

Women's Major Group

Position Paper

Gender Equality, Women's Rights and Women's Priorities are core to Sustainable Development Goals (SDGs) and the Post-2015 Development Agenda



Working draft 1.0. - 1 March 2013

Background

Women's Major Group

The Women's Major Group was created as a result of the United Nations 1992 Rio Earth Summit, which recognized women as one of the nine major groups of society whose participation in decision-making is essential for achieving sustainable development.

The Women's Major Group's role is to assure effective public participation of civil society women representatives in the United Nations policy process on Sustainable Development. The Women's Major Group is organised globally with over 350 representatives of non-governmental women's organisations. The coordination is assured by two organising partners and two core group members¹, see for more information the website of the UN at <http://sustainabledevelopment.un.org/index.php?menu=157>

Aim of this position paper on SDGs and post-2015

Governments and UN Agencies are busy preparing their priorities for a framework of goals and targets for development, following the Rio+20 summit in June 2012, as well as the post-2015 follow-up of the Millennium Development Goals. Many priorities are already being formulated in the first months of 2013. It is essential that the analysis and recommendations from the perspective of civil-society women's and gender organisations is taken into account.

The authors

The authors of the position paper are women's and gender representatives from the Global South, who have taken the lead in developing their views and priorities, and which form the basis for the consultation and input from all members of the women's major group. The chapters reflect the views of the authors. A summary with the key recommendations from all chapters forms the overall Women's Major Group position paper.

The process

A draft version of the position was sent to all the members of the Women's Major Group who contributed with comments. This 1 March 2013 reflects these comments. Three chapters are not included in this version as the consultation on these chapters has not yet been finalized, these are the chapters on Sustainable Energy, Gender Equality and Conflict and Peace.

Contact details

WECF: secretariat@wecf.eu

DAWN: info@dawnnet.org

GFC: info@globalforestcoalition.org

WEDO: Eleanor@wedo.org

¹ Organising partners are WECF - Women International for a Common Future, DAWN Development Alternatives with Women for a New Era and core group members WEDO – Women's Environment and Development Organization and GFC Global Forest Coalition.

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The opinion's expressed in the position paper are those of the authors.



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1.Summary of Policy Recommendations by the Women’s Major Group on global Sustainable Development Goals and post-2015

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2. Global Goals for Development – a critical analysis

2.1. Women, Gender Equality are key to a Just and Sustainable Future: an introduction

Author: Simone Lovera, GFC

Gender equality and women's rights and empowerment are fundamental to the discussions on possible new global goals, which are taking place as part of the post-2015 Development Agenda process² and the negotiation on universal Sustainable Development Goals (SDGs).³ Gender equality is a prerequisite for sustainable development, and advancing equality and realizing women's rights has been shown to accelerate development progress (as shown, for example, by a UN evaluation of progress on the Millennium Development Goals (MDGs)⁴). It is therefore essential that gender equality and women's rights and empowerment are integrated into these new development frameworks, both as a critical stand-alone issue, and as a priority cross-cutting issue.

We seek real, transformative change, and caution against a deductive process that leads to a set of goals, targets and indicators that are based on a simplification of complex realities. The MDG process has already shown that an overly simplified approach not only ignores the gender and environmental dimensions of different development goals, but also fails to recognize the need for an integrated, transformative and rights-based agenda as a pre-condition for genuine sustainable development. These lessons need to be learned now, to ensure that future development frameworks effectively address the multiple global crises humanity is facing, dealing directly with these crises by addressing their causes.

We must move beyond the rhetoric of 'gender mainstreaming'; women don't want to be 'mainstreamed' into such a polluted stream. Equitable and sustainable development should be recognized as the foundation for the post-2015 development framework. Development that is not sustainable does not make economic, social or environmental sense. This means that real structural changes are needed, not just another set of goals that narrow the development agenda. The world needs to redefine what it means by 'development', and change the hegemonic political and economic system that is the root cause of multiple current crises yet still strongly supported by a few powerful economic actors and their governmental allies.

Rather, it is critical to support concepts of sustainable livelihood such as 'buen vivir',⁵ that are based on the pursuit of human happiness and welfare in harmonious balance with the ecological limits of the planet. Such concepts are not new. They are embedded in biocultural⁶ approaches to the conservation,

² See <http://www.un.org/en/ecosoc/about/mdg.shtml> and <http://www.un.org/millenniumgoals/>

³ See <http://sustainabledevelopment.un.org/index.php?menu=1300>

⁴ <http://www.unwomen.org/publications/the-millennium-development-goals-report-gender-chart-2012/>

⁵ <http://www.palgrave-journals.com/development/journal/v54/n4/full/dev201186a.html>

⁶ The term biocultural expresses the inherent links between biological diversity and cultural diversity. According to the UN, "This concept encompasses biological diversity at all its levels and cultural diversity in all its manifestations. Biocultural diversity is derived from the myriad ways in which humans have interacted with their natural surroundings. Their co-evolution has generated local ecological knowledge and practices: a vital reservoir of experience, methods and skills that help different societies to manage their resources. Diverse worldviews and ethical approaches to life

restoration and sustainable use of ecosystems that have been practiced by many Indigenous Peoples and traditional communities for centuries. The post-2015 agenda should build on, support and enhance the resilience of such practices, and safeguard the rights, roles and needs of women, including with respect to the conservation and sustainable use of natural resources.

We demand a rights-based, transformative agenda that addresses discrimination in terms of restricted access to and control over resources and services, and violence against women in its many forms. Any post-2015 framework should be based on fundamental respect for women's rights and human rights, including the rights of Indigenous Peoples. Education for all, including education about women's and Indigenous People's rights, and education about the real causes and consequences of global crises, is also a pre-condition for transformative change.

Furthermore, these rights need to be ensured through binding rules and safeguards. These must include measures that protect traditional biocultural users of land and natural resources, especially women, from the negative social and environmental impacts of external investments in projects and initiatives such as mining and large-scale monoculture plantations. This includes firm, binding rules that allow corporate misdemeanours to be detected, and corporate liability to be enforced, redress for damages to be awarded. They should also ensure that independent impact assessments take place, identifying the potential risks and damage that may be created by new technologies and corporate investments, in advance of such projects being agreed and implemented.

However, there are fundamental tensions between rights-based, transformative approaches and top-down, abstract goals that are determined via the same actors and processes that have hastened the destruction of our environment and led to the current, precarious state in which we live. These tensions must also be addressed.

A post-2015 framework must respect and build upon the overarching principle of equitable sharing of environmental space, between nations, but also within nations. This implies the equitable sharing of burdens and benefits between women and men, between present and future generations, between rural and urban areas, between the countries that caused the current crises and the countries that are suffering from them, and between those with wealth and those living in poverty.

It also implies respecting the principle of common but differentiated responsibilities as it applies to countries and people, taking into account historical and ecological debts. This in turn means that current and historical responsibilities that different countries have for global crises like climate change must be taken into account when developing international agreements that assign obligations to mitigate those crises to specific countries. In other words: those that took the lead in destroying our planet and its climate must take the lead, and clean up their act.

We are also calling for principles and guidelines to be agreed concerning the actual process of developing a Sustainable Development Agenda post-2015. The Sustainable Development Agenda post-2015 must be judged and shaped in such a way that human rights and women's rights are at its core, and women's priorities are included and effectively addressed.

This requires gender parity in decision-making and sustainable development governance, and the full and effective participation of women from all continents in the post-Rio+20 policy-making process. It

have emerged in tandem with this co-evolution of nature and culture."
http://www.unesco.org/mab/doc/iyb/icbcd_working_doc.pdf

also requires an appropriate and equitable balance of participation of the different major groups in the post Rio+20 policy-making process, along with safeguards to prevent economically powerful groups from dominating or otherwise influencing the process to the detriment of economically and politically-marginalized groups like women.

2.2. Lessons learned from 50 years of human's rights, women's rights and 12 years of MDGs. Key principles for a process on a future sustainable development framework

(combined with **Eliminating root causes of inequalities, human rights abuse, unsustainable development and destruction of the environment** Human rights and women rights not ensured, unsustainable and inequitable economic model, extractive industries, bio-economy, unsustainable technology and unsustainable financial incentives.)

Not yet available

3. A new development paradigm, protecting women's rights and livelihoods and access to resources

3.1. Resources and Gender Equality

3.1.1. Food Sovereignty and Women's rights.

By Azra Sayeed, Roots for Equity and Norma Maldonado, Guatemala

Women's rights have been severely curtailed by the industrialisation of agriculture. The Green Revolution of the 1960s exposed small and landless farmers across the South, especially in Asia, to a wide range of negative social and ecological conditions, and compounded the exploitation experienced by women under existing feudal and patriarchal systems. Subsequent trade liberalization policies imposed on developing countries have exacerbated the situation, putting small and landless farmers, especially women farmers, at risk in multiple ways. The current economic, ecological and food crises are now pushing women and their families to the limit, with the starkest impacts being felt by the poorest, hungriest households.

The Green Revolution effectively forced farmers in developing countries to accept a technological food production revolution, mechanising many systems of cultivation and food processing. This had significant negative impacts on people and communities dependent on traditional agricultural practices for both food and income, with women bearing the brunt of these impacts. This was felt particularly keenly in post-harvest processing jobs, with machines operated by men undertaking jobs — such as the de-husking, threshing and milling of rice — that were previously performed mainly by women.⁷ This loss of access to food and financial resources, required to buy food and meet other household needs, contributed to declining food sovereignty at the household and community level. Food sovereignty is the preferred term here, over food security, as food sovereignty implies local control and sustainable production, independent of imports and agroindustry.

Subsequent neoliberal agricultural trade policies — which are ostensibly about liberalising trade in food and agricultural products — have, in reality, focused on supporting industrialised agricultural production by transnational corporations from the North, including by opening up many protected domestic markets in developing countries. In the food and agriculture sectors, this has had huge impacts, including on access to land resources, local food production, and the production of healthy food.⁸ Liberalisation also includes the dismantling of state institutions and interventions in the food sector, including subsidies and price-setting,⁹ all of which would previously have been in place to protect and promote food production security.

This opening up of developing countries' domestic markets, and a growing emphasis on producing food for export rather than domestic consumption, has also been forced on developing countries, through multilateral and bilateral trade liberalisation negotiations, and structural adjustment programmes. It has depressed the prices that many local farmers can earn from their labour, because of competition from

⁷ <http://www.fao.org/docrep/x0171e/x0171e04.htm>

⁸ More general information is available here: <http://www.criticalcollective.org/publications/food/>

⁹ http://www.accordsdepeche.com/fichiers/docs/bibli_07/160.pdf

cheap, subsidised imports from the North. It has also decreased land availability and food security, as land is given over to export-oriented agriculture.

For example, the North American Free Trade Agreement between Mexico, the US and Canada, which came into force in 1994, 'locked in' various liberalising reforms affecting peasant agriculture in Mexico. The Mexican government, anxious to increase exports to the US and Canada, agreed to the complete liberalisation of agriculture within 14 years. The overall result is that Mexico's imports of basic foodstuffs such as corn (including genetically modified corn) escalated dramatically, whilst Mexico exports a much smaller quantity of non-staple foodstuffs such as beef, fresh and canned fruit and vegetables, shrimp, beer and tequila. In other words, Mexico surrendered its ability to provide basic food products to its people and is now dependent on food imports. In addition, many small farms, unable to compete with cheap imports from the US, collapsed.¹⁰ According to a study commissioned by the Mexican government, the number of agricultural households diminished from 2.3 million in 1992 to 575,000 in 2002.¹¹

"Mexico's inability to compete with the US in the agrifood sector has spurred the recurrent migration of farm workers and threatens to eliminate the future generation of farmers."¹²

Liberalisation in the agricultural sector has also had severe impacts on indigenous peoples, especially women, in Guatemala, since it has undermined the traditional system of 'milpa' agriculture, which is primarily used to produce corn, beans and squashes. Mayan women also cultivate medicinal plants, vegetables, fruit, aromatic and food herbs on their patios, and have done so for hundreds of years: they know how to collect all the nourishment needed by their families. Despite all this precious knowledge, however, 49.3% of children below five years old suffer from chronic malnutrition; of those, 69.5% of indigenous children suffer from malnutrition.

Over the last two decades, government policies have focused on promoting the more profitable cultivation of vegetables, with new technologies that have caused soil and water depletion and pollution. As with Mexico, this situation was locked in following the signing of the US-Central America Free Trade Agreement, commonly referred to as 'CAFTA,' in 2003. This reinforced the role of Guatemala as a producer of vegetables for export, and many producers, again motivated by the high profitability of cultivating vegetables, stopped growing corn and beans, the local staple foods. Indigenous people, especially indigenous women, have been heavily affected by this change, and have had to look for alternatives to provide the nourishment needed by their families.¹³

In the same way, neoliberal policies implemented by the International Monetary Fund in cooperation with Central American governments have also affected people's access to water. The worst affected have been women, who are directly involved in the use and management of scarce water resources. In Guatemala, for example, the San Pedro Carchà is a region rich in water: it rains for nine or ten months every year. As a result there is a tropical forest that provides wood, and coffee and cardamom are cultivated. However, on the back of this wave of structural adjustments and privatisations, governments sold the rivers to private firms. Even though some of the local communities, after years of fighting for their territories, have won their lands back, they still have no water. As a consequence, Q'eqchies women have to walk for four hours a day to collect two and a half litres of water. Paradoxically, they

¹⁰ <http://www.bilaterals.org/spip.php?article15259>

¹¹ [11] José Romero and Alicia Puyana, Diez años con el TLCAN, las experiencias del sector agropecuario mexicano [Ten Years of NAFTA: Experiences of the Agricultural Sector in Mexico] (Mexico: El Colegio de México), p. 227.

¹² <http://www.bilaterals.org/spip.php?article15259>

¹³ <http://wideplusnetwork.files.wordpress.com/2012/10/ec-alt-eng2012thirdenglish.pdf>

walk along the river, but they cannot get water from it. The only way to reach water is literally to dig down into the ground, to a depth of seven metres, risking their lives and their daughters' lives. The women have sent many petitions to the local authorities, but their protests and needs have so far been ignored.¹⁴

Overall, the ongoing process of trade liberalisation has prised open so many national trade barriers that it has created a global economic system in which large corporations can trade and invest in many different countries much more freely than they could before. Typically these companies will be continually on the look out for new and profitable markets, and cheaper ways of producing their food products.

This process now characterises milk production, for example, with a global battle underway between small producers of 'people's milk' and giant dairy and food transnationals like Nestlé and Danone. Small producers face the twin challenge of trying to compete with cheap imports of powdered milk in newly liberalised economies; and threats to ban their own unpasteurised product for being 'unsafe'.

According to Grain (2011):

"Corporate control over the world's milk supply has been accelerating in recent years alongside the globalisation of the industry. The twenty largest dairy companies now control over half the global ("organised") dairy market and process about a quarter of global milk production. Just one company, Nestlé, controls an estimated 5% of that global market, with sales of US\$25.9 billion in 2009".

Again, this changing dynamic has huge implications for women. With urban markets taking up more and more of the milk being produced by rural communities, there is a huge pressure to sell all available milk. Rural women are generally the main caretakers of all livestock, including milk-giving animals. They have to cut and carry huge amounts of fodder from farmlands, prepare the fodder for the animals and finally milk the animals. At least prior to liberalization, much of this milk was kept at home yielding many sources of nourishment from milk, to buttermilk, butter and butter oil. But with milk, yogurt and other milk byproducts having become a lucrative source for affluent urban markets, milk for rural consumption has become a scarce commodity.

Competition for land, already an issue under the Green Revolution and trade liberalization policies, has increased further with the advance of 'green economics'. This has included the proposed transition to using biofuels — more accurately known as agrofuels because of the industrial scale of production — to provide liquid fuel for transportation.

Demand for these fuels has increased competition for land and 'landgrabbing', including with respect to supposedly 'marginal' lands that biofuel producers argue are not used for producing food.¹⁵ However, this is not the case. As FAO has acknowledged,¹⁶ women in rural areas are likely to be hit hardest by the industrial scale production of biofuels, since marginal lands provide key subsistence functions to the

¹⁴ Sources: The geopolitics of food and water in Guatemala: scarcity in a country with abundance... Norma Maldonado y Anaite Roulet Economic Alternatives for Gender and Social Justice, Voices and Vision from Latin America, WIDE 2011, <http://wideplusnetwork.files.wordpress.com/2012/10/ec-alt-eng2012thirdenglish.pdf>

¹⁵ For some specific examples of landgrabbing to grow biofuels in West Africa, see: <http://www.cbd.int/doc/biofuel/Econexus%20Briefing%20AgrofuelsMarginalMyth.pdf>

¹⁶ "Gender and Equity Issues in Liquid Biofuels Production – Minimising the Risks to Maximise the Opportunities." Andrea Rossi and Yianna Lambrou, FAO, April 2008, quoted in <http://www.cbd.int/doc/biofuel/Econexus%20Briefing%20AgrofuelsMarginalMyth.pdf>

rural poor. They are particularly important for women, who may not have access to more fertile agricultural lands. Furthermore, in countries where agriculture is a key income-generating activity for women, such as Benin, the implications of the spread of biofuels feedstock monocultures such as oil palm and sugar cane¹⁷ are bleak, with communities being forced from their territories. In general, women are the hardest hit by the new agrofuels phenomenon, as it hinders their ability to pursue traditional livelihoods.

“Waged agricultural workers do not own or rent the land on which they work, nor the tools and equipment they use. In these respects, they are a group distinct from farmers. Yet these workers remain invisible in terms of the goals, policies, programmes and activities to eliminate poverty and to strengthen the role of major civil society groups in promoting sustainable agriculture and rural development (SARD), world food security (WFS), and sustainable development (SD).”¹⁸

CASE STUDY

“In the cut flower industry, for example, data provided by the Ugandan National Union of Plantation and Agricultural Workers affirms that the majority of casual workers are women. Over 70% of this workforce is casually employed without job security and other benefits such as annual leave. The women workers are mostly employed in harvesting and in the grading sections. A full-time worker is paid a total package of 70,000 Uganda shillings (\$35 US) per month while a casual worker earns 1,500 Uganda shillings per day (75 cents US). The trend towards casual and temporary labour is encouraged by, amongst other factors, unpredictable weather conditions, unstable market demand for produce, and labour laws which require that certain benefits, such as notice pay, leave allowances, and medical attention, be provided to seasonal and permanent employees.”

Source: FAO et al (2007)

This situation has worsened even further in countries being hit hard by climate change, such as Bangladesh, Pakistan and the Philippines. In particular, the continuing onslaught of floods and heavy rains has led to massive internal displacement, as people are forced to seek alternative homes and livelihoods. This migration increases women’s likelihood of experiencing hostility and sexual violence generally. Women seeking domestic employment in urban centres may also endure year round verbal and physical abuse, as well as sexual violence, in their bid to support their family at home, whose access to land and food may have been hit hard by climate change.

Women also experience differentiated impacts as a result of climate change even if they do not migrate. In Bangladesh, for example, in the Khulna-Satkhira region, it was found that following natural disasters such as Cyclone Sidr, people struggled to find food, clean water and housing, and their were consequent outbreaks of illnesses and diseases such as diarrhea, cholera and malaria. Since women are frequently responsible for the provision of food and water, they are the hardest hit. It was also found that many lost their shrimp-farming livelihoods because of flooding;¹⁹ and that others find themselves in competition with migrant male shrimp-workers looking for work because their own lands are degraded.

¹⁷

<http://www.grain.org/article/entries/4575-land-grabbing-and-food-sovereignty-in-west-and-central-africa>

<http://www.greenpeace.org/usa/Global/usa/planet3/PDFs/Forests/PalmOilsNewFrontier.pdf>

¹⁸ http://www.fao-ilo.org/fileadmin/user_upload/fao_ilo/pdf/engl_agricultureC4163.pdf

¹⁹

http://www.oxfordresearchgroup.org.uk/publications/briefing_papers_and_reports/climate_change_drivers_insecurity_and_global_south

In Nepal, women are also finding themselves left to shoulder the burden created by climate change. 80% of the population are dependent upon farming, but an already existing trend of male migration to neighbouring India in search of work is being aggravated by drought and failing crops in Nepal's Western Hills. The women must remain at home and manage the farms as best they can, praying that the monsoon will bring plentiful rain.²⁰

Industrialised agriculture has also had major environmental impacts which have, again, impacted women in particular. Women responsible for securing food and medicines from local sources under traditional systems, find that land and biodiversity is being lost to agriculture (in an industrialised process in which men are more likely to be employed). The intensive use of pesticides; the large-scale degradation of agricultural land; deforestation to clear land for crops; the production of monocultures of agrofuels crops including oil palm, sugar cane and jatropha; and use of genetically modified seeds, are all factors putting an immense and ever-increasing burden on ecological systems.

GM cotton provides a specific example of devastating potential hazards. In addition to questions surrounding the potential health impacts of GM products (which could impact on people using GM cotton products,²¹ and on animals grazing on cotton^{22 23}), rural communities have been impacted directly by being encouraged to cultivate hugely expensive GM cotton varieties by Monsanto and Bayer CropScience. This has contributed to the tragic phenomenon of farmer suicides, with many farmers taking their own lives when the crops fail to deliver as promised,²⁴ because they have no prospect of repaying the debts they incurred to buy seeds and associated chemical inputs in the first place. The wives of these farmers and their children are left to fend for themselves.^{25 26 27}

The cultivation of monoculture cash crops and tree plantations that are water intensive, like sugar cane, bananas and eucalyptus, is also highly problematic for women. With water an increasingly scarce resource, decreased water availability and increased pollution from agricultural run-off again increases the distances that women have to walk, often carrying heavy loads, to fetch water for household consumption and bathing,²⁸ and to wash clothes in rivers and streams.

There is also a concern that the current proliferation of bio-gas powered tube wells for the irrigation of industrial-scale agricultural production, which is being driven by the increasing cost of diesel and electricity, will make the animal dung currently used for free by rural women, for fuel and fertilizer, harder to come by and more costly. Again this commodification of a natural resource will impact rural communities negatively, especially women.

Another relatively new dynamic that is having an extremely severe impact on food prices, and thus on women's ability to feed their families, is increased volatility in food prices. The price of traded food becomes ever more important to women as they lose access to lands and territories previously used for gathering or cultivating food for free, or because they have been forced to take up work, probably as agricultural labourers, to generate a financial income and have little or no time to farm.

²⁰ <http://www.ipsnews.net/2012/06/nepals-female-farmers-fear-climate-change/>

²¹ <http://www.greens.org/s-r/26/26-15.html>

²² http://indiagminfo.org/?page_id=238

²³ <http://www.gmwatch.org/latest-listing/49-2010/11872-bt-cotton-and-livestock-health-impacts-dr-sagari-r-ramdas>

²⁴ <http://www.thehindu.com/sci-tech/agriculture/article3248530.ece>

²⁵ <http://www.i-sis.org.uk/IndianCottonFarmersBetrayed.php>

²⁶ <http://www.i-sis.org.uk/farmersSuicidesBtCottonIndia.php>

²⁷ <http://www.guardian.co.uk/world/2012/may/15/india-gm-cotton-bayer>

²⁸ <http://www.fao.org/sd/fsdirect/fbdirect/FSP003.htm>

These high and volatile food prices are a result of many factors, including the deregulation of agricultural markets; the dominant role of a few large traders on world markets; increasing demand for land and water for animal feed and agro-fuels; more frequent crop failures as a result of weather extremes triggered by climate change; and a stronger link between prices for agriculture and energy commodities through the increasing use of energy intensive inputs and the use of agro-energy as a substitute for fossil fuels.

Another key factor is the increasing involvement of speculators and other financial investors in the agriculture/food sectors. Investors and banks are increasingly turning to these markets as a means of generating profits, a shift which was facilitated by deregulation in the US in 1999 (which removed caps on how much investors could engage in the food commodities markets). In 2012, for example, it was found that Barclays Bank had made some £500 million in 2010/11 from betting on the price of basic foodstuffs such as wheat and soya.²⁹ These investors are betting on prices of food, by trading in derivatives called 'futures', and they stand to make a handsome profit during devastating food crises, when food prices peak.

There are also indications that these companies' activities are driving the price of those foodstuffs up. Although the world of financial speculation is extremely murky, and it is hard to tell precisely what *is* being privately traded, it seems that investors betting that food prices will increase encourages food traders to hold back supplies of storable commodities with a view to selling them later when the price is higher. This restricts supply and pushes food prices up.³⁰ It seems that this is what happened during the Mexican Tortilla Crisis in 2007, when corn prices were high. Agribusinesses such as Cargill are alleged to have hoarded corn in 2006 and early 2007, claiming stocks were limited; they then sold the stores later at vastly increased prices. As a result, the price of tortillas, a basic foodstuff in Mexico, increased by more than 40%.³¹

Recommendations

The only viable response to the economic and food crisis — which has been triggered by twenty years of neoliberalism — is the full implementation of the food sovereignty paradigm.

The concept of food sovereignty can be understood as being about local access and control of food sources and associated productive resources. The term food sovereignty was coined in 1996, initially as a position by the international peasant farmers' movement, La Via Campesina, in response to and as a form of resistance to trade liberalization in the agricultural sector, which was being pushed hard by industrialised countries in the World Trade Organization (WTO).

Food sovereignty takes a rights based approach, encompassing the right of self-determination, and the right to food and decent work. It drives an anti-colonialist agenda in food production and consumption, upholding the right of small producers to have access and control over their productive resources including land, forests, water sources, and seeds. It emphatically acknowledges the central role of women as producers across various sectors including agriculture and fisheries. These conditions are

²⁹ <http://www.independent.co.uk/news/business/news/barclays-makes-500m-betting-on-food-crisis-8100011.html>
Find World Development Movement report and reference.

³⁰ New Internationalist report on speculation <http://www.newint.org/features/2011/11/01/food-speculation-commodities-trading/> and wdm webpages

³¹ <http://www.bilaterals.org/spip.php?article15259>

critical to ensuring access to affordable, safe and nutritious food for all, including urban marginalized communities.³²

In particular, food sovereignty emphasises domestic production based on traditional agro-ecological methods of food production, ensuring household and community food security first, and *then* distribution to wider domestic markets. It also emphasizes cooperation — rather than competition — in food and agriculture trade, rejecting and resisting trade liberalization as a means of controlling the production and livelihoods of small farmers producing for local markets. It also advocates a spirit of cooperation with respect to food aid, especially in the face of natural and climate disasters, and rejects the use of food aid as a means of controlling food and agriculture commodities markets.

Women’s rights, as set out in the legally-binding Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)³³ and other intergovernmental human rights treaties, must be implemented.

Overall, governments need to:

Reject industrial-scale agricultural production as advocated by agro-chemical/biotechnology firms, including imports, exports and organic production, that conflict with the pursuit of food sovereignty.

Reverse the concentration and misappropriation of land, redistributing lands held by feudal landlords, transnational corporations and financial investors to small and landless farmers, with women as key beneficiaries.

Ensure that, as small producers, women have equal rights to access and control productive resources such as land, seed, water, and forests.

Ensure that women have access to locally-produced, nutritious food free from chemical hazards. This should include special food rights for pregnant and lactating mothers.

Facilitate food production by small farmers, including women, that is based on sustainable agriculture and agro-ecological production processes, with a view to ensuring nutritious food is available to communities.

Provide financial support, including subsidies and interest-free loans, to encourage local, sustainable, organic agriculture that promotes food sovereignty;

Recognize food and agricultural production as part of the formal sector, allowing workers in this sector to enjoy the rights recognized under formal International Labor Organization (ILO) conventions, and giving women full recognition as part of the food production work force in all sectors, including agriculture, fisheries, livestock production, forestry and dairy.

Ensure women’s right to bargain collectively, which will enable them to secure policies relating to equal opportunities, equal pay for work of equal value, maternity leave and benefits, child care, and reproductive health services.

³² For a fuller definition of food sovereignty see: <http://www.foodsovereignty.org/FOOTER/Highlights.aspx>

³³ <http://www.un.org/womenwatch/daw/cedaw/cedaw.htm>

Reinvigorate and facilitate the continued maintenance of traditional seed banks by women, and support the reclamation of genetic resources from multilateral institutions.

Involve women in decision-making processes relating to food production, distribution and consumption, at the community, provincial and national level.

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3.1.2. Fisheries and gender equality

By Vivienne Solis Rivera, Coope Soli Dar R.L., Costa Rica (www.coopesolidar.org)

Poverty, limited access to all types of resources, and political, social and educational constraints have led to the subordination of women generally. This dynamic is entrenched in countries around the world, as women find it difficult or impossible to access those opportunities that might be available to their male counterparts, to improve their quality of life.

This includes access to natural resources and land, which may be more limited or even non-existent for women. This leads to enormous differences in the benefits that women and men are able to derive from the use of resources, and results in important inequalities that need to be confronted on the road to fair and sustainable development.

The unequal conditions experienced by women also make them more vulnerable to environmental change and natural resource deterioration, with multiple implications at the local level, including reduced food security and diminished access to water and clean energy. This in turn impacts on families' and communities' health.

In addition, women's work in natural resource-related production chains is intense, but barely recognized. Women are involved in the diversification of production in the agriculture, forest and fisheries sectors, with important implications for food security and food sovereignty, and the management of coastal, marine and forest resources.

More generally women are involved in natural resource-related knowledge transfer, decision-making at both household and local levels, and managing the sustainable use and conservation of scarce natural resources.

Women's roles in maintaining food security and adapting food production in response to climate change is also frequently overlooked or even denied.

Furthermore, even when women are continuously involved in managing and conserving natural resources, they often have restricted access to the spaces where environmental and economic policy decisions are being made.

These factors all need to be acknowledged and addressed. The direct relationship between the use, deterioration and reduction in availability of natural resources, and the feminization of poverty, underscores the importance of addressing the relationship between gender, environmental sustainability and development. It also highlights the fact that this is a particularly important avenue for poverty eradication.

Women in fisheries³⁴

³⁴ The information included in this section has been adapted from the meeting organized by ICSF in June of 2000. "Proceedings of the workshop on Gender and coastal Fishing communities in Latin America. Prainha do Canto Verde Ceara, Brazil. 10-15 Junio 2000 (2002) 152 pags. Information has been enriched by other sources cited in the references.

Coastal regions are amongst the most productive ecosystems in the world. In these areas, important cultural biodiversity intertwines with the richness of the sea and its resources. For women and men living in coastal and marine communities, fisheries are much more than just a means of employment. Small-scale fishing is a source of food for their families, and supplements their earnings from other activities such as farming and tourism. Fish is caught, processed, consumed and sold. Fishing provides food security, contributes to food sovereignty and a productive way of life, as well as an important nutritional service for non-coastal communities.

However, there are very few sex-disaggregated statistics available about the number of women involved in fisheries-related work, and it has been difficult to introduce the concept of gender to any relevant decision-making platform. Furthermore, the data that *is* available fails to capture the multidimensional nature of the work. This is surprising since women engage in a wide range of activities in the fisheries sector and in fishing communities all around the world. They engage:³⁵

- as workers (paid and unpaid) within the fisheries, in pre- and post-harvest activities, including seafood processing plants
- as the main fishers in inland fishing and aquaculture in many countries around the world
- as caregivers in fishing families and communities, maintaining social networks and cultural identity
- as workers in non-fisheries sectors supplementing the household income from fishing, which is often erratic
- as members of fishworkers' movements and fishers' organizations

While the exact nature of women's work differs by culture and region and between rural and urban areas, the common factor is that it is rarely seen as 'productive'. It has low social value and is normally seen as an extension of the 'domestic' space.

In general the characterization of men as fishers and women as fish processors and sellers is largely correct, but a closer examination of gender in fisheries reveals a more complex situation according to local and cultural contexts. In some countries, for example, it is common that women fish or collect seafood, such as mussels and clams, in coastal or inland waters. This is sometimes done as a side-activity but is very important for the nutrition of their families. Women also participate as entrepreneurs and as fish buyers; it is not unusual for them to advance money to finance fishing trips or give loans to fishers against a guaranteed supply of fish when the catch is landed (*Westlund, Holvoet, & Kébé, 2008. In ILO-FAO, 2011*).

However, these important roles are often overlooked when it comes to resource rights and decision-making and women's role in small-scale fisheries continues to be hidden. In many national laws, for example, women are not considered artisanal fishermen, because the definition of this activity usually excludes the pre- and post-capture activities in which women are actively involved.

"In the case of marine customary rights, gendered aspects remain silent either because the marine domain is historically considered as an exclusive male domain or due to the stigmatized nature of certain coastal property, e.g., the mangrove clam gathering areas used by women in Ecuador" (Kuhl and Sheridan, 2009).

³⁵ Adapted from ICSF web page <http://www.icsf.net>

In most cases, the role of women in small-scale fishing communities is limited to the domestic arena, and their work is hardly recognized as being productive. Traditional supposedly ‘ancillary’ jobs include preparing and baiting the fishing lines (by ‘lujadoras’ in Costa Rica, and ‘encarnadoras’ in Chile), beachcombing, and shellfish and seaweed collecting. In some coastal communities, women also market and process fisheries products and keep account of the resources generated by the sales. This might include cleaning shrimp and crab, for example. In more recent years women have also found employment in aquaculture, including fish farming (see Case Study 3 below).

In general, however, women are not rewarded financially for their work, or they are extremely underpaid, even though they usually work for extended periods of time. In Mexico for example, women may work 18-hour days (Salazar Hilda, 2000) and in Costa Rica the ‘lujadoras’ are paid minimal wages (see Case Study 1).

In addition women near the coasts and sea have generally had to assume the position of ‘head of household’ and take on the additional role of food providers during the prolonged absences of the fishermen while they are at sea.

Furthermore, the deterioration of coastal ecosystems and lakes affects communities’ quality of life, and this is also experienced in different ways by women and men. The reduction in income due to declining fish stocks, as a result of pollution, overfishing, climate change etc. is felt most keenly by women, who are already in a more vulnerable position financially. Women and their families may also suffer ill health as a result of the pollution of lakes and seas. There are serious health problems amongst the women of fishing communities located in oil-producing areas for example.

Case Study 1: Women line organizers (‘lujadoras’) in Tárcoles, Costa Rica
(Summary from: CoopeSoliDar R.L 2008)

The organization and baiting of the fishing lines is a slow and hard job. In this community, located on Costa Rica’s Pacific Coast this pre-capture job is work of women and young girls. It is a low-paid job and the women rarely have social security backup. Remuneration is only on the basis of fishing trips undertaken and is dependent upon the catch. Because of these uncertainties the job is not highly valued. Nevertheless, a large number of lujadoras are also heads of households. In addition to the low pay, the women have no legal or social support, and most of them are not part of a union or cooperative (which would help to protect their interests and facilitate access to various support systems).



Young lujadora working in Tárcoles – Costa Rica. CoopeSoliDar R.L., 2012.

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Case Study 2: The role of women in Senegalese fishing communities

(Summary from: Rajagopalan Ramya. 2012. An evaluation of the Roles of women in fishing communities of Dakar, the La Petite Cote, and Sine Saloum In: Yemaya No. 40. July 2012 page 12)

Research undertaken in September 2011, amongst twelve fishing communities, compares and contrasts the conditions facing Senegalese women trading and processing fish in Dakar, La Petite Cote and Sine-Saloum. The study recorded an increase in the numbers of women involved in trading and processing fish, even though the type of fish traded and processed has changed from species such as the grouper and croaker to the less profitable sardinella. It found that men do not earn enough and that women’s income is essential to meeting the costs of basic necessities such as providing for their children. The

study also found that women have little or no access to the formal credit system. Improving leadership capacities as well as organizational and communication skills are viewed as important priorities. One of the key suggestions from women in the fishing communities was for outreach aimed at building leadership at the community level.

Case Study 3: Young girls' involvement in fisheries

In accordance with common gender lines among adults in fisheries, boys tend to be involved in fishing and girls more in post-harvest activities. While data on child work and labor in fisheries is limited, and even more so for the aquaculture sector, it is likely that girls help in feeding fish, in particular at homestead ponds, and collecting fish seed, while boys may be more involved in the harvesting of fish. However, as in the adult world, gender roles in child work and labor are variable and should be understood in the local context (ILO-FAO, 2011).

Case Study 4: The participation of women in pre-capture, capture and post-harvest fisheries activities in Caletas in Chile

(Conapach, 2000. Women in the Caletas: A reality in the Chilean coastal Zone. In: "Proceedings of the workshop on Gender and coastal Fishing communities in Latin America. Prainha do Canto Verde Ceara, Brazil. 10-15 Junio 2000 (2002) pag. 21.)

In Caletas' women are primarily responsible for mending nets and traps, and cleaning boats; baiting longlines for fishing and crabbing; collecting seaweed and shellfish along the coast; setting nets and traps for fish and crabs in small boats; storing seaweed, shellfish and fish; all stages of processing such as drying, salting, smoking and cooking; and selling seaweed, shellfish and fresh and processed fish. They also own boats. The men are primarily engaged in boat-building; the maintenance of motors and fishing equipment; and most of the fishing.

Case Study 5: Female labor in industrial fish plants in Peru

(Nizama Claudio, 2000. From: "Proceedings of the workshop on Gender and coastal Fishing communities in Latin America. Prainha do Canto Verde Ceara, Brazil. 10-15 Junio 2000 (2002) pag.111.)

Women work in large numbers in factories canning tuna and sardines, and filleting, salting or shelling fish and shellfish. Women get paid either a minimum wage or by piece-work. Women working in these processing plants suffer sub-human conditions, with a workday that can stretch from 8 to 24 hours, with shifts day or night, including holidays.

Recommendations on women's rights, sustainable use and equity related to marine and coastal resources access

We already know that achieving genuine gender equality can be a real driver of change and efforts to achieve sustainable development (IUCN, 2008). Women — in all their rich diversity, and through their

productive work including as peasants, indigenous people, afrodescendants and fisherwomen — have a collective but differentiated traditional knowledge about natural resources that is crucial to the future sustainable management and conservation of those resources.

At the same time prioritising sustainable use approaches,³⁶ including community-based natural resource management and policies that give resource and tenure rights to women, is vitally important for women, since it allows them to increase the benefits they are able to derive from natural resources, with significant implications for poverty reduction. This approach involves promoting conservation based on a long-term vision of the sustainable use of nature, maximizing the value of common pool wild resources, and increasing local governance of natural resources.

There is also a specific need to recognize women as important participants in small-scale fisheries, not only because of their unrecognised or under-rewarded fisheries-related activities, but also because of their role in maintaining the social and cultural activities of fishing communities (Salazar Hilda, 2000). In particular, initiatives that provide women with credit, training and leadership development improve the efficiency, profitability and sustainability of their activities.³⁷ Women also benefit from more secure access to resources for craft-making, establishing small- and medium-sized enterprises and tourism; this in turn leads to more sustainable use of mangroves and other types of wetland areas, and protection for fish breeding grounds and wetland recovery.³⁸

To this end, there is an urgent need for better data. Baseline studies with a gender perspective provide more exact and precise information about the use of coastal and marine resources, allowing planners and policymakers to make better decisions. The importance of using gender-based demographic and production data, especially for development projects and programs in artisanal fisheries and marine conservation needs to be recognized.³⁹

It is also crucial that women are involved in decision-making related to these issues, based on recognition of their biodiversity-related knowledge and work. Women have strengthened fishworkers' organizations and broadened their agendas. When fishers' organizations include women in decision-making and leadership roles, the organizations are more likely to include activities like the provision of childcare, which benefits all members of the organization.⁴⁰ Even more significantly, apart from bringing in issues of concern to themselves as fisheries workers, women have raised concerns about the quality of life in fishing communities, focusing on access to health, sanitation and education.⁴¹

Effective governance and respect for women's rights are key prerequisites that enable women to engage in these processes. A serious shift towards sustainable development requires gender equality and an end to persistent discrimination against women at all levels of biodiversity and cultural resources use.

At the global level, there are two key agreements that need to be taken into consideration when discussing gender issues related to fisheries:

³⁶ “Use, if sustainable, can serve human needs on an ongoing basis while contributing to the conservation of biological diversity”, Sustainable Use Policy Statement, IUCN, 2000,

http://www.iucn.org/about/union/commissions/sustainable_use_and_livelihoods_specialist_group/resources/res_supolstat/

³⁷ Adapted from ICSF web page [http:// www.icsf.net](http://www.icsf.net)

³⁸ Adapted from ICSF web page <http:// www.icsf.net>

³⁹ Adapted from ICSF web page <http:// www.icsf.net>

⁴⁰ Adapted from ICSF web page <http:// www.icsf.net>

⁴¹ Adapted from ICSF web page <http:// www.icsf.net>

The Convention on Biological Diversity: Marine Conservation, the Aichi Biodiversity Targetsⁱ and Ecologically or Biologically Significant Marine Areas (EBSAs)ⁱⁱ

Two of the Aichi Biodiversity Targets relate directly to fisheries and small-scale fishing communities:

- Target 6: “By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and impacts of fisheries on stocks, species and ecosystems are within safe biological limits.”
- Target 11: “By 2020, at least 17% of terrestrial and inland water and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.”

It is important to note that the implementation of both of these targets and the identification of EBSAs will only be developed in a successful way if coastal and marine communities are involved, and social and cultural indicators are taken into consideration. All of these efforts must take gender considerations into account.

The Food and Agriculture Organization (FAO): International Guidelines for Securing Sustainable Small-scale Fisheries (SFF Guidelines)

The SFF guidelines are a supplement to the Code of Conduct for Responsible Fisheries (promoted by FAO in 1995). They are intended to support the enhancement of the sector’s already important role, and contribute to global and national efforts towards the eradication of hunger and poverty. These guidelines have been developed through a participatory and consultative process, involving representatives of small-scale fishing communities, civil society organizations, governments, regional organizations and other stakeholders. Furthermore, in several countries, particularly in Brazil, El Salvador, India, South Africa and Indonesia, participants elaborated proposals to promote gender equity, and the current ‘zero draft’ does contain a chapter on Gender, Equality and Equity. This document is now under review and this needs to be strengthened to ensure that the final document includes a comprehensive and cross-cutting vision of gender in fisheries.

Finally, on women’s rights and equity issues, we must:

- Highlight the contribution of women in fisheries and within the community, recognize the multidimensional nature of their work, and facilitate legal recognition of women workers in this sector.
- Take measures against the exploitation of women in their workplace, ensure social security, unemployment and insurance benefits for women and their families, and work towards putting an end to domestic and sexual violence.
- Encourage women to register their organizations so that they have the necessary means to access credit and participate in development programs.

- Strengthen implementation of international conventions relevant to the elimination of child labour in fisheries and aquaculture, including the Convention on the Rights of the Child (CRC) and relevant ILO conventions (including with respect to informal sector household chores).

- Ensure implementation of child labour legislation through the use of incentives, disincentives and enforcement mechanisms.

On sustainable use and conservation, we must:

- Promote ecosystem-based marine and coastal management, and recognise and promote sustainable use as a valid strategy for the adequate conservation of natural resources.

- Promote the role of women in the management of such zones and areas, and their participation in programs focusing on the conservation and restoration of coastal ecosystems. Facilitate information exchanges amongst them.

Generate gender specific proposals that will permit women and women's organizations to implement their ideas and actions related to conservation and sustainable use.

- Encourage information exchanges amongst involved women, and training programs for communities, especially gender-related events and others that enable fishing communities to carry out their own surveys and produce their own documents, so that they can maintain and improve the responsible management of their resources.

- Use traditional knowledge, with the approval and involvement of the holders of such knowledge (including women), along with the best available scientific and technical knowledge, as the basis for the description of areas that meet the criteria for EBSAs. Indigenous peoples and local communities must be involved in the process of describing EBSAs, by inviting them to regional workshops and consultations. relevant Social and cultural information relevant to any subsequent step in the process of selecting conservation and management measures, should be implemented.

- Promote the participation of fisherwoman in all relevant the fora to discuss global and national actions concerning the conservation of marine ecosystems.

- Support the process for the approval of the FAO International Guidelines for Securing Sustainable Small-scale Fisheries.

- Eliminate subsidies for industrial fishing fleets and encourage community-based governance models for marine protected areas.

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3.1.3. Forest, biodiversity and indigenous women's rights

By Isis Alvarez, Global Forest Coalition, Colombia

Forests are extremely diverse ecosystems on which many creatures depend, including human beings. Whether for direct or indirect use, people — and especially women — rely on the services forests provide and their associated biodiversity. Yet the world's forests are being destroyed at an alarming rate.

Rural and indigenous women, often heads of households,⁴² are particularly dependent on free access to resources including fuelwood, medicinal plants, fodder, fruits, nuts and seeds (WRM, 2002). Furthermore, during conflicts and natural disasters, displaced rural people become even more reliant on freely available forest products and services,⁴³ and this again applies in particular to women. As a result, women are recognized as being more severely impacted by environmental degradation (Shiva, V. cited in Leach, M, 2004: 291).⁴⁴ In fact when rural women's access to forest resources is improved, their income increases and they are most likely to spend this income on their children's education, health care and feeding the household.⁴⁵ Women's access to forests and associated biodiversity therefore has a direct bearing on poverty alleviation and the well being of families.

Furthermore, when women's involvement in related governance processes is restricted this in itself serves to perpetuate the problem, since they are unable to improve associated decision-making systems. Land tenure is a critical example. Women often cultivate lands that they do not own, and gather resources from forests to which they lack titles. Even where there are land tenure policies in place, some patriarchal cultures will not consider women's land tenure rights,⁴⁶ thus leaving women and even families landless. At the same time there has been a growing realization that insecure tenure rights are a key cause of forest degradation as forest users have few incentives — and often lack legal status — to invest in managing and protecting forest resources that they do not own (A. White & A. Martin. 2002). Failing to tackle such causes of deforestation and forest degradation aggravates negative impacts on vulnerable groups, such as women, who depend on forests for their livelihoods, thus increasing poverty. But many land policies and agrarian reform programs, whether they are redistributing land or reforming tenure rights, have overwhelmingly granted these rights to men, which in turn contributes to continuing discrimination against women.⁴⁷ Lastarria-Cornhiel (2009) affirms that one of the main characteristics found in land tenure reform and redistribution programs across the world is that they have tended to ignore gender.

Indeed, in spite of women's extensive traditional knowledge of forest management and sustainable resource use, they seldom have a voice in decision-making. Poor education and invisibility in public affairs, as a result of gender inequalities, often bar them from having a voice in decisions on land use and forest management (Sun *et al.* 2012), and from accessing new knowledge, technical capacity and other

⁴² Women's increasing responsibility in reproducing and maintaining the family has increased over the last decades because, among others, societies and resource-poor households become more economically vulnerable to global market forces (Lastarria-Cornhiel, 2009).

⁴³ Source <http://www.fao.org/gender/gender-home/gender-programme/gender-forests/en/>

⁴⁴ Source: <http://www.biblio.colpos.mx:8080/jspui/handle/10521/534?show=full>

⁴⁵ See Adedayo 2010, Blumberg 1991, Von Braun et al 1994, Hirschmann 1984 - See Lastarria-Cornhiel (2009).

⁴⁶ e.g. In countries like Albania or Kyrgyzstan, property rights in land and inheritance practices will conform to patrilineal custom, regardless of formal legislation that espouses gender equality of rights.

⁴⁷ In Mexico's *ejidos*, for example, only persons who have *ejidal* rights to land are considered *ejido* members with the right to vote on community issues. When women are denied equal property rights, they also experience reduced social, economic, and often political status.

related educational opportunities. Thus men are more likely to be able to access and control resources and derive improved income, including by engaging in commercial activities.

These problems are compounded by escalating global demand for timber, other wood-based products and non-timber-forest-products (NTFP), and agricultural commodities grown in previously forested lands, including for use as biofuels. Current climate change policies are also focused on and impacting access to forests and biodiversity greatly.

In general, forests are increasingly considered a valuable global commodity and private companies, backed by governments, are rapidly ramping up related commercial activities. In addition to commercializing timber and non-timber-forest-products, they can now buy and sell the carbon stored in trees through the introduction of market-based mechanisms focusing on payment for environmental services (PES), which are deliberately intended to create new and profitable opportunities for and thus engage the private sector. These include schemes such as Reducing Emissions from Deforestation and Forest Degradation and enhancing forest carbon offsets (REDD+).⁴⁸

Crucially, however, these schemes are based on the current UN definition of forests, which equates plantations with forests. This allows the conversion of real forests into monoculture plantations of alien tree species oriented towards the global market, thus leading to further biodiversity loss, soil erosion, and depletion of water sources, and other social and ecological impacts⁴⁹, again with disproportionate impacts on women. But it would be important to understand that forest resources are key for the survival of people who depend on them as opposed to industries seeking more profits from such resources.

In a vicious circle this commodification also exacerbates discrimination against women. Women often earn less, and own less, having fewer capital assets such as land, and fewer land and inheritance rights. They also have less opportunity to access education. As a result they are seldom engaged in negotiating deals or signing contracts, and this impacts directly on their ability to be involved in decisions about whether to accept the commodification of forest and biodiversity resources through projects such as PES and REDD+. Rather, it is men that are most likely to engage in these projects and benefit from them.

In addition, the increasingly prevalent use of individual property rights and denial of collective access to forest resources makes women even more vulnerable (Sun et al. 2012). Ownership of forests and the sale of forest products are largely under the control of men throughout the whole chain, and women's needs and concerns are neglected. They have little involvement in or influence over the way in which development activities are determined.

Furthermore, most rural women depend on subsistence farming, whereas privatization and market-oriented policies have tended to benefit larger farmers, increasing inequalities between them and smallholder producers (Bryceson and Jamal 1997 In Lastarria-Cornhiel, 2009). The relatively recent trend towards privatizing more and more land, including as part of a process of 'market-assisted land reform' has not given women legal and equal rights to land in rural areas (Lastarria-Cornhiel, 2009).

⁴⁸ Further information on REDD/REDD+ see <http://www.redd-monitor.org/redd-an-introduction/>

⁴⁹ For further information regarding the social and environmental impacts of forest conversion into plantations read the report 'Potential Impacts of Tree Plantation Projects under the CDM - An African Case Study' by Karumbidza & Menne – see references below.

Communities in Africa and Latin America are increasingly being evicted from their ancestral lands, especially where property rights have not been clearly defined,⁵⁰ often to make way for extensive agroindustrial plants and plantations. This is also known as land-grabbing.⁵¹ Women, usually small-scale farmers who used to grow their own food, now see their food security undermined: they can't feed their families properly any more, and in some cases are forced to depend on food aid (see box 1 below). Other consequences may include women having no choice but to migrate to cities⁵², adding to the thousands of people living in poverty; many of those who migrate end up in prostitution or other low-paid jobs.

Box 1. Ethiopia - Case Study by Patricia Howard, researcher from the Wageningen University (Antonios, 2006)

In Tigray, Ethiopia - one of the poorest regions in the world – there is a highly significant correlation between extreme poverty and households where the head of the household is a woman. Belonging to such a household means one is 35% more likely to be poor, compared to a 8% in households led by a man. In addition, women heads of family often lack land ownership, and where they do own land, 70% of the women are obliged to rent the land out, losing close to 50% of the harvest, because they lack enough workers or working animals to help them with direct harvesting. Thus many households headed by women depend on food aid. Additionally in this area, there is limited access to forest and agricultural resources, which are also key for their livelihoods, because it is an area severely affected by soil erosion, deforestation, and overgrazing. Access has also been deteriorating, including because of physical delimitation with fences and monoculture plantations. Cultural prejudices also affect women in Tigray: there is a high divorce rate fragmenting agricultural activities as “getting a divorce and building a new family, especially for men, is a new way of accessing additional land.” Despite this situation, the Ethiopian government has recently been involved in providing access to extensive areas of land to foreign investors, causing further harm to its people (Oakland Institute, 2011).

Conclusions and application to SDGs/post-2015

Women play an important role in feeding their families and hence, in the reduction of poverty. Although both men and women have roles with respect to the sustainable use and conservation of forest resources, women's roles are often ignored. Forest and land policies that are gender blind and do not take a rights-based approach will continue to marginalize women, both legally and socially, excluding them from decision-making and from benefitting from forest and land resources (Bandiaky-Badji, 2011). Environmental issues impacting women and other related subjects, such as health, should not be considered separately. According to Sun et al. (2012), focusing on the interface between environment and health would offer a strategic opportunity to build on the strengths of forest-dependent women, mobilise support across sectors and political scales, and converge lay and professional knowledge for forest governance that takes women's interests and needs into account. In addition, if women's land rights are improved this will progressively reduce discrimination against women, as they will have a formal right to voice an opinion about potential projects in their territories. To this end women's access to information and capacity-building must also be ensured, to enable them to participate in decisions regarding the sustainable use and management of resources, such as forests and associated biodiversity. This, of course, goes hand in hand with the need for governments to demand that companies implement consultation processes, in advance of projects being implemented and before contracts are signed.

⁵⁰ see for example Land-grabbing in Africa: A Review of the Impacts and possible Policy Responses, Kachika (2010)

⁵¹ Ibid.

⁵² El frente de la soja avanza: Inmensos monocultivos desplazan a los campesinos indígenas de la sabana chaqueña en Argentina <http://redaf.org.ar/noticias/?p=5577>

The current shift towards a 'Green Economy' which promotes an economy based on bio-products (bioeconomy) might not bring such rights and opportunities to women or rural peoples depending on the well-being of and access to forest and biodiversity resources; conversely, processes of privatization in a number of regions have shown that women are the most affected⁵³, thus "the push for a bio-based economy comes with a call for market-based mechanisms for the financialization of the Earth's natural processes, re-branded as 'ecosystem services,' which also encourage land and water grabs" (ETC Group & H.Boell Foundation, 2012). Such emergent approach appears to be 'business as usual', socially and environmentally blind to the needs of women and rural peoples worldwide where unsustainable consumption patterns remain unaddressed, increased environmental pressures as more and more biomass will be required, and with the use of unknown and risky un-tested technologies that brings substantial profits to a few business-men.

A post-2015 sustainable development agenda must include goals that strive for women's empowerment, and facilitate the conditions needed to promote and ensure women's autonomy and self-determination, ensuring their opportunities for food sovereignty and lessening their vulnerability to market forces, including those that promote working conditions close to slavery, and that increase the gap between rich and poor. It is necessary to protect women's traditional knowledge, and to promote its application/adaptation in sustainable development more broadly, since this knowledge has permitted the sustainable use and conservation of natural resources over many centuries. Sustainable production and consumption is not a myth, people have already cultivated and protected lands over millennia. Returning to locally-based economies that reduce resource consumption throughout the whole chain can bring possibilities for reducing the world's hunger and meeting the so-'longed for' Millenium Development Goals. MDGs initially aimed at eliminating gender disparity in primary and secondary education failed to address quality of education or rights to education. The development of the SDGs thus represents an important opportunity to ensure that this first step in women's empowerment really happens, and that specific, realistic and clear targets to that end are set.

The implementation of rights-based and people-centered projects that strengthen gender justice are critical to developing environmental and social benefits for all women and men.⁵⁴ "National subsidies for large-scale biomass and other unsustainable, risky investments should be replaced with public funding for sustainable and appropriate wind, solar and tidal energy. Government should stop subsidizing industrialized food production and instead offer effective support to small-scale farmers"⁵⁵ and other locally-based initiatives, especially those benefiting women. Funds need to be invested in programs that directly support alternative rights-based forms of forest conservation and restoration that are already known to work⁵⁶. These include Indigenous territories and community conserved areas (ICCA's) that can incorporate and ensure gender empowerment as depicted in the box below (Box 2).

In IUCN/WEDO's Forests and Gender report (2011) authors highlight that "taking a gender perspective in forestry has nothing to do with political correctness and everything to do with development and conservation effectiveness: an awareness of the power relations between men and women vis-à-vis forest resources can only help ensure that these resources are used sustainably and equitably for the benefit of current and future generations. If we ignore gender, there is no doubt that we will fail in our

⁵³ Ibid 9.

⁵⁴ See full [final women's major group statement for Rio+20](#)

⁵⁵ <http://globalforestcoalition.org/wp-content/uploads/2012/09/bioeconomy-flyer-ENG.pdf>

⁵⁶ Excerpt from the Women's Caucus statement during UNFCCC-COP16 in Cancun, 2010.

efforts to strengthen forests' contribution to poverty reduction, biodiversity conservation and sustainable development" (Aguilar *et al.* 2011).

Box 2. Case Study – All Women's Forest Protection Committee in Dengajhari village, Nayagarh (India); (Pathak, 2005)

Dengajhari village is situated in Nayagarh district of Orissa. These forests were once dense, but they were plundered due to the setting-up of heavy industries and the pressure on the forest resources due to population explosion; women had to walk as far as 12 km daily to collect firewood for their hearths, and villagers began migrating for employment. Faced with an impending ecological disaster, many villages in Ranapur initiated forest protection and regulated use of resources within and around their villages. There were few open-access forests left, leading to consequent clashes between the protecting communities and the illegal users. Gradually, facilitated by some NGOs, various clusters came together to form a *parishad* (federation).

Dengajhari consists of 30 households dominated by the Kand tribe. Patrolling parties, all men, began to face serious threats from the timber mafia and villagers were demotivated and discouraged to protect forests. Additionally, time spent on patrolling started affecting the daily wages and to compensate for the loss men were often compelled to fell a tree. In the meantime Ranapur Federation, with the help of NGO Vasundhara, started convening monthly meetings of the women from the member villages. The objective was to elicit better participation of women in the decisions related to forest protection. Women from Dengajhari regularly participated in such meetings. After some deliberations, the women decided to take on the responsibility of forest protection.

Around the same time, on 26 October 1999, 200 people with 70 carts were seen entering the forest. The village men rushed to the forest department but received no help from them. All the village women gathered at the village temple, divided themselves into two groups, waited at the paths leading to the forest and besieged the offenders with spades and sharp weapons. The offenders, all men, were scared of retaliating because of social reasons. They feared that they could get charged with violence against women—that too, tribal women—which was legally a serious offence! The men ran off. Women then sent for members of the federation and forest officials. The felled timber was confiscated and sold by the villagers, and the money was deposited in the village fund. After this incident, women started patrolling the forests regularly.

Although all meetings about village protection are open to all villagers, women are the main decision-makers. In a state like Orissa, where women's participation in decision-making is negligible, Dengajhari is among the few villages where even the monthly general body meetings of the Ranapur Federation are attended by women. The women have adopted the *thengapalli* practice for forest vigilance. Every day four women patrol the forest and by the evening the *thengas* or batons are placed in front of the houses that should take over patrolling the next day. The women's committee has also laid down certain rules for collection of forest resources. The small population of the village, which makes for a high amount of transparency and visibility of each other's activities, ensures that people abide by the rules.

As a result, Dengajhari itself protected about 80 ha of lush green forest and, if seen in association with protected forests of adjoining villages, the green patch is considerably larger, and possibly contains significant wildlife populations. Dengajhari is one village where the able support and intervention of the federation resulted in successfully thwarting external pressures. With that emerged a unique and powerful initiative by the women to become the caretakers of their forests.

Recommendations

The Rio+20 negotiations finished with very little progress for women's rights and rights of future generations in sustainable development. Strong commitments regarding **women's rights to land, property and inheritance which will therefore limit access to resource use**, were lacking. Thus, sustainable development goals must include specific reference to the implementation of the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) and women's rights, thus:

Ensure that CEDAW is implemented and enforced without delay if forest dependent women are to be empowered, and if women's rights are to be genuinely considered. Parties need to integrate the provisions of the Convention into national legislation, especially Articles, 3, 13, 14 and 15,⁵⁷ which - among others - refer to the right to access the same quality of education as men worldwide, enabling full and effective participation of women in the decision-making processes that affect them.

- Article 3 refers to Parties taking up all the appropriate legal and non-legal measures for full development and advancement of women, on a basis of equality with men;
- Article 13 refers to Parties taking measures to eliminate discrimination against women, on a basis of equality with men, in particular rights to family benefits, economic credits and participation in different sorts of activities;
- Article 14 refers to rural women, their problems and the roles which are key for family survival and recognizes the importance of women's work which goes unpaid, and application of provisions to rural women. Also ensure that women benefit from rural development (participation in planning, obtaining training/education, community activities, access to credits, agrarian reform, technology.)
- Article 15 equality with women including legal capacity; contracts and other private instruments restricting women's legal capacity should be null and void.

Governments should ensure that they:

Define new goals for sustainable development (SDGs and others), and related legislation, that consider gender as a cross-cutting issue.

Commit to long-term actions on gender equality and women's rights and **Integrate** the gender dimension in social, environmental, and cultural indicators.

Pay particular attention to addressing the drivers of deforestation and forest degradation, such as consumption patterns and failed climate policies promoting false solutions to climate change, since these have a disproportionate impact on women⁵⁸.

Urgently prioritise measures to halt land-grabbing. Clearly — as noted earlier in this paper — the formal right to land influences women's rights to access natural resources. As a result, greater recognition of women's right to own land is paramount when it comes to halting land grabs and reducing poverty. Women constitute the majority of the world's poor, and are often heads of family, but without access to land and control over its use, they lack the means to generate food and income⁵⁹.

⁵⁷ <http://www.un.org/womenwatch/daw/cedaw/text/econvention.htm#article3>

⁵⁸ During the last UN climate change negotiations, an important decision regarding gender balance was achieved: *"Promoting gender balance and improving the participation of women in UNFCCC negotiations and in the representation of Parties in bodies established pursuant to the Convention or the Kyoto Protocol."* Full decision in http://www.wecf.eu/download/2012/december/gender_balance.pdf

⁵⁹ Access to other productive resources such as water, irrigation systems, and forest products is also tied to land tenure (Meizen-Dick et al. 1997 in Lastarria-Cornhiel 2009).

Keep environmental services and forests out of carbon and other markets.

Revise and **redirect** perverse incentives that harm forests and biodiversity and destroy livelihoods (e.g. biofuels).

Redefine the FAO's definition of forests where forests are a holistic definition can include forest's complex processes and cycles that hold a high biodiversity of animal and plant species upon which many creatures and life forms depend on, including humans; Forests and biodiversity should not be considered as separate subjects in national and international legislation as both are inextricably linked and such division only serves the interests of big industries.

Apply moratoria and bans on deforestation in those areas where unsustainable forest and biodiversity use occurs, taking into account the needs and uses of local peoples who are dependent upon those resources for their livelihoods and wellbeing.

Recognize women's traditional knowledge, which has long proved to be effective in the conservation and stewardship of natural resources, as well as the right to fair and equitable distribution of benefits derived from this knowledge and/or the resources generated by the lands they tend (even if it is not formally theirs because of the lack of land tenure). **Incorporate** this knowledge into current forest policy.

Reward women for their biodiversity stewardship – especially regarding saving seeds and nurturing trees – through targeted and effective public governance measures — and recognise their work through awards and other measures that publicly highlight their efforts.

Prioritise biocultural approaches and initiatives such as Indigenous and local communities conserved territories (ICCAs) and the implementation of UNDRIPs in every decision-making step.

The Preamble of the Convention on Biological Diversity shows a commitment to gender equality by, *“Recognizing also: the vital role that women play in the conservation and sustainable use of biological diversity and affirming the need for the full participation of women at all levels of policy-making and implementation for biological diversity conservation.”* In addition, Aichi Target 14 makes a clear gender reference: *“By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable”*.

Hence, national-level interventions for sustainable development must recognize the different situations of women's role in forests in each country and design strategies to achieve gender equality and women's empowerment; country specific needs and realities need to be taken into account in international goals, for instance with the mainstreaming of gender into NBSAPs.

Women's access to a fair and equitable distribution of the benefits generated by their land should also be bolstered by the **ratification** and **effective implementation** of the Convention on Biological Diversity's Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS), and the enforcement of the United Nations Declarations on the Rights of Indigenous Peoples (UNDRIPs).

Increase women’s participation, capacity building, and other empowering strategies that allow them to gain greater control and power, and a stronger voice in decision-making processes. Women need to be aware of their rights, and how any planned activities can affect or benefit them.

Prioritise small-scale, community-led initiatives that have proven to be effective for income generation, food and energy sovereignty and welfare (*‘buen vivir’*) in general.

Secure land tenure rights and retain free access to natural resources for the most vulnerable groups in society, including women and particularly Indigenous women.

Improve monitoring systems for foreign investment and its social, economic and environmental impacts.

Article 3

States Parties shall take in all fields, in particular in the political, social, economic and cultural fields, all appropriate measures, including legislation, to ensure the full development and advancement of women, for the purpose of guaranteeing them the exercise and enjoyment of human rights and fundamental freedoms on a basis of equality with men.

Article 13

States Parties shall take all appropriate measures to eliminate discrimination against women in other areas of economic and social life in order to ensure, on a basis of equality of men and women, the same rights, in particular:

- (a) The right to family benefits;*
- (b) The right to bank loans, mortgages and other forms of financial credit;*
- (c) The right to participate in recreational activities, sports and all aspects of cultural life.*

Article 14

1. States Parties shall take into account the particular problems faced by rural women and the significant roles which rural women play in the economic survival of their families, including their work in the non-monetized sectors of the economy, and shall take all appropriate measures to ensure the application of the provisions of the present Convention to women in rural areas.

2. States Parties shall take all appropriate measures to eliminate discrimination against women in rural areas in order to ensure, on a basis of equality of men and women, that they participate in and benefit from rural development and, in particular, shall ensure to such women the right:

(a) To participate in the elaboration and implementation of development planning at all levels...

(d) To obtain all types of training and education, formal and non-formal, including that relating to functional literacy, as well as, inter alia, the benefit of all community and extension services, in order to increase their technical proficiency...

(f) To participate in all community activities...[and]

(g) To have access to agricultural credit and loans, marketing facilities, appropriate technology and equal treatment in land and agrarian reform as well as in land resettlement schemes.

Article 15

1. States Parties shall accord to women equality with men before the law.

2. States Parties shall accord to women, in civil matters, a legal capacity identical to that of men and the same opportunities to exercise that capacity. In particular, they shall give women equal rights to conclude contracts and to administer property and shall treat them equally in all stages of procedure in courts and tribunals.

3. States Parties agree that all contracts and all other private instruments of any kind with a legal effect which is directed at restricting the legal capacity of women shall be deemed null and void.

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3.1.4. Sustainable Energy and women's control

By Kalyani Raj, All India Women's Conference

(This chapter is still work in progress)

"A change in the energy production paradigm is necessary, and women should be at the forefront of the energy revolution."⁶⁰

INTRODUCTION:

This paper stresses the need to integrate gender into energy policies and reiterates the necessity for clean and safe energy access for women.

Energy is an essential and fundamental component of people's daily lives. When energy is lacking or in scarce supply, this absence of sufficient energy can drastically and adversely affect every kind of society, right across the world. Yet while men and women benefit equally from energy inputs, the reasons why they need energy and the ways in which they use it differ considerably.

Although women due to gender roles are frequently engaged in collecting fuel and water and have responsibility for many household chores, social and economic limitations may still prevent them from convenient access to natural resources, including energy. Furthermore, energy-related hardship is more exacting on women than on men due to the societal structure and the nature of their domestic duties, which may be impacted considerably by their ability to access energy resources.

Inevitably, the skewed division of power and responsibility hampers women's ability to engage in and influence all the decisions that might affect them, and this may well include addressing their own basic energy needs. Under such circumstances, any additional energy shortage will create even more difficulties for women, and affect women more than men. It is therefore imperative that the gender perspective is reinforced at the policy level with respect to energy production and distribution.

Employing a gender perspective in the assessment of energy distribution serves a two-fold purpose. Firstly, it outlines the difference in needs between the genders, taking into account the negative influences affecting women including significant factors like poverty and inaccessibility that may be impacting their lives. Keeping these important variables in mind is the key to formulating a fair and effective energy project plan.

The second objective of a gender sensitive methodology is to differentiate the roles adopted by men and women within the walls of home and society including with respect to energy solutions. It assumes that women should not be mere beneficiaries of technological developments, but active participants in resolving issues pertaining to their need for and access to energy sources.

BACKGROUND & GENDER DIMENSION WITHIN ENERGY:

⁶⁰ The Hon. Ms. Elizabeth Thabethe, Deputy Minister, Department of Trade and Industry, Republic of South Africa, speaking at the 'Power Kick for Africa 2011' conference held in Nigeria, in June 2011.

“Specific spheres of activity become the domains of different genders as they increase their knowledge and skill over time. As a result, local knowledge and skills held by women differ from those held by men.”
(Appleton, et al. 1995a)

While most countries do provide for equal individual rights for men and women with respect to their access to energy resources, there are barriers when it comes to their actual realization. Women’s rights to clean and safe energy are mostly suppressed due to unequal gender relations, despite the fact that it is women that contribute most to climate change mitigation, disaster reduction/prevention and the preservation of natural resources.

Women represent the life-giving and conserving aspect of human nature. In most developing countries, they spend longer hours in survival activities, like fuel, fodder and water collection than men do. Out of the total burden of work, women carry an average 53% in developing countries and 51% in industrialized countries (United Nations Report, 1995). They are also more involved and hence, judicious in the utilization of natural resources. Most women in developing countries have expertise and practical experience on how different fuels burn and how to use them optimally. Yet, they face energy poverty differently and more severely than most men do.

Children’s safety and family health are primary concerns of women. Their routine work like food preparation exposes them to indoor air pollution and food pathogens. Home maintenance makes them more vulnerable to energy pollution and waste contamination. The gradual depletion in biodiversity, decrease in agricultural income and ambitious urban opportunities forces rural men to migrate in search of greener pastures forcing women to take the additional burden of finding alternate means to meet their family’s energy and economic needs. However, the domestic activities performed by women, being unpaid family labour, are not quantified or measured and do not find a place in the energy system. While women’s energy related requirements and activities were traditionally well recognized, they were not highlighted in energy policies till last decade. Women themselves mostly underestimated their contribution and the importance of their own health while catering to the family needs. Moreover, educational constraints, cultural barriers and economic dependence also resulted in unequal distribution of control and benefit between women and men in the energy sector.

EQUITY & GENDER :

Collection, analysis and interpretation of appropriate statistics are essential aspects for gender integration in energy policies. In the absence of adequate information, gender policies can be influenced and biased. Article 2 of CEDAW, condemns discrimination against women in all forms. However, preliminary research indicate that the gendered nature of sectors like energy, does lack disaggregated data (Expert Group Meeting in Ghana 20-23 September 2011) resulting in the formulation of policies which are not gender sensitive. Women’s contributions are undervalued and technological innovations most of the times fail to reach deserving beneficiaries. Article 14 refers to rural women having equal access to productive resources. Insufficient training and advocacy, lack of finance and gender gap between men and women restrain women’s access to clean and safe energy. Strategic intervention by institutions and government agencies therefore, is essential to work out policy guidelines that acknowledge women’s contributions.

PROGRESS:

There has been a definite paradigm shift in the energy sector over last decade. With the development of technology and access to education, women are now actively participating in the energy profession in

many countries. From being household energy managers, users and suppliers, there is a thrust of their also becoming significant energy entrepreneurs. Women are managing funding agencies in a number of donor countries and supervising alternate energy projects in many developing countries. Civil societies and Non Profit organizations have played a crucial role in bringing about the change of scenario. Alternatives and options continue to be explored and developed to solve energy issues. Energy practices and policies now focus on a broader range of quality and access issues rather than on traditional technical and supply concerns. However, there are still gaps between the policy and implementation level and a stronger need for efficient enforcement.

CASE STUDY :

A joint study done by Jyoti Parikh, Soudamini Sharma and Chandrasekhar Singh in Himachal Pradesh state of India indicates a very interesting link between illiteracy and health problems. "Illiteracy apparently influences respiratory health, even in households using clean fuels, with illiterate women being at greater risk (12.5% with symptoms) than literate women (5.2%)". Himachal Pradesh is one of the progressive states in India where (based on the above report) the status of empowered women in family/community decision making capacity is comparatively higher than other states. 91% of the surveyed area have infrastructure for clean fuel and 49% of the households have the facility to use the clean fuel through a public distribution system. However, only 31% of the household were actually using it. Out of the total families surveyed, 64% of households were of the view that clean fuels are very expensive, 22 % were scared / hesitant to use them while 12% said that fuels were not always available. Linkages between health impacts and gender for various age groups have also been established in this paper. The study has revealed that girls below the age of five years and females in the 30-60 years age groups (who are usually the chief cooks in a family) are at higher risks than males in the same age groups.

During 1982-85, the Government of India initiated a national programme on Smokeless Improved Stove to get over the energy crisis in rural India. The programme was implemented at villages where women used fire wood or cowdung cakes for cooking.

A training module comprising of concept, construction, maintenance and repair of the improved stove was designed and the training was conducted in almost all states of India. All India Women's Conference, a national level NGO, was appointed the nodal agency for the government, for implementation of this project and they have been working on this project for the past two decades. This programme is still being continued in a few states but notably in Andhra Pradesh, where tribal women are being trained and are earning decent income. This initiative has reduced the drudgery burden as well as opened up income generation opportunity for rural women.

There is also a strong link between energy access and cost, depending on the geographical location, size, structure, income and expenses. In some countries, cost of energy constitutes a significant portion of household expenditure, whereas, in other places energy is considered a part of overall rural existence and its access/cost is not identified as a separate issue. In a joint German/South African pilot study conducted by The South African Department of Minerals & Energy (DME) and the Gesellschaft fur Technische Zusammenarbeit (GTZ), in three different areas of South Africa (one remote rural, one rural and one semi-urban), poor households (earning around US\$70 per month) were spending 26% of their total income on meeting energy needs whereas the richer family (earning US\$ 140 and above) spent only 7% (ENERGIA News June 2000). The reason for poor spending more on energy was mainly because of the types of fuel they used as well as their patterns of income and expenditure. In Zimbabwe, however, 'Energy is an intrinsic part of other activities and therefore, does not readily manifest itself as a problem. In the western part of Zimbabwe, a status symbol is attached to the bride who makes a large wood pile

(ibonda) during the first few months after her marriage'. (Women & Energy : A Zimbabwean Perspective by Sithembile L. Nyoni).

CONCLUSION :

Clean and safe energy needs to be considered an essential human right. An integrated equity based approach by the State to the issue of energy can uphold, protect and promote access to basic energy services. The energy issue is also linked with the prevalent cultural and social norms that shape rights for women and influence legal framework. In 2010 UN Secretary General's Advisory Group on Energy and Climate Change (AGECC) called for commitment and action on two goals; "universal access to modern energy services and reduction of global energy intensity through energy efficiency measures". There needs to be a concerted effort from regional, national and global agencies to ensure equitable policy framework for fair disbursement and judicious consumption. Advocacy among women in rural regions about equity, energy resources and options is most essential. Renewable energy techniques, which are also linked to income generation, should be further subsidized and popularized. Access to finance needs to be liberalized and capacity building resources be improved to encourage more number of women to become energy entrepreneurs.

Recommendations :

- a) Strategic and gender-sensitive investment in energy infrastructure to make women's labour contribution more productive.
- b) Subsidy and incentive for production and utilization of modern and clean fuels that correspond with women's energy needs.
- c) Women's access to liberalized credit and finance
- d) Regulations supporting owning of assets by women & intellectual property rights
- e) Technology and advocacy for improved household energy system
- f) More women to be engaged in energy decision making processes at national as well as global Level.
- g) Tools like Self Help groups to be strengthened to set up effective linkages between women Clean energy entrepreneurs and Micro finance institutions.

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3.1.5. Unsustainable Energy: women are twice as sensitive to nuclear radiation

By: Karin Wurzbacher, UmweltInstitut München, and Sascha Gabizon, WECF International

Nuclear energy presents a highly significant health risk. Human health is impacted negatively by exposure to nuclear materials at all stages of the nuclear cycle, from the mining of uranium, through to the production of atomic weapons, the generation of nuclear power and the storage of nuclear waste.

Exposure to ionizing radiation causes damage to the chemical structures of cells. When cells or their DNA are damaged, natural cellular processes try to repair the damaged areas. If they are unsuccessful the mutated cell may die. But if it survives, the mutated DNA can accumulate in the body through subsequent cell divisions that can potentially lead to cancer.

The way in which radiation affects health is dependent on several factors relating to exposure, the type and intensity of radiation, the weather (such as rain and wind), proximity to the source of radiation, and length of stay in radiated areas. After nuclear accidents most health effects appear a number of years later, often in the next generation. In fact, the less radiation a person is exposed to, the longer the latency period, and the later the disease is likely to be detected.

Ionizing radiation has both direct and indirect health effects, which are known as 'deterministic' and 'stochastic' effects respectively. For deterministic effects there is a direct link between cause and effect. For example, in Chernobyl, 28 power plant workers died after massive exposure to radiation (0.8-16 Gy). Stochastic (or chance) effects entail a latent response in which the probability of developing a disease, such as cancer, cataracts, heart or vascular disease, increases later in life. However, the origin of the disease is difficult to trace back to radiation, because these diseases can also have other causes. The largest stochastic effect in Chernobyl was the dramatic increase in thyroid cancer in the area surrounding the power plant.

Equally dangerous impacts include non-carcinogenic diseases. For example, the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) estimates that between 30,000 and 207,500 children have been born with genetic mutations due to nuclear radiation from the Chernobyl disaster.

One specific consequence of radiation is its effect on reproductive health. After Chernobyl a lower fertility rate was observed in affected areas, while the number of stillbirths increased dramatically. Additionally in remote areas of Poland, there were fewer live births in 1986 compared to previous years. In the Chernobyl region there were also indications of many miscarriages (natural aborted pregnancies), and the number of miscarriages in Western Europe also increased as a result of the Chernobyl disaster.

It is notable that women and children suffer greater health damage from radiation. For example, cancer incidence and death as a result of exposure to radiation is twice as high for women as it is for men.^{61,62} Radiation sensitivity depends on age and on sex, and is especially high for the unborn child. The same goes for all female organs. The higher sensitivity of women is a result of, among others, hormones and cell growth in certain tissue, for example in breasts.

⁶¹Mary Olson, NIRS Briefing Paper October 2011 - www.nirs.org/radiation/radhealth/radiationwomen.pdf

⁶² Biological Effects of Ionizing Radiation (BEIR) VII, Phase 2 report, "Health Risks from Exposure to Low Levels of Ionizing Radiation," published by the National Academy Press in 2006, Washington, D-C.

The latest research clearly shows that current radiation protection is insufficient to protect the unborn child effectively. Radiobiological research focuses mainly on malformations that may occur during the organ formation weeks three to seven (10); mental retardation, which usually occurs during week eight to 15 or in a weaker form in weeks 16 to 25 (11); and cancer in children, especially leukaemia, which may occur anytime during the pregnancy and is induced by low radiation doses (6, 7).

Perinatal mortality due to Chernobyl

A number of academic research projects have shown that the effects of low-level radiation on a foetus can be terminal. After the accident in Chernobyl, Germany witnessed a highly significant correlation between exposure of pregnant women to caesium and perinatal mortality seven months later (2). A local connection between caesium soil exposure in Bavarian districts and increase in rates of perinatal mortality in 1987 was reported (3). In one particular area of Bavaria, where there was a 0.5 mSv per year increased background radiation, the infant mortality was significantly higher (15.7 %) than in the rest of Bavaria (4). As a consequence of above ground nuclear tests, West Germany also showed a marked increase in perinatal mortality around the year 1970, against an otherwise steady downwards trend. The deviation from the trend correlates with the calculated strontium concentration process in the pregnant women (5).

Children are especially at risk from radiation, because there is more cell division during childhood growth and development. Dividing cells are more susceptible to mutation than resting cells. Furthermore, cells only acquire the ability to recognize and repair damaged cells during childhood — embryos do not yet have this function. In addition, growing children assimilate more nutrition into the body than is released, therefore substances which are contaminated will be more readily incorporated. For example, the thyroid gland of growing children quickly takes up iodide. UNSCEAR suspects that the consumption of radioactive iodide in milk is responsible for the high number of thyroid cancer cases diagnosed between 1991 and 2005 in children who were younger than 18 years when the Chernobyl disaster occurred.

In an epidemiological investigation, the KiKK study focuses on childhood cancer in the proximity of nuclear power plants. Mandated by the Federal Office for Radiation Protection, the KiKK study is conducted by the German Childhood Cancer Registry and is the most extensive study on these types of cancer cases. A main conclusion of the study is that the risk of developing leukaemia increases in relation to one's proximity to a nuclear power plant.

Case-Control-Study: increased child leukaemia near nuclear power plants

The cancer rate in children under five living within 5 km of German nuclear power plants is highly significant at 60% (6), and the leukaemia rates are also significantly high at 120% (7). The risk increases significantly in relation to proximity to the site. These are the results of a case-control-study, the so-called German KiKK-study (Children near Nuclear Plants study) (6, 7). This study pinpointed the distance of individual case-homes from each of the 16 German nuclear power plants, meaning that it was better able to classify exposure than former ecological studies, which used approximate distances. When using the weaker ecological approach with the same data, one finds only a non-significant increase (8) in leukaemia, in comparison to the highly significant 120 % increase in risk found in the superior case-control analysis. Subsequent studies from other European countries suggest that children living near nuclear sites are at no greater risk than other children. The combined analysis of data from Great Britain, France, Switzerland and Germany yields a highly significant 44 % increase of leukaemia risk in young children within 5 km of nuclear power plants and a significant increase of risk with proximity to the site (9).

Radiation harm includes not only cancer and leukaemia, but reduced immunity and fertility, increases in other diseases including heart disease, and birth defects including heart defects and other mutations. For example, radioactive contamination of pregnant women in Chelyabinsk, Russia, has resulted in mutations of chromosomes which have been transmitted through three or four generations.⁶³

Recent studies also confirm increased cancer development in nuclear plant workers. The effect of low exposure is double underestimated. Already, the life span working doses, that are permitted within the current threshold limits, lead to increased cancer rates (ICPR 2007)⁶⁴.

Lung cancer risk also increases in response to exposure to radioactive radon gas in houses. The risk increases by roughly 8% per 100 Bq/m³. An increase of between 100 and 200 Bq/m³ shows additional cancer illnesses (ICPR 2007).

Uranium mines also pose a health risk for workers and surrounding communities, and can impact trans-boundary pollution. Although uranium mining releases less radiation than a nuclear accident, small doses of radiation can still affect health in the long run. The danger is magnified in cases where safety measures are inadequate (eg. there are underground mines with a lack of ventilation, radioactive raw metals, high amounts of uranium in drinking water, and open mining dumps). A study in Kazakhstan showed that the frequency of chromosomal anomalies in uranium miners was positively correlated with the duration of exposure.

Another large risk exists in relation to the storage of radioactive waste and slurry. In the production of yellowcake (yellow uranium concentrate), waste by-products called tailings are left over. Consisting of heavy metals, arsenic and other chemicals, tailings still retain 85% of the original radioactivity. When improperly covered, the surface of the tailings dries up, and uranium- and arsenic-laced dust can be blown across the landscape. Additionally, radon gas, a decomposition product, is released from reprocessing facilities and radioactive waste dumps in significant quantities. As explained above, long exposure to radon gas can increase the risk of developing lung cancer in addition to other types of cancer.

Inadequate storage of nuclear waste is a particularly prevalent problem in Central Asia. In Kazakhstan, Kyrgyzstan, Uzbekistan and Tajikistan, more than 812 tons of radioactive waste is stored in open and closed uranium mines. Tailings are more often than not found in the immediate vicinity of residential areas and some are even used as playgrounds, pastures or farmland.

Military operations using depleted uranium (DU), which is a by-product of enriched uranium production, also have significant impacts. Uranium itself is a toxic heavy metal, which accumulates in the bones and can induce a variety of diseases such as cancer, genetic disorders, and the disruption of function in the kidney, liver, and lungs. DU induces both chemotoxic and radiotoxic effects on the body. The former predominantly disrupts liver and kidney functions, while the latter can induce chromosomal and genetic disorders, for example, chromosome breakage. The people mainly affected by this are soldiers and civilians in war zones. Projectiles that do not reach their target stay in the ground where the effects are unknown. In addition, after the use of uranium munitions in military operations, radioactive DU particles

⁶³ Tomsk research quoted in WECF factsheet on nuclear industry and health: www.wecf.eu/english/publications/index.php

⁶⁴ ICPR recommendations presented 19th of June 2007 in Berlin, Germany. The International Commission for Radiation Protection (ICRP) presented new basic recommendations and the latest academic research results into radiation induced cancer and connections to radiation sensitivity.

are released into the air and water. These particles affect people directly, but also enter into the food chain and bio-accumulate in animals and people. The exact effect on human health is uncertain.

Regulations and institutions mandated to deal with radiation protection are weak. In most countries, radiation protection regulation is based on the recommendations of the International Commission for Radiation Protection (ICRP). Unfortunately, the ICRP is too slow when it comes to updating its recommendations in relation to new scientific evidence concerning radiation health damage. Also, a 50-year old agreement between the World Health Organisation (WHO) and the International Atomic Energy Agency, which has turned into a lobby group for the nuclear industry, means that there is now a lack of international guidelines on the protection of health from radiation.⁶⁵

In general, the ICRP bases its recommendations on the dose reduction factor DDREF (dose and dose-rate effectiveness factor) Unfortunately, the use of dose reduction factor DDREF is not based on scientific findings. The ICRP and some other bodies have included this factor, which halves the risk per unit dose at low doses or low dose rates compared to the risk given by a linear extrapolation from a high level dose. According to the widely adopted “linearity hypothesis” the increased risk is proportional to the higher radiation dose. The dose reduction is not based on observed data of cancer induction, in reality it is only based on laboratory findings and model assumptions which have not been proven to be true in real life.

For example, the ICRP has only provided an estimation of the slow-burn stochastic radiation risk of induced cancer and leukemia (and it has not even provided this for other diseases). New data on atomic bomb survivors, on the population exposed by the accident in Chernobyl, and on patients who received therapeutic exposures, has led to reconsideration of possible impacts, such as radiation-induced cardiovascular disease (e.g. circulatory disease). It is also known that the threshold dose of radiation-induced eye cataracts is now considered to be about 10-fold lower than formerly estimated; it may now be recognised as a malignant stochastic effect of radiation exposure.

It is critical that women should have equal protection under the law. In all countries, regulation of radiation and nuclear activity ignores the disproportionately greater harm experienced by both women and children.⁶⁶ Current radiation protection fails to take into account the fact that women are twice as sensitive to radiation as men. Instead, an ‘average’ sensitivity is calculated which is considered equally applicable to men and women. In reality this means that women are being afforded less protection than men. A more sensible approach would be to differentiate between men and women within the calculation.

Women should have equal protection under the law, and regulation should be strengthened to protect those most at risk from ionizing radiation: women and children.

Women’s right to know about the health risks they are faced with when exposed to ionizing radiation and how to protect themselves from this harm, should also be implemented.

It is wrong to argue — as some regulators do — that “if women were subject to different threshold limits they would be discriminated against in their profession. The right to equal opportunity would be breached.” This is absurd. Correctly interpreted equal rights can only be achieved through better protection of women. Women are being discriminated against if the variation in radiation sensitivity is *not* included in radiation protection.

⁶⁵Appeal by Health Professionals for the Independence of WHO, launched in 2007, <http://www.cwhn.ca/en/node/40679>

⁶⁶The background for some recommendations include calculations of the different radiation effects on women and children but the final ‘allowable’ doses to the public do not incorporate this information.

In general, radiation risks can be and should be reduced. However, in the end there is no 'safe' level of radiation, and a global phase-out of nuclear energy is the only acceptable path to take. In the mean time, governments should take the following steps immediately:

- Strengthen legislation, taking into consideration the higher radiosensitivity of unborn life and of women working within radioactive areas, and the likelihood of other non-malign illnesses being caused by chronic radiation exposure.
- Revise the threshold dose limits in line with current radiobiological knowledge especially in relation to radiation-induced cancers.
- Abolish the scientifically unproven dose-reduction-factor DDREF in low-dose ranges as used by ICRP. Instead adopt a linear dose-response-relationship (until the scientific knowledge brings new evidence).
- Implement women's right to know about the health risks associated with women's exposure to ionizing radiation and how they might protect themselves from this harm.

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3.1.6. Climate Change, Desertification and Gender Justice

By Carmen Capriles, Reacción Climática, Bolivia

Acknowledgments to Eleanor Blomstrom, Rachel Harris, Isis Alvarez, Simone Lovera, Osprey Orielle Lake, Lorena Terrazas, Mirna Fernandez

Principle 20: Women have a vital role in environmental management and development.

Their full participation is therefore essential to achieve sustainable development.

(Rio Declaration on Environment and Development, Earth Summit, 1992)

Introduction

During the 1992 Rio Earth Summit (United Nations Conference on Environment and Development, UNCED), climate change, desertification and the loss of biodiversity were identified as the greatest challenges to sustainable development. Since then, despite three United Nations conventions — the Framework Convention on Climate Change (UNFCCC), the Convention to Combat Desertification (UNCCD) and the Convention on Biological Diversity (CBD) — and other efforts, results are minimal and each threat remains, decreasing the likelihood of a sustainable future.

An unstable climate resulting from carbon dioxide emissions (CO₂) and a growing lack of productive land and loss of species work together in a feedback loop, increasing the related negative consequences, which can include lack of food security and availability of clean water. These impacts have a gender dimension and will contribute to increasing poverty, particularly among the poorest, where women make up the majority. The post-2015 framework and sustainable development goals must address this interrelationship.

The climate science

The greatest contributor to climate change (global warming) is CO₂. The world must lower its CO₂ emissions to a concentration of approximately 350 parts per million (ppm) to stabilize the planet's temperature (Hansen, 2009) and therefore the climate. Data show that atmospheric concentration of CO₂ hit a new annual average in 2012 (393.81 ppm), which is an increase of 2 ppm per year during the last 10 years and 40% greater than preindustrial levels (Table 1).

Table 1: Annual average of concentration of CO₂ in the atmosphere

Year	Annual average of CO ₂ (ppm)	Notes
2012	393.81	
2011	391.62	
2009	387.37	Copenhagen Accord (UNFCCC)
2007	383.76	Bali Action Plan (UNFCCC)
2001	371.13	
1997	363.71	Kyoto Protocol
1992	356.38	Earth Summit in Rio de Janeiro
1987	349.16	The last year when annual average CO ₂ level was less than 350 ppm
1959	315.97	The first year with comparable data

Source: Annual CO₂ Data from the National Ocean and Atmosphere Administration, USA (NOAA): [NOAA-ESRL Found in: http://co2now.org/Current-CO2/CO2-Now/noaa-mauna-loa-co2-data.html](http://co2now.org/Current-CO2/CO2-Now/noaa-mauna-loa-co2-data.html)

In 2010, CO₂ emissions primarily came from two sources: the burning of fossil fuels and land use change (deforestation and logging, and intensive agriculture) (Le Quéré et al. 2009,⁶⁷ Nature Geoscience Canadell et al.

⁶⁷ http://www.pmel.noaa.gov/images/headlines/ngeo_689_aop.pdf

2007, PNAS,⁶⁸ R A Houghton, undated⁶⁹). Historically, the major emitters have been developed countries, but as of 2009, some emerging economies were emitting more than developed countries. For example China now emits more in total than the US (although the US still emits far more than China on a per capita basis) (R A Houghton, undated⁷⁰). In addition, as several studies show, the steep rise in Chinese emissions is a result of manufacturing goods for consumption in foreign markets (R A Houghton, undated⁷¹) which begs the question: who is responsible for these emissions?

Historical and Common but Differentiated Responsibilities

It is vital to take into account the principles of historical and common but differentiated responsibilities, when considering future action. This principle addresses the fact that today's temperature rises are a result of CO₂ emissions that occurred in developed countries years ago during and after the industrial revolution; it is the developed countries, therefore, that are responsible for addressing the current climate change challenge. In practical terms this means developed countries have an obligation to repay the ecological debt they owe to developing countries, who are already facing the negative effects of global warming. This debt is to be repaid in the form of financial resources from public sources and the effective transfer of appropriate technology that will facilitate adaptation to a changing climate. Developed countries are also expected to reduce their consumption patterns and establish mitigation strategies with a view to stabilizing the climate. In order not to make the same mistakes that industrialised countries have made in the past, developing countries including emerging economies should try to adopt low carbon approaches in their bid to meet the fundamental needs of their populations on the basis of sustainable development.

This principle also has an important gender dimension that needs to be understood. Women are more severely affected by climate change and natural disasters, especially because of impacts on food, health and homes, and women's allocated responsibilities in this regard, including within the home and as small-scale farmers. Women are also more at risk because of discrimination and poverty, which makes them disproportionately more vulnerable in the first place and also less able to recover from natural disasters (IUCN, 2007⁷²).

Women generally contribute less to CO₂ emissions as well. For example, women are over-represented as heads of low-income households and underrepresented in high-income groups. In this respect, gender inequalities resulting in differentiated income levels have also played a role in CO₂ emissions (Whitty, 2007; UNESCO website⁷³).

Gender equality should be recognized and supported as a key factor in the drive to achieve climatic justice. Women and men, as a result of their differential economic and social roles and experiences, also have differentiated responsibilities and capacities in terms of adapting to and mitigating climate change. Women have significant contributions to make, based on their involvement in areas such as sustainable agriculture to take just one example, but are often overlooked in related decision-making processes.⁷⁴ Future strategies need to focus on women as a vital part of development, including with respect to deciding on and taking measures to adapt and face climate change. To this end it will be necessary to provide them with all the necessary means and tools, including capacity building to better understand climate change and to create and identify alternatives and solutions, and to ensure that resources are available for implementation. This responsibility relies not only on the States but also at lower levels within societies.

Climate impacts are gendered

Aside from increasing average temperatures, climate change is manifesting itself in different ways around the world, including through increased and more intense storms and floods; long droughts and forest fires; less reliable

⁶⁸ <http://www.pnas.org/content/104/47/18866.abstract>

⁶⁹ http://unfccc.int/files/methods_and_science/research_and_systematic_observation/application/pdf/iucn_houghton.pdf

⁷⁰ http://unfccc.int/files/methods_and_science/research_and_systematic_observation/application/pdf/iucn_houghton.pdf

⁷¹ http://unfccc.int/files/methods_and_science/research_and_systematic_observation/application/pdf/iucn_houghton.pdf

⁷² For now: http://cmsdata.iucn.org/downloads/climate_change_gender.pdf

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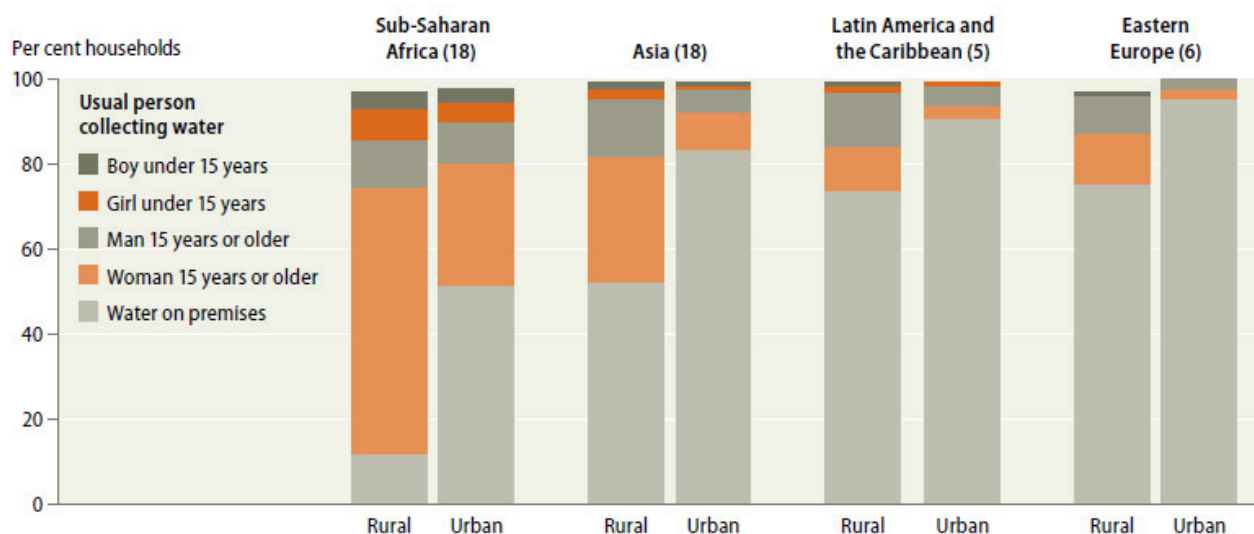
⁷⁴ <http://www.unwomen.org/focus-areas/climate-change-and-the-environment/>

or loss of seasonal crops due to changing distribution and intensity of rain; melting glaciers; the migration of species and resultant shifting disease vectors; and loss of biodiversity. Impacts will be felt everywhere, from big cities to small villages, from the poles to the deserts, in developed and developing countries, at the coasts and up in the mountains. However, the impacts will vary from region to region,⁷⁵ and the most vulnerable will be least able to deal with the changes that climate change is bringing.⁷⁶

Climate change will result in imbalances in the availability of water, food and energy resources. This will be significant for all, but particularly for women. For example, in areas affected by floods, such as Bangladesh, women may be in a more vulnerable situation due to lack of information, an inability to swim or cultural restrictions on movement.⁷⁷ Women are also generally the ones responsible for fetching household water (see Table 2); when water is scarce or contaminated, women and girls spend many hours on the task — decreasing available time for school or other livelihood/employment activities.

Table 2: Distribution of households by person responsible for water collection

Distribution of households by person responsible for water collection, by region and urban/rural areas, 2005–2007 (latest available)



Source: *(The) World's Women 2010. Trends and Statistics. UNDESA, 2010*
 In <http://www.un.org/waterforlifedecade/gender.shtml>

Contaminated water may be a result of poor sanitation or the destruction of water systems during climate-related storms, which results in water-related illnesses and diarrhea; and it is often women who spend time and energy to take care of the sick. Water quality and availability issues may increase malnutrition, which puts everyone's health at risk, in particular girls and pregnant women. Rising sea levels and coastal flooding can also result in sea water intrusion into fresh water sources. This can have significant health impacts. In Bangladesh for example, women who drink water with high salt content experience reproductive health impacts such as eclampsia, miscarriage and stillbirth twenty times higher than in other areas of Bangladesh (Islam, 2013).

⁷⁵ <http://co2now.org/Know-the-Changing-Climate/Climate-Changes/ipcc-faq-regional-climate-variations.html>

⁷⁶ http://www.bridge.ids.ac.uk/reports/Climate_Change_DFID_draft.pdf (see p11)

⁷⁷ http://www.bridge.ids.ac.uk/reports/Climate_Change_DFID_draft.pdf (see p6)

During long walks for water or in camps and shelters after storms, women also face increased levels of physical and sexual violence. Limited water also means less water available for productive purposes. Women, especially heads of households, will therefore have to deal with higher food prices, lower incomes, decreased ability to feed their families (especially rural women who play a primary role in household food production) and increased time poverty. In tending to basic needs, education will become less of a priority, contributing to cycles of poverty and challenging efforts to meet goals of universal education. In short, the consequences of climate change impact almost all aspects of women's daily lives and long-term development, which in turn affects the entire community.

Furthermore, productive systems are beginning to deteriorate and eventually whole ecosystems may collapse. Such impacts pose a huge challenge, particularly to those relying most on natural resources, such as local populations that rely on native flora for resources that do not need to be paid for, especially women using them for household needs. It is critical to build resilience to the impacts and to mitigate the causes of climate change; women play a pivotal role in both adaptation and mitigation and their contributions should not be underestimated. New policies on climate change must incorporate measures consistent with the reality of women in the most vulnerable sectors, mainly in rural areas (Capriles, 2010).

Responding to the challenges of climate change

The threats of climate change have a strong gender impact, thus mitigation and adaptation strategies should incorporate gender considerations in order to move beyond the status quo, transform the current dynamic, and improve the state of gender equality. Countries should make sure mitigation and adaptation strategies take into account the rights and needs of women as well as ensuring the equitable sharing of the costs and benefits of these approaches, not only between countries and generations but also between men and women.

Furthermore, current mitigation strategies are often based on market or payment-related mechanisms which lack a gender or long-term social justice perspective. For example, the current promotion and use of biofuels has been taken forward without gender and environmental analyses that might have predicted their high social cost when they compete with food crops or are grown for industrial uses that do not contribute to development of the local community; and that their production can be just as bad for the climate when full lifecycle emissions are taken into account. Other mitigation strategies that prioritize carbon sequestration may also affect the relationship between women, especially indigenous women, and the forest, especially if access to traditional territories is restricted or banned for conservation purposes.⁷⁸ Many such strategies fail to prioritize local community benefits or consider the implications for women in terms of unequal land tenure rights. Ultimately they are likely to reduce access to forest resources, include water, food, fuel and other resources necessary for sustainable livelihoods.

Climate change links with CEDAW and women's rights

Women's rights and gender equality must be guaranteed in order to achieve sustainable development. This means that climate change must be addressed in a way that ensures women's rights are taken into account, and that women are not further jeopardised by the proposed solutions.

Existing legal and normative frameworks guide the connections between gender equality, women's rights and climate change. The three Rio Conventions and/or their resulting decisions— UNFCCC, CBD and UNCCD – all now include references to women or gender equality. CEDAW addresses the connection, for example, in Article 14, *"...the particular problems faced by rural women and the significant roles which rural women play in the economic survival of their families, including their work in the non-monetized sectors of the economy, and shall take all appropriate measures to ensure the application of the provisions of the present Convention to women in rural areas"*.

Some governments have taken an approach that addresses both adaptation and mitigation; the Bolivian proposal on Integrated Forest Conservation Policies, for example, takes the multiple functions forests provide into account. This includes livelihoods for local communities, as well as biodiversity, food security and access to water resources. Nevertheless it should still be ensured that all approaches are fully in line with CEDAW and also take into account women's rights and needs and the vital role women play in biodiversity conservation. According to WEDO (2007)

⁷⁸ <http://globalforestcoalition.org/wp-content/uploads/2010/12/Impacts-marketbasedconservationmechanisms-on-woman41.pdf>

“Women are often perceived primarily as victims and not as positive agents of change. However, women can be key agents of adaptation and mitigation to climate change. Their responsibilities in households, communities and as stewards of natural resources position them well to develop strategies for adapting to changing environmental realities”. Thus we need a framework that addresses all these various dimensions of climate change.

Conclusions

A post-2015 framework that moves towards achieving sustainable development must address climate change in a way that recognizes that climate change, like other global crises, is not gender neutral. Addressing climate change requires an equitable approach that protects and promotes human rights in order to ensure sustainable livelihoods, and as part of this approach protects and promotes women’s rights, with a view to achieving gender equality.

The role of women should be central in any proposed goals, taking into account that they have a strategic role to play in achieving real solutions to the climate crisis, from both an adaptation and mitigation standpoint. As climate change and gender equality are addressed hand-in-hand, it is also important to create policies that are flexible enough to adapt to women’s varied and changing roles in society – to avoid locking women into specific gender roles that ultimately thwart the goal of transformative change.

As the threat posed by increasing concentrations of CO₂ in the atmosphere has not resulted in a strong political response, it is clear there is a lack of political will to commit to lowering emissions and stabilizing temperature. Therefore real change may best be based on something more tangible and visible – the impact on people’s lives, homes and businesses – coupled with the scientific facts. Linking climate change to the post-2015 development agenda means focusing the world’s attention on issues that are directly affected by climate change such as water access, supply and availability, food security and sovereignty, as well as alternative, renewable, sustainable and low-cost energy sources. In all cases, goals should focus on integrating women into key roles and ensuring women and men have the necessary information, the appropriate technology and the resources they need to face these challenges.

The costs and benefits posed by adaptation and mitigation strategies must also be addressed through a gender-sensitive lens in order to strategically tackle some of the equity and equality gaps that are delaying the achievement of sustainable development.

Recommendations

1. Design and implement rights-based, socially just, gender-responsive and coherent ecosystem-based approaches to climate change mitigation and adaptation.
2. Integrate gender-sensitive solutions to climate change into the post-2015 framework and SDGs to ensure gender equality, and ensure that women’s rights and empowerment are fundamental cross-cutting goals when addressing the climate crisis and sustainable development.
3. Address common but differentiated responsibilities from a gender perspective.
4. Promote the capacity-building of women in relation to skills that facilitate the development and use of adaptation technologies, especially those that have co-benefits such as improving resilience and ensuring livelihoods.
5. Engage women leaders and facilitate women’s equitable participation in decision-making processes at all levels.
6. Recognize and take into account women's specific needs and abilities, and women's human rights.
7. Incorporate solutions that go beyond current economic models, which are often based on privatization strategies that do not promote gender equality.
8. Promote different means of information sharing, to ensure that women have timely access to relevant and quality information; and integrate this within all the goals.
9. Maintain flexibility to account for local realities and practices, and draw upon successful practices of promoting efficient resource use in different social contexts when designing adaptation and mitigation strategies.

10. Support and engage in research into the experiences of women, including through the collection of sex-disaggregated data that identifies concrete problems, sustainable and unsustainable coping strategies, and potential solutions.

Case Studies

Case Study 1: Financing for Climate Change Mitigation and adaptation in the Philippines: a Pro-poor and Gender-sensitive Perspective

By Athena Peralta

This study shows that it is women who have led their households and communities in the development of agricultural coping strategies including food preservation, mixed cropping and crop diversification, water harvesting and irrigation, growing reliance on wild fruits and forest products, and cultivating at higher levels. Financial coping strategies include shifting from crop production, taking out loans, selling off livestock, seeking government financial assistance, reducing food consumption, and migrating to find other sources of work and income. Drawing from a rich body of local and traditional knowledge, people in the countryside have begun to adjust to extreme weather variations using a variety of adaptation and coping strategies (not all of which are sustainable), with limited resources and support. Women farmers are organizing and strategizing in order to secure their livelihoods and access to basic needs, and are increasingly engaged in organic farming initiatives, integrated pest management programs, agro-forestry, and tree-planting projects. Currently, the Philippines financing policy framework has limited focus on women's concerns and minimal women's participation. For example, in assessing the Philippines national financial regime, the study found a lack of recognition of links between climate change and the financing of overall development goals, including gender equality; an inordinate reliance on market-based solutions that do not account for gender roles and the feminization of poverty; and a lack of consultation and participation of women and women's rights advocates.

<http://www.wedo.org/prototype/wp-content/uploads/genderandclimatechangefinance.pdf>



Case Study 2: Gender and Climate Change: South Africa Case Study

By Dr. Agnes Babugura

In trying to understand gender and climate change in the context of South Africa, it is important to appreciate gender and gender relations in the country. In this context the contemporary position of women in South Africa cannot be fully appreciated without an understanding of the ways in which colonialism, capitalism and apartheid have dictated the development of social relations and fractured society along racial, class and gender lines (Baden, et al., 1998). South Africa therefore presents a unique situation from a political perspective, particularly with reference to apartheid, to encourage a situation in which women and men can make real choices about their own lives and other issues. In spite of major gains, there still remain enormous disparities and inequalities between men and women. The most important challenges are faced by women in rural areas, who are still living in poverty with limited resources to ensure sustainable livelihoods. Gender roles are undergoing change due to climate-related impacts, which are further heightened by factors such as



unemployment, HIV/AIDS and poverty, which causes men and women to engage in different activities, with more women diversifying their livelihoods. In this study it was evident that women are now more involved in activities that generate earnings, thus reshaping relationships between men and women. The income generated by women through trade is used to sustain the household, and women generating an income also have more opportunities and power to decide what the income can be used for.

<http://www.fanrpan.org/documents/d00920/>

Case Study 3: Women and Climate Change in Los Andes

By Carmen Capriles

The Andean region has a high level of ethnic and cultural diversity and includes countries that emit very low levels of greenhouse gases into the



atmosphere, such as Bolivia, Peru, Ecuador and Colombia. It is also an area currently threatened by global warming. Almost 10% of the freshwater reserves in the world are within the Andean region; it is the second largest reservoir of freshwater on the planet. Much of this fresh water is in the form of glaciers. The increase in global temperature has already led to the loss of permafrost in several summits, and the Chacaltaya glacier located at 5,200 meters above sea level has been gone since 2009. This alarming fact has a big impact on the people who depend on water from snow-ice melting for domestic supply, productive activities and in many cases, power supply. In the Andean highlands, agriculture is the one of the most important activities and is based on irrigation by gravity, which leads to an inefficient use of water. Irrigation is one of the main activities and takes a great deal of time; the participation of women is low, mainly due to the fact that harnessing irrigation waters from melting glaciers is both tedious and harsh. The climatic conditions, loss of fertility and related socioeconomic factors are contributing to male migration to urban centres in search of a better life. Women are left behind in the communities, which results in an increase of responsibilities for women and a feminization of the rural areas. More women are now dealing with rising temperatures in places where radiation is one of the highest on the globe, while at the same time they have less access to any kind of resources and struggle to produce sufficient food on infertile land.

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3.1.7. Chemicals, waste and women's health

Authors: Alexandra Caterbow , WECF – Women in Europe for a Common Future and Genon Jensen, HEAL Health Environment Alliance

Chronic, non-communicable diseases (NCDs), such as cancer, cardiovascular disease, respiratory illnesses, and diabetes, are the leading cause of death worldwide, translating into an estimated 36 million deaths annually and hitting developing countries much harder than industrialized countries - 80% of deaths occur in low and middle income countries. NCDs are also the leading cause of preventable morbidity and related disability, significantly affecting the wellbeing of many individuals and workers around the world. As a result, the associated health care costs of NCDs are also rising exponentially.

New recognition of the growing burden of these diseases indicates that environmental factors are a key risk factor. However, the World Health Organisation and the majority of national health ministries have not yet acknowledged the importance of addressing environmental factors as a cause of NCDs.

Indeed, the WHO failed to include environmental pollution in its list of priorities for addressing NCDs, despite the long list of NCDs that are linked to environmental degradation.⁷⁹ Smog hangs over many cities, especially in middle- and low-income countries, and simple air quality measures could help to reduce respiratory and heart conditions dramatically. A 2012 assessment of the global burden of disease, carried out by 450 experts including the World Health Organization, confirmed that air pollution is a top level risk for public health.

In addition, a recent systematic review of the burden of disease attributable to chemicals estimated that 4.9 million deaths (8.3% of the total) and 86 million disability-adjusted life years⁸⁰ (5.7% of the total) in 2004 were attributable to the unsound management of and environmental exposure to selected chemicals.⁸¹ Many experts believe this is a conservative estimate, since many daily exposures are not taken into account, and the review only included areas where data is available.

Harmful chemicals are everywhere. Thousands of chemicals are used to enhance production processes, and increase the performance or lower the price of almost all goods. Chemicals are added not only to food and food packaging, but also to everyday articles such as clothes, mobile phones, glue, carpeting, furniture, cosmetics, toys and detergents. Harmful chemicals are everywhere in the air, including as a result of burning wood, coal or gas, and because they are contained in air-borne sprays and gases such as pesticides, perfumes and car fumes. They enter our bodies and get into our blood through our eyes, nose, lungs, mouth and skin.

For example, there is considerable evidence linking breast cancer to a polluted environment and the chemicals used in everyday products and workplaces. They include: industrial chemicals, pesticides, dyes,

⁷⁹ HEAL chronic disease and environmental prevention fact sheet, http://www.env-health.org/IMG/pdf/110913_HEAL_fact_sheet_-_Chronic_disease_and_environment-final.pdf

⁸⁰ One disability-adjusted life years (DALY) can be thought of as one lost year of 'healthy' life. http://www.who.int/healthinfo/global_burden_disease/metrics_daly/en/

⁸¹ Annette Prüss-Ustün and others, "Knowns and unknowns on burden of disease due to chemicals: a systematic review", *Environmental Health*, vol. 10, No. 9 (20110). Available from www.ehjournal.net/content/10/1/9. Estimates of the burden of disease attributable to chemicals included estimates from the following sources: chemicals involved in unintentional acute poisonings; chemicals involved in unintentional occupational poisonings; pesticides involved in self-inflicted injuries; asbestos; occupational lung carcinogens; occupational leukaemogens; occupational particulates; outdoor air pollutants; indoor air pollutants from solid fuel combustion; second-hand smoke; lead; and arsenic in drinking water.

chlorinated solvents, drinking water disinfectant by-products, pharmaceuticals and hormones, endocrine disrupting chemicals such as parabens and phthalates, dioxins, furans, phenols and alkylphenols, polyaromatic hydrocarbons (PAHs), styrene, metals and phytoestrogens. These chemicals names may mean little to the consumer but we are all exposed to them and we unknowingly carry them in our bodies. Up to 280 synthetic chemicals have been detected in umbilical cord blood and as many as 300 in human fat tissue. In laboratory tests 250 chemicals which mimic or interfere with oestrogen have been identified.

One such worrying group of products is cosmetics. Cosmetics can contain ingredients that have been linked to diseases such as breast cancer, asthma and allergies, and to reproductive disorders. The skin is the largest organ in the human body and through it we can absorb ingredients present in cosmetics. This is a large and profitable industrial sector: women may use up to 26 different products daily, there are over 5,000 different ingredients used in cosmetics, and 5 billion products are sold to 380 million consumers every year in the EU alone.

NCDs cause 60% of all deaths worldwide, and 18 out of the 35 million deaths related to NCDs each year are women.⁸² In fact, NCDs are the biggest threat to women's health globally. These diseases are also on the rise. The WHO estimates that around 1.7 million women will be diagnosed with breast cancer in 2020, a 26% increase from current levels.⁸³ In 2010, 143 million women were diagnosed with diabetes, and by 2030 the number is expected to rise to 222 million.⁸⁴ These are just two examples showing the urgency and importance of addressing the issue of NCDs and women. Other diseases, such as respiratory and cardiovascular diseases or allergies are likely to show similar trajectories.

It is very important to give the chemicals aspect more weight in the discussion on NCDs and women in general, for several reasons. Firstly, recent studies state that NCDs can often be linked to chemical exposure during the foetal and early years of childhood development.⁸⁵ We can, for example, find harmful chemicals in the body tissue and umbilical cords of newborns⁸⁶. The US Center for Disease Control found 100 different harmful chemicals like BPA, flame retardants, phthalates, in pregnant women, with 43 of them in all women tested.

Critically, certain chemicals can disrupt normal signalling pathways or mimic hormone signalling during foetal development, which may lead to an increased risk of developing NCDs later in life. It is also known that these negative effects can occur even when people are exposed to low levels of chemicals and during critical windows of development.⁸⁷ One group of chemicals to which these effects apply are endocrine disrupting chemicals (EDCs). So far there are around 900 chemicals characterized as EDCs.

Also, women are exposed and affected differently than men, where men might be more exposed to chemicals in their workplace, women might be more exposed through chemicals in e.g. cleaning products. Women fulfil in most countries a gender role as main decision makers for their families' food and living conditions, and thus are implicitly involved in what crucial to pollution may enter households via products and food, and they are key in finding and implementing solutions. Biologically, from similar

⁸² WHO (2005): Preventing Chronic Diseases: A Vital Investment: WHO Global Report, Geneva.

http://www.who.int/chp/chronic_disease_report/en/

⁸³ WHO (2002): The world health report 2002 – Reducing Risks, Promoting Healthy Life, Geneva

⁸⁴ NCD Alliance: Non-communicable diseases: A Priority for Women's Health and Development

⁸⁵ Barouki et al: Developmental origins of non-communicable disease: Implications for research and public health. Environmental Health 2012, 11:42

⁸⁶ Environmental Working Group: Pollution in People, Cord Blood Contaminants in Minority Newborns, 2009

⁸⁷ find a list of scientific references here

<http://www.endocrinedisruption.com/prenatal.criticalwindows.references.php>

exposures to harmful chemicals, women and men may be differently effected and develop different illnesses, e.g. breastcancer or prostrate cancer.

Conclusions and Recommendations

In general we face two problems: there are chemicals that have negative effects on women and on their children, and those chemicals are found virtually everywhere, in the air we breathe, the food we eat, and the products we use. If rates of NCDs caused by chemicals are to be effectively reduced, the only solution is to reduce exposure to these harmful substances. It is thus necessary to phase out and safely substitute harmful chemicals especially those used around women and children. It will involve a ban on hazardous pesticides, and the clean up of contaminated sites and hot spots, as well as ensuring that the polluter pays for such changes.

People have a right to know about the pollutants in their environment, and more information should be provided, especially with a view to reducing the exposure of women to toxic chemicals. This will include more gender sensitive studies/research; awareness raising for women and especially pregnant women; education training for professionals working with women and children, like professionals in the health and education sector (gynaecologists, midwives etc.); and the continuation of WHO Human Bio-Monitoring (HBM) programmes

Best practices already exist in all areas. Countries like France and Denmark are frontrunners in terms legislation, and have already banned phthalates from products. They are also developing stronger policies to protect their citizens from EDCs (Endocrine Disrupting Chemicals). For example, the Government of Denmark brought out a publication informing women about chemicals which are particularly dangerous during pregnancy, and gave tips about how they could protect themselves.⁸⁸ Many civil society organisations are carrying out awareness raising for consumers, and advocating for strong EDC criteria, a strong mercury treaty and the successful adoption of EDCs as an emerging issue in the UN multi-stakeholder Strategic Approach to International Chemicals Management (SAICM) process.

Recommendations for SDGs and post-2015

Priority needs to be given to a healthy environment free of harmful substances in the SDGs and post-2015 development goals.

The example of China, and its February 2013 government report on environment which acknowledge “cancer villages” around the industrial centres, and where a record number of days with toxic smog have been measured this year, shows that too long development has gone at the expense of our health and environment.

Already at the World Summit on Sustainable Development in Johannesburg in 2002, heads of state agreed on the goal to eliminate harmful chemicals in consumer products by 2020. The Joburg chemicals goal is not at all on track, in particular in developing countries and emerging economies, the problem of harmful chemicals is increasing instead of decreasing. The UNEP Global Chemicals Outlook (2012) estimates 900,000 death each year from pesticides and

⁸⁸ http://www.mst.dk/English/Chemicals/consumers_consumer_products/information_campaigns/Good_Chemistry_pregnant/

harmful substances, and 2 million diseased. The related health costs are exploding, and are estimated to surpass the ODA sub-Saharan countries receive for their health sector – whereas these chemicals are almost all imported.

We therefore recommend that the SDGs/post2015 process should:

1. Overall target; achieve elimination of hazardous manmade chemicals from harming public health and entering into the environment by 2030 in all countries
2. All women and men are informed and aware of the problems of hazardous chemicals and able to protect themselves and their families by 2030
3. Achieve zero harmful chemicals in consumer products by 2020 (WSSD goal 2002)
4. Achieve elimination of Endocrine Disrupting by 2020 globally

3.1.7. Water, Sanitation and Hygiene – possible gender targets

Authors: Claudia Wendland, Margriet Samwel and Anke Stock, WECF

Introduction

The Millennium Development Goals (MDGs) aim at halving the number of peoples without access to water and sanitation. The water MDG has been achieved - although questions remain about the quality and affordability of the water. Another question is that of how to reach the other more than 780 million people still being without access to water, as “low-hanging fruits” are no longer to be expected. The sanitation MDG is far from being on track, more than 2.5 billion people are without access to sanitation. Mortality and morbidity related to unsafe water and inadequate sanitation remain unacceptably high; and water resources are often used in an inefficient manner. Women and girls are more affected by this than men, as described below.

In the discussions on possible focus areas for the Sustainable Development Goals (SDGs) during the lead up to the Rio+20 summit, water and sanitation were mentioned by some governments as possible focus areas. In the post-2015 (post-MDG) process ‘water’ is also one of the 11 thematic focus areas. The preliminary discussions range from targets on transboundary water management (over-consumption, pollution of rivers, lakes, aquifers) to providing safe drinking water, safe sanitation and hygiene for everyone. The area related to drinking water, sanitation and hygiene is referred to as WASH (Water , Sanitation, Hygiene).

It is important to identify specific gender dimensions of water and sanitation, which could lead to prioritizing actions in the SDGs and post-2015 agenda to reduce the great gender divide which is still found in this sector in many countries.

Inequalities in the drinking water sector

Those who have not benefitted from the MDGs, and who do not have access to drinking water (according to the MDG definition) are the most deprived among people living in poverty – in majority women. The number of people in rural areas using an unimproved water source in 2010 was still five times greater than in urban areas (UNICEF/WHO, 2012).. In these rural areas, women are disproportionately affected, inter alia due to existing traditional gender roles. Women are in majority responsible for collecting water (64% in average). Even girls have a share in fetching water (8%)⁸⁹. In areas where men or boys are responsible for water collection, they are more likely to have a means of transportation (donkeys, motorcycle), whereas women mostly carry the water by hand.

The focus for the SDG/post-2015 water agenda should therefore be on safe water for women in rural areas. However, the majority (66%) of the Official Development Assistance (ODA) is targeted to the development of large water supply systems, and not on smaller systems in particular not for rural areas (UNICEF/WHO, 2011).

Sanitation and hygiene – the great gender divide

⁸⁹ UN GA A/67/270, August 2012, paras. 27, 32, 67.

Lack of safe sanitation and hygiene discriminates against women

One of the most significant divides between women and men, especially in developing countries, is found in the sanitation and hygiene sector.

Access to safe and sustainable sanitation is essential to ensuring health and well-being. It reduces the burden of treating preventable illnesses and is a prerequisite for ensuring education for all and the promotion of economic growth in the poorest parts of the world. Access to adequate sanitation is a matter of security, privacy and human dignity.

Women suffer more than men when there is a lack of appropriate sanitation facilities (toilets/bathrooms).

Increased violence

Women suffer more risks of abuse and more difficulty when defecating and urinating in the open is their only option (COHRE et al., 2008). In the absence of sanitary facilities or due to cultural reasons, women in many countries often have to wait until dark to go to the toilet or the bush.

In rural areas, men often avoid using pit latrines when they are badly maintained (stench, dirt) and relieve themselves outside whilst women remain dependent on the pit latrines. Often in urban areas, women and girls face innumerable security risks and other dangers when they use public facilities which are open to both men and women. Research in East Africa indicates that safety and privacy are women's main concerns when it comes to sanitation facilities (Hannan and Andersson, 2002). Without safe sanitation, women's dignity, safety and health are at stake.

Bad health

WHO statistics show that young children and immune-weak people (elderly, HIV-Aids) are at greatest risk from becoming ill – such as diarrhoea or helminth infections – from WASH related causes. These increase cases of disease, also increase women's workload, as in most cases women are the main care takers of sick family members.

Even where sanitation facilities exist, the lack of privacy (e.g. no doors, no locks) in the facilities is a greater burden for women. As a result of all the above, women in many countries try to drink as little as possible during the day and often suffer from associated health problems such as urinary tract infections, chronic constipation and other gastric disorders (GWA, 2006).

In many countries where women rely on public toilets hygiene conditions in public toilets are poor and lead to the spread of infectious diseases.

Menstrual hygiene is a taboo

Women and girls are more dependent on safe water and a hygienic toilet for their health than men. Menstruation hygiene management (MHM) is a challenge when adequate WASH conditions are absent, e.g. a lack of sufficient and safe water for washing⁹⁰. Many women are also subject to health risks. Urinary tract infections, dermatitis, abdominal pains, vaginal scabies and complications during pregnancy can all be caused by poor menstrual hygiene management. In rural areas of developing countries, it is often difficult (or unaffordable) to purchase hygienic material to manage menstruation in a hygienic way,

⁹⁰ See also UN GA A/67/270, August 2012, para. 73.

particularly in public spaces, in school and at the work place. An issue is also the embarrassment that prevents young girls and women sharing their questions about MHM, the shame often associated with menstruation, and the cruelty of others laughing at young girls and women when they find out they are menstruating.

Reduced educational, economic and political participation

Research shows that children are hampered in physical and intellectual development due to WASH related diseases such as helminth infections. In addition, absenteeism – in Africa in particular amongst girls - increases when there are no toilets in school. Teenage girls need privacy and washing facilities for menstrual hygiene. Women have less opportunity to be active in public life, to travel, to work, when there is no access to sanitation.

Lack of access to funds and equity

A combination of unequal and uneven power and legal structures based on discrimination and a lack of political commitment often leads to the neglect of women's needs and hinders their involvement in sanitation development and planning. The majority of the world's 1 billion people living in poverty are women and the feminisation of poverty, particularly among women-headed households continues to increase in a number of regions. Land tenure is a particularly significant stumbling block. It is generally estimated that men's landholdings average three times those of women. Women represent fewer than 5% of agricultural landholders in North Africa and Western Asia and an average of 15% in sub-Saharan Africa (IFAD, 2011). As a result women often lack access to related assets and resources for toilet construction (COHRE et al., 2008).

Human right to water and sanitation and specific women's rights to water

In 2010 the UN General Assembly recognised the human right to water and sanitation. The right was affirmed by a resolution of the Human Rights Council in October 2010 and reconfirmed in the Rio+20 outcome document. The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), stipulates specific rights of rural women to water and sanitation in Article 14 (2)(h)⁹¹.

The Special Rapporteur on the human right to safe drinking water and sanitation, Ms. Catherina Albuquerque, has postulated 10 criteria⁹² – 5 normative and 5 crosscutting - by which to measure if this human right is respected.

- **Criteria 1-5:** Normative criteria: **availability, accessibility, quality/safety, affordability, acceptability**. All these criteria have to be met for the full realization of the human right to sanitation and water.
- **Criteria 6-10:** Cross-cutting criteria: **non-discrimination, participation, accountability, impact, sustainability**. In order to be a good practice from a human rights perspective, all of these five criteria have to be met to some degree, and at the very least, the practice must not undermine or contradict these criteria.

⁹¹ See also specific reference in the General Recommendation No. 24 (1999).

⁹² See Compilation of Good Practices, UN GA A/HRC/18/33/Add.1, June 2011, para.2.

Implementation of these rights, and integrating the 10 criteria into the design of national and international water and sanitation programmes, with a specific focus on women in rural areas, should therefore be a key priority for the SDG and post-2015 agenda.

Universal WASH priority areas

Starting from the overarching aim of the human right to water and sanitation, the following three priority/goals should be defined, that is what all programmes should aim to achieve:

1. Drinking Water for All

- Indicator - 100% of the population have access to drinking water according to the 5 normative criteria (water of safe quality, affordable, accessible, available, acceptable) and 5 crosscutting criteria.

2. Sanitation for All

- Indicator – 100% of the population use adequate sanitation systems according to the 10 criteria

3. Zero mortality due to lack of hygiene

- Indicator – 0% of the population die from WASH related diseases

Increasing access to sanitation in one area can jeopardize the access to safe drinking water and increase mortality in a neighbouring area, as human excreta spread pathogens and if toilet waste is not safely treated, it can be a hazard. On the other hand, urine, - which is relatively free of pathogens – and faeces contain valuable nutrients for fertiliser and soil improvement. Therefore, a 4th overarching priority/goal is required:

4. All human excreta and wastewater are safely managed

- Indicator – 100% of human excreta & wastewater are safely stored, transported and adequately treated before being used or being disposed in the environment in a safe and acceptable manner.

GENDER-WASH priority areas

In addition to the overarching priority areas, the following gender specific priority areas should require policy focus and dedicated implementation and financing programs:

1. Priority for women living in poverty in rural and slum areas

- Indicator: at least 2/3 of funding (state budget, ODA) for rural and slum areas with specific windows for women

2. Safe Menstrual Hygiene

- Indicator – 100% of women and girls should have access to safe sanitary facilities and be enabled to manage their **menstrual hygiene** (MHM) in a dignified fashion

All women and girls have access to menstrual sanitary material, including privacy in sanitary facilities (doors), waste-bins for sanitary materials and their safe disposal, e.g. washing facilities – to clean their own pads, and hands

3. WASH in all Schools

- Indicator – 100% of educational institutions - schools, kindergartens and universities - have safe water, safe sanitary facilities, hand washing and soap and guidelines for safe toilets for girls
 - i. Including hygiene education in all schools

4. Women Leadership in WASH sector

- Women's leadership in the WASH sector
 - 50% women in (local) WASH management at all levels (from decision-making, planning, implementation, monitoring)

5. Zero taboo on toilets and menstruation

- All countries have awareness raising campaigns on WASH issues: toilets, human faecal matter and MHM

6. Zero gender violence

- All countries have awareness raising campaigns on elimination of (WASH related) gender violence and policies to eliminate this

Integrated policies and programmes

An integrated approach to gender, water, sanitation and hygiene is necessary and needs to be focussed on affordable, local solutions. The large private sector corporations are not able to provide these solutions, investments need to be made in local drinking water committees, communal enterprises and women's cooperatives. Also sustainable, innovative technologies which are available – such as urine diverting dry toilets – need to be up-scaled. Local capacity of women and men needs to be built on the safe treatment and use of sanitation products as fertilisers and soil improvers. Food security can be increased with such fertilisers which are readily available at very little cost, regardless of infrastructure and economic resources. Providing effective management for wastewater and toilet products can create many jobs in the context of a green economy. For example, wastewater collected and treated to reduce its harmful impacts, can be re-used to reduce the operational costs of industrial processes and agricultural production. In addition, the recovery of energy can contribute to reducing emission of greenhouse gasses. Women should be included equally at all stages to ensure a long-term sustainability of the approach and the technologies.

3.2. Governance and Women's Human Rights

3.2.1. Women leadership, gender equality in decision making

(still to come from WEDO)

3.2.2. Gender, poverty and the need for a social protection floor

Giulia Massobrio, SustainLabour⁹³

Defining the post-2015 development agenda has precise implications for women: given the structural gender discrimination that pervades the current system, any 'new' model will be just as gender-unequal as the current one unless there is a concerted and proactive effort to reverse this trend.

The link between gender equality, poverty eradication and social protection is crucial. The current model is characterized by the feminization of both poverty and exclusion from social protection. To be a woman not only means being poorer; it also means being less likely to be covered by social protection in terms of income security, access to essential services, and formal employment-related benefits. As a consequence, women are disproportionately vulnerable in social, economic and environmental terms, and this manifests itself in the form of increased poverty, social exclusion and inequality.

This is why the Women's Major Group considers the extension of social protection for women to be an essential element of the Sustainable Development Goals. Social protection is a core human right under international law,⁹⁴ and an extremely powerful tool for combating poverty, promoting income distribution and building resilient societies.

As a first, urgent step in this process, the Women's Major Group is calling for the implementation of national Social Protection Floors, in order to guarantee that all women in need have the right to income security and access to essential services (such as health, including reproductive health, education, housing, and water and sanitation). Social Protection Floors provide a useful and effective tool to help reverse gender-based power imbalances.

To be a woman means to be poorer and to have lower social protection

The feminization of poverty remains entrenched in our societies. Despite Millennium Development Goal 3's focus on women's empowerment, gender inequality persists, and women are still fighting against poverty and hunger, even there is only three years to go until the 2015 deadline for meeting these goals.⁹⁵ As the OECD points out, "women account for roughly half of the world's population, but...comprise the majority of the poor and excluded."⁹⁶ Worldwide seven out of ten people living below the poverty line (US\$1.25 per day) are women; the same is true for seven out of ten people dying from starvation.⁹⁷

The feminization of poverty is a direct result of the current economic model which is predicated on power imbalances, making women more vulnerable from the social, economic and environmental points of view. From a social perspective, this model perpetuates a system of gender-based stereotypes, which often generates discrimination in terms of responsibilities assigned, access to and control over resources, and decision-making opportunities. From an economic perspective, it produces employment discrimination and segregation, often confining women to reproductive and care-related work, while

⁹³ See www.sustainlabour.org.

⁹⁴ Under human rights law, States are legally obligated to establish social protection systems. This duty flows directly from the right to social security, which is articulated most prominently in Article 9 of the International Covenant on Economic, Social and Cultural Rights (ICESCR).

<http://www.ohchr.org/Documents/Issues/EPoverty/HumanRightsApproachToSocialProtection.pdf> (see p20)

⁹⁵ See UN Millennium Development Goals (MDGs) Report, 2012.

⁹⁶ See OECD, Promote gender equality and empower women, 2010, p. 11.

⁹⁷ See UN Millennium Development Goals (MDGs) Report, 2011.

men are more likely to be in charge of productive, remunerated work. Finally, from an environmental perspective, disparities in access to and reliance on natural resources increases women's economic vulnerability and exposure to environmental disasters.

The feminization of lack of social protection also remains as a critical challenge. Social protection is recognized as a fundamental human right by the Universal Declaration of Human Rights (1948),⁹⁸ the International Covenant on Economic, Social and Cultural Rights (1966)⁹⁹ and by other major United Nations instruments. With particular reference to women's rights, the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) explicitly recognizes women's right to social security, including unemployment benefits, occupational safety and health, maternity protection and maternity leave, and the right to social services to enable family-work conciliation.¹⁰⁰ Yet despite such recognition, only 28% of the global population has access to comprehensive social protection systems.¹⁰¹ Within this alarming scenario, women tend to be quantitatively and qualitatively worse off than men. Fewer women are covered by adequate social protection and — even when they are covered — they are usually provided with a lower set of social protection benefits.¹⁰²

Worldwide fewer women are employed than men (47.6% and 75.3 % respectively),¹⁰³ and women's working lives are generally tougher. Women's work is more likely to be in the informal economy, their jobs are less remunerative and more precarious, and their careers are often interrupted for maternity or care responsibilities. As a consequence, their contributive capacity is lower and they may well, as a direct consequence, have less access to contribution-related benefits (which may include sickness, injury, unemployment, family, maternity, old-age, invalidity, and/or survivors' benefits).

Moreover, given that access to social protection usually depends on a formally recognized employment relationship, women — who are more likely to be working in the unrecognised informal economy, as casual labourers or homeworkers, or in care work and/or self-employment — are again more unlikely to be entitled to any social protection coverage.

Overall, unemployment and underemployment affect women's income security throughout life and, as a result, limit their ability to pay for essential services such as health, education and housing, among others. Women face higher financial barriers to access health care and they are more dependent upon their families.¹⁰⁴ In addition, there is continuing gender disparity in access to primary, secondary and tertiary education,¹⁰⁵ and in accessing clean water and improved sanitation.¹⁰⁶

⁹⁸ See art. 22 and 25 of the Declaration.

⁹⁹ art. 9 of the Covenant.

¹⁰⁰ See art. 11.

¹⁰¹ ILO considers as "comprehensive social protection systems" those covering all branches of social security as defined in ILO Convention n. 102. Data is provided by the ILO World Social Security Report 2010/2011, http://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS_146566/lang--en/index.htm See p.1.

¹⁰² The last ILO World Social Security Report 2010/2011 shows a significant gender gap everywhere: for instance, in nearly all countries elderly women are covered to a much lesser extent than elderly men. http://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS_146566/lang--en/index.htm

¹⁰³ See UN Millennium Development Goals (MDGs) Report, 2012.

¹⁰⁴ See ILO World Social Security Report, http://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS_146566/lang--en/index.htm See p.69.

¹⁰⁵ See UN Millennium Development Goals (MDGs) Report 2012, goal 3, p. 20.

¹⁰⁶ See Human Development Report summary, 2011, Introduction.

As mentioned above, gender discrimination in social and economic roles also exacerbates women's environmental vulnerability. Women are at a higher risk from and are disproportionately affected by

BOX 1

CASE STUDY: Lack of decent work and social protection for Bangladeshi women in the garment industry

Many of the world's biggest apparel brands have turned to Bangladesh as a low-cost production base. As a result, 80% of Bangladesh's economy (worth US\$24 billion) is dependent upon the export of ready-made garments. Such revenues are generated at the expense of the three million plus people employed in the sector, which generally fails to meet minimum labor standards such as social protection, occupational health and safety, and freedom of association. Women are particularly affected, as they represent over 70% of ready-made garment workers. The majority of them are poor women from rural areas that, due to the limited options open to them in terms of rural livelihoods and urban formal work, are an easily accessible pool of informal labor that can be exploited in unsafe circumstances. Lack of compliance with basic labor standards has exposed workers to several fatal accidents over the last few years, as exemplified by the fire in Ashulia, an industrial zone north of Bangladesh's capital, on 24 November 2012, when the Tazreen Factory was destroyed and more than 122 workers, most of them women, lost their lives.

Source: Munima Sultana, "Negligent auditing kills over 120 workers in Bangladesh", ITUC Equal times, 26/11/2012. Tripti Lahiri and Syed Zain Al-Mahn Mood, "Bangladesh: how rules went astray", Wall Street Journal, 5/12/12.

climate change and environmental degradation, because they have access to fewer resources — including land, credit, agricultural inputs, technology and training services, and participation in decision-making bodies — and this impedes their ability to avoid or adapt to various situations.¹⁰⁷ The lack of basic social protection increases women's dependency on natural resources and decreases the likelihood that they can overcome environmental distress.

Reversing the trend: why social protection is crucial for gender equality

Social protection is a fundamental right that applies to all human beings. At the same time, it is an economic and social necessity for development based on social justice. Social protection is aimed at protecting people from the unexpected contingencies that occur in life, by providing basic income security and access to essential services throughout life. Thus, it constitutes a major driver for poverty eradication, because it reduces inequality and social exclusion, and promotes equal opportunities including gender equality.¹⁰⁸

Moreover, social protection constitutes a fundamental pillar of decent work and a core tool for income distribution. In fact, one of the objectives of the ILO's Decent Work Agenda at the national level is "to

¹⁰⁷ See Aguilar, L., Is there a connection between gender and climate change?, International Union for the Conservation of Nature (IUCN), Office of the Senior Gender Adviser, quoted by ILO, Green Jobs: Improving Climate for gender equality too, p.2.

¹⁰⁸ See Preamble of ILO Recommendation 202. http://www.ilo.org/brussels/WCMS_183640/lang-en/index.htm

achieve the extension of social security to all and...to ensure a just share of the fruits of progress”, together with promoting rights at work, employment creation and social dialogue.¹⁰⁹ Gender equality is included as a cross-cutting issue within this Agenda, in order to assure its concrete mainstreaming in any program aimed at promoting decent work.

Lastly, social protection contributes to long-term resilience to the current multiple crises, by acting as an automatic social and economic stabilizer¹¹⁰ and by protecting people in the planned transition to sustainable development, which will imply adjustments in the labor market. Social protection systems can contribute by minimising the risks of change, optimising gains for all workers and their communities, and providing green job opportunities for women.¹¹¹ Once more, this function is particularly relevant for women’s resilience, as they are among the most affected by these crises and the most vulnerable in terms of facing environmental distress.

Given the alarming picture on social protection coverage worldwide, as described above, and the specific lack of coverage with respect to women, the Women’s Major Group strongly supports the urgent implementation of Social Protection Floors (SPFs) at the national level, as promoted by the ILO and the WHO and supported by the European Commission,¹¹² the United Nations, the G20,¹¹³ numerous governments and civil society organizations.

This global initiative is aimed at guaranteeing the right to basic social protection coverage to all in need. In this sense, the Floor is a strategy for the horizontal extension of coverage on the one hand (that is, to increase the quantity of people covered by basic social protection guarantees, to cover all those in need). On the other hand however, it must also be a first step towards vertical extension (that is, a step towards progressively increasing the quantity and quality of social protection benefits being provided).¹¹⁴

As agreed in the recently adopted ILO Social Protection Floors Recommendation (No.202, June 2012) guarantees should ensure, at a minimum, that all in need have the right, throughout their lives (youth - old age), to basic income security, as well as the right to access essential services as defined at the national level, including health, water and sanitation, education, food security, and housing.¹¹⁵

Recommendation 202 makes explicit reference to gender equality as a key principle in terms of implementing social protection floors. National floors can be extremely powerful tools for reversing gender-based power imbalances both in terms of access to resources and in roles assigned. They answer women’s specific needs and priorities related to poverty, social and economic exclusion, shifting their involvement from the informal to formal economy, and providing access to decent and green job opportunities.¹¹⁶

¹⁰⁹ See ILO Declaration on Social Justice for a Fair Globalization, 2008.

¹¹⁰ See ILO Global Jobs Pact, where the role of social protection in economic and social recovery was highlighted.

¹¹¹ See Sustainlabour, Background document to the Madrid Dialogue – A new paradigm for employment, social inclusion and poverty eradication in a sustainable planet, 2011.

¹¹² See European Commission, Social Protection in European Union Development Cooperation, 2012.

¹¹³ See G20 2012 conclusions referring to SPF.

¹¹⁴ See ILO, Social security for all. Building social protection floors and comprehensive social security systems, 2012.

¹¹⁵ According to R. 202, art. 5, the SPF should comprise at least access to essential health care, including maternity care; basic income security for children, in order to access nutrition, education and care; basic income security for the elderly and for persons of an active age who are unable to earn sufficient income (in cases of sickness, unemployment, maternity and disability).

¹¹⁶ “The social protection floor provides an opportunity for a comprehensive review of the basic social protection systems in any country, and hence new means of addressing the spectrum of problems outlined above, many of which reflect the traditional power imbalances that have characterized gender relations throughout history”. See Social Protection Floor Advisory Group report chaired by Michelle Bachelet (ILO-WHO, 2011), p. 59.

In defining the floor, it is crucial to distinguish between the social protection approach and the safety-net approach. Safety nets are temporary relief programs, aimed at mitigating the transitory adverse effects of certain contingencies. They are needs-based, in the sense that they target the determinate needs of specific groups faced with the contingency; they are not integrated into the whole social protection system.¹¹⁷ On the other hand, the social protection approach is rights-based: its prerequisite is the recognition of social protection as a fundamental right to be guaranteed to everybody, starting from the basic social protection rights included in the floor. Thus, while the net provides temporary relief to target groups because of an emergency, the floor is aimed at guaranteeing basic social protection to all beyond contingencies. Moreover, unlike the net, the floor is conceived as the first step of a comprehensive social protection system; it has to be linked with other social, labour and economic policies within an integrated national development strategy.¹¹⁸

Given these key differences, the Women's Major Group advocates for a rights-based floor based on the social protection approach, rather than the safety-net one. This must be a first step towards developing comprehensive social protection systems that effectively include the gender perspective and promote women's empowerment.

The SPF-Initiative is both fair and feasible. ILO studies show that it is globally affordable at virtually any level of economic development, even if less developed countries need international support to implement it gradually.¹¹⁹ For example, El Salvador, Benin, Mozambique and Vietnam could provide a major social protection floor for as little as 1-2% of their Gross Domestic Product (GDP); and Burkina Faso, Ethiopia, Kenya, Nepal, Senegal and Tanzania could provide a universal basic pension for just over 1% of their GDP. In Brazil, the conditional cash transfer 'Bolsa Familia' already covers 46 million people, at a cost just 0.4% of its GDP (see Box 2).¹²⁰

Moreover, the cost of *not* acting to extend social protection will be much higher. As pointed out by the European Commission, "the cost of a well-designed floor is small if compared to the cost of failing to provide social protection,"¹²¹ in terms of increased social, economic and environmental vulnerability.

¹¹⁷ An example is given by the social safety nets promoted by the World Bank and the International Monetary Fund in the late 1980s and early 1990s in the context of market-based structural reform programs in Latin America and East Europe. See ILO, Bachelet Report, p. 13.

¹¹⁸ See Bachelet Report, p. 13.

¹¹⁹ According to ILO costing studies related to low-income countries in Africa and Asia, the cost of a basic set of social transfers (excluding health care) that enable people to access or purchase essential services was estimated to be in the range of 2.3 to 5.7 percent of GDP in 2010. See Michael Cichon, Christina Behrendt and Veronika Wodsak, The UN Social Protection Floor Initiative, Friedrich Ebert Stiftung, 2011, p. 9.

¹²⁰ Data are provided by Michael Cichon, Christina Behrendt and Veronika Wodsak, The UN Social Protection Floor Initiative, Friedrich Ebert Stiftung, 2011, p. 9, as quoted by the International Trade Union Confederation- ITUC, The social protection floor: made simple, 2012, p. 2.

¹²¹ European Commission, The 2010 European report on development, social protection for inclusive development, Robert Schuman Centre for Advanced Studies, European University Institute, 2010, in ILO, Bachelet Report, p. 47.

With respect to financial responsibility for the floor's implementation, on the one side the Women's Major Group recognizes the overall and primary responsibility of the State; on the other side, it calls for the establishment of a Global Fund for Social Protection, to support poorest countries in implementing the SPF. Such a position is coherent with ILO Recommendation 202, art.12, which states that, "National social protection floors should be financed by national resources. Members whose economic and fiscal capacities are insufficient to implement the guarantees may seek international cooperation and support that complement their own efforts."¹²²

4. Conclusions and Post-2015 recommendations: social protection for all with gender equality

The global extension of social protection is an essential tool for overcoming women's social, economic

BOX 2

GOOD PRACTICES FROM BRAZIL: the BOLSA FAMILIA¹ Example

One of the most successful examples to show that the Floors are both effective and economically feasible is the 'Bolsa Familia' Programme of Brazil. Roughly translated as 'family grant,' it is the largest conditional cash transfer program worldwide. Launched in 2003, Bolsa Familia provides income support to poor families, subject to their fulfilling certain human development requirements (such as ensuring child school attendance, take up of vaccinations, nutritional monitoring, and participation in prenatal and postnatal testing). It currently reaches 13 million families — about a quarter of Brazil's population — at a cost of 0.4% of Brazil's GDP (US\$3.9 billion in its 2010 budget). In terms of income distribution, Bolsa Familia is estimated to have accounted for 15% of the improvement in the Gini Coefficient for Brazil between 1999 and 2009. Moreover, its positive effects in terms of poverty reduction and income redistribution also helped Brazil cope with the current multiple crises.

Source: ILO Bachelet Report, 2011, p. 13, 38, 47; ILO Social Security Report 2010-2011, p. 76. Official Bolsa Familia webpage in Portuguese: <http://www.mds.gov.br/bolsafamilia>.

and environmental vulnerability, including in the light of promoting sustainable development. In this framework, ensuring universal access to basic social protection guarantees constitutes a human right, as well as being a direct and efficient way of reducing gender inequality, and a key tool for building resilient societies.

For this reason, the Women's Major Group strongly supports the ILO-WHO Social Protection Floor Initiative. In such a framework, the Women's Major Group recommends a goal of 'Social Protection for All with Gender Equality', to be reached by 2030, at least at the level of national Social Protection Floors (SPFs).

The national floors have to be right-based (avoiding the safety-net approach based on temporary relief programs), and they have to be designed as part of comprehensive social security systems. This way, the floors will be an instrument to extend protection to all in need (horizontal extension), as well as a first step towards progressively higher protection levels (vertical extension).¹²³

¹²² The proposal is also supported by the Workers and Trade Unions' Major Group. See ITUC Briefing Position paper "Post-2015 UN development agenda: towards decent work for all and universal social protection".

¹²³ The reference for the minimum standards of social protection is ILO Convention 102, 1052.

The national floors have to be implemented according to ILO Recommendation 202 principles, which include universality of protection; entitlement to benefits prescribed by national law; special attention to the informal economy; realization with targets and within time frames; accountable financial management; financial, fiscal and economic sustainability based on social justice and equity; coherence with social, economic and employment policies; and high-quality public services to enhance the delivery of social security systems.

In coherence with the principle of “non-discrimination, gender equality and responsiveness to special needs” as recognized by ILO R.202, the Women’s Major Group calls for the inclusion of all women in need among the priority groups covered by the national protection floors, in order to guarantee their income security and access to essential services (health, including reproductive health, and education, housing, water and sanitation). Moreover, the Women’s Major Group calls for the effective crosscutting inclusion of women’s needs and priorities in the design, implementation and evaluation of the SPFs, starting from guaranteeing women’s participation in the related decision-making processes. This is the only way to design floors able to take into account and reverse gender-based discrimination (in access to resources, employment opportunities and social welfare systems) and sexual division of responsibilities (including care and non-remunerated work).¹²⁴

Concerning the floors’ financing, again in coherence with ILO Recommendation 202, art.12, the Women’s Major Group recognizes the overall and primary responsibility of the State in guaranteeing the Floor’s affordability; at the same time, the Women’s Major Group calls for the establishment of a Global Fund for Social Protection, in order to boost SPF implementation in the least developed countries.

Gender Equality Targets

Accordingly, the Women’s Major Group sets the following gender equality targets:

- 1. Essential services:** universal financial and geographic access to essential services (health, including reproductive health, and education, housing, water and sanitation) for all women in need by 2030.
- 2. Income security:** universal provision of social transfers, in cash and in kind, for all women lacking minimum income and livelihood security, to be established by 2030 (prioritising single parent-households headed by women).
- 3. Vertical extension of coverage:** there should be a 30% increase in the number of women able to access social protection benefits beyond essential services and income security (as set out in targets 1 and 2 above), in accordance with ILO Convention 102 standards (that is, higher levels of protection in the branches of medical care, sickness benefit, unemployment benefit, old-age benefit, employment injury benefit, family benefit, maternity benefit, invalidity benefit and survivors' benefit), with particular attention being paid to women’s emancipation from traditional job-related roles (such as domestic workers, self-employed workers, and at-home care workers).
- 4. Conciliation policies:** there should be a 30% increase in the availability of work–family reconciliation mechanisms prescribed by national law (such as nurseries/daycare centers for children; incentives facilitating paternity leave; social services aimed at reducing the pressure on unpaid and care work).
- 5. Participation:** there should be a 40% increase in the numbers of women effectively involved in participatory decision-making processes concerning the design, implementation and evaluation of social protection systems, including the national floors.

¹²⁴ See ILO-WHO Bachelet Report, p. 60.

6. Gender-disaggregated data: the goal should include a target promoting the universal use of gender-disaggregated data, statistics and indicators for the design, implementation and evaluation of social protection systems, including the national floors, in coherence with ILO Recommendation 202, art.21.

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3.2.3 End the Gender Pay Gap - Living Wage and Decent Work for Women

By Warda Rina, Programme Officer, Breaking Out of Marginalisation, Asia Pacific Forum on Women, Law and Development (APWLD) with inputs from Giulia Massobrio, SustainLabour

“Everyone who works has the right to just and favourable remuneration ensuring for himself and his (sic) family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection.”

Universal Declaration of Human Rights Article 23(3)

Women workers and decent work

Given its crucial role in eradicating poverty and empowering societies, the International Labour Organization’s Decent Work Agenda¹²⁵ was added to the Millennium Development Goals (MDGs) in 2008 (through the addition of a target ‘b’ under Goal 1, which is to “Achieve full and productive employment and decent work for all, including women and young people”¹²⁶).

According to ILO, the Decent Work Agenda should have four strategic objectives, with gender equality as a cross-cutting objective. These objectives are: creating jobs (generating opportunities for investment, entrepreneurship, skills development, job creation and sustainable livelihoods); guaranteeing rights at work (including workers’ representation and participation); extending social protection (guaranteeing a minimum living wage, safe working conditions, and essential social security to all in need) and promoting social dialogue (through workers’ and employers’ organizations’ effective participation).¹²⁷

This inclusion acknowledged the failure of the original framework to include employment in its analysis of poverty alleviation, and the phenomenon of jobless growth. Yet with respect to income the selected target still only measures the proportion of workers receiving the pitiful amount of US\$1.25(PPP) per day. This is itself an important statistic, since the ILO estimates that 1 in 5 workers worldwide do not even earn this amount,¹²⁸ but it means that there is no target measuring whether employees are being offered a dignified, living wage.

MDG Goal 3 on gender equality¹²⁹ also includes a target for the percentage of women in the non-agricultural labor force. Yet once again, this target is not measuring the availability of decent work, appropriate wages or good working conditions; it also excludes the large majority of women workers employed in agriculture. Thus the target is failing to address the fact that jobs where the majority of women are employees — worldwide and in all economic sectors — are characterized by lower pay, less skilled employment, precarious conditions, fewer employment benefits, fewer career opportunities, less involvement in decision-making and less unionization.

¹²⁵ <http://www.ilo.org/global/about-the-ilo/decent-work-agenda/lang--en/index.htm>

¹²⁶ http://www.ilo.org/empelm/what/WCMS_114244/lang--en/index.htm

¹²⁷ See 2008 ILO Declaration on Social Justice for a Fair Globalization:

http://www.ilo.org/wcmsp5/groups/public/@dgreports/@cabinet/documents/publication/wcms_099766.pdf

¹²⁸ The Millennium Development Goals Report, 2011. It should be noted that PPP (Purchasing Power Parity) equates to an equivalent purchasing power of USD1 in the USA. Therefore it measures global buying power based on a US benchmark. An example may be that if USD1.25 could purchase 2 bananas in the USA the local salary would be sufficient to purchase 2 bananas in local currency.

¹²⁹ <http://www.un.org/millenniumgoals/gender.shtml>

In light of the Sustainable Development Goals process, we need to make the link between decent and green jobs, since the human and environmental sustainability of employment go hand in hand (see SustainLabour's report on women's discrimination in green jobs¹³⁰). It is important to bear in mind that a 'green economy' is not socially- or gender-equitable by definition or default. To reverse the current inequitable dynamic, governments will need to take proactive measures to ensure that women do not continue to suffer discrimination under a new 'green economy.'

It will not be possible to eradicate poverty unless fair and just conditions of work, including proper remuneration, are established. A global calculation for a living wage is required, to ensure that a family can live on a wage with dignity. It is particularly imperative to articulate measures for decent work and living wages that apply to informal sectors and migrant workers.

The gender pay gap

The 'gender pay gap' is an indicator of entrenched discrimination and inequality (as are sexual division of work, employment segregation, constraints on upward mobility, and the difficulties women face reconciling the requirements of home and working life). Gender differences in labor force participation rates, unemployment rates and gender wage gaps are a persistent feature of global labor markets.¹³¹ Industries that employ large numbers of women are amongst the lowest paid, most insecure and most exploitative, and nearly two thirds of women work in 'vulnerable employment,' lacking basic security, benefits and conditions.¹³² Domestic workers, for example, suffer the largest gender pay gap by sector.

This situation exists because of the systemic de-valuing of women's work and entrenched assumptions about women's dependency on men. The gender pay gap is also a result of employers' gender-based assumptions. They deliberately employ women because of beliefs that women will not complain, are less likely to unionise, and are only working to derive 'supplementary income'. The gender pay gap occurs within industries and is evident in cross-industry comparisons.

If we take the example of the Asia Pacific region, women workers comprise the majority of workers in the garment industry, in domestic work, in service industries and in agricultural subsistence farming. But while women's labor market participation has grown, the conditions and wages that the majority of women workers receive are still below subsistence levels, and cannot be regarded as decent. The majority of women workers in Asia continue to be employed in 'vulnerable employment',¹³³ and in some countries the percentage of employment classed as 'vulnerable' is also increasing.¹³⁴ Asia has the highest gender pay gap in the world.

Globally, economic growth has largely been achieved by increasing the labor burden on women. Increasing participation rates and 'productivity' demands have resulted in the lowering or stagnation of real wages, whilst output has increased and cheaper products have been made available to consumers around the world. Again this dynamic is clearly seen in the Asian region, where inequalities have

¹³⁰ Green Jobs and Women Workers: Employment, Equity, Equality; Draft Report, at: <http://www.sustainlabor.org/IMG/pdf/women.en.pdf>

¹³¹ OECD Thematic Paper on MDG3, 2010.

¹³² MDGs Report, United Nations, 2009.

¹³³ UN defines this as the percentage of own-account and unpaid family workers in total employment.

¹³⁴ See figure provided in ILO (2011). Thailand and Malaysia have both increased numbers of vulnerable workers.

increased dramatically, alongside high growth rates, increasing profits, and increasing rates of labor productivity.¹³⁵

By setting the target indicator for wages at the rate of US\$1.25 (PPP) per day, and at the same time tracking productivity increases (in the form of a target measuring Gross Domestic Product per employed person), the MDGs have effectively contributed to the freezing of real wages and increasing inequality: this low target justifies the payment of poverty wages and rewards governments even if they are setting exploitative minimum wages. While wealth has increased exponentially in many countries there has been no corresponding increase in wages or decrease in unemployment, and no discernible decrease in the gender pay gap. Poverty-level wages continue to force workers to work lengthy hours of overtime, forgo health and safety standards, get into debt, and sacrifice their families' education, health and well-being.

Box: the case of domestic workers

The exploitation, systemic devaluing and abuse of domestic workers affects millions of women in developing countries. Up to 90% of domestic workers are women,¹³⁶ and domestic work is one of the largest drivers of women's labor migration in the world.¹³⁷ For example, domestic work is now the most common occupation for women in the Asia Pacific region accounting for around one-third of all female employment in Asia.¹³⁸

However, the labor laws in most countries fail to recognise domestic workers as workers, resulting in denial of even the most basic labor and human rights. Domestic workers routinely work 16-18 hours a day every day of the week, are denied holidays, are underpaid or not paid at all for long periods, are abused, harassed, confined to the house, restricted from contact with family members and friends, and may find their employment terminated without notice. Migrant domestic workers are particularly vulnerable to exploitation and abuse, with problems arising because of language barriers, discriminatory labor laws, predatory recruitment agencies, the withholding of documents by employers, and threats of deportation.¹³⁹

The deficiency of legislative protections for domestic workers allows recruitment agencies and employers to exploit women with impunity. Furthermore, because they are denied the status of workers, many domestic workers are also excluded from national welfare systems, pensions, health insurance and unemployment benefits. Several countries also prevent domestic workers from unionising or using labor courts and tribunals. Any commitment to a new development framework that intends to benefit marginalised women must aim to elevate the rights enjoyment of domestic workers.

Proposals: goals and recommendations

¹³⁵ Prabhat Patnaik, Ideas Working Paper, Paper no. 05/2009, A Perspective on the Growth Process in India and China, 2009.

¹³⁶ National Domestic Workers Movement, 'About Domestic Workers' 2010, available from <http://www.ndwm.org/> viewed 24th March 2010.

¹³⁷ United Nations Population Fund, "The State of world population 2006: A Passage to Hope: Women and International Migration," (2006), 25.

¹³⁸ Ip Pui Yu, Asian Domestic Workers' Network, 'Asian Domestic Workers' Network' 2010, available from <http://en.domesticworkerrights.org/?q=node/3> viewed 24th March 2010.

¹³⁹ Asia Pacific Forum on Women, Law and Development (APWLD), The Right to Unite, 2010.

In terms of developing global sustainable development goals, a priority area must be focusing on decent green jobs based on the principles of adequate and equal remuneration, accessibility and equal opportunities, accountability and social protection, and social dialogue.

A development framework that aims to ensure workers, families and communities can live in dignity must also incorporate a target that realistically values labor and sets targets that focus on improving living and working conditions. We propose that this target focus on a living wage.

A living wage is a wage that enables a family to live in dignity. A living wage should be calculated on the cost of a basket of goods that would include sufficient calories for a family (using the local dietary habits) and a similar amount for non-food costs including housing, clothing, energy and material goods.

The Asia Floor Wage campaign, for example, has developed an equation that provides for both food and non-food costs for a family. This standard should be used to guide the development of a living wage indicator.¹⁴⁰ A living wage is rarely available to workers in Asia Pacific. No major textile producing countries in the region have legislated for a minimum living wage, and¹⁴¹ many garment workers are denied even the legal minimum wage.¹⁴²

A living wage also needs to assure workers' capacity to contribute to adequate social protection schemes, according to ILO Convention No.102. Moreover, it has to be supplemented by basic social protection guarantees for all in need, and good quality public services. The equation developed would also vary to take account of privatized or otherwise inadequate provision of services. Privatization increases the costs of energy, water, education, healthcare and transport, as do reductions in food subsidies and other initiatives focused on cutting public spending.

A common living wage or floor wage would have multiple development benefits. It would prevent capital flight in search of the lowest possible labor conditions. These practices lead to unemployment and unpredictable economic conditions. It would increase much needed tax revenue. It would also reduce the gender pay gap.

Proposals for a decent green employment agenda as part of global Sustainable Development Goals should therefore focus on a special effort to reduce the current gender discrimination in employment, in particular in the following five areas:

An increased effort to employ women, including through:

- an increase in the rate of women in employment
- reduced gender discrimination
- reduced impact of austerity measures on women
- more family friendly measures

An increased effort to recruit more women, including by:

- increasing the recruitment of women in non-traditional jobs
- integrating gender quotas into recruitment policies, in particular affirmative action in public employment programs

¹⁴⁰ Asia Floor Wage, *Stitching a Decent Wage Across Borders*, 2009.

¹⁴¹ The Asia Floor Wage calculations updated in 2012 do not include the increase in the minimum wage in Thailand which will come into force on the 1st January 2013 and will be applicable to garment workers but not domestic workers.

¹⁴² In Bangalore alone research found that at least 125,000 workers were paid below minimum wage and denied almost £10 million in wages by unscrupulous employers in the garment industry, Action Aid.

Increased investment in training and educating women, including by:

- more training programmes targeted at women, in particular in non-traditional fields of expertise
- more gender-friendly training conditions that take into account women's specific needs and constraints

Eliminating the gender pay gap, including through:

- legislation intended to abolish the gender pay gap
- facilitating self-organisation of women, for example by supporting the creation of unions to support their demands (especially since women in unionized workforces are less likely to suffer large gender pay gaps¹⁴³).

Proposals SDGs - Post2015

Governments must promote ratification and compliance with the ILO Convention concerning decent work for domestic workers (C. 189) and related Recommendation n. 201

An indicator that measures the gender pay gap should be included in the post-2015 development framework, addressing both policy and implementation. This means that it should:

- measure whether a legal standard has been set that establishes a living wage
- measure the difference between the minimum and living wage, where a minimum wage exists
- target the inclusion of all workers, with particular requirements for domestic, migrant and other vulnerable workers, according them the same conditions, rights and benefits as other workers
- track how many workers receive a living wage
- track how many women workers receive a living wage

Overall the aim must be to increase decent and green jobs for women. Below examples of SDG/post-2015 targets:

- reduce unemployment rate of women to close to 0% by 2030
- creation of green jobs for women of at least 50% of total green jobs by 2030
- reduction of the average pay gap to 0% by 2030
- increase of women in professional training and retraining for those needing up to 100% by 2030
- increase of women in decision-making positions in companies and social dialogue to at least 50% by 2030

¹⁴³ ITUC, Frozen in Time: Gender pay gap unchanged for 10 years, 2012.

3.2.3. Sexual and Reproductive Health Rights,

By Alexandra Garita and Ximena Andión

RESURJ- Realizing Sexual and Reproductive Justice

Women's sexual and reproductive rights and health: critical investments for achieving sustainable development

As a global community, we have miserably failed to provide women, particularly poor women and adolescents, with the sexual and reproductive healthcare they need to live fulfilling, just and healthy lives.

Women's oppression and lack of agency denies their humanity and places them in situations where their sexual and reproductive rights are violated. Furthermore, gender discrimination limits their freedom to acquire knowledge about their bodies and their rights. Despite some progress, the situation of women's sexual and reproductive rights has not improved significantly in the last decade.

For these reasons alone, the international community has a moral imperative to secure women's sexual and reproductive rights and health. This can be done by measuring the effectiveness, reach and quality of women's health programs, but it also necessitates participatory and social accountability approaches, so that women are able to influence those areas that require political, social and financial investments.

In the Post-2015 development agenda, multiple goals can be developed that address women specifically (as are outlined in other chapters of this book). One of these must be to secure women's sexual and reproductive rights, and in so doing achieve their equitable access to quality sexual and reproductive healthcare. This will undoubtedly impact a whole range of development outcomes positively, as well as contributing to social, gender and environmental justice.

Women's reproductive rights

Sexual and reproductive rights are human rights. The International Conference on Population and Development's Programme of Action (ICPD, 1994) recognized that the right to sexual and reproductive health and reproductive rights are enshrined in international human rights treaties already adopted by the international community. The bodies that monitor compliance with international human rights treaties (such as the Committee on the Elimination of All forms of Discrimination Against Women and the Committee on Economic Social and Cultural Rights) have since expanded the content and scope of States Parties' human rights obligations related to sexual and reproductive rights and health.

Under international human rights law, violations of women's reproductive rights constitute violations of human rights, including the right to information, the right to life, the right to non-discrimination, the right to health, and the right to be free from torture, and cruel or inhuman treatment. The primacy of international law imposes an obligation on States to protect, respect, and fulfil these through all means necessary.

Reproductive rights violations lead to negative development outcomes because they fuel gender, economic and social inequalities. These violations include preventable maternal mortality and morbidity; forced sterilizations and forced abortions performed on women belonging to different ethnic minorities

and also on those who are HIV positive; lack of effective access to safe abortions where they are legal due to non-regulation of conscientious objection, among other factors; lack of informed consent and choice over contraceptive methods; harmful practices such as honour killings, female genital mutilation, and early and forced marriage; and sexual violence.

Securing women's sexual and reproductive health and rights is not only a fundamental goal in its own right; it is also critical to achieving social, economic and environmental development, the three pillars of sustainable development.

Women's access to quality sexual and reproductive health care services

There has been little progress in achieving Millennium Development Goal 5 (MDG 5) on improving maternal health,¹⁴⁴ which requires a 75% reduction in maternal mortality and morbidity and aims to guarantee universal access to reproductive health. Indeed, MDG 5 is one of the Millennium Development goals that is most off-track, and the UNDP 2012 MDG Progress report (UNDP, 2012) notes that the international community is far from achieving it. In addition, MDG 6, on halting the spread of HIV,¹⁴⁵ has been insufficient for women.

In 2015 we are still likely to be far away from achieving these goals, because even now:

- Eight hundred women still die from pregnancy-related causes every day (WHO, 2012).
- Over 220 million women (who are married or living in union) in developing countries want to prevent pregnancy, but lack access to effective contraception — resulting in 80 million unintended pregnancies, 30 million unplanned births and 40 million abortions — half of them unsafe and life-threatening (Guttmacher Institute and UNFPA, 2012).
- Since the 1990s progress has slowed with respect to increasing contraceptive use, with unmet need for family planning remaining persistently high in some of the poorest regions of the world, including Sub-Saharan Africa (Gita & Nayar, 2012).
- Nearly half of all people living with HIV globally are women (UNAIDS, 2012). Young women aged 15-24 are most vulnerable to HIV with infection rates twice as high as in young men; they account for 22% of all new HIV infections (UNAIDS, 2011). Every minute, a young woman is newly infected with HIV (Murray *et al*, 2010).

Maternal deaths are the result of a combination of poverty, social exclusion, inadequate access to quality health services, and gender discrimination. The chief causes are haemorrhage, obstructed labour, sepsis and eclampsia, and unsafe abortions (WHO, 2012). Wider causes of women's deaths during pregnancy and childbirth have to do with structural discrimination — poor nutrition, anaemia, early marriage and child-bearing, violence and low female educational attainment (Sen, 2009). Furthermore, it is estimated that giving women in developing countries access to modern contraception would prevent at least 79,000 pregnancy-related deaths a year (Guttmacher Institute and UNFPA, 2012).

Addressing all of these determinants requires strengthening health systems, particularly primary health care, which can provide women with comprehensive sexual and reproductive health services, including: safe contraceptives and fertility regulation methods of their choice; HIV prevention (and treatment in high burden countries); and maternity care, including antenatal care, skilled birth attendance, and emergency obstetric care. It also means training health providers to be sensitive to the needs of poor

¹⁴⁴ <http://www.un.org/millenniumgoals/maternal.shtml>

¹⁴⁵ <http://www.un.org/millenniumgoals/aids.shtml>

women (OHCHR, 2010).

Ensuring women's access to quality reproductive health care also entails addressing the structural, legal, gender and economic barriers that keep women from accessing or using the information and services that they need. This can be done by including a range of related factors when developing targets and indicators concerning women's health, including the prevalence of: intimate partner violence; early and forced marriages; unequal power relations; discrimination by health care providers; spousal and parental consent laws; conscientious objection clauses; user fees in health care services; and sexual and reproductive preferences and intentions.

Prioritizing women's sexual and reproductive rights and health post-2015

Prioritizing women's sexual and reproductive rights and health within the Post-2015 framework is critical because:

a. Preventing and combating illness among women leads to a healthier and more productive population

- Reproductive ill-health constitutes a significant part of the world's total ill-health: one-third of all deaths and disabilities among women of reproductive age and one-fifth of the total global burden of ill-health (Guttmacher and UNFPA, 2012).
- Disease and ill-health diminish people's personal capacity and their ability to contribute to their household, resulting in lost incomes and lower productivity.
- Poor health, poverty and social inequalities are intrinsically linked. Investments in better health, including sexual and reproductive health, are central for individual security as well as for reducing mortality and morbidity, which in turn improves a country's productivity and development prospects.

b. Investment in women's sexual and reproductive health provides economic benefits for governments

- Sexual and reproductive ill health burdens national budgets, and lost incomes and lower productivity slow down economic development.
- Investments in women's sexual and reproductive health and rights consolidate investments made in education and employment and reduce future demands on government budgets.
- Providing women with the contraceptive method of their choice, along with wider investments in women's health, education and empowerment, can reduce fertility levels and facilitate the demographic transition in developing countries, offering opportunities for economic growth, job creation, women's employment and poverty alleviation (Canning & Schultz, 2012).

c. Securing women's health is critical for their agency and empowerment as well as their families' well-being

- Denial of women's sexual and reproductive rights undermines women's opportunities for education and employment, driving gender inequalities and poverty.
- If women can make decisions about their sexuality and reproduction they can decide more fully with respect to their lives in general, contributing to social and economic development.
- Women can break out of the poverty trap more easily if they are healthy and able to manage their family size.

- Enhancing woman’s individual financial security and earning power means that families benefit from a more stable income.
- Gender equality and inclusion also contributes to promoting social justice.
- When women can negotiate their reproductive health decisions with men, this exercise of their rights leads to increased decision-making roles within families and communities that benefits all.

d. When women are empowered and informed, they make responsible choices over their reproduction and contribute to stabilizing population growth and increasing prospects for sustainable development

- As the Cairo Programme of Action established *“universal access to reproductive health information...can affect population dynamics through voluntary fertility reduction.”*
- Many women prefer to have fewer children, but are unable to control their own fertility. Women that are empowered to control their fertility and reproduction will make informed and responsible choices that will ultimately contribute to stabilizing population growth and to advancing environmental, social and economic sustainability.
- Alongside efforts to reduce unsustainable and inequitable patterns of consumption and production in general, providing women with the contraceptive method of their choice at the time that they need it and respecting their human rights would help stabilize population growth and associated resource demands.

e. Investing in the human development and human rights of the largest generation ever of young people, including adolescent girls, means investing in the future and in sustainable development

- Lack of information about their bodies and their rights makes young people, particularly girls, vulnerable to violence, early and forced marriage, early and forced pregnancies and child-bearing, sexual coercion, unprotected sex, HIV/AIDS, unintended pregnancies and unsafe abortions.
- Guaranteeing the health and rights of adolescents, including to comprehensive sexuality education and to sexual and reproductive health services that are appealing to them and non-judgmental, is critical to ensuring that they can actively participate in social and economic life.
- Investing in the health and rights of adolescent girls ensures the well-being of a whole generation.

CONCLUSIONS AND POST-2015 RECOMMENDATIONS: Women’s Sexual and Reproductive Rights and Health

As the failure to fulfil the relevant Millennium Development Goals has already demonstrated, there is a need to have a much more holistic approach to development. In the case of women’s health, this means not only a focus on maternity care and contraceptives, but ensuring that women in all their diversity and throughout their life cycle receive comprehensive, integrated sexual and reproductive health information, and services that are of quality and respect their rights.

Particular attention must be made to the principle of equity (focusing on the ones who need it most), as this is critical to bridging the development gaps within countries as well as among countries. This means allocating sufficient budgets to the poorest and most marginalized women and finding the best ways to reach them, meet their needs, and fulfil their human rights.

As Agenda 21 notes *“The growth of world population and production combined with unsustainable consumption patterns places increasingly severe stress on the life-supporting capacities of our planet.”*

Furthermore, as civil society has already voiced, during a consultation with the High Level Panel on Eminent Persons for designing the Post-2015 framework, *“harsh economic conditions interact with long-standing social inequalities, biases and discrimination, as well as with key aspects of population dynamics such as migration, urbanisation and changing age structures (towards larger numbers of young people in some cases and many older people in others) to determine who is most severely affected. This includes children, girls and women, subordinated and oppressed castes and racial/ethnic groups, indigenous or disabled people, people living with HIV, sexual minorities, migrants and sex-workers, as well as widows, and older people. The existing social and economic inequalities faced by these groups as well as by pastoralists, small-scale farmers and informal traders are being intensified by current growth models. It is these people whose capabilities need to be supported. Their human rights, including their economic, social, cultural, sexual and reproductive rights need to be protected, promoted and fulfilled”* (CSO Communiqué to the High Level Panel, Monrovia, Liberia, February 2013).

Integrating a human rights approach in the Post-2015 framework is critical to making development more sustainable and effective. A human rights perspective allows us to look at the underlying causes and systemic obstacles to achieving development outcomes. For instance, a country could have invested a lot of money in creating Emergency Obstetric Services, which indeed is fundamental, but women may still not be accessing the services. This may be caused by issues related to inequality and discrimination against women within the family (for instance they can't leave the house without their husband's permission), lack of information and education (they don't know that the service is available), and lack of water and sanitation, among other issues. If we only focus on the immediate impacts on women's health, without considering the underlying drivers, we lose the capacity to have sustained and effective results that can really change people's lives.

Human rights are based on the principles of non-discrimination, participation and accountability. These are key principles that should be integrated into the efforts to achieve any sustainable development goals, particularly if we are to reach the most marginalized.

RECOMMENDATIONS SDGs – Post 2015

1. Create a set of 'principles' that will define the Post-2015 Development Agenda. The principles of equity, equality, non-discrimination, accountability and participation should be paramount.
2. Create multiple goals that address women as a specific group. One of these goals should focus on ensuring equitable and universal access to integrated sexual and reproductive health services, with quality of care and protection of reproductive rights.
3. Create multiple goals that address adolescents and young people as a specific group. One of these goals should focus on ensuring that adolescent girls and young women have the knowledge and the skills to know about their bodies and their rights, negotiate sexual and reproductive decision-making, access health services, and be free from violence and discrimination. This can be done by ensuring comprehensive sexuality education in and out of schools, and by providing adolescent girls with the sexual and reproductive health services that they need while respecting their privacy and confidentiality.
4. Ensure that women's sexual and reproductive health and rights are components of key aspects of any health, population, and gender equality 'goals' that emanate from this framework.

5. Focus on the prevention of ill health and disease: providing women of all ages, especially girls, with the information and programs they need to claim their rights and stay healthy. This includes information and education about sexuality and reproductive health, and about the health risks associated with tobacco, drugs, alcohol and poor nutrition, in order to prevent non-communicable diseases, among others.

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3.2.4. *Transforming the economic and financial systems* – towards justice, transparency and accountability

Author Nidhi Tandon (first draft version February 2013)

A chill on ‘economic growth’

The last decades of economic growth have come at immense (and as yet unaccounted for¹⁴⁶) costs to both planet and people – especially the poor and the disenfranchised. Put another way, the combined debt of nation states – from the individual citizen to systemic ecological¹⁴⁷ debt – is an indication of the heavy price that we are paying in the name of economic growth.¹⁴⁸

At the same time, the staunchest supporters of globalization and the ‘free market economy’ have rather less to say in its favour today, particularly in the shadow of the financial crash and the impacts of the ‘recovery’ since.¹⁴⁹ In effect, the recovery has only served to further compound inequality and income gaps. (93% of income growth has gone to 1% of the richest in the world). The economic system is only as robust as its weakest link and this weakest link now arguably comprises a large proportion of the world’s population.

This sobering balance sheet makes an indisputable case for a recalibration and an entirely new visualisation of what socio-economic progress on a finite planet actually means.

The markets of Nature

A UNEP/ European Commission report on “*The Economics of Ecosystems and Biodiversity*” attempted to address the inadequacy of national accounting by suggesting new approaches to macroeconomic measurement that would value of ecosystem services, especially those upon which the poor depend.¹⁵⁰

¹⁴⁶ The pattern of “winners” and “losers” associated with ecosystem changes—and in particular the impact of ecosystem changes on poor people, women, and indigenous peoples— has not been adequately taken into account in management decisions. <http://www.millenniumassessment.org/documents/document.356.aspx.pdf>

¹⁴⁷ Approximately 60% (15 out of 24) of the ecosystem services examined during the Millennium Ecosystem Assessment (2005) are being degraded or used unsustainably, including fresh water, capture fisheries, air and water purification, and the regulation of regional and local climate, natural hazards, and pests. The full costs of the loss and degradation of these ecosystem services are difficult to measure, but the available evidence demonstrates that they are substantial and growing. See <http://www.millenniumassessment.org/documents/document.356.aspx.pdf>

¹⁴⁸ Annual natural capital losses are typically estimated at an unimpressive few percentage points of GDP. If, however, the natural stocks upon which the livelihood and welfare of the poor depend are included, then we are talking about fifty percentage points and more. TEEB –The Economics of Ecosystems and Biodiversity for national and International Policy Makers – Summary Report: Responding to the Value of Nature 2009, UNEP, p.5; see also: The EU’s Beyond GDP process which is piloting an environmental index for use alongside GDP and launching macro indicators to communicate key issues on sustainable development.

¹⁴⁹ George Soros, among others warns against the false premises of an unregulated financial market, commenting that “it has served well the interests of the owners and managers of financial capital. The global markets allowed financial capital to move around freely and made it difficult for individual states to tax it or regulate it. Deregulation of financial transactions also served the interests of the managers of financial capital; and the freedom to innovate enhanced the profitability of financial enterprises”. George Soros (2008) http://www.georgesoros.com/articles-essays/entry/the_crisis_what_to_do_about_it/ The International Monetary Fund is now considering ‘capital controls’ to limit cross-border investment flows into vulnerable economies and multinational companies are reversing relentless outsourcing.

¹⁵⁰ The rural poor are the most vulnerable to loss of Natural Capital (biodiversity and ecosystem services). Appropriate policies require an understanding of this link and ways to measure the importance of such services to incomes and livelihoods. Measuring the GDP of the Poor can clarify current dependence and risks to poverty, development and MDGs from losses of natural capital.

The problem is that when more and more of the planet's land assets are valued using a \$ metric on a global market, in other words, when nature is being commoditized, what is at stake? An entire value system is at stake. The 'ability to buy' not only rests with those who have the means, from 'high net-worth individuals' to investment management companies, sovereign wealth funds, and multi-national corporations. But the perceived value of nature and land is altered from how it can sustain life for generations to come to what it can 'earn' on the market today and in the short run. Land becomes a strategic asset to be speculated on, as population increases and land supply decreases.¹⁵¹ The present global market dollar valuation¹⁵² of resources is poised to both reinforce this trend and further embed expectations that future value, profit and power lie in the rights to land and freshwater. And according to prevailing principles of free market economics, as products become scarce, prices rise; pricing most poor people in view of their available assets de facto out of the land market – or, in some situations, putting people in tremendous debt situations by forcing them to borrow in order to stay in the land market. Those women whose access to land is dependent on their community status do not even figure in this kind of land market.

A crisis of legitimacy

Economists and policy makers have overlooked the fact that many more people care about equity than about the economy's efficiency and wealth generating capacity. Put another way, a political-economic model that does not systemically address inequality will eventually face a crisis of legitimacy.

If we are willing to stand by only the principles of gender equality and by extension accept and even determine that the fate of poor women should be equal to that of their poor male counterparts, then there is something fundamentally amiss in our interpretation of human rights and development. The problem is larger, systemic, and structural. It is not reducible to individual rights.

A robust green economy will not materialise if all that takes place is a retrofitting of the prevailing economic system to secure the "green economy" interests of the powerful few, while serving the poor supplemental as opposed to integral social policies. The Green Economy's litmus test will be whether it will empower and engage women every step of the way in its design and implementation, and whether it takes to heart the perspectives of poor communities and especially the interests, knowledge and priorities of women in these communities. These are existential issues for women, for there are real perils and risks if the natural resources upon which these communities depend are brought into an economic value system that for all intents and purposes dismisses, negates and displaces the value systems and priorities of the poor.

Pooling of assets, community trusts and cooperative modes of production and exchange

The hard-won gains that the majority of the world's poor women have made in the last few decades in securing their societal, legal and economic rights are under siege by the intensification and deepening of a market-centred framework and mentality. The property and environmental wealth of the weak is exposed and vulnerable to the agenda and incursions of the powerful. In the face of global competition and the power of finance capital, it is reasonable to argue that poor women simply cannot hold on to their green economy assets: land, water, seed and knowledge. In losing these assets they lose their dignity, their self-reliance and the core of their empowerment. Consequently, their communities suffer and the futures of their children are put in jeopardy.

¹⁵¹ Our Shrinking Earth http://www.cces.ethz.ch/agsam2009/panels/AGSAM2009_keynote_Head.pdf

¹⁵² More dollar value statistics are available from the June 2010 McKinsey Global Institute Report *Lions on the Move: The Progress and Potential of African Economies.*

At the local level, from village to cosmopolitan communities, in formal and informal economies, women and men are breaking global challenges down to manageable scale, and organizing local development programmes and projects within the confines of immediately available resources. This is taking the form of alternative economic and value systems where the primary investment 'currency' is people's time, labour, ideas and creativity¹⁵³. Across many rural communities, for instance, women are adapting models of sustainable agriculture centred on their knowledge and nurtured seed banks, with Local Exchange and Trade Systems (LETS) facilitating barter exchange systems within and among their communities. Community Development Funds (CDFs) are an example of communities pooling their assets and resources to optimize sustainable and cooperative use of resources and to deliver loans and grants to poor communities.

Women's collective agency can transform society – it depends on and determines their individual agency. Women's ability to influence their environment goes beyond formal political channels, which can be limited by social norms and beliefs regarding gender roles and institutional structures. Women can influence their environments through their participation in informal associations and through collective action, but their success depends in part on their individual ability to make effective choices.¹⁵⁴

Conclusions

The economist E.F. Schumacher wrote: "...with increasing affluence, economics has moved into the very centre of public concern, and economic performance, economic growth, economic expansion and so forth have become the abiding interest, if not the obsession, of all modern societies"¹⁵⁵. John Keynes agreed with this assertion when he advised against "overestimating the importance of the economic problem, or sacrifice to its supposed necessities other matters of greater and more permanent significance" while others have suggested that economics is less about 'increased growth' and more about "increased borrowing" – from each other and from the environment! In light of these expressed concerns by economists and social scientists alike, great caution is called for when applying outright economic principles to the management and stewardship of the planet's natural assets in the name of 'greening the economy'.

The conversation needs to begin with a national reassessment of how globalization is impacting society rather than pushing for women to be inserted into an iniquitous system, and what it will take to thrive and to protect what is important in a rapidly changing world – where the winners take all and the losers have everything to fight for.

As its meaning is still evolving and open to interpretation, there is a time-sensitive window for the women's movement to take the Green Economy concept beyond the primary mandate of today's market economy. In this period of instability and rising tensions where the fundamentals of economic development are being questioned, there are fresh attempts to articulate what prosperity and well-being look like. A consensus needs to be reached – that the Green Economy should be based on three imperatives: (a) the environmental imperative, (b) the development (economic and social) imperative, and (c) the equity principle.

¹⁵³ Examples include cooperatives and enterprises owned by workers themselves, farmers' movements that are taking over private land of commons, and women's biodiversity-based farming systems.

¹⁵⁴ Source: World Bank. 2011. *World Development Report 2012: Gender equality and development*. Washington, DC: World Bank.

¹⁵⁵ E.F. Schumacher, *Small is Beautiful*, 1973

In a green economy framework where business-as-usual is abandoned in favour of sustainable development, women's empowerment cannot be confined to economic measures alone but must be integrated and woven in with a deeper set of social and nature-based values. Human beings, all living creatures and nature itself have an inherent life-value that cannot be reduced simply to economic value parameters.

3.2.5. Extractive Industries and Women's rights - Balance and Sustainability, Transformation for Survivability: Extractivism, Post-Extractivism (and beyond)?

**Author: Noelene Nabulivou,
DAWN Executive Committee Member, Fiji**

Extractive Industries and Women's rights

Balance, Sustainability, and Transformation for Survivability: Envisaging a post-extractivist future

*By Noelene Nabulivou,
DAWN Executive Committee Member, Fiji*

"We reject models based on extractivism, and current production and consumption patterns that do not contemplate an integral vision of development ..."

Young women advocates working on the intersections between gender, economic and ecological justice¹⁵⁶

Introduction

In the SDG and Post-2015 Development Agenda negotiations most States, UN agencies and civil society have already affirmed universal human rights, equality and sustainability as core principles to guide discussions. However, it is not possible to realize such crucial principles without addressing the multiple converging crises of food, fuel, finance and climate change, all of which have been caused by anthropocentric development models rooted in unsustainable production and consumption. These crises have been triggered by runaway neoliberal globalization, which has brought with it a highly militarized and financialized political economy, and an ongoing dependence on fossil fuels which is being held tightly in place by closed and politicized oil regimes.

A new, alternative and genuinely transformative approach will clearly necessitate a strong and principled position on extractivism, which is itself centred on maximising production and consumption at all costs. But what might that position entail? And why is it a gender equality, human rights and sustainable development issue?

Firstly, it is critical to recognise that terrains of control, violence and extractivism are many, and interlinked. These terrains are extending as industrialised countries and transnational corporations are looking beyond tapping the last drops of oil, gas, water and minerals from existing sources; they are also prospecting for new resources in the oceans and the polar regions in particular,¹⁵⁷ threatening food supplies, biodiversity,¹⁵⁸ and ultimately the global ecological balance as never before. Private sector interests are also using new and untested geo-engineering technologies to explore our land and oceanic depths for oil, gas, rare earth and minerals despite strong opposition from many local communities and

¹⁵⁶ References:

i GEEJ Combined statement - Africa, Asia, the Pacific, Latin America, and the Caribbean:

http://www.dawnnet.org/uploads/documents/GEEJ%20Statements_Combined_PacAfLatC_2011-Jun-23.pdf

¹⁵⁷ See: <http://www.asoc.org/issues-and-advocacy/antarctic-environmental-protection/biological-prospecting>
http://www.nytimes.com/2012/09/19/science/earth/arctic-resources-exposed-by-warming-set-off-competition.html?pagewanted=all&_r=0

<http://www.wired.com/wiredscience/2012/12/deep-sea-mining-is-closer-than-you-think>

¹⁵⁸ http://www.ias.unu.edu/resource_centre/Bioprospecting%20in%20the%20Arctic.pdf

civil society groups and networks.^{159 160}

Private sector interests including transnational corporations (TNCs) are also uncomfortably prominent in recent multilateral negotiations offering considerable resources but engendering few transformative results for local communities. Slick corporatised development packages assist states to tick boxes on gender equality, sustainable development and human rights, but not so readily acknowledged by these corporatised development agencies and state backers is the extent to which such consultancy driven public relations exercises are also the latest public face of a corporatised elite that is intent on changing the very nature of overseas development aid (ODA) and development.

These transnational companies and their lobby groups are increasingly synchronising their lobbying efforts, co-opting trade, aid and development agendas on a scale never seen before. They are often, for example, behind pushes for weak voluntary agreements in place of enforceable multilateral treaties. With the complicity of some states, they have also set their sights on watering down long-agreed Agenda 21 development principles including 'common but differentiated responsibilities', 'technology transfer', 'the precautionary principle', and more recently 'prior and informed consent'. They also show a remarkable capacity to reinvent themselves time and again in various facets of development tracks.

It is instructive to consider how such companies interact to control the direction of the global economy. Recent research shows that there is a 'bow-tie' shaped network, where the centre knot of the 'bow-tie' represents a core group of 147 transnational companies collectively controlling around four tenths of the economic value of all global TNCs. Another relevant fact, especially in light of the players in the recent global financial crisis, is that three quarters of that core are financial intermediaries. Overall, the top holders within this group of 147 can be thought of as an economic 'super-entity', because of the influence they wield.¹⁶¹

One of the most interesting aspects of this analysis is the contrasting extent to which these core actors are still generally treated as separate and disparate development actors rather than a 'political' power bloc, both in terms of theoretical analysis and practical advocacy. Is this really the most useful framing, when these economic agents hold such *de facto* sway over economic and development agendas by sheer economic weight and (hidden) numbers? As with the economists who ignored the signs of the impending global financial crisis, are governments effectively ignoring a form of development coup, which is taking place partly by stealth and partly by invitation?

The possibility that this core group of TNCs intentionally acts in a coordinated fashion, as a bloc, is an urgent political and economic question that needs to be dealt with by the SDG and Post-2015 Development Agenda process, but it also needs to be addressed more broadly because of its implications for global financial instability. To what extent are these institutions exposing themselves and the financial system to 'contagion'? If one thread of the bow-tie frays, do other parts unravel as well? Which ones? In predictable ways or not? And what are the most effective multilateral, governmental and civil society responses if and when they do?

¹⁵⁹ For example, The UN Convention on Biological Diversity (CBD) has instituted a de facto moratorium against ocean fertilization, one form of geoengineering, at its Ninth Conference of the Parties in Bonn, Germany in 2008. This moratorium was expanded to cover all geoengineering technologies at COP 10 in Nagoya, Japan held in October 2010. www.etcgroup.org

¹⁶⁰ <http://www.criticalcollective.org/?publication=geopiracy-the-case-against-geoengineering>

¹⁶¹ Vitali, S; Glattfelder, J.B. and Battiston, S. 'The network of global corporate control.' 2011. http://arxiv.org/PS_cache/arxiv/pdf/1107/1107.5728v2.pdf

Meanwhile, while states and corporations are locked together in frequently exclusionary and semantic battles in various multilateral and bilateral processes, feminist, women's rights and other wider social justice networks have been strenuously advocating for change, to address the breadth and depth of development crises, and the adequacy or otherwise of policy and social movement responses. Even before the Rio Earth Summit in 1992, women advocates from Africa, Asia, the Caribbean, Europe, Latin America and the Pacific had been conceptualising struggles for social justice, rights and sustainable development, *"on diverse territories and geographies including the body, land, oceans and waterways, communities, states, and epistemological grounds."* recognising these terrains as, *"fraught with the resurgent forces of patriarchy, finance capitalism, neo-conservatism, consumerism, militarism and extractivism."*¹⁶²

They also assert that the care of individuals in society should never be bargained away by governments negotiating economic, trade and environmental agreements and that all policies focusing on social needs such as health, education, water, livelihoods and such, must protect and promote the right of all women to fully control their bodily autonomy and integrity, and gender identities and sexualities.¹⁶³

Women have also called for policies and programmes that hold in ecological balance all humans, animals, plants, art, medicines, staple food, livelihoods, symbolic wealth and social relationships, including women's informal networks of mutual support.¹⁶⁴ They therefore insist that large-scale land and ocean-rights acquisitions by states and the private sector, for mining, gas, oil and export-oriented agriculture, should be re-examined in the light of human rights-based, social justice and ecological sustainability. Many reject continued economic prioritisation of the export of raw materials, such as minerals, fossil fuels and agricultural commodities, as being ultimately unsustainable and ecologically unsound.

There is also an increasingly loud call by feminists for recognition of the deeper structural roots of the current crises and for analytical clarity on interlinkages between them. Specifically, they recognise that multiple global crises are caused by an anthropocentric development model rooted in unsustainable production and consumption patterns, and the financialisation, militarisation and extractivisation of an economy based on, and exacerbating a wide range of gender, ethnicity, class and other inequalities.¹⁶⁵

Survivability and Sustainability: Moving toward Post-Extractivist Futures

Given that the prevailing extractivism and neo-extractivism approaches are inadequate responses to the development challenges of this time, there is a need for major paradigmatic shifts.

It is prudent to look back for previous large-scale successes emanating from the women's movement, for ideas and strategies. Southern feminist analysts Gita Sen and Anita Nayar of DAWN recently re-examined some of the key shifts in population, environment and human rights, focusing on the period since the pivotal United Nations Conferences of the early 1990s, held in Rio de Janeiro, Vienna, Cairo and

¹⁶² Joint Statement by Women Activists from the Economic South at Rio+20: *'Governments Gamble with Our Future. South Feminists Demand Responsible Action Now'*. 22 June, 2012, Rio de Janeiro, Brazil: <http://www.dawnet.org/advocacy-cso.php?id=248>

¹⁶³ In contrast to the strategic approach implicit in 'malestream' development, which involves both women and men in addressing gender issues. To read more: http://www.zwrcn.org.zw/index.php?option=com_easyblog&view=entry&id=12&Itemid=100

¹⁶⁴ GEEJ Combined statement - Africa, Asia, the Pacific, Latin America, and the Caribbean:
http://www.dawnet.org/uploads/documents/GEEJ%20Statements_Combined_PacAfLatC_2011-Jun-23.pdf

¹⁶⁵ Ibid

Beijing.¹⁶⁶ Two of their observations are particularly pertinent to discussions of gender, extractivism, corporate accountability and human rights.

Firstly, they highlight the joint work of environmentalists and women's groups over the past 30 years to transform a then-hegemonic Malthusian approach to population and environment¹⁶⁷ linkages towards one based on human rights, and cognisant of gender equality concerns. This has been a process in which the debate about issues of women's bodily autonomy, and their sexual and reproductive health and rights, has directly influenced the wider development and human rights discourse.

Secondly, and just as usefully, they describe the extraordinary catalytic momentum of the immediate years prior to, and work at 'Planeta Femea,' the women's tent at the Earth Summit in Rio in 1992. This was where women's organizations thrashed out a consensus position on population policy that would bridge the considerable differences that existed among groups from different regions and backgrounds prior to that time.

Women now find themselves at a similarly crucial moment in time, and are urgently calling for catalytic and paradigm-changing elements to be included in the Sustainable Development and Post-2015 Development Agenda. Women's movements are again required to influence global development trajectories, with a view to bringing about development solutions that are both pragmatic and realistic, but of a sufficiently transformative nature and scale to move humanity away from the current dangerous development path which is based on extractivism and geo-piracy,¹⁶⁸ which involves the use of dangerous and untested technologies including experimental seabed mining.¹⁶⁹

Such old-school development can only persist when enabled, unwittingly or otherwise, by the current hegemonic trade, financial and corporate systems. Thus social coalitions have to challenge these underlying systems, and to do so need to be wide, sure and sharp. Successful and transformative challenges need to be exponentially strong.

Conclusions and recommendations

We currently find ourselves in the midst of a global financial crisis, which neoclassical economists previously said could never happen. They simply ignored the signals of impending crisis.¹⁷⁰ So what other signals should we now heed, before it is too late? What must we do to reclaim and transform sustainable development for the needs of our time?

With respect to issues of ecological balance and sustainability, gender equality and human rights, the Women's Major Group therefore recommends the following:

Overall:

¹⁶⁶ Sen, G and Nayar, A. 'Population, Environment and Human Rights: A Paradigm in the Making' in *Powerful synergies: Gender Equality, Economic Development and Environmental Sustainability*. UNDP. 2012.

¹⁶⁷ https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=13&sqi=2&ved=0CicBEBYwDA&url=http%3A%2F%2Fwww.stanford.edu%2F~ranabr%2FMalthusian%2520and%2520Neo%2520Malthusian1%2520for%2520webpage%2520040731.pdf&ei=Iq0TUdOXXK6eq0AXixIDwDQ&usg=AFQjCNEJ_mHNvy7-dONRNH57DUiH0AgaUQ

¹⁶⁸ EtcGroup. Geopiracy: The Case Against Geoengineering. 2010. <http://www.etcgroup.org/content/geopiracy-case-against-geoengineering>

¹⁶⁹ Rosenbaum, Dr. Helen. The Deep Sea Mining Campaign (DSM). Report: 'Out of Our Depth'. <http://www.deepseaminingoutofourdepth.org/tag/experimental-seabed-mining/>

¹⁷⁰ Keen, S. *Debunking Economics*. Revised and Expanded Version. 2011. Zed.

*Development approaches must be both analytically and procedurally transformative, calling for interlinked core changes, focusing equally on the roles of states, civil society, private sector and other development actors.

*Development approaches must be based on human rights, democratisation and de-militarization, ensuring international solidarity action in times of social, economic, environmental and humanitarian crises.

* Development strategies must be comprehensive, and should include human rights principles, goals, targets, indicators, and means of implementation and financing for structural transformation. They should focus on public policies implementable at national and local levels, and ensure maximum available resources.

* There should be greater dialogue and strategic articulation among social movements, particularly among women's movements, in order to participate and influence the political, social, economic, and ecological processes including SDGs, and in all areas of the Post-2015 development agenda processes.

On gender equality, erotic justice, human rights and sustainable development:

*Broad and full recognition of women as rights holders, especially of economic, social and cultural rights, rather than casting them as welfare recipients and labour supply.

*Constitutional recognition of Economic, Social, Cultural and Ecological Rights by all governments, including explicit recognition of internationally agreed gender equality and human rights commitments and normative frameworks, and the creation of mechanisms to ensure the enjoyment of these rights.

*Recognition of the intersectional nature of gender and sexual identity, and the design and implementation of development policy that precludes discrimination on the basis of ethnicity, class, gender identity and expression, sexual orientation, ability, or beliefs.

*State compliance with agreed international, regional and national agreements to prevent and eradicate all forms of violence and discrimination against women as their human right, in order that women can fully participate in sustainable development. This will include the elimination of all forms of violence and fundamentalism based on misogynist, homophobic, lesbian-phobic, and trans-phobic ideas

* The meaningful participation of women and young people in designing development models.

*Recognising the intrinsic links between sexual and reproductive health and rights, care and social and the productive economy, which should be fully reflected in macroeconomic policy-making, in a manner that also includes robust social protection systems.

*Movement away from vague and generalised references to 'women's unpaid care burden' toward concrete policy recognition of unequal and unfair burdens that women endure to sustain care and wellbeing, which is further exacerbated in times of economic and ecological crisis.

*Universal access to social protection and public services for children, youth and the elderly as well as the execution of policies focused on the equitable redistribution of paid and unpaid work, by all.

Specifically on extractive industries,

*State resistance to corporate interests that have warped the sustainable development paradigm toward the economic pillar, with a move towards emphasising sustained socio-economic and ecological sustainability for all instead.

*An increased policy focus on food insecurity, soil degradation, land alienation, and long term socio-cultural impacts of extraction on affected communities, including indigenous and migrant peoples, fisher and forest peoples, pastoralists, and many other marginalized communities.

*Specific attention to the risks and burdens disproportionately borne by women and girls as a consequence of extractive industries.

*Ultimately, the re-orientation of national agricultural plans, away from the extractive industries and export-oriented agribusiness and towards local women-led and small-holder agroecology practices. This should include strong protection of local and free seed supply and distribution systems.

On macroeconomic, trade and finance practices,

*Transform systemic inequalities driven by current international monetary, financial and trading systems, and give ecology and equality equal priority along with economic development.

*Reaffirm that poverty and economic injustice cannot be alleviated by more 'growth' on its own, but rather through increased economic-social inclusion, and by re-emphasizing human wellbeing in equilibrium with the environment as the key focus of development.

*Reassert states' responsibility to uphold, through policy regulation and enforcement, the interests of the public and of the environment over that of corporate industry.

*Ensure all macroeconomics policies are in compliance with human rights, and social and ecological justice, and include a reduction in volatility and debt burdens; endogenous, employment and food-security focused development; and policies focused on gender-related redistribution of assets including land, credits, technology and resources.

*Overcome inequalities through progressive income taxation and effective taxation of corporations, incentivising small and medium enterprises over transnational corporations, and tackling structural discrimination and inequalities of labor markets, including horizontal and vertical segregation, and informality.

* Move from Freedom of Investment Models (FOI) toward Investment for Sustainable Development Models (ISD) that recognise that foreign direct investment benefits to host countries are not automatic, and that regulations are required to balance the economic requirements of investors and states' needs.

*Ensure that Agenda 21 and Rio+20 commitments on technology transfer, skills development, research, and establishment of firm local economic linkages are explicit in all investment and trade regimes, and in line with the precautionary principle and principle of prior informed consent in the UN Declaration on the Rights of Indigenous Peoples.

*Refrain from entering into future bilateral trade agreements on extractives products wherever possible, and gradually phase out first generation trade agreements.

*Strengthen sub-regional and regional trade alignments and agreements for increased negotiating strength, especially for SIDS, AOSIS, and LDCS regarding extractives products;

*Strengthen national legislation with respect of protection offered to foreign investors by codifying typical BIT-provisions into domestic law;

*Across-Government approaches to trade and finances, through Inter-Ministerial Committees and translating this through to high level and technical work at the regional level on extractives products;

*Domesticate and codify BIT-provision protections into national law, so that they are far better clarified and accountable in terms of overall alignment with the National Constitution. This potentially allows more close oversight on issues of human rights and justice, including gender equality and women's empowerment.¹⁷¹

*Articulate these transformations in all Post-2015 development agenda work, explicitly clarifying associated gender equality-related gains and losses resulting from such policy

On geo-engineering and other extractive technologies,

*Reaffirm the decision of the 10th Conference of Parties of the Convention on Biological Diversity taken in Nagoya, concerning an ongoing global ban on geoengineering.¹⁷²

*Multilateral bans on new technologies including fracking, experimental seabed mining and black sands mining.

¹⁷¹ 'South African Minister: New approach needed on investment treaties' *SouthViews*, No. 48, 7 Dec 2012. *South African Trade and Industry Minister, Robert Davies, recently explained his country's change of policy on investment treaties. Extract from his speech at the session on UNCTAD's Investment Policy Framework for Sustainable Development (IPFSD), Geneva, 24 September 2012.*

¹⁷² <http://www.iisd.ca/vol09/enb09544e.html>

- *Establishment of an independent, broadly-supported and representative civil society oversight body with the right, agreed by governments, to comment on all phases and aspects of intergovernmental climate change negotiations;
- *Cut greenhouse gas emissions (GHCs) immediately, directly and deeply.

On agricultural and food sovereignty issues:

- *Food sovereignty, in particular the protection of traditional knowledge and indigenous biological resources as well as the right to safe and nutritious food must be guaranteed;
- *Put food sovereignty and security at the centre of national regional and global development policies, above export-oriented agriculture.
- *Strengthen the World Food Security Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries, and Forests in the Context of National Food Security; and reconfigure toward enforceable multilateral agreements, including on responsible agricultural investment;¹⁷³

On environmental and climate justice,

- *Accept that there are ecological limits to the 'growth' paradigm and that sustainable development concepts must be safeguarded from corporatised frames and initiatives that prioritise profit over all;
- *Developed countries to re-pay their climate debt by transferring environmentally-sound technologies and financial resources required for south states to shift to low-carbon growth;
- *National level prioritisation of renewable energy access for rural communities and the urban poor;
- *End financialization of emissions management caused by trading, outsourcing, and subsidies;
- *Strengthen accountability mechanisms, resources and capacity of UNCLOS, as the only international multilateral UN governance mechanism on oceans;
- *Strengthen planetary systems measurement and monitoring through both satellites and ground-based initiatives that are open and available to all states;
- *Advance policies relating to 'Loss and Damage', as advanced at COPs 16, 17 and at the recent UNFCCC COP18 in Doha (Dec 2012), with particular attention to gendered analysis of levels of loss and damage associated with adverse effects of climate change and global warming, and attention to added vulnerabilities and responsibility arising through delayed state action;¹⁷⁴
- *Increase the global and local transparency of all climate-related programs, measurements and technologies through a UN technology assessment facility as proposed at Rio +20¹⁷⁵

¹⁷³ 2012 Global Hunger Index. Pg. 48

¹⁷⁴ Neelormi, S and Ahmed, A U. Loss and damage in a warmer world: Whither Gender Matters? Gender Perspectives on the Loss and Damage Debate. Nov 2012. <http://www.lossanddamage.net/4807>

¹⁷⁵ ETCGroup. 'The Artificial Intelligence of Geoengineering'.ETC Group Communiqué : Jan-Feb 2013. Issue 109. www.etcgroup.org

3.2.6. Emerging Technologies: Sustainability, Gender and the Need for Technology Assessment and Monitoring

Authors: Neth Daño and Kathy Jo Wetter, ETC Group (Philippines, USA)

Unsustainable technology revolution

The past few decades have seen unprecedented technological advances, which are massively transforming the planet and impacting people's daily lives. While the dramatic leaps and bounds in information and communications technology (ICT) development are perhaps the most obvious, there are many other emerging technologies that are also impacting our world and shaping our future, just as significantly but much less visibly — and not necessarily in the direction of sustainable development.

Technological developments in molecular biology in the 1980s have led to a situation in which genetically modified organisms (GMOs) are now ubiquitous on farms and grocery shelves in many countries around the world. However, a more recent but related technology, synthetic biology,¹⁷⁶ has taken biotechnology a step further: it is now possible to shift from transferring single genes from one species to another to build made-to-order stretches of DNA, one base pair at a time. These novel genomes can transform microorganisms into tiny 'biological factories', which can process almost any biomass to make almost any bio-product (eg. grasses to diesel fuel, or maize to plastic). Furthermore, whereas it had taken 13 years and US\$3 billion to map the human genome just ten years ago, it is now possible to map a complex genome in 8 days for less than US\$10,000 (ETC Group, 2012). A new field known as 'meta-genomics' allows the sequencing of entire communities of organisms in one fell swoop in order to exploit the microbial functioning of ecosystems.

In addition, a suite of techniques to manipulate matter on the scale of atoms and molecules, referred to as nanotechnology, can dramatically transform the material properties of conventional substances by taking advantage of 'quantum effects'. With only a reduction in size (to around 300 nm or smaller in at least one dimension) and no change in substance, materials can exhibit new characteristics — such as electrical conductivity, increased bioavailability, elasticity, greater strength or reactivity — properties that the very same substances may not exhibit at larger scales. But the qualities that make nanomaterials so attractive to industry across a wide range of fields — their mobility and small size, on the same scale as biological processes, and their unusual properties — turn out to be the same qualities that can make them harmful to the environment and to human health. Nanoscale particles can easily enter most cells, often without triggering any kind of immune response. While there is great uncertainty about the toxicity of nanoparticles, hundreds of published studies now exist that show manufactured nanoparticles, currently in widespread commercial use (including zinc, zinc oxide, silver and titanium dioxide) can be toxic.

In tandem with these developments, new hyperspectral imaging¹⁷⁷ technologies — using satellites and airplanes — are making it scientifically and financially possible to map and measure unique biodiversity across the globe. The near-term possibilities include the aerial identification of proprietary crops or livestock with unique genetic traits or DNA markers, which could impinge on farmers' rights to save and/or improve genetic material through breeding. The risk of biopiracy also increases. On the planetary scale, geo-engineering — the deliberate large-scale manipulation of the earth's systems (by injecting

¹⁷⁶ "Synthetic biology is the engineering of biology: the synthesis of complex, biologically based (or inspired) systems, which display functions that do not exist in nature." <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2174633/>

¹⁷⁷ Hyperspectral imaging is a process that maps not just visible light but the entire electromagnetic spectrum.

sunlight-reflecting particles into the stratosphere, for example) — is being pushed as a technological ‘quick fix’ to the climate crisis and for other ecological crises, such as ocean acidification and water cycle imbalances.

In addition to the potential ecological and health issues that surround these untested technologies and products, there is a concern that they are collectively creating industrial platforms that demand entirely new production and/or processing systems. The most direct impact of new designer materials created using nanotechnology or synthetic biology, for example, is multiple raw-material options for industrial manufacturers, which could mean major disruptions to traditional commodity markets. It is too early to predict with certainty which commodities or workers will be affected and how quickly. However, if a new nano-engineered material or a new bioproduct created using synthetic biology equals or outperforms a conventional commodity and can be produced at a comparable cost, it is likely to replace the conventional commodity. Modern history is replete with examples of new technological products and processes replacing traditional commodities, causing massive displacements in livelihood and employment.¹⁷⁸

The new technologies thus have the potential to have a profound impact on communities and peoples’ livelihoods, including women in rural areas involved in commodity production and those in urban areas engaged in processing and manufacturing. Their suitability in terms of meeting national and local needs is also highly speculative. The global South and marginalized sectors, especially women, are already bearing the brunt of environmental deterioration and climate change and are also likely to be the guinea pig for testing these powerful technological packages.

The public and private sectors, mainly in rich countries, have poured staggering quantities of research and development funds into these technologies. For example, agribusiness invests at least US\$100 million to develop each herbicide-tolerant crop variety that is marketed together with the companies’ proprietary chemicals. Global public investment in nanotechnology research has exceeded US\$50 billion since 2000, with more than 60 countries now having national nanotechnology initiatives (ETC Group, 2010). The leading global investors and developers of synthetic biology products include six of the ten largest chemical companies, six of the ten largest energy companies, six of the ten largest grain traders, and the world’s seven largest pharmaceutical companies (ETC Group, 2012). All the processes and products developed by these companies are protected by intellectual property rights that ensure monopoly control, and profits.

Many governments in developing countries see access to new technologies as vital to their ability to respond to developmental and environmental challenges. They are therefore anxious to ensure that legal and institutional obstacles such as intellectual property rights regimes and licensing arrangements do not impede access. Technology development and transfer, however, do not necessarily involve assessment of the impacts that such technologies may have on human health, environment and livelihoods. Thus, as the tragic history of many technologies has already shown, technology transfer can amount to dumping unwanted and untested technologies from industrialized countries onto developing regions. Not recognizing the importance of technology assessment and mechanisms involves high economic and political costs for proponents and regulators respectively, and can often have irreversible impacts on human health and the environment (ETC Group, March 2012).

¹⁷⁸ In the face of perennially low and volatile prices for primary export commodities, and the persistent poverty experienced by many workers who produce commodities, few would argue in favour of preserving the status quo; however, preserving the status quo is not the issue. The immediate and most pressing issue is that new technologies are likely to bring huge socio-economic disruptions for which society is not prepared.

This is especially the case with these new technologies, many of which are being allowed to reach the market without long-term safety tests and/or regulations, and often without labels and adequate information about the processes and risks involved being made available to the consumer. Controversies over the adverse effects of GMOs on human health, biodiversity and the environment have been raging since the mid-1990s for example. Despite that, GM varieties of maize, soybeans and cotton are now cultivated on an estimated 160 million hectares of land in about 25 countries (ISAAA, 2012). Similarly, by 2011, over 1,300 products of nanotechnology had come to market, with virtually no regulation in place despite dozens of scientific studies showing the toxic effects of some nanomaterials (Wilson Center, PEN online inventory). Ironically, low technology-awareness prevails in the age of high-tech.

More worryingly still, the UNEP Foresight Report, “21 Issues for the 21st Century,” notes that the pace of introducing new technologies has increased while the role played by regulatory bodies in protecting the public from the consequences of new technologies has actually diminished (UNEP, 2012: 40). The situation is both ironic and alarming given the rapid introduction of new technology products into ecosystems and the food chain. These lapses in technology governance are happening at precisely the same time that citizen concern over the safety of technologies is growing and the public’s lack of confidence in the ability of governments to protect its interests is increasing. Technology-related disasters, including ‘Mad Cow’ disease and Foot and Mouth disease (mostly in industrialized countries) and, later, the rapid spread of genetically modified crops, have contributed to this distrust (ETC Group, 2012). The meltdowns at three of Fukushima’s reactors in 2011 did nothing to improve the situation. Meanwhile, unlabeled and untested products of nanotechnology have come to market, and products of synthetic biology will arrive soon.

The situation in the conventional chemicals sector is relevant and revealing. According to an OECD study cited in the UNEP Foresight Report, very few of the 1,500 most commonly used chemical substances in industrialized countries have been adequately assessed for their health risks; 10% have not been examined at all; and virtually none have been examined for their environmental effects (UNEP, 2012: 40). Yet, global chemical markets, including agrochemicals/pesticides, are growing and becoming increasingly concentrated (ETC Group, 2011). The ten biggest agrochemical companies control more than 90% of the global market, for example. A disturbing trend cited in the “OECD Environmental Outlook to 2030” is the shift of chemicals production from traditional hubs in industrialized countries to emerging economies in developing countries, where regulatory regimes are even less stringent and oversight capacity is much lower (OECD, 2008).

These developments and trends have understandably contributed to a widespread view that risks and unintended side effects multiply in parallel to scientific-technical progress and as a result of that progress (Maasen and Merz, 2006:10). As the recent history of global controversies over technologies involved in nuclear power, GMOs and industrial food production shows, different experts can hold different, often contradictory views while claiming a grounding in ‘sound science,’ leaving the public confused, feeling powerless and distrustful of the experts relaying the information. As a result, science is no longer regarded as a producer of unambiguous knowledge (Grunwald, 2002 in Maasen and Merz, 2006).

The invisible dimension: gender and technology

Gender concerns in technology are often overlooked. As one feminist scholar has observed, the “technology question in feminism is generally neglected” (Faulkner, 2000). Gender being a ‘non-issue’ in technological discourses is largely due to the pervasiveness of the concept of ‘technology neutrality.’

As the minority in 'hard technology' fields such as engineering, women are generally regarded as recipients of technology rather than creators of technology, while, conversely, they are regarded as nurturers of nature and the environment (McIlwee and Robinson, 1992 and Edwards, 1996 in Faulkner, 2000). As a result, women's power with regards to technology is relegated to exercising 'consumer choice' over products that are made commercially available to them (Faulkner, 2000:15). But as consumers, women are being exposed to the risks involved in food and consumer products of genetic engineering, nanotechnology and synthetic biology, often with no or little information being provided to them by technology owners/sellers. Indeed, it is often the case that the adverse consequences of these new technologies are not known, and by the time unexpected consequences become apparent, the technology is already well-entrenched (referred to as the 'Collingridge Dilemma'), often with irreversible impacts. This quandary is evident in the case of GM crops and foods whose risks to human health and the environment came to global attention only after the products had been introduced into the human food and animal feed supply systems (UCS, 2004). The same story is echoed in products of nanotechnology, which are prematurely designated as 'clean' even though credible institutions have barely begun to look into the safety of the technology.

The new manufacturing methods involved in technology platforms such as nanotechnology and synthetic biology will also impact women in other ways as well, including through commodity replacement or displacement, as described above; choice of employment and manufacturing locations; and impacts on global markets for natural resources ranging from copper to cotton and from natural fibers to vegetable oils, on which the livelihoods of millions of rural women depend. In particular, as synthetic biology aims to produce high-value compounds through new bio-fermentation methods and nanotechnology aims to alter substances to exhibit new properties, the impacts of these technologies on the exporters of natural commodities (mainly produced in developing countries) could be profound, while the products themselves could end up being hazardous. The risk of livelihood displacement is especially relevant for women in developing countries: on average, women make up 43% of the total agricultural labour force in developing countries (although only 20% of landholders are women) (UN, 2012; FAO, 2010).

Muted right: women and technology

As the principal international legal instrument on women's rights, the Convention on the Elimination of Discrimination against Women (CEDAW) enshrines the right of women in rural areas to access appropriate technology (along with access to credit and loans, marketing facilities, and equal treatment in land and agrarian reform and in land resettlement schemes). However, CEDAW is silent on the right of women in urban and peri-urban areas to appropriate technology and completely fails to acknowledge gender concerns in technology. With its silence on the relationship between technology and women, CEDAW implicitly perpetuates the prevailing condition of women being passive recipients of new technologies with no active role in decision-making with respect to the technology development process.

Just like all other intergovernmental agreements and processes that involve years of negotiations and compromises, CEDAW has greatly underestimated the speed of technological change and the impact some key technologies may have on the global environment, climate change, and the South's economy. Even more so in fact, given that this agreement was negotiated and adopted by states in the 1970s when the impacts and influence of technological innovations were not as dramatic as they are now. The massive influence of new technologies in shaping today's world economy and socio-political relations merits a review of CEDAW and other international legal instruments on the protection of the rights of women, taking the gender dimension of new technologies into account.

Facing a blank wall: where's gender in technology governance?

There is a consensus view among global institutions and experts that there is little substantive effort to assess, let alone try and control the introduction of new technologies to minimize harmful effects (UNEP, 2012; ETC Group, 2011; Unger, 2002). Technology governance is virtually absent in today's real world where the products of high technology dominate many peoples' lives.

Conducting a literature search on the gender dimension of technology governance can be likened to searching for the proverbial needle in a haystack. Scholarly writing or documentation of actual experiences and reflections on this topic is virtually non-existent – beyond the sparse literature on the gender question in technology in general and the more recent focus on gender and governance in the information and communication technology (ICT) sector.

Women are at the forefront of dealing with the unintended and unpredictable consequences of new technologies, but are not yet empowered to assess their relevance, alternatives and potential impacts. Gender concerns cannot be dismissed and women's rights as active actors cannot remain muted if technology is to become a tool to attain sustainable development.

Making technology work for sustainable development

Many civil society organizations, including women's organizations and health movements, have called for a ban on GMOs and a moratorium on nanotechnology until the socio-economic and health and environmental implications are understood. Despite these calls, this new Industrial Revolution is marching ahead almost entirely unmonitored and unregulated.

It would be unforgivable for any post-2015 agenda to ignore, remain silent on or underestimate the importance of addressing technology issues. A relevant and forward-looking post-2015 agenda must include the following key strategies to ensure that technology will contribute to the attainment of sustainable development.

Firstly, strategies must be developed to integrate grassroots participation and gender concerns in decision-making in technology development, including in the design of technologies as well as in the context of their use. However, the increased and active participation of local people and women in decision-making about new technologies will lead to sustainable development only if it is linked to a radical vision and agenda for the transformation of technology into "a practice that is more democratic and respectful of diversity, and with products which are safer, friendlier and more useful" (Faulkner, 2000: 18).

Second, technology assessment must be made an integral component of technology governance; and gender perspectives on technology must be integral to any such technology assessment framework. Women must be key actors in technology assessment at different levels and stages of the technology development process. To this end democratic mechanisms for assessing new technologies must provide meaningful opportunities for recipients and users of the technology, including women, to participate in the design, decision-making and assessment of the potential impacts that these new technologies might have on health, economy, livelihood, culture and the environment. These processes must be put in place at the local, national and regional levels.

Third, at the intergovernmental level, the logical prerequisite to technology development and transfer is the creation, by the United Nations, of a technology evaluation and information mechanism that is based on the precautionary principle and supports national sovereignty and technology policy choices. As

reaffirmed in the Rio+20 outcome document, governments must go beyond rhetoric and operationalize the commitment to strengthen “international, regional and national capacities in research and technology assessment, especially in view of the rapid development and possible deployment of new technologies that may also have unintended negative impacts, in particular on biodiversity and health, or other unforeseen consequences.” (UNCSD, 2012: para. 275)

The UNEP Foresight Report itself urges policy makers to “consider...organizing a new international governance system which would produce, and potentially oversee, new international procedures to identify dangerous side effects of technologies and chemicals before they are produced” (UNEP, 2012). It suggests that such a governance system would be anticipatory, impartial, aware of the need to deal with the risks arising from interactions among multiple technologies developed for different purposes, and universal. It must also ensure that individual countries and their corporate interests do not make decisions that can have global impacts unilaterally (UNEP, 2012). The report urges policymakers to work together with the scientific, environmental and other stakeholder communities to determine what a new governance system should look like.

Technology Assessment at the core of Technology Governance

Technology assessment (TA) is a concept that originated in the early 1970s reflecting attempts to analyze and evaluate the impacts of applications of scientific-technical knowledge in modern society (Maarsen and Merz, 2006: 11). TA aims to address concerns about the unpredictability of technology impacts, and to address the lack of public trust that results from controversies over technologies. TA is regarded as a response to the Collingridge Dilemma mentioned above, which posits that by the time unintended and/or undesirable consequences are discovered, the technology is already well-entrenched meaning that control is extremely difficult and change is expensive and time-consuming (Collingridge, 1980 in Nordman, 2010:5).

In order to be effective, technology assessment needs to be anticipatory, comprehensive, inclusive and oriented towards decision-making. Recent experiences and methodologies developed in some countries in Europe demonstrate that TA is not limited to considering the potential consequences of an emerging technology but also includes its social and cultural context and determinants of its emergence, acceptance and application (Maarsen and Merz, 2006: 11).

Interest in TA increased in the 1970s and through the 1980s, with the creation of assessment institutions in the United States and across Europe, but the trend reversed in the 1990s and interest declined throughout the decade (Unger, 2002). Ironically, in the years after the Rio Earth Summit in 1992, the capacity of governments and the international community to undertake technology assessment and evaluation diminished. Immediately following the Earth Summit, the UN Center on Science and Technology for Development (UNCSTD), first established in 1979, was drastically cut back from its significant New York offices to a small secretariat housed within UNCTAD in Geneva. Simultaneously, the UN Centre on Transnational Corporations (UNCTC), which monitored the major industries developing new technologies, was eliminated altogether. Some national technology assessment facilities – existing mainly in industrialized countries – were also diminished or eliminated. In the mid-1990s, for example, the US Congress’s Office of Technology Assessment (OTA) was shut down. The collapse in the ability of governments to assess new technologies took place at exactly the point in time when it was most needed – as the world moved to liberalize trade and financial systems in pursuit of economic growth and, as indispensable to that strategy, unleashed the most rapid, and broadest, expansion of new technologies in history (EEA, 2011) .

Beginning in the new century, however, at least a dozen industrialized countries have moved to resuscitate or strengthen their technology assessment capacity. Within the European Union, for example, the Science and Technology Options Assessment (STOA) organ of the European Parliament, which was established in 1987, was updated, in 2004 and in 2009. Assessment mechanisms in at least nine European countries — including Germany, Switzerland, Denmark, the United Kingdom, Finland, France, Greece, Italy, and the Netherlands — have been strengthened and upgraded to respond to the rapid advance of technological innovations and growing concerns among their citizenry about the consequences of emerging technologies (ETC Group, 2012). It should be noted, however, that over the same period, other government bodies directly and indirectly involved in assessing technology impacts experienced diminished capacity or were eliminated altogether. In 2010, for example, the UK abolished its Sustainable Development Commission as well as the Royal Commission on Environmental Pollution [RCEP]. A 2008 investigation by the Union of Concerned Scientists also revealed that more than half of the 1,600 scientists at the US Environmental Protection Agency reported political interference in their work during the previous five years (UCS, 2008: 2).

Opposition to technology evaluation can be expected from some industries and governments. Arguments against undertaking technology assessments historically revolve around protestations that the assessments are premature – or, alternatively, too late – are too costly, or are not worth the potential delay in commercial deployment or risk to competitive advantage (ETC Group, 2012). However, there is reluctant recognition from many parties, and within the UN, that ‘business as usual’ is not working. In the absence of any technology assessment mechanism to deal with intergovernmental concerns and transboundary issues, the UN has had no structural alternative but to adopt three moratoria related to new technologies since the beginning of the 21st century, namely, on GURTs (genetic use restriction technologies, or Terminator seeds) in 2000; on ocean fertilization in 2008; and a general moratorium on climate-related geoengineering in 2010, which was reaffirmed in 2012 – all under the aegis of the Convention on Biological Diversity (CBD).

From the UN to states: building technology assessment capacity

Rio+20’s outcome document, “The Future We Want,” reaffirmed the commitment of the international community in 1992 to strengthen the capacity of countries to pursue national and regional technology assessment initiatives (as embodied in Chapters 34 and 35 of Agenda 21). Nevertheless, the UN system has no credible capacity to evaluate technologies or to advise governments. Furthermore, the use and application of technologies will vary from country to country because of the extraordinarily different health, environmental and socioeconomic conditions that might apply. Thus there is an urgent need for both a global and national-level monitoring and information-sharing capacity that includes the full participation of civil society – especially the indigenous and local communities that will be affected, with a particular effort to include the views of women.

There are several ways to operationalize this commitment to move toward a technology assessment and information mechanism, which has remained unimplemented since 1992. One is through the establishment of a Technology Assessment Service under the strengthened UNEP, which could establish a dedicated secretariat to service the needs of governments. Another is by reinvigorating UNCSTD with more staff, resources and an expanded mandate to monitor technologies and share information under the guidance of an intergovernmental committee. A reinvigorated UNCSTD should serve as the key UN body that provides up-to-date information and capacity to regional and national institutions in terms of conducting technology assessments, and it should be adequately supported to operationalize its mandate.

It is important to note that the multilateral system's technology assessment capacity does not need to reside within an environmental network or institution *per se*. A more strategic approach would be the creation of an International Convention for the Evaluation of New Technologies (ICENT) under the UN General Assembly, which would have the advantage of being able to address the socio-economic as well as the environmental aspects of new technologies. ICENT should aim to create a socio-political and scientific environment for the sound and timely evaluation of new technologies in a participatory and transparent process that supports societal understanding, encourages scientific discovery and facilitates equitable benefit-sharing (ETC Group, March 2012).

Institutional capacity to identify and monitor significant technologies must include an evaluation of their social, economic, cultural, health and environmental implications. UN monitoring and assessment of new technologies must be based on the Precautionary Principle and assessments must be completed before a new technology is released.

In order to minimize waste and risk, the monitoring process should accompany the development of the technology from science to shelf. Any technology assessment body established (or reinvigorated) at the UN must have 'teeth' to assert the integrity of the multilateral community and to counter unilateral or 'coalition of the willing' impositions of dangerous or untested technologies with global impacts. This should include the establishment of a legally-binding prohibition on all forms non-UN-sanctioned deployments that have the potential to cause harm to the planet, such as geo-engineering technologies (ETC Group, 2012).

At the regional, national and local levels, governments, civil society, social movements and communities must be encouraged and supported to establish technology assessment platforms or mechanisms that will allow key sectors and potentially affected communities to directly participate in the evaluation of emerging technologies. Gender perspectives must be integrated in the framework and approach of any technology assessment model.

A first promising mark on the current blank wall of gender and technology assessment is the proposal for a critical feminist technology assessment that seeks to extend existing technology assessment procedures to give full voice to the range of interested groups in technological design and to begin assessments with a critical debate about which technologies are needed and whose needs will be met by them, rather than focusing only on technologies already in use (Morgall, 1993, cited in Faulkner, 2000:17).

A recent report submitted by the UN Secretary-General to the UNGA, in response to the request made by member-states in the Rio+20 outcome document, recommended the establishment of an international network of technology assessment centres and/or national and global advisory groups on technology assessment and ethics as important elements of a global technology facilitation mechanism (UNGA, 2012: 16). Any such technology assessment platforms must be democratic, participatory, inclusive, comprehensive and proactive. Women, as key users and consumers of products of most emerging technologies, must be actively involved in technology assessment processes, as well as indigenous and local communities, which are generally the least prepared to deal with the unforeseen consequences of technologies and are virtually never consulted in the technology development process.

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