



United Nations Entity for Gender Equality
and the Empowerment of Women

UN Women submission on “Gender-responsive mitigation and technology development and transfer”

Background

At its twentieth meeting, the Conference of the Parties to the UNFCCC (COP-20) adopted the Lima Work Programme on Gender (Decision 18/CP.20) to advance the implementation of existing gender equality mandates across all areas of the climate negotiations. Decision 18/CP.20, among others, invited Parties to communicate views on gender-responsive climate policy with a focus on mitigation action and technology development and transfer. This submission is a response to that invitation.

UN Women’s submission is organized as follows: (i) An Introduction which elaborates on gender equality issues, including the use of gender analysis and gender mainstreaming, and the importance of gender-responsive financing mechanisms; ii) Gender-responsive mitigation, including concrete examples of how gender perspectives were reflected in mitigation actions; iii) Technology transfer and development and the gender dimensions; iv) Recommendations contributing to gender-responsive policies and actions on mitigation and technology development and transfer; and vi) Recommendations on the scope and expected outcomes of the in-session workshop to be held in conjunction with the 42nd session of the Subsidiary Bodies in June 2015.

I. Introduction

The imperative of gender equality

Gender equality and women’s and girls’ human rights and their empowerment are fundamental for pursuing sustainable development trajectories with equitably shared benefits. As such, discussions on the post-2015 development agenda and sustainable development goals, the new climate agreement, and the post-2015 disaster risk reduction framework have all reiterated the centrality of advancing gender equality and women’s empowerment for a truly transformative development path. To better ensure the realization of a just and equitable global climate regime that will shape gender-responsive climate actions on the ground, women and girls must be able to exercise their right to be agents and beneficiaries of climate action and responses and to participate fully in the shaping of such action and responses, including those relating to mitigation and technology development and transfer.

While important progress has been made in recent years, gender inequality remains a key global challenge. Gender equality is an unfinished development agenda. Sustainable development will remain elusive unless the international community addresses the unequal distribution of power, resources and opportunities that perpetuate gender inequalities and poverty, environmental degradation, and tackle deeply entrenched socio-cultural norms and practices that justify and condone discrimination and violence against women and girls, their exclusion from decision-making processes and unequal access to, control over and ownership of productive resources.

Gender equality and women's empowerment in the context of climate change

It has become increasingly evident that climate change has differential impacts on various groups of the population. The poor, including women and girls, are among those disproportionately dependent on climate-sensitive resources for their livelihoods. Women's dependence on and unequal access to land, water, and other resources and productive assets, compounded by limited mobility and decision-making power in many contexts, also mean that they are disproportionately affected by climate change.¹

Gender stereotypes are defined and perpetuated by socio-cultural, religious and economic inequalities. Whether manifested in terms of cultural norms that define "appropriate" behavior for women and men or ownership, inheritance and decision-making practices that limit the ability of women and girls to have equal access to resources, information and technology, these limitations translate into greater vulnerabilities for women in the face of climate impacts while compromising their responses and actions. There is ample evidence² showing how, during disasters such as flooding, women and children are not only among the casualties but also the hardest hit. Because of cultural practices they may not be allowed to leave the house without a man to accompany them; or they leave last because of care-related work.

Given prevailing severe climate variability, large-scale land and water grabs, and pervasive food and nutrition insecurity, the costs of gender inequality for sustainability are high. But in a recent assessment of women's economic empowerment in relation to access to natural resources such as land and water, it was argued that "more equitable access to assets and services – land, water, technology, innovation and credit, banking and financial services – will strengthen women's rights, increase agricultural productivity, reduce hunger and promote

¹ United Nations Development Programme, *Human Development Report 2011: Sustainability and Equity: A Better Future for All*, (New York, 2011). Accessed at <http://hdr.undp.org/en/content/human-development-report-2011>.

² Neumayer, Eric and Plümper, Thomas (2007), *The gendered nature of natural disasters: the impact of catastrophic events on the gender gap in life expectancy, 1981–2002*. *Annals of the Association of American Geographers*, 97 (3). pp. 551-566

economic growth.”³ Moreover, women’s participation in local institutions governing natural resources is critical for sustainable land, forest, and water management.⁴

These vulnerabilities, these differences in circumstances, and the imperative to ensure the realization of their human rights, including the right to non-discrimination and the right to participation, are reasons to define mitigation and technology development and transfer policies and actions that are gender-responsive.

Gender analysis and Gender mainstreaming⁵

Gender equality, women’s empowerment and the realization of their human rights are easily overlooked, in particular, in the context of climate discussions given the argument that climate change impacts and responses, including mitigation and technology development and transfer are “gender-neutral”. Taking this view, however, perpetuates existing gender inequalities and violates the human right of women to be full and equal participants in decisions on climate change responses that affect them and their societies. Realizing women’s human rights implies recognizing and addressing the underlying and/or immediate causes of women’s and men’s human rights violations; challenging structural constraints to the equal rights and choices of women and girls;⁶ and putting in place appropriate policy and programmatic responses in line with human rights principles. A human rights-based approach to gender equality also calls for the participation of marginalized, disempowered and discriminated against groups of women and men in decisions that affect their livelihoods and overall sustainable development.

Gender mainstreaming is defined as “the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any area and at all levels. It is a strategy for making women’s as well as men’s concerns and experiences an integral dimension in the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and social spheres so that women and men benefit equally and inequality is not perpetrated. The ultimate goal is to achieve gender equality.”⁷

Gender mainstreaming as a strategy emerged as a result of dissatisfaction with earlier approaches to narrowing gender gaps, which were often directed exclusively on women, e.g.,

³ Organization for Economic Cooperation and Development, *Poverty Reduction and Pro-Poor Growth: The Role of Empowerment*, (Paris, 2012).

⁴ Bina Agarwal, *Gender and Green Governance: The Political Economy of Women’s Presence Within and Beyond Community Forestry* (Oxford, Oxford University Press, 2010); see also Isha Ray, “Women, Water, and Development,” *Annual Review of Environment and Resources*, vol. 32, (2007). pp. 421-449.

⁵ For a comprehensive discussion on gender mainstreaming and gender analysis, refer to Guidance Note: Gender Mainstreaming in Development Programming, UN Women, 2014. The Guidance Note also includes an Annex on Gender Mainstreaming Toolbox, which includes Gender Analysis Tools, Sector-Related Gender Mainstreaming Tools, Gender-Responsive Budgeting Tools, and Gender Mainstreaming in Programming Tools

⁶ Chant and Sweetman (2012) in UN Women. *Guidance Note: Gender Mainstreaming in Development Programming*. New York, 2014.

⁷ ECOSOC (Economic and Social Council). *Agreed conclusions*. E/1997/2. 1997.

initiatives on ensuring women's and girls' access to education and resources. While such interventions were well-intended, they did not address the underlying causes of gender inequalities, which required broad processes of changing structural barriers, in particular at policy and institutional level. Thus, it was not enough to work toward women's participation in an unjust and unsustainable development process. There was a need to look into the structures and practices that perpetuate inequalities of all kinds and the relations between women and men, particularly with regard to the division of labour, access to and control over resources, and potential for decision-making. There was increased understanding of the importance of working with men to jointly redefine gender roles and relations and to move away from 'women' as a target group, to gender equality as a development goal.⁸

By integrating gender equality components in national public and private organizations, in central or local policies, and in services and sectoral programmes, the long-term goal is to transform discriminatory institutions, recognize that discrimination can be embedded in laws, policies, cultural norms and community practices⁹ that, for example, limit women's access to natural resources and or/technology or ignore their specific needs and contributions to mitigation responses. Such progressive changes rely on access to data, gender expertise, sound analysis, supportive cultures and capacity-building, budgets and the mobilization of social forces.¹⁰

Gender analysis¹¹ is one of the cornerstones of gender mainstreaming and involves efforts to understand how and why issues affect women and men differently and unequally within a particular context or development sector, and what options exist to address them. Prerequisite resources for effective gender analysis include: specialized expertise in gender issues and sector-specific technical expertise to conduct or to use research: time for analysis of data; and access to adequate and flexible financial resources for new research. Gender analysis also relies upon access to national data such as gender statistics, operations research (i.e., findings derived from testing pilot projects, and from programme monitoring and evaluation) as well as qualitative data generated through policy and academic research and participation assessments.

Some of the most commonly used gender analysis tools include the Harvard Analytical Framework and the Moser Gender Planning Framework and the Women's Empowerment Framework. Gender analysis frameworks typically include questions addressing the following:

- i) the differential perspectives, roles, needs, rights, priorities and interests of women and men as social groups and stakeholders in the designated programme sector, country, region or institution, including their practical and strategic gender-related needs and the relations between women and men pertaining to their access to, and control over resources, benefits and decision-making processes at all levels;

⁸ UN OSAGI. *Gender Mainstreaming: An Overview*. New York, 2002.

⁹ UN Women (2014)

¹⁰ UN Women (2014)

¹¹ Based on UN Women Guidance Note, 2014

- ii) the diversity of women's and men's circumstances, social and economic relationships, and consequent status (e.g., class, ethnicity, age, culture, abilities, employment, income, health status, housing status and/or movements);
- iii) social, political, legal, economic and institutional contexts, including national development priorities and strategies, constraints, opportunities and entry points for reducing gender inequalities and discrimination and for realizing human rights;
- iv) the presence and positions of key actors who influence development policies and programmes in various contexts and the extent of their support or opposition in relation to specific issues.

As climate change impacts are not neutral, and women and children have been documented to suffer disproportionately from the impacts of climate change, a gender analysis framework (as above) and gender mainstreaming approach should be taken at every stage of developing mitigation or technology development and transfer interventions. This will help ensure that projects and policies aimed at lowering emissions and enhancing carbon sinks, or oriented towards technology development and transfer are gender-responsive.

The need for sex-disaggregated data and indicators

Policies and strategies and programmes need to be informed by data. For this reason, there is a strong need for the generation of sex-disaggregated data that would help provide the evidentiary support for engaging women in mitigation and technology development and transfer policies and programmes, as well as to show the sustainable development co-benefits of actions on these two thematic areas. Tools, such as Energia's practical handbook for Mainstreaming Gender in Energy Projects, provide guidance on mainstreaming a gender perspective and creating actionable research that analyzes and demonstrates the potential value-added of gender-sensitive activities, while also generating field information on production, technologies and experiences in community-level initiatives using gender-sensitive indicators and evaluation procedures. Similarly, a tool capturing gender equality indicators in areas of sustainable development has been developed by the IUCN¹² covering sectors such as agriculture, energy and forestry in support of its Environment and Gender Index (EGI). The EGI examines gender indicators in the following categories: livelihoods; ecosystem; gendered rights and participation; governance; gendered education and assets; and country-reported activities. The result is a quantitative measurement of country performance at the intersection of gender, environment and sustainable development, providing a vital tool for tracking the advancement of gender equality and women's empowerment while contributing to effectiveness and accountability in implementation.¹³

The Case for Gender-responsive Financing of Climate Programmes

¹² IUCN, *Gender Indicators*. Accessed at <http://www.mtnforum.org/sites/default/files/publication/files/5354.pdf>.

¹³ IUCN. *The Environment and Gender Index (EGI) 2013 Pilot*. Washington, D.C., 2013.

At the Fourth High-Level Forum on Aid Effectiveness held in Busan in 2011, governments made a strong commitment to gender equality by calling for targeted public expenditures to ensure benefits for both women and men. A gender equality indicator has also been inserted in a global monitoring framework on development cooperation, which captures the portion of developing countries with systems to track and make public allocations for gender equality and women's empowerment.

At the national level, gender-responsive budgeting (GRB) is a useful tool to help ensure that gender-responsive policies and plans will have dedicated resources to ensure their sustained implementation. Supported by inclusive consultations engaging women, gender-responsive budgeting has contributed to the implementation of programmes that took into account women's voices and hence were tailored to respond to their needs. It is also a tool to encourage transparency and accountability.

More specifically, GRB facilitates multiple-track gender mainstreaming at sectoral and local levels, as follows: i) it can propose modifications to existing mainstream programmes and budgets to improve their responsiveness to identified gender gaps and needs; ii) it can propose complementary interventions that indirectly address gender priorities and disparities, but can have a tangible positive impact on gender equality and women's empowerment (e.g., water and transportation infrastructure, expansion of health programmes, or small-scale environment-friendly waste disposal systems or alternative energy source for cooking or lighting); iii) it can also recommend simultaneous programmes directed to particular excluded groups to address their specific circumstances; iv) it ensures that performance monitoring systems incorporate indicators that track progress in addressing the gaps identified in the budgetary analysis; and v) it ensures that gender equality interventions are costed and financed, and that there is political will for funding gender-related civil society organizations and strengthening gender institutional mechanisms in government.¹⁴

The Indonesia, the government, acknowledging women's pivotal role in natural resource management, institutionalized a framework to promote gender equality in order to facilitate women's participation in decision-making processes and bridge the many inequalities in access to resources between women and men. A key part of the framework was the introduction of gender-responsive budgeting across seven different departments, including the Ministries of National Development Planning, Agriculture, National Education, Women's Empowerment and Child Protection, and Finance. The Ministry of Forestry revitalized its dormant Gender Working Group and initiated gender-responsive planning, budgeting and implementation alongside its gender awareness and gender-analysis training workshops.¹⁵

Financing climate programmes from a gender perspective is increasingly being recognized by existing mechanisms, including the Global Environment Facility (GEF), the Green Climate Fund (GCF) and the Clean Development Mechanism (CDM).

¹⁴ UN Women, 2014.

¹⁵ UN-REDD, *Integrating gender into REDD+ safeguards implementation in Indonesia*, (2012). Accessed at http://www.unredd.net/index.php?option=com_docman&task=doc_download&gid=10376&Itemid=53.

The Global Environment Facility's (GEF) Policy on Gender Mainstreaming requires all interventions to demonstrate a gender analysis of the specific roles of and impacts on men and women as appropriate prior to receiving funding. The policy notes that project results "can often be superior when gender considerations are integrated into the design and implementation..."¹⁶ requiring project reviews to consider "soft" elements previously overlooked, such as differential social and economic benefits disaggregated according to gender.

The Green Climate Fund's (GCF) governing instrument has institutionalized the consideration of gender equality issues from its inception. The governing instrument provides that "The Fund will strive to maximize the impact of its funding for adaptation and mitigation, and seek a balance between the two, while promoting environmental, social, economic and development co-benefits and taking a gender-sensitive approach."¹⁷ The governing instrument likewise specified that due consideration should be given to gender balance in the composition of the Board (of the GCF) as well as in the GCF Secretariat. The GCF board was tasked to develop mechanisms to promote the input and participation of stakeholders, including women and indigenous peoples.

In the elaboration of its Gender Policy, the Fund acknowledges the exacerbation of gender inequality by climate change impacts, calling for a gender analysis of potential project risks and for women to equally benefit from activities supported by the Fund.¹⁸ Subsequently and to further respond to its mandate to take on gender sensitive approach, the GCF includes a section on "gender" among the information to be supplied by entities applying for accreditation as a fund intermediary to the GCF. Under this section, the applying entity is required to i) demonstrate competencies, policies and procedures to implement the Green Climate Fund's Gender Policy; ii) demonstrate experience with gender and climate change, including a track record of lending to both men and women.

The Clean Development Mechanism has also begun to focus on financing for small-scale projects where women can take a lead role in contributing to mitigation.¹⁹ To address the challenges of financing smaller projects, the CDM system encourages aggregation or "bundling" them together, opening up more possibilities for women to benefit from increased financial access. Similarly, financing of NAMAs designed to capture both sustainable development and climate benefits can facilitate the prioritization of scarce domestic finance for mitigation actions with the best sustainable development impacts. This will also help ensure that MRV frameworks used capture the sustainable development co-benefits of climate actions.

¹⁶ Global Environment Facility, *Policy on Gender Mainstreaming*, (2012). Accessed at http://www.thegef.org/gef/sites/thegef.org/files/Gender_Mainstreaming_Policy.pdf.

¹⁷ UNFCCC Decision 3/CP.17, FCCC/CP/2011/9/Add.1. Accessed at <http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf#page=55>

¹⁸ Heinrich Boell Foundation, *Moving Beyond "Business as Usual,"* (Washington, D.C., 2015). Accessed at <http://us.boell.org/2015/02/05/moving-beyond-business-usual-hard-fought-decisions-gcfs-8th-board-meeting-barbados>.

¹⁹ UNFCCC, *CDM and Women*, (Bonn, 2012). Accessed at http://unfccc.int/resource/docs/publications/cdm_and_women.pdf.

While beyond the remit of this present submission, the discussions above were meant to demonstrate that existing financial mechanisms supporting mitigation and adaptation projects already integrate the need to incorporate or take account of gender equality considerations.

The UNFCCC: addressing gender equality issues

In the context of the UNFCCC, incremental progress in considering gender equality issues through the incorporation of gender-specific references in decisions and conclusions adopted by Parties has been demonstrated in recent years. Although the Convention itself was “gender-blind” at its adoption, there are now 32 decisions covering the various thematic areas considered by the Parties that are “gender-sensitive” or that aim to advance gender equality through improving women’s participation or ensuring gender-responsive actions.²⁰ It must be mentioned that in terms of thematic areas covered, decisions relating to adaptation were at the top of the list: ten decisions, compared to three which are mitigation-related and four which relate to technology.

The 2014 Lima Work Programme’s call for the elaboration of the link between gender equality and mitigation and technology development and transfer is thus timely and will contribute to better understanding of the relevance of gender equality in these thematic areas.

II. Gender-responsive mitigation

Mitigation strategies require international coordination among nations. The challenge faced by governments, private sector, civil society and other stakeholders is how to work together to protect a global atmosphere with no inherent national boundaries. The capacity of a community to reduce emissions and enhance sinks and reservoirs depends on social, economic and environmental circumstances and the availability of resources.

The conventional approach on mitigation and technology development and transfer is oriented towards what was termed as “climate-first”,²¹ meaning mitigation and technology development and transfer policies and programmes are seen primarily in light of their contribution to lowering greenhouse gas emissions. The default association has therefore been on large-scale projects, such as energy and industry -- sectors often viewed as male-dominated. Mitigation and technology development and transfer, as concepts, have thus been regarded as “gender-neutral”. This “climate-first” approach is limited in its scope. First, it neglects the differentiated social and economic impacts on and benefits for women and men of mitigation

²⁰For specifics see compilation of UNFCCC gender-specific decisions and conclusions at: <http://www.wedo.org/wp-content/uploads/GE-Publication-ENG-Interactive.pdf>

²¹Definition of “climate-first” and “development-first” is adopted from Karen Holm Olsen, *Sustainable Development Impacts of NAMAs: an integrated approach to assessment of co-benefits based on the experience with the CDM*, Low Carbon Development Working Paper No. 11, (UNEP Riso Center, Denmark, 2013). Accessed at <http://orbit.dtu.dk/en/publications/sustainable-development-impacts-of-namas-an-integrated-approach-to-assessment-of-cobenefits-based-on-experience-with-the-cdm%289eccaf3f-3db9-4b68-88a7-f52a3c26ab89%29.html>.

and technology development transfer; second, and more importantly, it fails to fully account for women's specialized knowledge and contribution to mitigation efforts, including the aggregate mitigation contribution of smaller-scale projects at the household and community levels, of which women lead and engage in. Throughout the developing world women are often the primary users of fuel and energy, forest resources, agricultural products and make many of the decisions that determine how a household utilizes these resources. Women are thus key actors in lowering emissions and enhancing sinks.

For the above reasons, the argument for a "development-first, co-benefit approach"²² (of mitigation actions) to sustainable development is worth supporting. The goal would thus be a transformational change towards low carbon and sustainable development, where national low carbon development strategies (LCDs), also called low-emission development strategies and Plans (LEDS), for example, would aim to identify measures that promote development objectives while also yielding co-benefits for mitigation. A COP 16 Decision has in fact encouraged developing countries to formulate LEDS in the context of sustainable development.²³ Sustainable development co-benefits, which include gender equality and women's empowerment, are also now being integrated in countries' Nationally Appropriate Mitigation Actions (NAMA), and in the consideration of Clean Development Mechanism (CDM) projects. An examination of a NAMA applied in Chile entitled "Implementation of a National Forestry and Climate Change Strategy" noted gender equality as a social co-benefit, alongside a decrease in greenhouse gas emissions due to reforestation and other environmental and economic co-benefits. These developments provide entry points for the integration of sustainable development co-benefits (to be monitored, reported and verified as GHG reductions and actions) in Measuring, Reporting and Verification (MRV) frameworks. The discussions that follow will provide concrete examples.

Application of gender lens in mitigation actions: some specific examples

Rapid Gender Capacity Needs Assessment, Bhutan

The Rapid Gender Capacity Needs Assessment, implemented in Bhutan by its government in partnership with UNDP in 2013 supports the mainstreaming of a gender perspective in the design of NAMAs, LEDS and MRV across "a number of key sectors including transport, waste, housing and industry." The objectives of the assessment, documented as an example of mitigation-related good practice by the International Partnership for Mitigation and MRV²⁴, were to build capacity for scaled up gender-sensitive mitigation actions while generating sex-disaggregated data in order to support the long-term effectiveness of policies. To do so, the assessment focused on, among other strategies, identifying gender gaps and entry points in these sectors and building the capacity of key stakeholders by increasing awareness, bringing them together and conducting interviews across all sectors. Training and capacity-building workshops requiring a minimum percentage of women participants were

²² Ibid., Olsen (2013).

²³ Decision 1/CP.16, Paras 45 and 65, UNFCCC.

²⁴ International Partnership on Mitigation and MRV: Good Practice. Accessed at <http://mitigationpartnership.net/gpa>

conducted for NAMAs and LEDS to increase knowledge and mobilize women's participation in political and economic decision-making, including through the appointment of gender focal points from each ministry/agency to provide guidance on the cross-cutting nature of gender mainstreaming.²⁵

The result was the development of clear scope, objectives, and emissions reductions targets with institutional arrangements to support the mainstreaming of gender considerations into the design of national strategies on mitigation. The provision of sex-disaggregated data on a sectoral basis is now a regular feature of progress reports.

Gender-responsive Clean Development Mechanism projects

The Clean Development Mechanism (CDM) aims to assist parties not included in Annex I achieve the dual objectives of lowering greenhouse gas emissions and contribute to the achievement of sustainable development, by supporting emissions reduction projects and activities. Gender equality and women's empowerment is considered a catalytic principle for achieving sustainable development for all, thus making the CDM a key tool for promoting a strong focus on women's potential in mitigation strategies and resulting socio-economic co-benefits as a means for fulfilling its mandate.

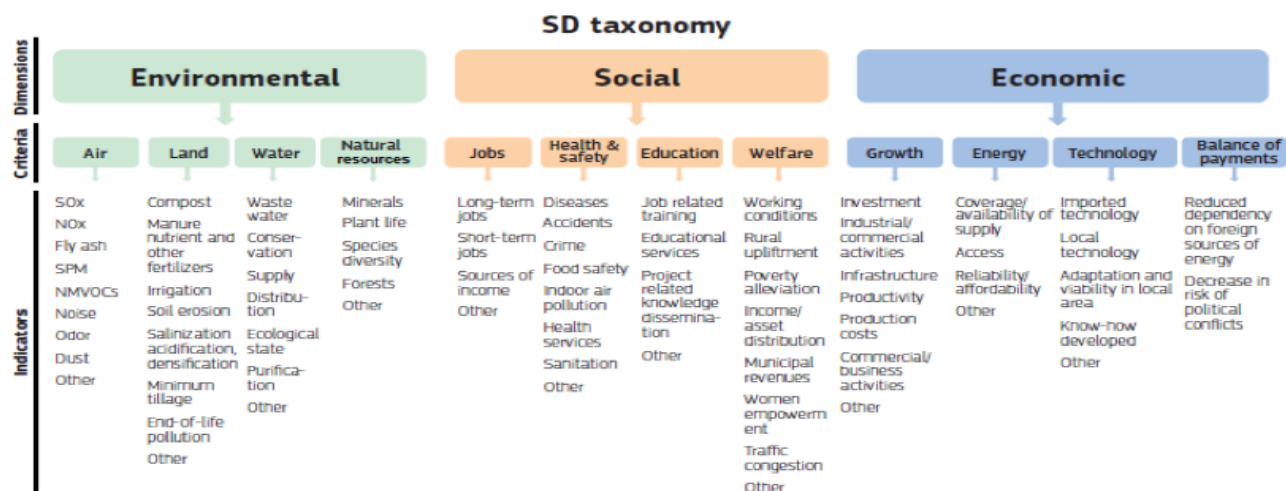
To implement this dual mandate, the 70th session of the CDM Executive Board (November 2012) endorsed the use of the sustainable development tools to aid in highlighting potential co-benefits of CDM projects and activities. Implemented on a voluntary basis, project developers utilize the tool to capture sustainable development benefits of projects and activities beyond the lowering of GHG emissions. Women's empowerment is listed under Social / Welfare (see below) but many other indicators under the social, environmental and economic dimensions have gender dimensions, including those related to water, jobs, health and safety, education, welfare, growth, energy, technology, among others.

Clearly, there is scope and merit to looking at mitigation beyond lowering GHG emissions.

*Proposed Taxonomy of sustainable development criteria in CDM projects*²⁶

²⁵ Global Good Practice Analysis, *Bhutan: Integrating gender targets into LEDS and NAMAs*, (2014). Accessed at <http://www.mitigationpartnership.net/gpa/integrating-gender-targets-leds-and-namas>.

²⁶ Olsen, 2013.



While the above tool is comprehensive and covers the three dimensions of sustainable development in considering CDM-funded projects, this tool has remained voluntary and its implementation has never been monitored nor assessed. To address this shortcoming, a CDM Policy Dialogue in 2012 recommended to follow up with reporting, monitoring and verification on impacts, to enhance safeguards against the risk of negative sustainable development impacts. This also aimed to support host countries with capacity-building and sharing of best practices in their assessment of the sustainable development component of CDM projects.

CDM's Gender Spectacles Tool

The "Gender Spectacles Tool" is employed by the CDM to carry out rapid, preliminary screenings of popular mitigation project types in an attempt to understand the circumstances, strengths and needs of the women and men whose lives are impacted by the policy or project in question. By gaining insight into local dynamics and assessing the gender impacts of the planned intervention, a gender analysis enables the designing and scaling up of mitigation activities and policies that also provide social and economic co-benefits to both women and men. This is done by assessing, for example, whether a project will support the empowerment of women and girls while decreasing emissions by examining impacts on work load, household income, training, participation, and whether new income generation opportunities will be created. Other sectors similarly examined through this gender lens include health, natural resource management, energy costs, etc.²⁷

²⁷ Ministry for Foreign Affairs, Finland, *Gender and the Clean Development Mechanism*, (Helsinki, 2010). Accessed at <http://formin.finland.fi/public/download.aspx?ID=76303&GUID=%7B042E0394-E6BF-4DDA-9139-50BE31E8857%7D>.

The Gender Spectacles Tool recommends the bundling up of smaller-scale projects where women wield more influence to decrease transaction costs while accessing more funding opportunities. The Grameen Shakti programmes in Bangladesh did so to great effect by aggregating small solar projects in rural areas and involving the local communities in the planning, implementation, and maintenance of solar home systems. Building capacity through access to financing, business skills, training and technical skills has resulted in the training of over 3000 rural women as engineers adept in the assembling, installation, maintenance and repair of the solar systems, giving them not only jobs in the short-term, but more importantly, tools to empower them and build their resilience.²⁸

Women's participation in forest management, India

The gender mainstreaming strategy has also been proven effective in increasing the success of forest carbon stock programmes under the REDD+ initiative, with a study undertaken by UNDP finding that the typology most useful for achieving REDD+ objectives was based on ensuring the increased participation and engagement of women in all phases of decision-making. A study of women's participation in forest management in India found a corresponding fall in illicit grazing and illicit felling, with significantly increased reforestation and regeneration of forest goods. The co-benefits resulting from their increased participation included the increased political empowerment of women due to greater involvement in committees and decision-making processes, greater economic independence and improved household income levels. In addition to enhancing forest carbon stocks, the co-benefits of women's participation demonstrated a multiplier effect that strengthened their household and community as a whole.²⁹

One Million Women to change consumption patterns, Australia

Recognizing the important role of women both in developed and in developing countries' households, the 1 Million Women initiative, a coalition of women in Australia, was launched to tap women's role as decision-makers in the use, production, distribution and disposal of goods at their households. Several studies have shown that women take the lead in articulating individual responsibility and translating personal ideas of responsibility into lifestyle and behavioral changes, expressed in part by consumer choices that aim to benefit the environment.³⁰ The campaign has been acknowledged as a UNFCCC Momentum for Change *Women for Results* winner, with plans to scale up outreach and activities at the global level.³¹ Combining this sense of individual responsibility with collective empowerment to decrease

²⁸ ENERGIA, *The Benefits of Gender Balance in Climate Change Mitigation Investments and Sustainable Energy Initiatives*, (2012). Accessed at <http://www.eldis.org/go/home&id=65114&type=Document>.

²⁹ UN-REDD, *The Business Case for Mainstreaming Gender in REDD+*, (Geneva, 2011). Accessed at http://www.undp.org/content/undp/en/home/librarypage/womens-empowerment/the_business_caseformainstreaminggendereinredd.html.

³⁰ World Bank, 2011.

³¹ UNFCCC *Momentum for Change: 1 Million Women*, (2014). Accessed at http://unfccc.int/secretariat/momentum_for_change/items/7844.php.

emissions is an example of the tools women have at their disposal to affect mitigation strategies, which project designers and policy-makers could learn best practice lessons from.

III. Technology transfer and development: The gender dimensions

Technology transfer and development is recognized by the UNFCCC as central to the mitigation of and adaptation to climate change impacts. Technology in climate change discussions extends beyond the immediate definition of tools and machinery to include knowledge, processes, activities and, crucially, economic and socio-cultural contexts.³²

Social, economic, and political inequalities limit women's access to the knowledge, information, training, disposable income and other resources that could enable them to identify and utilize the appropriate technologies available. Technologies that are designed and introduced without taking into account the particular needs of women and differential impacts on them as compared to men work to exacerbate gender inequalities and undermine the overarching goals of stabilizing and lowering emissions. Compounding these inequalities is the misconstrued perception of technology as a male-dominated arena more suitable to the characteristics and abilities culturally ascribed to men, particularly when it comes to heavily mechanized sectors with mitigation potential such as energy and industry, or in some cases, even with respect to mechanized tools and equipment in agriculture.

A study by UN Women in cooperation with IFAD, FAO, and WFP³³ demonstrated the differential impacts of the agricultural technologies of the Green Revolution on the livelihoods of women and men farmers in India, finding that many introduced technologies had negatively impacted the poorest women from landless or near landless households, often resulting in insufficient employment generation and low wages. Women were given more labor-intensive tasks while being paid less than men, or would lose their traditional jobs entirely due to the introduction of technologies that saved time and labor for wealthier, land-owning farmers. The same study, however, finds that enabling the adoption of technologies by women by researching and addressing their needs can result in greater acceptance and diffusion of these technologies. Women play an integral role in "the formation of kinship and formal networks, farmers' groups and self-help groups among small- and medium-scale land-holding farmers" including "landless and tribal women." Such group action can overcome constraints such as access to information, credit and inputs, while raising the confidence of female participants and economic benefits as a result. This clearly speaks to the need to address technology transfer and development within the context of the realities these women live in, marked by a disproportionate lack of access to or deprivation of land rights, legal recourse, household finances, education and other resources.

³² UN Women, *Factsheet: Women, Gender Equality and Climate Change*, (New York, 2009). Accessed at http://www.un.org/womenwatch/feature/climate_change/downloads/Women_and_Climate_Change_Factsheet.pdf.

³³ UN Women, *Rural Women's Access to Science and Technology in the Context of Natural Resource Management*, (New York, 2011). Accessed at <http://www.un.org/womenwatch/daw/csw/csw56/egm/Rathgeber-EP-6-EGM-RW-Oct-2011.pdf>.

Incorporating gender considerations at every step of the design/implementation/evaluation process additionally provides social and economic co-benefits that serve to make technologies more attuned to the needs of the community as a whole while advancing gender equality. The use of gender analysis in studies has shown that women's risk perception is higher than those of men³⁴, leading them to reject riskier technologies that may impact the environment and local communities negatively. Their participation in the decision-making process of forest management, for example, has been shown to increase rates of reforestation while decreasing the illegal extraction of forest products³⁵, making a strong case for enabling women's access to the information and communication technologies that would support their work in enhancing forest carbon stocks.

The examples below aim to demonstrate ways of making technology more gender-responsive.

Gender-responsive Technology Needs Assessment

Albania's Technology Needs Assessment (TNA), singled out in a UNFCCC Secretariat report on best practices³⁶, cited gender equality as a key principle. Albania in its TNA accounted for women's needs and abilities and encouraged their participation. Technical Needs Assessments (TNA) are carried out by Parties and used in the work of the Technology Executive Committee (TEC) and Climate Technology Centre and Network (CTCN). The "Third synthesis report on technology needs identified by Parties not included in Annex I to the Convention" prepared by the Secretariat in 2013 examined the TNAs contributed by over 85 countries in an effort to support enhanced action on technology development and transfer. An analysis of the report found that Parties overwhelmingly identified energy and agriculture as the most prioritized sectors for mitigation and adaptation, with technologies prioritized for each sector related to solar and biomass/biogas energy generation and crop management.³⁷

Throughout the developing world, women and girls are key users of fuel for energy and take part in agricultural production, which provides a strong basis for their active engagement in the identification of and/or design of technologies used in these sectors. While the TEC itself acknowledges the importance of women's participation by calling for gender balance, the TNAs it uses as a key information source do not. There are no set methodologies for TNAs, but from previous examples, it is clear that there are several entry points for gender considerations. These include increased stakeholder participation from women and women's groups in order to bring their needs and abilities to the fore throughout the TNA process in identifying sectors, designing technologies, and monitoring and evaluation.

³⁴ [Henwood, Karen Linda](#), Parkhill, Karen and [Pidgeon, Nicholas Frank](#) 2008. Science, technology and risk perception: from gender differences to the effects made by gender. *Equal Opportunities International* 27 (8) , pp. 662-676.

³⁵ World Bank, 2011.

³⁶ UNFCCC, *Best practices in technology needs assessments*, (Bonn, 2007). Accessed at <http://unfccc.int/resource/docs/2007/tp/03.pdf>.

³⁷ UNFCCC, *What are the technology needs of developing countries?* (Bonn, 2013). Accessed at http://unfccc.int/ttclear/misc/_StaticFiles/gnwoerk_static/HOME_carousel/ff36315120154f119f19b295f348e700/329ae298f41f40708df6344b0618d39c.pdf.

Barefoot College, partnership with UN Women

Giving women the training and ability to participate in all steps of design and implementation of a technology increases its efficacy. There is a greater sense of ownership by the community as a whole, making it more likely for them to uptake and diffuse the technology. The Barefoot College in partnership with UN Women trained women in villages throughout selected African countries to install and maintain solar panels and systems, guaranteeing their communities a steady, low-emission source of energy. The women in turn trained new students, thus spreading knowledge and allowing for the rapid diffusion of the solar technology throughout the villages.³⁸

Co-benefits of technology development: women's empowerment and resilience

The co-benefits of technologies that reduce the amount of time women spend gathering fuel and water, farming, cooking, and performing countless other tasks are innumerable. For example, the reduction in pollution due to decreased biomass use as a result of energy-efficient technologies contributes to the health of the community as a whole, while freeing up women's time to pursue other income-generating activities supports their economic empowerment.

There are studies demonstrating that women often reinvest that time and money back into the community itself, thus ensuring its sustained resilience while advancing gender equality. **Kabeza village in Rwanda**, adopted a set of technologies that sought to increase efficiency and productivity in all sectors. Led by a female-headed cooperative, the village ensured that women's needs were well addressed and their inputs taken on board during the course of development planning. For example, women and children had been walking increasing distances to fetch firewood and water, the latter of which often came from contaminated sources. The procurement of rainwater harvesting systems and biogas plants increased access to clean water and energy and allowed women more time to focus on other productive activities such as terracing, tree planting, and other agricultural and economic activities. The results of their efforts showed increased agricultural productivity due to better resource management, decreased deforestation and pollution, and an increase in the incomes of not only women, but the community as a whole, resulting in better livelihoods and increased resilience to climate change impacts.³⁹

In Mali, UN Women and the Malian Agency for the Development of Household Energy and Rural Electrification (AMADER) implemented the "Energy for the reduction of gender inequality" programmes, which identified and introduced technologies to meet the energy

³⁸ UN Women, *Mothers Lighting Up Homes and Communities in Rural Tanzania*, (New York, 2012). Accessed at http://www.unwomen.org/~media/headquarters/attachments/sections/library/publications/2013/12/un%20women_ee-tanzania-brief_us-web%20pdf.ashx.

³⁹ UN-PEI, Rubaya: The Sustainable Village, (2014). Accessed at http://www.unpei.org/sites/default/files/event_documents/Rubaya_poster.pdf.

needs of women in 19 villages throughout the country.⁴⁰ Beyond energy provision, the project was developed to deliver socio-economic co-benefits such as reducing time spent on housework and gathering firewood, improvement of health due to lowered pollution levels, and economic empowerment through the generation of income-producing activities and stable jobs.

In two pilot villages, women performed household tasks that required the collection of firewood, contributing to desertification and exposing the households to smoke and soot. Needs assessments were undertaken in order to identify the most appropriate technologies for each area of energy use, resulting in the installation of solar kits, dissemination of energy-efficient stoves, rehabilitation of existing mills, and installation of shelling units to aid in oil extraction for shea-based products. The programme has included awareness-raising and capacity-building workshops in order to demonstrate the correct use of introduced technologies as well as a monitoring mechanism in each locality in order to provide corrective actions and further strengthen the capabilities of women. It has been recommended for scaling up as a good practice by the World Bank in expanding access to modern and renewable energy in rural areas.⁴¹

IV. Towards gender-responsive policies and actions on mitigation and technology development and transfer

Climate change impacts are not gender-neutral. Thus, climate policies and responses, including on mitigation and technology development and transfer should be informed by gender analysis and be gender-responsive. Framing the discussions on mitigation and technology development and transfer within the context of sustainable development would allow for the consideration of sustainable development co-benefits (including gender equality and women's empowerment) of actions and decisions on these two thematic areas. Specific recommendations to promote and support a gender-responsive policies and actions on mitigation and technology development and transfer are proposed below:

- Ensure the application of existing tools, such as the proposed taxonomy of SD tools in CDMs to enable the assessment of their value-added and viability as a tool in meeting the dual objectives of the CDM: lowering greenhouse gas emissions and contributing to the achievement of sustainable development;
- To allow for the assessment and the promotion of NAMAs' sustainable development

⁴⁰ UN Women, *Projet: Energie pour la Reduction des Inegalites Genre das le Contexte de l'Insecurite Alimentaire et du Changement Climatique*, (2013).

⁴¹ World Bank, *Update on the Implementation of the Gender Equality Agenda at the World Bank Group: Background document for October 11, 2014 Development Committee meeting*, (Washington D.C., 2014). Accessed at <http://siteresources.worldbank.org/DEVCOMMINT/Documentation/23475671/DC20013-0010%28E%29GenderEquality.pdf>.

benefits⁴²: i) adopt a development first, co-benefit approach in identifying national sustainable development objectives; ii) design NAMAs with SD indicators, stakeholder involvement procedures and safeguards against negative impacts; iii) financing of NAMAs should be informed by SD impacts; iv) monitor, report and verify using an integrated approach; and v) certification of credited NAMAs' SD impacts to be traded under domestic or

- Applying a gender analysis in all stages of project/programme development – from the design to implementation, monitoring and evaluation processes; build capacity for gender analysis among staff and managers;
- Adopting gender mainstreaming strategy in the design and implementation of sectoral programmes contributing to mitigation and technology development and transfer, such as in energy, transport, agriculture, natural resource management, water, among others.
- Support the development of systems and capacities to enable the collection and management of sex-disaggregated data and gender indicators; sex-disaggregated data and tools for gender mainstreaming will also help support the development of gender-responsive MRV frameworks to evaluate NAMAs and LEDS (and the extent to which these incorporate gender considerations).
- Ensuring women's participation, engagement, voice and leadership in designing policies, strategies, responses. To ensure the full engagement of women, especially grassroots women and women from developing and least developed countries, training and capacity-building support is required, as well as facilitating their access to knowledge, information and other resources.
- Means of implementation – finance, technology transfer and development, capacity-building, investments - and partnerships to support mitigation and technology development and transfer actions must be gender-responsive and inclusive.

This means engaging women as full and equal participants in all levels of policy formulation and decision-making and in governance of institutions, as well as in accountability mechanisms. Greater investments and dedicated funding for programmes and projects with gender equality and women's empowerment components and/or targeting women and girls as direct beneficiaries must be strengthened, including through gender-responsive budgeting (GRB) at the national level.

The Global Environment Facility (GEF), the Green Climate Fund (GCF) and the Clean Development Mechanism (CDM) have all put in place policies and mechanisms to ensure that gender equality considerations are taken on board in the administration of their

⁴² Taken from Olsen, 2013.

mandates and the awarding of funds for projects and programmes on adaptation, mitigation and technology development and transfer.

- In furthering the technical examination process and defining the work programme of the Technical Expert Meetings (TEMs), incorporate a gender perspective in the themes to be discussed for 2015 and 2016

The technical examination process is aimed at exchanging views on how to unlock mitigation opportunities for raising pre-2020 ambition including through examining effective emission reduction policies, barriers to their implementation and the scaling-up and identifying incentives and feasible options for support. The TEMs also assess mitigation benefits, co-benefits, including adaptation and sustainable development co-benefits, identification and costs of barriers to the implementation of policy options. To bring prominence to and clarify the linkages to gender equality and women's empowerment issues, TEMs to be scheduled for 2015 and beyond should consider gender equality issues as well.

Specific Actions proposed for the UNFCCC Secretariat

- Undertaking an assessment on how "gender considerations" as reflected/mandated in decisions adopted by Parties with respect to mitigation and technology development and transfer have been applied by them.

The conclusions of the in-session workshop could recommend this as one action area whereby Parties, on a voluntary basis, could report on how they are applying the mandated actions advancing gender equality in decisions on mitigation and technology development and transfer. Decisions with respect to finance may also be relevant in this regard.

- Step-up efforts (including through capacity-building and brainstorming, workshops) to ensure that UNFCCC staff providing substantive support to the various thematic issues covered by the Convention are aware of the gender perspectives in their respective thematic areas (to ensure that they are able to provide that perspective when supporting Parties or Chairs / co-Chairs in discussions, negotiation of decisions/conclusions, etc.);
- Reach out to / coordinate with other technical experts within the UN System, academia, think tanks, civil society, including through maintaining a list-serv to exchange information regularly, conducting regular meetings (possibly online), hold meetings on-site during COP or intersessionals to discuss and exchange views on the gender dimensions of climate change, in general, and the specific inter-linkages by theme (to ensure synergies and build capacities);
- To support the abovementioned work, ensure that a senior gender focal point is appointed as soon as possible, as called for by the Lima Work Programme on Gender.

V. Recommendations on the scope and expected outcomes of the in-session workshop to be held in conjunction with the 42nd session of the Subsidiary Bodies, June 2015

For the in-session workshop to be held in June 2015, UN Women proposes the following:

Substantive coverage:

- **Setting the context:**
 - Elaboration of what gender analysis and gender mainstreaming mean in the context of mitigation and technology development and transfer;
 - Extends beyond programmes for or targeted to women; addressing root causes of gender inequalities, thus, may mean structural and institutional change, paradigm shift, and engagement of men;
 - Providing examples of how gender analysis and gender mainstreaming are applied, for example, in drawing up a policy or an action plan for a sector (e.g., climate change policy and action plan; or energy sector policy and action plan), and the various tools and approaches used enable / support a gender analysis or gender mainstreaming;
- **Elaboration of what gender-responsive means** in climate policy and practice. This could cover:
 - Review of literature elaborating on the inter-linkages between gender equality, women's empowerment and climate policy and practice;
 - Review of how gender considerations have been reflected in UNFCCC decisions or workshop conclusions, or decisions and outcomes of related intergovernmental bodies – e.g., UN General Assembly resolutions (Second Committee); UN Convention on Biological Diversity and UN Convention on Combatting Desertification decisions; Rio+20 outcome; UNEP decisions; World Conference on Disaster Risk Reduction outcome; Commission on the Status of Women agreed conclusions.
- **Gender-responsive mitigation and technology development and transfer**
 - Understanding mitigation and technology development and transfer
 - sectors or thematic areas that could be considered -- agriculture, forestry, energy, transport and infrastructure, water resource management, land use
 - What are the linkages between gender equality, women's empowerment, the realization of their human rights and climate change mitigation and technology development and transfer?
 - Reviewing examples from the UNFCCC context (NAMA, CDM, TNA, CTCN, etc.), identifying best practices and assessing gaps;

- Reviewing national-level actions – successes and limitations/challenges in applying a gender perspective or in gender mainstreaming mitigation or technology development and transfer policies and actions;
- The role of finance and gender-responsive budgeting
- The role of and the need for research, data/evidence
- The role of global institutions and frameworks, including guidelines and monitoring frameworks in establishing a gender-responsive policies on mitigation and technology development and transfer in ensuring the implementation of these policies
- **Discussion** of policies, mechanisms, tools, actions (at all levels) to ensure that mitigation and technology development and transfer policies and programmes do not perpetuate gender inequalities or lead to the further marginalization of women; how were women and men engaged in the conceptualization, development, implementation and monitoring of policies and programmes on mitigation and technology development and transfer?
- What institutional mechanisms are required (global, regional, national) to support the implementation of a gender-responsive mitigation and technology development and transfer policies and programmes? How can gender-responsive financing mechanisms or gender-responsive budgeting be a tool for ensuring a gender-responsive mitigation and technology development and transfer programmes?
- What is the role of the UNFCCC Secretariat, Parties and observers to the UNFCCC, UN system entities, other international and regional organizations, women’s groups and other civil society organizations, think tanks and researchers, and private sectors and foundations in promoting a gender-responsive climate policy and action, in particular on mitigation and technology development and transfer?

On Outcome of the in-session workshop, two outcomes are proposed:

- 1) **In-session workshop Report**, which will record / compile all the presentations of panelists and the discussions among participants, and a list of participants. The report should be made available online;
- 2) **Conclusions of the in-session workshop** agreed on by Parties. The Conclusions should include specific follow-up actions to implement the recommendations coming from the workshop discussions / proceedings. The Conclusions should also recommend concrete actions on the further implementation of the Lima Work Programme on Gender.

