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Enabling Just and Equitable Transitions through Rural Women's Power

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^{*} The views expressed in this paper are those of the author and do not necessarily represent those of the United Nations.

The Commission on the Status of Women has an opportunity in 2018 to address the systemic barriers to rural women's human rights and sustainable livelihoods and support transformative strategies to alleviate the burden of an inequitable global order that impacts most negatively on rural women. This paper addresses two inter-related barriers to rural women's human rights and sustainable development: the globalisation of neoliberal economics and climate change; and two inter-related opportunities to advance rural women's human rights: rural and Indigenous women's movements and moves toward a "Just and Equitable Transition" of global economic and political systems in the context of climate change. Whilst there are multiple systemic barriers to rural women's human rights, including militarism, fundamentalisms and the rise of authoritarian governance, the paper will draw particular attention to neo-liberal policy expansion through trade and investment treaties and policies that privilege foreign investment in land, infrastructure development, energy and water.

Rural and indigenous women are the primary users of natural resources in the Asia Pacific region. However, they are often absent and systematically excluded in decision-making process related to management of natural resources and economic policies. Climate change also has a disproportionate and devastating impact on women's lives in the region. When rural and indigenous women's movements have been organised and given a decision-making role in managing their common resources and policies, human rights outcomes improve for the entire community.

Key Recommendations for inclusion in the EGM consolidated text and draft agreed conclusions:

- Recognise the prevailing **neo-liberal economic model** has been a driver of displacement and violations of rural women's rights and is incapable of supporting gender-equitable sustainable development;
- Recognise the detrimental impact of **trade and investment treaties** on the human rights and sustainable livelihoods of rural women;
- Reiterate that states should not accede to agreements that undermine human rights commitments and Agenda2030;
- Recognise the importance of **seed saving and sharing**, retention of traditional knowledges and affirmative policies for rural women;
- Stress the importance of states utilising the full range of **TRIPS flexibilities** to enhance **food sovereignty**, sustainable development and gender equality;
- Recognise the disproportionate impact of climate change on rural women and the intersections of climate change and other drivers of inequality;
- Stress the importance of states committing to a **just and equitable transition** of the economy in the context of climate change;
- Support the transition to **energy democracy** in the transition to universally available renewable, clean energies;
- Recognise, redistribute and resource paid and unpaid labour of rural women;
- Support **global tax cooperation** required to finance human rights inputs required to advance rural women's human rights;
- Commit to fully funding the rapid transformation required to support rural women to adapt to the impacts of climate change as well as benefit from global mitigation strategies;

1. Globalised Neoliberalism as a Barrier to Rural Women's Rights

The Expert Group report for the 58th session of the UN Commission on the Status of Women concluded that "the prevailing neo-liberal economic model is incapable of supporting gender-equitable sustainable development." ¹ The inequalities embedded in neo-liberal economics and governance are particularly detrimental to rural and indigenous women. These are numerous examples of the way that the progress of governments in many of the Beijing Platform's Critical Areas relating to rural women is determined by the broader macroeconomic framework.

Neoliberalism is characterised by a shift away from government regulation of markets and state provision of essential services and a shift toward global regulations to protect foreign capital and constrain the states' capacity to legislate in favour of human rights. For rural and indigenous women neoliberal prescriptions exacerbate existing inequalities and culminate in reductions in both economic, social and cultural rights as well as civil and political rights. For example, Asia has experienced a steady decline in the provision of essential public services (one cause of which has been prescriptions by international financial institutions to privatise government utilities) leading to an increase in the amount of unpaid work undertaken by women (ranging from collection of fuel and water to increased care work for extended family unable to access public health, education and care); this in turn has decreased the capacity of women to participate in decision-making processes in their communities, which has further cemented their marginalization in negotiations and decisions over community resources, such as land.

The extreme levels of inequality² generated by four decades of neoliberalism is matched by a stark urban-rural divide. Inequality not only poses a tremendous threat to inclusive political and economic systems, but also exacerbate the effects of gender inequality. For example, research has shown that a range of health and social indicators, including levels of violence, get worse as levels of income inequality increase.³

A. Impact of Trade and Investment Treaties on Rural Women

Globally there are more than 3000 bi-lateral or multi-lateral trade and investment agreements that govern global trade and investment. Recent large multilateral agreements, such as the Regional Comprehensive Economic Partnership (RCEP) and the Trans-Pacific Partnership Agreement (TPP) have sought to expand the scope of agreements to provide for global governance over an increasing number of economic issues outside of the UN and WTO system. The agreements, designed primarily to enable unhindered flow of global capital, are a significant barrier to the realisation of the rights of rural women. Advocates argue that trade agreements are designed to "level the playing field" and ensure foreign investors are not negatively impacted by national laws that preference locals or restrict their investment from making profits. In reality, gender discrimination as well as enormous differences in economic and political power, mean that trade agreements discriminate against rural women. In 2015, ten UN Human Rights Council mandate-holders voiced their concern over the impact of trade and investment agreements on human rights, jointly as well as in separate reports.

¹ UN Women, Report of the Expert Group Meeting on Structural and Policy Constraints in Achieving the MDGs for Women and Girls (2013) p.17

²In 2016 1% of the global population own 50.8% of household assets. Credit Suisse "Global Wealth Report 2016" accessed at https://www.credit-suisse.com/corporate/en/research/research-institute/global-wealth-report.html

³ UNICEF, Global Inequality: Beyond the Bottom Billion—A Rapid Review of Income Distribution in 141 Countries (2011), 33.

The collective statement warned that trade agreements "are likely to have a number of retrogressive effects on the protection and promotion of human rights, including by lowering the threshold of health protection, food safety, and labour standards, by catering to the business interests of pharmaceutical monopolies and extending intellectual property protection."3

• Land Investment displaces women's subsistence farms

Many countries restrict foreign investment in land and provide leases or concessions to investors on a case by case basis. Recent trade agreements incorporate a 'national treatment' provision which requires governments to treat foreign investors in the same was as they treat locals. Consequently, unless governments provide a specific exemption in the agreement, land can be purchased by foreign corporations and individuals. Among the attractions of Asian countries to foreign investors is the apparent abundance of cheap land. In fact, approximately 19.2 million hectares of land in Asia have been acquired in deals involving foreign investors in the last decade.⁴ This makes small land holdings vulnerable, particularly where land tenure documentation is not secured. The expansion of export-oriented crops has led to the decreasing availability of land for subsistence agriculture that is primarily tilled by women.⁵ Small scale, subsistence farms of women are unable to compete with the huge agro-business monopolies both because of economies of scale and benefits of large capital but also because of pre-existing discrimination that means women are less likely to be able to access inputs, credit, technology, information nor able to fulfil the regulatory requirements that come with cross-border, digitalised trade. Evidence suggests that the promotion of cash crops and the inclusion of large agro-business exacerbates the marginalisation of women agricultural workers, as managing cash crops is considered to be a task for men, particularly if mechanisation is introduced (while subsistence crops are considered "female" crops).⁶

In addition, the removal of tariffs on imports means that subsidised food can flood a local market and displace women's produce. The North American Free Trade Agreement (NAFTA) was associated with 2 million farmers losing their land resulting in high levels of internal and external migration. For women, this meant migrating into either dangerous special economic zones where labour exploitation and violence against women has been well documented, or across borders to become migrant domestic workers.

While foreign investment has led to large areas of arable land being developed for the production of food crops, far from enhancing the food security of local communities, investment in the agricultural sector has frequently been for the purpose of developing export industries that largely benefit large corporations. The expansion of commercial agriculture also leads to the depletion of communal land and resources, which women frequently rely on for the collection of fuel, water, and fodder for medicinal purposes.⁷ In PNG, for example, there has been an unprecedented surge in land grabs by foreign companies for the production of palm oil. 5.2 million hectares—an area equivalent to one-tenth of the total land mass of PNG—has been acquired, most of which was community-held forest.

⁴ <u>http://www.oxfamblog.org/fp2p/?p=5328</u>

⁵ Jane Korinek, Trade and Gender: Issues and Interactions, OECD Trade Policy Papers No. 24 (2005).

⁶ Bharati Sadasivam, The Impact of Structural Adjustment on Women: A Governance and Human Rights Agenda, 19 Human Rights Quarterly3 (1997)

⁷ Report of the Independent Expert on the effects of foreign debt and other related international financial obligations of States on the full enjoyment of all human rights, particularly economic, social, and cultural rights (2012) UN Doc. A/67/304 [70].

Further, these large-scale projects are often undertaken without sufficient consultation of women in local communities or without their free, prior and informed consent.

In Asia examples of land acquisitions and displacements that have negatively impacted rural and indigenous women can be found in almost every country (case studies annexed to this report). The documented cases of forced evictions and reduction of land and forest for inhabitants causes shifts in labour and migration patterns. Women leave their homes and work as labourers in factories, plantations or as domestic workers with sub-standard labour conditions. Militarization of land concessions, which allows intimidation and violence by armed security guards, whether private or state police and military, has also threatened the security of women human rights defenders involved in land disputes.

• Intellectual Property Rights for Corporations: Seeds saving, traditional knowledge, women's health at risk

Rural women routinely save and share seeds as a way of ensuring sustainability, bio-diversity and reduced costs. Trade agreements currently being negotiated include intellectual property protections that goes well beyond the requirements of the World Trade Organisation's (WTO) agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). They often require that state parties sign UPOV91, a convention for the <u>Protection</u> of New Varieties of Plants. The convention provides intellectual property protection for seeds and plants which generally prohibits farmers from saving and sharing protected seeds which can include seeds that they have been using for years prior to the protection being granted.

Trade agreements seek to "harmonize" intellectual property rights awarded to corporations and remove TRIPS provisions designed to give developing countries flexibilities in the implementation of intellectual property rules. Recent examples extend the period of protection for medicines, extend protections for small variations and provide an additional period for testing and licensing.

Intellectual property rights have been awarded for traditional plants and medicines used by rural and indigenous women for generations but 'discovered' by foreign corporations (or foreign corporations purchase the rights from researchers). For example, women in Northern Thailand have used a traditional root, pueraria mirifica, for various hormone related problems including menstruation, menopause and fertility and, consequently, have some of the lowest breast cancer rates in the world. They often sell the product at local markets. The US has awarded a patent⁸ for the plant including for simply drying or pulverising the plant.

Rural women's health outcomes are further threatened by trade agreements with the increasing costs of health that come with privatisation. Trade agreements increasing include service chapters which require state services to be opened to foreign investment if any part of the industry is currently provided by the private sector. Rural women's access to prescriptive medicines is also threatened, particularly by the inclusion of the two largest providers of generic medicines, India and China, in the RCEP. Monopoly protections awarded to pharmaceutical companies will significantly increase the costs of medicines and particularly impact on the poorest. One study found that the TPP will reduce the percentage of HIV-positive Vietnamese with access to anti-retrovirals to plummet from 68% to 30%. In Malaysia, the price of breast cancer drug Herceptin could go from USD 2,600 to

⁸ https://www.google.com/patents/US6673377

USD 44,000. Evidence suggests that when health care is privatised or more costly, rural and lowincome families are less likely to spend on women's reproductive healthcare⁹.

• Preventing Affirmative Action

Trade agreements may limit the capacity of governments to use affirmative action or 'temporary special measures' to eliminate discrimination against rural women. Governments use a range of policy techniques to advance rural women's access to land tenure, markets and support their local production. With the government the largest buyer in most markets, pro-women procurement can benefit rural women's livelihoods and help to retain their local industries. However, the inclusion of 'Government Procurement' chapters means that all government procurement, apart from defence or other identified industries, must treat foreign investors equally and governments are therefore prevented from preferencing local industries. Recently the Indian Government reportedly expressed concerns about the proposed government procure from marginalised women, amongst other groups. Similarly, a number of governments have introduced lower land taxes or registration fees when women are registered as land holders or co-owners. The 'National Treatment' provisions could prohibit such incentives unless they are also extended to foreign investors

One of the most concerning elements of trade agreements has been the investor protections or 'Investor State Dispute Settlements' (ISDS) which allows corporations to sue governments in specifically convened tribunals. Affirmative Action provisions have amounted to law suits from corporations against governments. South Africa was sued by a group of Italian companies after the government introduced its Black Economic Empowerment laws to remedy the impact of apartheid. The government subsequently reduced the legislated entitlements of Black South Africans to resource ownership. Any attempt to remedy existing levels of exclusion for rural women could similarly be subject to a suit.

ISDS has been commonly used to challenge decisions by governments in relation to the licensing and regulation of extractive industries. Rural women have been at the forefront of movements to prohibit extractive industries in their communities or to seek remedies and clean-up of their environments and are detrimentally impacted when investor protections are elevated above their human rights. Similarly, corporations responsible for the provision of water and energy have been able to sue governments when their licences have been revoked for non-compliance. This includes failure to provide services to rural communities who are not a profitable target group for corporations. Subsequently, trade agreements limit the capacity of governments to ensure rural women are provided with essential resources, goods and services. The UN Independent Expert on a Global Equitable Order suggests that "far from contributing to human rights and development, ISDS has compromised the State's regulatory functions and resulted in growing inequality among States and within them".

⁹ Schuler S, Bates L, Islam M (2002). Paying for reproductive health services in Bangladesh: intersections between cost, quality and culture. Health Policy and Planning 2002;17(3): 273–80

2. Climate change exacerbates gender inequalities and conflict.

The fact that climate change impacts differently and more deeply on women has been well documented¹⁰. It is recognised that women are exposed to increased risks because of their primary role in care work and agricultural production and that climate change is likely to increase the burden of water and food collection, increasing the burden of work on women, particularly rural women.¹¹ It is less often recognised that this heightened vulnerability commonly arises from structural discrimination and patriarchal social relations.

Rural women suffer the most from climate related disasters. They suffer the highest mortality and carry the burden of the long-term impacts of loss of land, livelihood and security. Women and children make up the majority of deaths resulting from water-related disasters.¹² Perversely, while there is a huge disparity in historical emissions between wealthy and developing country emissions, "a country's level of urbanization correlates more with carbon emissions than its wealth."¹³ Rural communities in developing countries have low or even negative emissions.

Climate change can exacerbate gender inequalities. As communities respond to climate change they develop their own adaptation strategies. Some of these have devastating impacts for rural women. For example, in Bangladesh, a persistent link has been suggested between the loss of lands and livelihoods due to climate change and early, child or forced marriage¹⁴. Researchers also found that climate change increased demands for dowry payments and that child marriage and dowry may form local adaptation strategies¹⁵.

Similarly, in Nepal, rural women from remote, climate affected areas report increased levels of migration for marriage as well as migration for domestic work as a result of diminished livelihoods¹⁶. Climate change exposes women to increased risks of violence, trafficking and conflict. In the last sixty years, at least 40% of all intrastate conflicts have had a link to natural resources and the environment¹⁷. Gender-based violence is likely to increase, and there will be a growing expectation that violent solutions to disputes are acceptable¹⁸.

"As recognition grows that the natural environment is a factor in many armed conflicts, and that environmental degradation has specific gender-related impacts, conflict prevention efforts must necessarily account for these factors. Women's knowledge of the natural environment and resource

http://artsonline.monash.edu.au/oxfam/files/2014/05/Are-climate-challenges-reinforcing-child-and-forced-marriage.pdf ¹⁵ Also see Human Rights Watch (2015), *Marry before your house is swept away*, https://www.hrw.org/report/2015/06/09/marry-your-house-swept-away/child-marriage-bangladesh

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<sup>16</sup> APWLD (2014), Climate change destroying livelihoods and traditions of Mugal women in Nepal,
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http://apwld.org/wp-content/uploads/2014/12/flyer-mwui-corrected-12-1.pdf

¹⁷ UNEP, Retrieved March 12, 2015, from http://www.unep.org/disastersandconflicts/Introduction/EnvironmentalCooperationforPeacebuilding/tabid/54355/Defaul t.asp

¹⁰ 52nd session of the Commission on the Status of Women (2008), "Gender perspectives on climate change," Issues paper for interactive expert panel on *Emerging issues, trends and new approaches to issues affecting the situation of women or equality between women and men*, <u>http://www.un.org/womenwatch/daw/csw/csw52/issuespapers/</u><u>Gender%20and%20climate%20change%20paper%20final.pdf</u>

¹¹ UNFPA, Making NAPAs work for women, https://www.unfpa.org/sites/default/files/pub-pdf/climateconnections_4_napas.pdf

¹² UNDP, Overview of Linkages between Gender and Climate Change 2013, p.3

¹³ https://www.thenatureofcities.com/2017/07/30/urban-rural-inequalities-carbon-emissions/

¹⁴ Margaret Alston et al (2014), Are climate challenges reinforcing child and forced marriage and dowry as adaptation strategies in the context of Bangladesh?, Women's Studies International Forum,

¹⁸ APWLD, Climate Change and Natural Disasters Affecting Women Peace and Security, March 13, 2015.

scarcity can play an integral role in early warning systems for climate-related resource scarcity and conflict, and in developing a sustainable response to conflict."¹⁹

Climate change is already a driver of migration with estimates that climate induced migration will reach up to 1 billion people by 2050²⁰. Large-scale migrations may increase the risk of conflict in host communities as tensions and competition over land and resettlement areas arise. This exposes women not only to the traditional threats of a violent environment, but also to the dangers of long migrations such as hunger, dehydration and extreme weather. Sexual violence is a serious threat both in conflict and in refugee situations. Displacement thus greatly increases the threat of increased sexual violence against women. In relocations areas, women see their access to job limited, being forced to take care and provide food to children and elderly, meanwhile men are leaving to find jobs outside of these areas²¹.

Women from matrilineal rural communities face the loss of social currency when lands are diminished or lost. Rising tides in the Carteret Islands of Papua New Guinea have already led to a relocation of Islanders. The Islands are matrilineal and displacement means women lose an essential part of their identity, livelihoods and status

Another outcome of climate change with serious implications for rural women is the implementation of mitigation and adaptation projects that marginalise and exclude women, frequently in poor rural communities. For example, Asia and the Pacific is a hub for clean development mechanism (CDM) projects. Of 7,213 CDM projects registered all over the world, 6,094 CDM projects operate in Asia and the Pacific and primarily fund large-scale industry and power sector projects. These projects overlook important issues such as land rights, land conflicts, corruption and weak governance. Most of the existing REDD+ projects in the regions are also problematic, enforced without free, prior and informed consent by women and men in the affected community. In several documented cases, women were forcibly evicted from their homes and lands, their peace and security threatened or were forced to migrate and live in the most precarious environments.

3. Rural Women's Movements key to Transformational Change

APWLD contends that the most critical strategy to secure rural women's human rights and resist the drivers of displacement and exploitation is the existence of rural women's movements. The largest global study on violence against women found that the key to achieving progressive changes to laws and policies on violence against movement was the existence of autonomous feminist movements²². The same authors found that shifts in economic policies were made possible when women's movements and other social movements collaborated. For rural women, local movements are critical to democratic participation, resistance, shaping local policies, shifting patriarchal practices, as well as space to share women's sustainable agricultural practices, share seeds and other resources and endure environmental disasters and changes.

¹⁹ Radhika Coomaraswamy, Preventing Conflict, Transforming Justice, Securing the Peace: A Global Study on the Implementation of UN Security Council Resolution 1325 (2015) forthcoming.

²⁰ Morris, N (2008), *Climate change could force 1 billion from their homes by 2050*. The Independent, retrieved 15 September 2015, http://www.independent.co.uk/environment/climate-change/climate-change-could-force-1-billion-from-their-homes-by-2050-817223.html

²¹ APWLD, Climate Change and Natural Disasters Affecting Women Peace and Security, op. cit.

²² Htun, M & Weldon, L (2012), *The civic origins of progressive policy change: combating violence against women in a global perspective*, 1975-2005, American Political Science.

Despite their importance women's movements are increasingly under attack by both state and nonstate actors. Their ability to operate autonomously has been curtailed by restrictive laws and surveillance. Rural women, particularly those involved in the defence of land and environment have faced violence, criminalisation and murder.

APWLD has been using Feminist Participatory Action Research (FPAR) with grassroots women communities in the Asia-Pacific region to document their own evidence, identify their policy responses and build local movements. The results of this programme are clear: to advance gender equality for rural and indigenous women and address the gendered impacts of climate change, we must support and strengthen **women's local movements**.

The Beijing Platform for Action Environment specifically urges international organisations and NGOs to conduct participatory action research "".

257(b) Develop gender-sensitive ... participatory action-oriented research, methodologies and policy analyses, with the collaboration of ... local women researchers, on the following:

(i) Knowledge and experience on the part of women concerning the management and conservation of natural resources ...

(ii) The impact on women of environmental and natural resource degradation, deriving from, inter alia, unsustainable production and consumption patterns, drought, poor quality water, global warming, desertification, sea-level rise, hazardous waste, natural disasters, toxic chemicals and pesticide residues, radioactive waste, armed conflicts and its consequences;

(iii) Analysis of the structural links between gender relations, environment and development, with special emphasis on particular sectors, such as agriculture, industry, fisheries, forestry, environmental health, biological diversity, climate, water resources and sanitation;

(iv) Measures to develop and include environmental, economic, cultural, social and gendersensitive analyses as an essential step in the development and monitoring of programmes and policies;

The FPAR experience demonstrates that stronger outcomes result from local women's movements democratic engagement. From securing policy changes in formal and informal legal systems, to developing local adaptation strategies and building capacities to resist displacement, rural women's movements are able to advance rights when governments create enabling environments.

4. Just and Equitable Transition

The Paris Agreement commits governments to take into account "the imperatives of a just transition of the workforce ...". The agreed conclusions of CSW61 linked a just transition to gender responsive climate policies for the first time in intergovernmental text. The concept of a just and equitable transition provides an opportunity to re-design societies in ways that are equitable, just and sustainable: an opportunity to build a Feminist Fossil Fuel Free Future.

Originating from the trade union movement, a just transition usually refers to ensuring justice for workers displaced by environmental or climate policy changes. The concept has been part of a strategy to encourage energy sector unions to support climate action that can also be in the interests of their members. It has included labour movement demands for greener jobs, social protection for workers in affected industries, retraining and social dialogue. But there are also calls, amongst the labour movement and civil society, for a more transformative approach to just transitions - a transition that addresses the injustices embedded within neoliberal capitalism. Consequently a wholelistic framework could be used to consider transitions that are just and equitable for rural and indigenous women.

The value of a just and equitable transition for rural women

A "just and equitable transition" requires systemic shifts in global economic governance as well as changes to national fiscal and monetary policies. It will require the restoration of the capacity of states to regulate in the public interest without being aggravated by investor protections within preferential trade agreements, debt obligations or world trade organisation limitations. Transitioning to new economies should also feature moves to energy democracy and restoration of public goods, public services and public-sector employment that has been demonstrated to advance women's human rights as well as safeguard the environment.

A just and equitable transition must seek to shift the gendered division of paid and unpaid labour. Rural women carry the largest unpaid work burden, much of it unpaid family farm labour rarely counted in labour statistics. In India, rural women spend 51 per cent of their time in unpaid work,²³while rural women's participation in the paid labour market in India is declining.²⁴ The recognition, redistribution and resourcing of unpaid care work is essential for rural women. A universal basic income may be a feature of a just and equitable transition that values women's subsistence, currently unpaid, labour. A universal basic income would also provide women with autonomy to make decisions about their lives and play a role in limiting economic dependency.

Public funding of care in addition to redistribution of both paid and unpaid labour and an overall reduction in labour hours should be central to a just and equitable transition. A low-carbon, just economy that deals with redistributes labour, addresses climate disruption and upholds human rights will require an enormous increase in health and care workers in rural communities.

Energy Democracy

Mega-energy projects and extractive industries have disproportionately impacted on rural women. The transition to renewable, clean energy should come with a transformation not just in the source of energy but the purpose, distribution and control over energy. China is cancelling plans for 85 coal stations, India is also cancelling plans for coal stations, and the price of solar energy is now lower than coal-based electricity. This is the time for building a gender-just new renewable energy sector focused on the 1.2 billion people estimated to be without energy, 80% of whom live in rural areas. Gender-responsive structuring for both the delivery of electricity and the industry itself has the capacity of changing the situation of rural women and girls in developing countries, remote areas, and small island states.

 ²³ Ghosh, Jayati, (2015). Unseen Workers: Women in Indian agriculture. Originally published in Frontline Print edition, Available from http://www.macroscan.org/cur/apr15/pdf/Unseen_Workers.pdf
 ²⁴ http://in.one.un.org/wp-content/uploads/2016/09/jayati.pdf

The power of small-scale, low-cost alternatives, particularly in remote areas and poorer communities, has the potential to redistribute power from corporations and make **energy democracy** a reality.

- In Bangladesh, the World Bank reported in 2011 that 750,000 households and shops in areas not linked to the national grid had installed solar home systems via a government project. By 2016, the project had installed 3.9 million solar home systems, benefiting 20 million people, and are joined by solar startup companies that set up nano or micro grids allowing solar homeowners to sell surplus electrical power directly to other microgrid participants via peerto-peer (P2P) networks.
- In northern Philippines, there is an example of a small village in Kalinga Province, Cordillera
 region, which fought back against geothermal projects in its area through protests and
 petitions against military occupation as well as geothermal energy. Women produced an
 evidence-based position paper to submit to the government and led a march denouncing
 human rights violations in the area. Despite all odds, the indigenous community of that
 village persisted, and formed a village cooperative (with visible women's leadership), that
 installed a micro-hydro facility. This facility provides affordable and clean energy to nearly all
 of the households in the village.

Both instances demonstrate that there are alternatives to national grid structures, and that these can be managed at a small level without squeezing profits from impoverished or rural communities, with the potential of transformative change for rural women and girls, who predominantly are responsible for collecting fuel in areas that do not have electricity.

Agrarian reform is also critical to a just and equitable transition. Industrial farming, logging and other land monopolies are large contributors to climate change. Small land-holdings by women using agroecology principles can improve both soil sequestration and prevent erosion and other degradation through pollutants. When women are given equal rights to land holding and inputs yields grow and can prevent deforestation.