

SUBMISSION BY the South Centre on ‘on gender-responsive climate policy with a focus on mitigation action and technology development and transfer’

At COP-20, the Parties to the UNFCCC adopted the Lima Work Programme on Gender (Decision 18/CP.20) which seeks to both further advance the implementation of decisions 36/CP.7, 1/CP.16 and 23/CP.18 as well as to advance the integration of gender equality considerations into, and to facilitate, gender responsive climate change policy, in particular, with regard to further strengthening all activities related to adaptation and mitigation as well as decision-making on the implementation of climate policies.

The paragraphs 11 to 13 of Lima Work Programme on Gender call for:

11. *Requests* the secretariat to organize an in-session workshop on gender-responsive climate policy with a focus on mitigation action and technology development and transfer during the forty-second session of the Subsidiary Body for Implementation (June 2015) and prepare a report on the workshop for consideration at its forty-third session (November–December 2015);

12. *Also requests* the secretariat to organize an in-session workshop on gender-responsive climate policy with a focus on adaptation and capacity-building, and training for delegates on gender issues during the forty-fourth session of the Subsidiary Body for Implementation (May 2016) and prepare a report on the workshop for consideration at its forty-fifth session (November–December 2016). Future work could include in-session workshops on other themes;

13. *Invites* Parties and admitted observer organizations to submit to the secretariat, by 18 February 2015 and 3 February 2016, respectively, their views on the matters to be addressed at the in-session workshops referred to in paragraphs 11 and 12 above.

The South Centre, an inter-governmental organisation of developing countries, welcomes the invitation to observer organisations to present views on gender responsive climate policy with a focus on mitigation action and technology development and transfer.

The South Centre is pleased to outline its preliminary views on gender-responsive climate policy especially as it relates to mitigation action and technology development and transfer. This submission is organized as follows: 1) Overview of gender and climate change issues; 2) highlights of gender and mitigation issues; 3) highlights of gender and technology transfer and development issues; 4) some preliminary thoughts on gender and the financing of mitigation actions; and 5) conclusions and recommendations with regard to the matters to be addressed at the in-session workshop on gender-responsive climate policy with a focus on mitigation action and technology development and transfer.

I. Gender and the pillars of Climate Change Protection and Development

Climate change and climate variability are already adversely affecting the lives of countless millions of men, women, boys and girls in Africa, Asia, the Caribbean, Latin America and the

Pacific. Extreme weather events, rising sea levels, and short and medium term climate related threats to water and food production, all have differential impacts on the lives of women and men.

Women and men have different capability, opportunities and access to resources to facilitate the adaptation to a changing climate. Women, as a group, relative to men, as a group, also have different possibilities for recovering from frequent and intensive periods of droughts, floods and hurricanes.

Adapting to climate change and climate variability places increasing burden on women's and men's care and social reproduction work. In some countries, the effects of climate change also place women and girls at greater risks for bodily injury, rape and harassment when they must travel further and further away from home to secure household drinking water, fuel and food (Bridge 2008). In addition, women, due to historical discrimination and biases in both the formal and informal labour markets, financial and credit markets, as well as cultural and social practices, have less assets, income and savings to deal with the loss and damages from extreme weather event.

Climate strategies that call for radical emissions reductions and societal transformation will impact men and women differently, given different cultural, gender and socio economic dynamics. Climate mitigation policy must tackle areas such as public transportation, the accessibility of individual, household and business to clean energy and their responsibilities for energy efficiency production and household goods, waste handling and consumption. Commitments to reduce emissions and transition to low carbon pathways that underlie developing countries' nationally appropriate mitigation actions (NAMAs), all have implications at individual, household and firm levels and have different burden and benefits for men, women, female headed/male headed households, women-male farmers, and women and men owned and operated micro-small and medium enterprises (MSMEs).

Gender issues are therefore important in climate protection policies, specifically in the design, implementation and assessment of mitigation and technology development and transfer strategies as well as the financing of both, for at least three main reasons: 1) climate change can adversely impact structural gender inequalities, to the greater disadvantage of women, given the different cultural, gender and socioeconomic contexts, hence, 2) women and men, given their different challenges, constraints and readiness to take advantage of opportunities around climate change issues should have equitable participation in decision-making around climate change policies; and 3) the success of climate policy will depend on the degree to which women and men in communities are empowered and incentivized to act, thus monitoring and accountability of climate protection policies should take gender equality and women's empowerment issues into consideration.

- 1) Structural gender inequalities are affected by climate change, climate variability and the losses and damages these generate. The effects of extreme weather events as well as the long term chronic impact of climate change on water, agriculture and natural resources may adversely impact pre-existing structural gender inequalities to the disadvantage of women and girls. Crises of health and food systems and the measures implemented to mitigate these may enhance or worsen the situation for gender equality and women's social and economic empowerment.
- 2) Participation & Democracy: The gendered nature of the economic and financial architecture that dominates the responses to climate change has implications for the participation of men and women in decision-making and affects men's and women's lives in different ways. Hence, it is important that women as well as men have a voice in decision-making on climate change policy, especially around adaptation, mitigation, technology and climate finance strategies. A high degree of integration of women's and men's participation and systemic representation (agency) across all aspects of climate governance is essential to ensure the most fair, equitable and cost effective solutions to the climate challenge.
- 3) Accountability & Monitoring: monitoring the gendered outcomes of climate change policy responses is important for pin-pointing reforms of climate protect system so that adaptation and mitigation responses can promote gender equality, poverty eradication and sustainable development. Knowledge, experience, insights and capacities for contributing to the way forward requires drawing on all the available resources to which a country has access in a climate constrained world. Women, Indigenous Peoples, as with other groups that have been historically marginalized, have knowledge, insights and practices that could be integrated in climate protection policies. They also need the upgrading of their knowledge and capacities for ensuring livelihoods, sustainable development and for contributing to local, national and planetary safety.

II. Gender and Mitigation Issues in Brief

In seeking to mitigate GHGs, the focus is on low carbon, clean and efficient energy development, and the enhancement of both natural and man-made greenhouse gas sinks. While the former focuses on industrial production, energy generation and energy-end use intensive sectors such as transportation, the latter revolves around a large number of activities such as agricultural production, deforestation, land-use and land-use changes that are important for the lives and livelihoods of men and women in quite distinct ways. Mitigation strategies, though generally associated with technological interventions, are hence not gender or equity neutral.

Some mitigation actions, such as the provision of clean and modern energy services, save women's and men's time and lives and promote better health. However, other mitigation actions such as those implemented to affect land use, and land-use change and can shift the balance of

economic and social resource distribution between women and men and among different communities and hence can exacerbate inequality. Mitigation strategies that focus on land use such as those that involve investment in land to produce agro-fuels and programme aimed at reducing deforestation and degradation from forests etc., depending on how they are implemented, may displace communities and exacerbate loss of access to land for women. It may also exacerbate or create land related conflicts that disenfranchise women and put women and girls at risk for gender related violence.

Overcoming mitigation and gender blind spots and biases

Mitigation, in as much as it focuses on large scale, capital-intense energy, manufacturing and commercial activities, has not been seen as an area that is amenable to gender dynamics. Thus there has been a blind spot with regard to the household sector in this area of climate change. However, this blind spot is being marginally transformed towards a greater appreciation of the role of the household, informal and community sectors in both creating mitigation factors as well as being areas for the proactive application of mitigation actions.

- *The household sector and black Carbon*

An important area where mitigation efforts can translate into immediate and direct benefits for women on multiple levels is the area of women's cooking activities using traditional biomass and/ or lighting with kerosene lamp in the developing world and its association with the production of black carbon (soot/smoke).ⁱ Black carbon is argued to contribute to about 18 percent of global warming (Rosenthal 2009) is the likely number two leading contributor to global warming. The household sector in developing countries, which is still over-reliant on traditional unsustainable biomass and or kerosene lamps, should therefore increase in importance in the mitigation strategies of developing countries.

Addressing black carbon will require paying greater attention to mitigation at the household level in order to reduce its release into the atmosphere. Reduction in black carbon emissions is now seen as a relatively cheap way to reduce global warming, as it can be accomplished by simply switching to solar and new energy efficient low (or none) soot cooking stoves (GHF 2009 and Rosenthal 2009). As noted by researchers, solar or other forms of energy efficient cooker in 20 million homes at an approximate cost of \$20 each, will cause less smoke and less fuel use (Rosenthal 2009).

- *Gender and Renewable Energy*

The renewable energy sector can produce employment and entrepreneurial activities in the areas of energy development, production and transportation. Here, gender issues arise in terms of 'employment equity and working conditions and women's participation in decision making

(NORAD 2010). There is need for rapid and large scale emersion and enrolment of women in skill building programs in all levels of the six renewable sectors identified by the IPCC (solar, wind, hydro, geothermal, ocean, and biomass-bio energy). Though there is tremendous amount of research on the mitigation potentials of each of the sector, there is insufficient research on the gender dimension of these sectors as well as with regard to the petroleum and oil sector.

- *Gender, land-use, forest management and REDD+*

Women's efforts are critically important in many developing countries for sustainable forest management (reducing harvest rates and harvest damage). Gender concerns and priorities should be an essential core of initiatives designed to improve forest governance arrangements, strengthen capacities and means for forest law enforcement, encouraging adoption of reduced impact logging, strengthening forest conservation programmes. Women's and men's different constraints, challenges and opportunities to respond effectively to new opportunities must be the grounding for the development of community-based small scale forest enterprises in the area of wood and non-wood forest products and improving forest fire management systems (paraphrased from UNREDD 2009).

- *Gender and Response measures*

Gender sensitization in the area of the economic and social consequences of response measures is an important but under recognized area. Actions that attempt to reduce emissions may have negative economic or social consequences for vulnerable groups of men and women in the trade and other sectors as well as with regard to the elimination of fossil subsidies and the applications of levies. These mechanisms need to be assessed for their gender and social equity impacts.

III. Gender technology development transfer and in Brief

The development (or acquisition), deployment, diffusion and transfer of technology to control greenhouse gas emissions is critically important for both adaptation and mitigation in developing countries. Successful adaptation and mitigation of climate change in priority sectors such as agriculture, fishery, forestry, coastal zones, and health require relevant adaptive technologies. The adoption of relevant technologies is also important for systemic observation, monitoring of climate variability and the prevention and protection against climate related disasters at local, subnational and national levels.

In order to contribute to gender equality outcomes, technology development should focus on areas that help to ease women's time burden, scale up their economic activities and promote their human development. Examples include solar or wind powered water pumps for the drying of agricultural products, which in many developing countries is a female-dominated activity. Even as countries seek to upgrade to capital-intensive technologies (e.g., carbon capture and storage,

nuclear energy, clean fossil fuel generation and biofuels) they should ensure that the technologies are appropriate to the needs of different social groups.

Access to technological resources goes hand in hand with capacity building to both enhance the use and application of the technology and access to new equipment and knowledge helps to promote women's awareness, skill and resourcefulness with regard to adaptation and mitigation.

Technology transfer and cooperation is also linked to financing. It is important to focus such support on technology that is gender, social and development friendly and that protects the web of life and promotes ecological security. This includes paying particular attention to protecting traditional knowledge and seeking to improve and enhance its effectiveness through gender-sensitive approaches to traditional knowledge and gender-aware benefit sharing agreements. For example, rainwater harvesting, recharging of ground well and facilitating sustainable agriculture and development are critical to women's involvement in food production and food self-sufficiency. However, these areas tend to be time consuming and impose a heavy care burden on women and girls. Technological support would be beneficial in reducing women's time burden as well as increase their productivity.

III. Some preliminary thoughts on gender and mitigation finance

In examining gender and mitigation and technology development and transfer it is also important to highlight the linkage to mitigation finance which is an important tool for leveraging greater participation of women in mitigation projects and for promoting technology transfer. It is important to also consider mitigation finance because of the fiscal and budgetary implications of financing mitigation actions in developing countries. In the context of constrained climate finance flows, there is likely to be the potential of trade-offs between financing climate activities versus financing traditional economic and social development budgets (such as poverty eradication, targeted gender equality interventions and food security). This is increasingly so if there is in-adequate provision of climate finance at the global level.

There are clear fiscal aspects to financing mitigation activities in developing countries. Unlike, adaptation, which tends to rely more on grant financing, mitigation financing leans more towards loans (low or highly concessional). Both the IMF and the World Bank have pointed out that '(f)iscal policy has a critical role to play in mitigating greenhouse gas emissions and raising revenues for climate finance, fiscal consolidation, and other purposes' (IMF 2012). In the context of the more ambitious mitigation actions that will be expected from developing countries under the Paris 2015 agreement, there will be need for fiscal expenditure vis a vis such activities as Feed-in- tariff programmes, investment subsidies for clean energy and energy efficient investment, tax credits and publicly support R&D. The extent to which strong demands are placed on fiscal policy for mitigation by developing countries will depend on the nature and scope of financing offered through the UNFCCC financing mechanisms as well as the price of

carbon, the operation and function of carbon markets (nationally, regional and globally). Furthermore, the push towards the phasing out of fossil fuels subsidies, while it may relax constraints on government budget, through the elimination of the subsidies, may create higher costs for fuels for cooking, farming etc., unless great care is taken to offset such untoward results.

Where market based mechanisms, such as the CDM and REDD+, are allowed to operate projects, in order to protect women from losing access to land without just compensation, structural and institutional changes will be needed, including land reform that goes beyond western conceptions of property titles. In some cases, conventional entitlement processes have been associated with further marginalization of women and the dispossession of families from land. Land reform must therefore be undertaken in gender-sensitive consultations involving men and women stakeholders in the community. It must also take into account different forms and dimensions of the existing inequities and accounting for both distributive and corrective justice. Thus there has to be social and gender justice preconditions that must be settled on prior to the operations of programmes under REDD and/or similar mechanisms.

There needs to be specific skills-upgrading and knowledge-building programmes geared towards women in order to enable more women to take advantage of climate change related opportunities in the medium to long run. Such capacity building and skill development effort should cut across the financing of the thematic areas of mitigation technology development and transfer and financing. They should focus on all levels from rehabilitative work in home and commercial buildings to infrastructure to technical specialist in carbon risk management. Particular attention should also be paid to building capacities or women to fully participate at all levels of carbon marketing financing instruments and mechanisms. This may mean that some of the funding streams associated with the Convention as well as multilateral development banks may have to be sequestered or redirected toward gender-specific capacity building, education and awareness training.

V. Recommendations with regard to the in-session workshop on mitigation and technology transfer and development

1. Scope of the In-session workshop

The in-session workshop should seek to comprehensively tackle all the aspects related to gender and mitigation and technology development and transfer as highlighted in this submission.

Parties and observers should be encourage to present and discuss case studies and presentations from both Developing and Developed countries as well as different socio economic contexts that focus on at least the three broad categories of actionable entry point for the consideration of gender and mitigation:

- I. Embedding mitigation actions within the context of sustainable development which can help to promote gender equity and women's empowerment by addressing at least four issues: 1) women's and men's energy needs and uses; 2) women's and men's employment and entrepreneurship—potential challenges and constraints in the agriculture, energy and power sectors; 3) incorporating women's and men's traditional knowledge and practices into mitigation strategies and policy frameworks; and 4) paying focused attention on ensuring gender equity in the use, conservation and management of forests.
 - Exploring best practices with regard to promoting women's and men's role in the domestic economy that can have global benefits. Such activities include 1) the promotion of renewable energy through enhance development of bioenergy (e.g., Jatropha oil for cooking, lighting and power); and 2) women and community-led agricultural and village-driven activities around afforestation, reforestation and biogas/waste management. Projects, programmes and projects that support biomass energy development, 'as it can play an important role in sustainable energy development, as well those that seek to understand and promote specific issues areas such as the gender dimensions around mechanisms such as Feed-in tariff programmes should also be highlighted.
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- II. Focused discussion around the equity issues in the carbon market, such as CDM and REDD+, including:
 - Impact on men and women who have no legal land tenure
 - Impact on men and women who are unable to afford the expenses involved in the preparation of environmental impact assessments, the delivery of environmental services
 - Implications for men and women who are not able to meet the range of quantifiable qualification criteria and the provision of upfront and operational finance and risk insurance
 - Privatization of both knowledge and communal lands
 - Risk of the substitution of monoculture timber plantation versus biodiversity-friendly economic activities such as bee-keeping.

Ultimately, the workshop should also seek to show-case the use of gender analytical tools (that are climate policy relevant) into global, regional and national climate protection policies. Both experiences from developed and developing countries across the different global regions should be emphasized.

2. Practicalities of the workshop

The in-session workshop should utilize a variety of techniques including: short focused panel presentation with lead discussants, talk show formats, short videos and skype links with

women's group working on mitigation projects and small group techniques around the key mitigation areas: RE/EE, forests and land-use, market and non market-based mechanisms etc.

ⁱ The IPCC (2007) glossary defines black carbon as the “operationally defined species based on measurement of light absorption and chemical reactivity and/or thermal stability; (it) consists of soot, charcoal, and/or possible light-absorbing refractory organic matter”. In the developed countries the main source of black carbon are diesel fuels. But in the developing countries it is produced from the burning of wood, animal dung, vegetable oil, and other biomass fuels. V. Ramanathan and Greg Carmichael found that “black carbon soot, from burning wood and other biomass, cooking with solid fuels, and diesel exhaust has a warming effect in the atmosphere three to four times greater than prevailing estimates.” (Nature Geoscience 1, 221-227, March 24, 2008). According to Ramanathan and Carmichael, “*black carbon* emissions arising from: (1) "cooking with biofuels such as wood, dung and crop residue," 20% of the total, (2) "fossil fuel combustion (diesel and coal)," 40% of the total, and (3) "open biomass burning (associated with deforestation and crop residue burning)," 40% of the total. They argue that "soot and other forms of black carbon could have as much as 60 percent of the current global warming effect of carbon dioxide.” Ramanathan and Carmichael also argue that “over 400,000 annual fatalities among women and children are attributed to smoke inhalation during indoor cooking”, especially in Asia. The IPCC (2007) defines black carbon as the “operationally defined species based on measurement of light absorption and chemical reactivity and/or thermal stability; (it) consists of soot, charcoal, and/or possible light-absorbing refractory organic matter”