil society organizations in both the Global South and the North have important expertise for building community resilience to face climate change. This paper discusses initiatives and models for community-based environmental /climate change activism, and promising areas of collaboration with university-based researchers. It explores emerging challenges and potentialities linking civil society organizations and climate justice, and outlines the methods and results of several related international and local projects. Local-level initiatives led by civil society organizations can effectively address gender equity challenges by building women's knowledge, interest and engagement in water-related and climate change issues, focusing on low-income neighbourhoods where paid jobs are scarce. Global networking inspires and facilitates similar processes worldwide.

KEYWORDS: climate change, climate justice, gender, public participation, environmental education, women and work, green community development, international equity, income distribution, labour unions, civil society engagement, climate change adaptation

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I. Introduction

In the coming decades, countries around the world will face increasingly severe challenges related to global climate change. While the details vary from country to country, the impacts will be especially grave for marginalized people, whose access to food, potable water, and safe shelter may be threatened due to fluctuations in rainfall and temperature, and to extreme weather events.

International strategies for addressing climate change are in disarray. The complicated financial and carbon-trading mechanisms promoted by the United Nations and other global institutions are far too bureaucratic, weak, internally-inconsistent, and scattered to represent meaningful solutions to climate change. And the housing, health, and livelihoods of marginalized people worldwide are already being threatened by climate-change-related impacts. This means that the marginalized in every community, by definition, have expertise in how priorities should be set to address climate change. Their experiences, knowledge and views must be part of local, regional, national, and international governance – including urban planning and housing, water management, agriculture, health, and finance policies.

A recent book on urban climate change adaptation summarizes the major challenges that low and middle-income countries face as a result of climate change: "(M)ost of the world's urban population live in cities or smaller urban centres ill-equipped for adaptation – with weak and ineffective local governments and with very inadequate provision for the infrastructure and services needed to reduce climate-change-related risks and vulnerabilities. A key part of adaptation concerns infrastructure and buildings – but much of the urban population in Africa, Asia and Latin America have no infrastructure to adapt – no all-weather roads, piped water supplies or drains – and live in poor-quality housing in floodplains or on slopes at risk of landslides. Most international agencies have long refused to support urban programmes, especially those that address these problems" (Satterthwaite et. al., 2007, p. vi). Climate change thus exacerbates already-grave sustainable development challenges.

This paper examines bottom-up strategies for facing these kinds of challenges, especially with regard to how these approaches address gender and women's social vulnerability. The details of each particular community's situation – ecological, social, political – are crucial for this type of approach. How do communities organize socially and politically to meet biophysical and weather-related changes that affect their livelihoods? How are the needs of the most vulnerable addressed?

I have been involved with university-community collaborations to address these challenges through two international projects -- the Sister Watersheds project with Canadian and Brazilian partners (2002-2008) and a Climate Change Adaptation in Africa project with partners in Canada, Kenya, Mozambique, and South Africa (2010-2012) -- as well as recent green community development initiatives in several marginalized neighbourhoods, and several additional networking projects. This work has demonstrated the wide applicability of local-level efforts in vulnerable communities to address equity challenges by developing strategies and materials for increasing the knowledge, interest and engagement of local residents on water-related and climate change issues, focusing in particular on women and youth. I have seen how collaborative partnerships between university researchers and community activists/organizers can generate fruitful synergies, strengthen educational outreach, build skills, and foster global networking.

"Climate justice" is defined by activists in various ways. For example, the Climate Institute says, "Climate Justice is a vision to dissolve and alleviate the unequal burdens created by climate change. As a form of environmental justice, climate justice is the fair treatment of all people and freedom from discrimination with the creation of policies and projects that address climate change and the systems that create climate change and perpetuate discrimination" (Climate Institute 2013).

The international organization Climate Justice Now! states:

- ◆ "Climate justice is based on the understanding that, while climate change requires global action, the historical responsibility for the vast majority of greenhouse gas emissions over the past 250 years lies with the industrialised countries of the North. Cheap energy – in the form of oil, coal and gas – has been the engine of their rapid industrialisation and economic growth.
- ♦ Communities in the Global South as well as low-income communities in the industrialised North have borne the toxic burden of this fossil fuel extraction, transportation and production. Now these communities are facing the worst impacts of climate change from food shortages to the inundation of whole island nations.
- ♦ See the Bali Principles of Climate Justice: http://www.indiaresource.org/issues/energycc/2003/baliprinciples.html
- **♦** Genuine solutions include:
 - leaving fossil fuels in the ground and investing instead in appropriate energy-efficiency and safe, clean and community-led renewable energy
 radically reducing wasteful consumption, first and foremost in the North,
 - but also by Southern elites.
 - huge financial transfers from North to South, based on the repayment of climate debts and subject to democratic control. The costs of adaptation and mitigation should be paid for by redirecting military budgets, innovative taxes and debt cancellation.
 - rights-based resource conservation that enforces Indigenous land rights and promotes peoples' sovereignty over energy, forests, land and water.

• sustainable family farming and fishing, and peoples' food sovereignty" (Climate Justice Now! 2013).

II. Gender Justice and Climate Justice

Women are generally the experts on climate change impacts and priorities at the grassroots level, because of its impacts on their paid and unpaid working lives, but they usually have subordinate or limited roles in policy and governance. This needs to change if the challenges of global warming are to be effectively met (Perkins and Figueiredo 2013).

Women are not only "victims" of climate change, they are also stakeholders, leaders, and actors producing change. "There is the potential, albeit largely untapped, to facilitate the integration of women's economic empowerment in mitigation and adaptation measures and thus be able to achieve several objectives simultaneously" (Bäthge 2010:4).

Claims the International Labour Organization, "Huge opportunities exist to create green jobs through energy and industrialization policies that reduce the environmental footprint. These jobs can provide decent work and incomes that will contribute to sustainable economic growth and help lift people out of poverty. Women, with their unique knowledge and capabilities of natural resource management and use of energy sources, are strong change agents and key contributors to climate change mitigation and adaptation programmes at local, regional and international levels" (ILO n.d.: 1) But the same report points out that it is unknown how many of the 2.3 million jobs created in the renewable energy sector in recent years, or the 20 million additional jobs expected to be created by 2030, are women's jobs (ILO n.d.:3).

The International Trade Union Confederation, in a press release decrying the failure of governments to accomplish more at the Warsaw Conference of the Parties which ended on November 24, 2013, called for measures to green all industries and build widespread economic transformation: "The labour movement will step up its efforts and mobilise to ensure working people demand climate action with investment in greening all industries to drive sustainable jobs supported by Just Transition measures – a critical strategy for ensuring workers are fully involved in the transformation needed to save our climate" (ITUC 2013:1).

At the World Social Forum in Tunisia in March, 2013, a workshop sponsored by the Friedrich-Ebert Foundation focused on "Just Transition from a gender perspective." According to the organizers, "A transition to a future of enriched lives, a healthy planet and just societies still is possible....Without gender justice, there cannot be social justice" (Mayer 2013).

Rachel Harris of WEDO, the Women's Environment and Development Organization, in a recent presentation on gender and the Just Transition, called for the elimination of labour market discrimination, elimination of barriers to women's participation in the formal economy including access to education, credit, healthcare and social protection (Harris 2013).

"Since 2010 the COP decisions on response measures have referred specifically to the vulnerability of women and children and the positive and negative impacts response measures can have on these segments of the population. However, with regard to a just transition to a "green economy" with decent jobs there can actually be opportunities in response measures to involve women in capacity building and training activities so they can partake in the benefits of this transition. WEDO's presentation at the response measures forum focused on this opportunity and what it takes for economies to fully involve women in their formal structures.

Some of the recommendations include:

- Ensuring that transitions to a new energy economy includes equal opportunities for both women and men to participate in job trainings and employment
- Diversify the workforce as well as the economic landscape creating work atmospheres that are comfortable and conducive to a diversity of employees
- Recognition of and utilization of skills acquired from unpaid/care labor (i.e. management, multi-tasking, diplomacy, mediation, detail-oriented)
- Consultation with those transitioning from the previous labor force and those transitioning into the new work force to ensure needs and concerns are met and incorporated into new jobs framework
- Ensuring employee safety, security and well-being at the workplace
- Technologies used in the workplace are accessible to diverse employees
- Adequate compensation for unpaid/care work
- Workers' rights/safeguards and social protections
- Incentives for private sector to promote gender equality standards for decent work and quality jobs" (Harris 2013).

Even in Europe, a 2012 report found that "women's involvement in climate change decision-making at national, European and international levels is still low" and that women are a low proportion of graduates in scientific and technological fields deemed important for climate change response (EIGE 2012: 3).

III. Climate Change and Work

Climate change related work tends to be focused on infrastructure renewal, alternative energy development, housing retrofits, etc. – traditionally maledominated jobs (SustainLabour 2012:2).

But health care, sanitation, teaching, agriculture, and other often female-dominated work roles are also important in times of climate change.

"It is therefore necessary for governments and trade unions to act in order to avoid the trend for women being excluded from the benefits of the change in the production model towards sustainability. The proportion of green jobs held by women must be increased and the quality of these jobs guaranteed. It is not just a question of justice: The change towards sustainability will not be possible without the fundamental contribution of women, who perform must of the tasks which are crucial to achieving this aim. This is most noticeable in less developed countries, where the majority of the population most vulnerable to the risks entailed by the current production model is located" (SustainLabour 2012:2).

Examples of the kinds of jobs and economic responsibilities which women are already assuming in relation to climate change include:

- natural resource conservation and forestry/agroforestry
- development of alternative energy sources
- soil and water conservation and environmental services; agriculture adaptation
- disaster prevention

Bäthge (2010), Adeniji (2011) and Perera (2012) give a number of examples of each of these types of work in the global South. An International Labour Organization publication on gender equality and green jobs (ILO, n.d.) gives examples of green job creation in the global North as well.

Because gathering biomass fuel is "women's work" throughout the global South, the transition to non-carbon energy sources would have the double benefit of allowing women to use their time more productively.

"One of the most important ways of reducing poverty and promoting national development is by involving women in productive economic activity rather than wasting so much of their time and effort securing basic fuels for survival. Besides being a constraint on general economic development, national dependence on biomass energy creates major limitations on women's opportunities for social advancement and the effectiveness of their work. Energy policies nand interventions that recognize women's roles in the energy sector and build on their expertise and influence will be much more effective in promoting sustainable economic an dsocial progress. In places where traditional biomass fuels are coleted and managed primarily by women, there are serious economic and social consequences. These activities substantially increase women's physical burdens, damage their health, and take up time that could otherwise be spent on caring for their families, educating themselves and their children, and engaging in income-producing activities. Burning biomass fuels is also a major contributing factor in high sickness and mortality rates for women and children" (Karlsson 2007:12).

No less important are skills-sharing and transmission for sustainable commons governance – largely traditionally female job roles such as teaching, childrearing, and community work (Perkins 2013a:929; Perkins 2013b).

"Time and again, experience has shown that communities fare better during natural disaster when women play a leadership role in early warning systems and reconstruction. Women tend to share information related to community well being, choose less polluting energy sources, and adapt more easily to environmental changes when their family's survival is at stake. Women trained in early warning disaster reduction made a big difference in La Masica, a village in Honduras that, unlike nearby communities, reported no deaths during Hurricane Mitch in 1998. Integrating gender perspectives in the design and implementation of policies and laws also helps meet the gender-differentiated impacts of environmental degradation – shortage of water, deforestation, desertification – exacerbated by climate change" (ILO n.d.:3).

Since many adaptation projects will undoubtedly be undertaken locally, especially in the global South, microfinance will likely play a large role in funding them. "The value (microfinance) holds for climate change adaptation is in its outreach to vulnerable populations through a combination of direct and indirect financial support, and through the long-term nature of its services that help families build assets and coping mechanisms over time... (this can) help families build and diversify assets, so that they have more than one means of livelihood; more than one skill set to avoid dependency." (Hammill et.al. 2008:117-119). Women may have greater access to microfinance than to other loans, and "several compelling case studies of specific (microfinance institutions) have concluded that the net impact of various gains and losses associated with (microfinance) is to empower women and reduce vulnerability" (Hammill et.al. 2008:119).

The Grameen Shakti (GS) microloans initiative in Bangladesh has trained more than 5,000 women as solar PV technicians and maintenance workers and has installed more than 100,000 solar home energy systems in rural communities in Bangladesh. GS aims to create 100,000 jobs in renewable energy and spinoff businesses (ILO n.d.:4).

Brazil's "one million cisterns" program in the drought-plagued Northeast includes special courses for women who learn concrete construction skills in order to qualify for jobs building water-retention tanks. (Mulheres Pedreiras 2013:1). According to a 39-year-old teacher of the course, Maria Verônica dos Santos, who took a similar course with men in 2008, there is some discrimination against women. "Some say, do you think a woman can learn to do this?, but I don't talk much, I just go and show my work and they see that I can really do it.... It's difficult, it's a hard job, but I really like what I do and if (other women) have the will, they can learn to do it very well" (Mulheres Pedreiras 2013:1). Hundreds of women have been trained in this program since 2003 -- along with many more men -- as a result of

concerted activism and organizing by women's groups in Brazil and their international partners and supporters (Moraes 2011:141-166).

In South Africa, the "Million Climate Jobs Campaign" sponsored by COSATU, the Confederation of South Africa Trade Unions, was initiated in 2011 and calculated that more than 3 million new jobs could be created in a Just Transition in South Africa. "Production processes which are more environmentally friendly tend to be more labour intensive, using people rather than machines or chemicals to do the work... Climate jobs can help promote gender equality, because new kinds of jobs created can be opened to both men and women alike, and with equal pay for equal work... Women also need to be considered for the widest range of jobs and skills required to establish a low-carbon economy" (COSATU 2012:42-44).

The first study I could find on how climate change adaptation and mitigation might be affecting women workers is Masterman-Smith (2011?), writing about Australia and focusing on nursing and health professions. She states, "Though little research exists on the implications of greening the economy on workers' rights and conditions, Mattera and others caution that there are no guarantees that green jobs are good jobs.... Indeed many green jobs are substandard and women workers and other disadvantaged groups tend to be concentrated in them. Given the economic, political and social pressures that climate change is bringing to bear, robust labour law that reflects the realities of both a carbon-constrained and socially unequal world, is needed if a just transition for all workers is to be realized" (Masterman-Smith 2011?:2).

A 2012 ILO presentation on "How can women benefit from green jobs?" states that 80 percent of the jobs related to green technologies will be created in the secondary sector (industry/manufacturing) and that women will likely lose out in terms of training opportunities and new skills for these jobs. The obstacles for women's access to green jobs are mainly the same as in the traditional "brown economy": lack of access to education, finance, decision-making, skills, and discrimination. The study advocates "targeted support to green entrepreneurial initiatives /businesses propelled by women, gender mainstreaming in green jobs, support for training and skills for women, addressing of gender inequality in the science and technology education and professional fields, e.g. through affirmative action and champions, and increasing women's access to productive resources" (Wintermayr 2012:19-20).

IV. Old Inequities, New Challenges and Priorities

Climate change heightens the importance of pay equity, affirmative action, training of women and men for jobs across the spectrum of employment, and a broader view of what work should be paid work and how much it should be compensated – traditional and long-standing labour market challenges. This parallels the heightened importance of income distribution, development and poverty reduction

priorities in general, in times of climate change, and is true in both the global North and the global South.

As Bäthge notes, for women to be able to assume a fair share of the jobs and responsibilities connected with global change, the following elements must be in place for them:

- access to education, training and upgrading
- access to and control over productive resources including access to land and ownership rights
- access to markets (land, labour, financial and product markets)
- access to services
- benefits from the use of public funds, particularly for infrastructure, and access to public goods
- means of enforcing claims for unpaid / reproductive work and redistribution/remuneration for such work
- the possibility of generating income from the use of their own labour (Bäthge 2010:7).

The International Labour Organization similarly urges the following steps be adopted:

"Actions to promote climate change adaptation and mitigation:

- Tapping into the vast knowledge and natural resource management abilities of women when devising adaptation and mitigation policies and initiatives for climate change.
- Mainstreaming gender perspectives into international and national policies.
- Ensuring that women and men participate in decision- and policy-making processes.
- Promoting participatory approaches in local and community planning activities.
- Creating opportunities at the national and local level to educate and train women on climate change, stimulate capacity building and technology transfer and assign specific resources to secure women's equal participation in the benefits and opportunities of mitigation and adaptation measures.
- Gathering new sex-disaggregated data and gender analysis in key sectors such as agriculture, tourism, forestry, fishing, energy and water usage to further understand how climate change impacts on women's lives." (ILO n.d.:5).

Gender is increasingly being recognized as a crucial equity parameter for employment in internationally-funded climate change adaptation programs (FAO 2012:40), so there is at least lip-service being paid to the importance of gender justice.

V. Conclusion

Civil society organizations and trade unions have an important role in pressing for the policy and economic changes necessary if women, half the labour force, are to maintain and improve their position as workers in times of climate change. Says a SustainLabour document prepared for the Rio+20 environment and development conference, "Fair sustainable development objectives and commitments, as well as policies and measures in line with the principles of Just Transition, will make the trade union movement and working people the promoters and advocates of a change in the development model towards sustainability. Our vision brings together the social and environmental aspects of sustainable development so that they mutually strengthen rather than limit each other. Furthermore, it makes green and decent jobs a fundamental instrument for the eradication of poverty towards a sustainable and more just world" (SustainLabour 2012:3).

In terms of how to operationalize this good will, I would like to offer a series of ways of framing gender / climate justice. I think these sorts of specifics might help activists and unions to "get on the same page" about what they are trying to do in concrete terms.

- 1) Climate change affects women more than men, due to gendered work and social roles, and women have fewer means to defend themselves. (Women as victims).
- 2) Climate change derived jobs are mostly in male-dominated sectors, so women need Affirmative Action and special training so they will have access to them too. (Women as needy).
- 3) Male-dominated jobs in energy and manufacturing cause the bulk of climate change emissions; female-dominated work roles are much less to blame for climate change. Women also work fewer hours and consume less and drive less. (Women as righteous).
- 4) Women are knowledgeable about climate change's effects, due to their social and economic roles, and how efficient priorities should be set for addressing climate change. (Women as experts).
- 5) Female work roles in health, education, sanitation, agriculture etc. are vital parts of addressing climate change, and thus ARE and should be recognized as 'green jobs'. (Women as essential).
- 6) A broad view of the Just Transition includes new forms of economic organization (beyond market or state) such as commons, which requires networked governance forms at which women are adept. (Women as commoners).
- 7) Bringing communities into the democratic movement to push politics toward a Just Transition requires community organizing and networking which rely

- on women's skills and connections in green community development. (Women as leaders).
- 8) The opportunity and need for economic restructuring provided by climate change creates a possibility of fundamentally revisioning job creation and economic organization; equity by gender, ethnicity, race and class is an essential element of this opportunity and vision. (Women as the vanguard).

In my view, it's crucial to move beyond the "women as needy victims" end of the spectrum towards the "women as experts, leaders and the vanguard" view if climate justice and gender justice are to be embraced in the new kinds of economies we are working for.

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