



Women Building Power

Towards Climate and Energy Justice
for Women in Africa





WoMin is an African gender and extractives alliance. We work with more than 50 allies in 14 countries across East, Southern and West Africa.

Publisher

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Main mission

WoMin's main mission is to:

- support the building of women's movements to challenge destructive extractivism
- propose development alternatives that respond to the majority of African women's needs.

Our approach

Our approach to making change happen includes:

- political education
- participatory research
- women-led grassroots-driven campaigning
- alliance and women's movement building
- solidarity.

Our focus

Our focus areas are:

- fossil fuels energy and climate justice
- extractivism, militarisation and violence against women
- women's rights, consent and democratised socioeconomic decision-making.

Thank you

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breadfortheworld
"HAVE FAITH. END HUNGER."



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Glossary of Terms

COP	Conference of Parties	SAP	Structural Adjustment Programme
CVF	Climate Vulnerability Forum	SDG	Sustainable Development Goal
GCF	Green Climate Fund	SE4All	Sustainable Energy for All
GHG	Greenhouse gas	TNC	Transnational corporation
IFI	International financial institution	UN	United Nations
IMF	International Monetary Fund	UNDP	United Nations Development Programme
INDC	Intended Nationally Determined Contribution	UNEP	United Nations Environmental Programme
IPCC	Intergovernmental Panel on Climate Change	UNFCCC	United Nations Framework Convention on Climate Change
NASA	National Aeronautics and Space Administration	WBCSD	World Business Council for Sustainable Development
NGO	Non-governmental organisation	WHO	World Health Organization
NOAA	National Oceanic and Atmospheric Administration	WTO	World Trade Organization



Introduction

The current energy system is an unjust, unequal one that results in energy poverty for the vast majority of people across Africa. Women are particularly affected by the harmful social and environmental effects given their work in caring for others, and providing for the needs of their families.

The present energy system has to change if women and communities are to lead healthier, more complete lives. Women in communities, in movements, in other civil society organisations, and as individual activists can work together to change this situation. We can come together to build a movement for change.

However, to do this we need information, skills and tools. We need to understand the system in order to change it.

In this paper, the first in a popular series, we think through ways of understanding the current energy system in order to strengthen our actions to change it. The paper forms part of the Women Building Power knowledge hub of a campaign which aims to support women's movement-building and organising towards a future in which African women enjoy climate, energy, food, gender, and development justice. While the campaign is led by WoMin it is not a WoMin campaign, and will be owned by the participating organisations.

The current campaign is rooted in grassroots struggles led by women and is building in four countries – the Democratic Republic of the Congo (DRC), Nigeria, South Africa, and Uganda. The campaign will continue into 2017 when four new countries will join the campaign. For more on the campaign see **Section 7** of this paper.

This paper is structured as follows:

SECTION 1

In **Section 1** we uncover just how unequal and unjust the current energy system is, and we look at reasons for this. We look at the impacts of the current energy system on the environment and people, and particularly on women. We highlight that in sub-Saharan Africa today large numbers of people have no access to safe, clean, and affordable energy.

SECTION 2

In **Section 2** we provide information on nonrenewable and renewable sources of energy, we highlight the extremely harmful effects of the extraction of the main sources of nonrenewable energy – coal, oil, gas, and uranium – and we discuss the advantages of a move to renewable energy sources such as sun, water, wind, and biogas.

SECTION 3

In **Section 3** we take a brief journey into Africa's colonial past, the development of industry, and trace the more recent adoption by world powers of capitalist neoliberal policies that fuel a development model referred to as 'maldevelopment'. We highlight that this model is harmful for the majority of the world's people and the majority in Africa because it focuses on profit-making for a few and disregards the needs of the majority. We note that this model of economic development that places profit above people and the planet shapes the current unjust energy system. We explore how within this model of development new forms of women's oppression force women to labour in ways that benefit men and elites.

SECTION 4

In **Section 4** we look at climate change, its links with the unjust energy system, and at some of the key issues we need to explore in developing solutions to both climate change and the current energy system. We highlight the catastrophic impacts of climate change on the health, livelihoods, and well-being of people across Africa and women in particular. We look at how large corporations push their interests and agendas within the United Nations (UN) climate change discussions, making them appear champions of the environment whereas in reality they are working hard to ensure their profit-making, pollution-creating production continues unabated. We note that climate change hits hardest those least responsible for creating this crisis. Wealthier people in the Global North are responsible for 80% of the greenhouse gases (GHG) that have led to climate change. But it is the poorer people in the Global South who face the worst impacts of climate change. We make the point that solutions should be people-centred, community-based, women-driven and shaped by decentralised processes of decision-making.

SECTION 5

In **Section 5** we focus on the need to find new ways to deal with energy poverty that will be just and fair, and will not exploit people or the environment. We need to search for solutions that enable safe, clean and affordable energy for the majority of the world's people. We need to shift to an energy system based on renewable energy. We need to make sure the system of producing clean energy does not exploit workers. And we need to make sure that clean energy is not used to create more wasteful goods that end up in landfill sites and create more pollution. All of this means that the transformation of the energy sector must be at the heart of global action. It means we need to make sure communities and rural women are central to decision-making. And it means we need to roll back the power of large corporations.

SECTION 6

In **Section 6** we focus on what is needed to build an African ecofeminist movement for climate and energy justice. We suggest the importance of an Energy Transformative approach which demands that African women – the majority of women most impacted by energy poverty – be heard, participate, and take a leading role in energy decision-making, control and governance at all levels – from the local to the global. This approach demands that women participate equally with men in planning future energy systems. It challenges the corporate take-over of the energy system. It also advances state planning of energy provision and use, development, climate change mitigation, and national security.

SECTION 7

In **Section 7** we pull together the key arguments of the paper. We note there is an urgent need to move to a different system of energy production and use. The focus needs to shift to ways of providing cheap or free energy. Changes are needed in decisions about what energy is required, where that energy is needed, for what purpose it will be used, and the form of that energy. Changes are needed in who makes these decisions. And there is a need for deep change in the way we think about development so that people and caregiving are at the centre of development. Ordinary people, especially women, peasants and the working class and their representatives, must be the decision-makers. Unless we do these things poor and working-class women in Africa and elsewhere, will not enjoy safe, clean or affordable energy.

SECTION 1

Unveiling the energy system and its deep flaws

In this section we look at the current energy system. We uncover just how unequal and unjust the system is and we look at its impacts on communities and on women in particular.

We look at the energy system against the background of the current ruthless global economic agenda. The focus of this agenda is on profit, with little concern for the damage caused to people, the environment or the planet. Those concerned about justice, a fair distribution of resources and the rights of women and men refer to this current economic agenda as 'maldevelopment'.

'Maldevelopment' is a process of development which does not cater for the human and social needs of the wider population. It has meant a plundering of Africa's natural resources, gross environmental degradation and land-grabbing, and the marginalisation of peasants and women.

Women are exposed to environmental damages from an energy system they do not benefit from. Most poor women live in what we call energy poverty. They do not have adequate access to safe, clean and adequate energy. They are exposed to the health impacts of the fuels they use for cooking and lighting. They are exposed to pollution from mines, from fossil fuels, and nuclear power stations.



The unequal, unjust energy system

The way we currently produce, distribute and consume energy is unsustainable, unjust and harms communities, workers, the environment, and the climate. Across the world nearly 1.3-billion people – or one-fifth of the world's population – still live without safe, local sources of clean energy.



<http://www.action4energy.org/img/map.png>

¹ Sustainable Energy for All (SE4All) (2015) *Progress Towards Sustainable Energy 2015*, <http://www.se4all.org/sites/default/files/GTF-2105-Full-Report.pdf>



The majority of Africa's people live without safe, affordable sources of clean energy. This is so despite the fact that Africa is rich in oil and mineral deposits, and has abundant sources of clean and safe energy such as the sun, wind, and water.

Lack of access to safe energy sources is a major constraint for personal, social, and economic development in Africa and elsewhere. Lack of safe and adequate energy limits economic development, restricts people's life chances, and keeps millions of people in extreme poverty. The lack of energy for people in Africa is one of the biggest barriers to development and prosperity on the continent.



Energy poverty is lack of access to modern **energy** services. It refers to the situation of large numbers of people in developing countries whose well-being is negatively affected by very low consumption of **energy**, use of dirty or polluting fuels, and excessive time spent collecting fuel to meet basic needs.

An important form of energy across the world is electricity, which is predominantly used by small businesses, big corporations, and middle-class people in urban centres, who use electricity for cooking, heating, cooling and so on. Whilst electricity provides personal benefit to those who have access and important developmental benefits – powering hospitals and schools, for example – there are serious problems with the way it is produced, used and distributed.



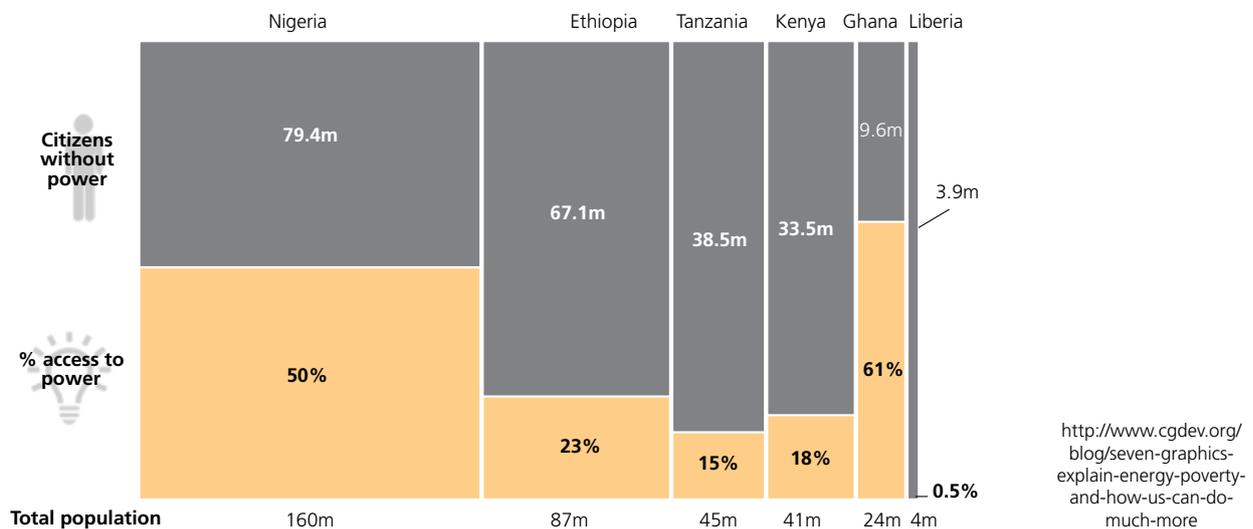
Electricity is a secondary energy source, which means it is generated from the conversion of primary sources of energy, such as fossil fuels (coal, natural gas, oil), nuclear power and renewable sources (wind, hydro, solar, geothermal). See Section 2 for further discussion on the different sources of energy, and their costs and benefits. It is important to note that energy justice for Africans cannot simply be reduced to equal access to electricity. Our measure of success should not be that everyone has electricity provided through unreliable wasteful national grids. Energy justice can be achieved by meeting energy needs through a combination of micro and small-scale technologies (implemented at family and community or collective level) and through electricity channelled via small-, medium- and large-scale grids where necessary. We draw on statistics and analysis which specifically address who does or does not have access to electricity. This does not, however, mean that we believe that electricity access equals energy justice. See Sections 5 and 6 for a fuller discussion of the change we are aspiring to.



Across the world we find that those who do not have electricity outnumber those who do have access to electricity. Of all the continents, sub-Saharan Africa (the area of the continent of Africa south of the Sahara desert) is hardest hit by lack of electricity, with 625-million people living without electricity, or with very limited access to electricity and other safe and clean sources of energy. Most of the electricity generated in Africa is for the use of corporations.

It is estimated that two out of every three people in sub-Saharan Africa have no access to electricity.² Yet there are no policies and programmes to support access to clean, safe, and free energy. The following graph shows the energy gap in six countries in Africa supported under United States President Obama's five-year presidential initiative, and referred to by that initiative as Power Africa countries.

Over 230-million people in the six countries listed below live without power.



Why is there energy poverty and energy inequality?

There are three important structural reasons why so many people still do not have basic electricity and safe alternative energy supply:

1. Privatisation and the focus on profit drives energy provision within the present economic development model, charging high prices to consumers.
2. Governments prioritise the needs of companies over the needs of people.
3. African elites collude with giant corporations to export Africa's oil and gas resources for their own profit, at the expense of providing safe and clean energy for local use.



<http://www.struggle.pk/privatization-cartoon/>

Privatisation

Since 2000, there has been an increase in energy provision by private companies. As a result of policies promoted by the World Bank, several countries privatised their energy sectors which put the control of energy in the hands of unaccountable corporations. These corporations charge high prices placing energy out of the reach of the majority of the world's people. They do not provide energy to the rural poor because they cannot make profits from the poor. Such approaches also mean that any other (non-profit generating) sources of energy generation are discouraged.

² Sustainable Energy for All (SE4All) (2015) *Progress Towards Sustainable Energy 2015*, <http://www.se4all.org/sites/default/files/GTF-2105-Full-Report.pdf>

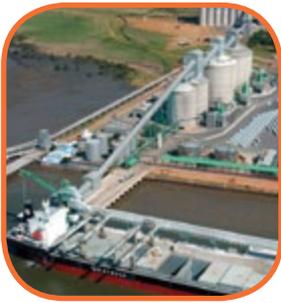


Governments prioritise the needs of corporations over the needs of people

Governments' energy planning and investment are driven by the needs of multinational corporations for infrastructure for mines or industries, including energy, railways, water, ports, and roads.

The terms on which these kinds of infrastructure are developed are costly and wasteful. Governments raise large loans to develop this infrastructure and in the long term these steal money away from important public investments in education, healthcare, housing and so on. Governments are often not able to repay these loans, nor can they meet the costs of maintaining such infrastructure.

Prioritising the energy needs and interests of corporations leaves little money for the needs of communities and any energy supplied to communities is almost incidental.



State and capital working together to make sure elites benefit

Large transnational and multinational energy corporations make deals with African governments and national elites. This enables these corporations to make huge profits from the export of Africa's energy and other resources. African governments and elites benefit in the kickbacks they receive, or from running businesses that receive preferential income from large corporations. But the majority of Africa's people are left without access to the energy produced.

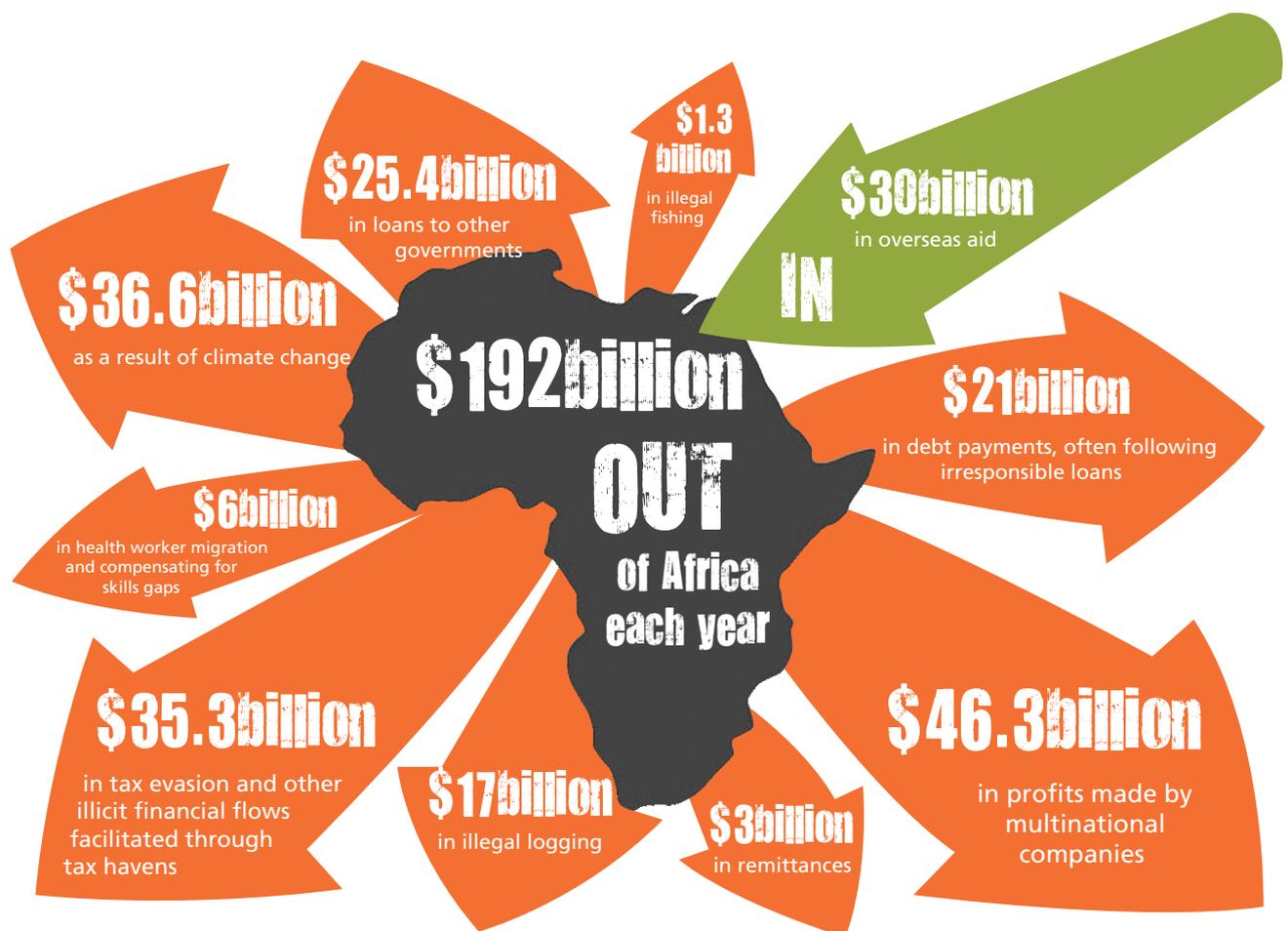
Many of these multinational or transnational corporations (TNCs) are more powerful than many governments. They have higher incomes than the majority of countries in the world. These include companies such as Royal Dutch Shell, Exxon Mobil, BP, Chevron, Total, Petrobras, Gazprom, PetroChina, and Sinopec-China Petroleum, all of which are involved in the oil and energy sectors.³



³ <https://makewealthhistory.org/2014/02/03/the-corporations-bigger-than-nations/>

Nigeria is a good example of how energy corporations benefit at the expense of the majority population. Nigeria has extremely large supplies of oil and gas resources, but it is corporations such as Shell and Exxon-Mobil which benefit from this. These two corporations pump out Nigeria's oil and gas, and export this to other countries for their own profit. The oil and gas that could power the country many times over makes these companies, and a small Nigerian elite, rich at the expense of the majority of the population. In Nigeria 50% of the total population, and 90% of the rural population have no access to safe energy, including electricity.

Often these corporations do not pay or pay only minimal taxes. One key way in which African countries can benefit is by closing loopholes that allow multinational corporations to move large amounts of money around without paying taxes. Even the conservative Wall Street Journal confirms that Africa loses at least US\$60-billion every year.⁴



http://www.developmenteducation.ie/uploads/LootingAfrica_infographic

⁴ <http://www.wsj.com/articles/africa-loses-60-billion-a-year-illegally-report-says-1422794047>



The gendered costs of energy inequality and energy poverty

The costs of energy inequality and energy poverty are deeply gendered. Women bear the costs because of the unequal and unfair gender division of labour between men and women, which sees women and girls take the main responsibility for collecting fuel, making fires for cooking and bathing, cooking and taking care of the young, sick and elderly.

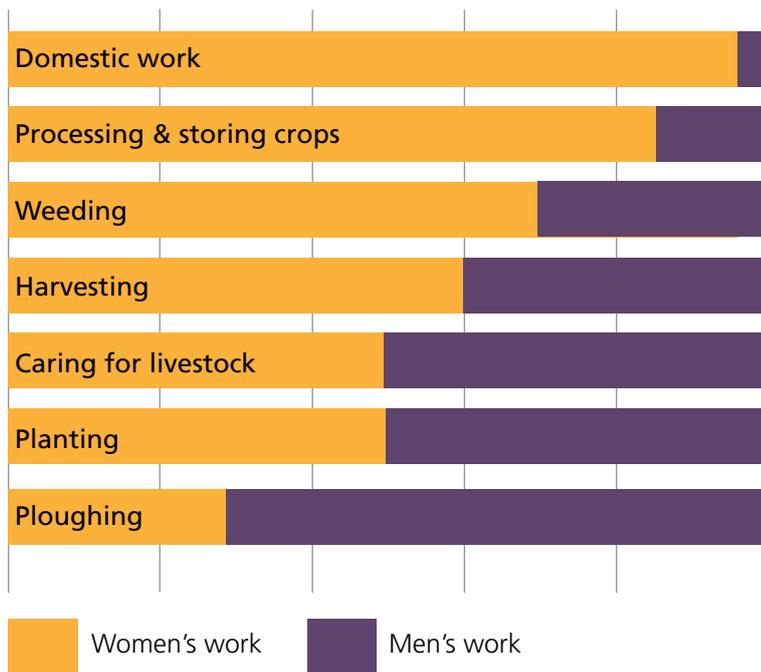


Gender Division of Labour

The way work is divided between women and men according to their gender roles is referred to as the 'gender division of labour'. In most societies it is women who are expected to cook, clean, and do the work involved in caring for children, the sick and the elderly. In most societies men are not expected to perform this work. Feminist demands have included sharing of housework by men, wages for housework, and that women's work in the home (also called reproductive work) gets counted in national budgets and national accounts.



0 20 40 60 80 100





Inhaling smoke fumes from traditional fuels

Inhaling smoke fumes is the largest environmental contributor to ill-health and results in 4-million deaths across the world, more deaths than from malaria and HIV/AIDS combined. It is mainly girls and women who are impacted. Additional health burdens are created by mines and pollution emitting industries, as well as those generating dirty sources of energy, such as oil, coal or nuclear power stations. Most of these deaths are of women and children, and it falls to women and girl children to take care of those who suffer ill-health because of this pollution.

In Africa, the figure for deaths from inhaling smoke fumes is 600,000 deaths annually.⁵ In 2012, of 915-million people living in sub-Saharan Africa, nearly 730-million used traditional fuels like wood and dung to heat their homes and for cooking.

Women's and girls' time and energy taken up collecting fuel and water



In the absence of an adequate energy supply, women and girls spend most of their day performing basic subsistence tasks, including the time-consuming and physically draining tasks of collecting fuel and water. Women have to plan and work extremely hard and long hours to meet household energy needs. This includes making sure there is hot water for cooking and bathing, energy for lighting and space heating, and energy for food processing, preparation and cooking. This work limits women and girls from access to education, better livelihood choices, and decent wage employment. It also limits their options for social and political interaction outside the household⁶ and their options for leisure and recreation.

In a world of climate change, characterised by droughts, deforestation, and displacement, women face increased challenges meeting household energy and other needs. Women and girls have to put more time and energy into drawing water and finding fuel for fires.



In addition, when there is poor energy access, women and girls are exposed to heightened levels of violence. In Tanzania, due to deforestation made worse by climate change, rural women have to travel long distances to fetch firewood, leaving children unattended at home for long periods. This leads to complaints from men that the women are not looking after the children properly, resulting in family conflict.⁷ In the Somkhele and Fuleni communities in KwaZulu-Natal South Africa, women have similar experiences. In addition, their search for firewood takes them to isolated places leading to incidents of sexual harassment and rape.⁸



⁵ Premature deaths due to pollution, http://www.se4all.org/sites/default/files/2013/09/Special_Excerpt_of_WEO_2010.pdf: 14

⁶ Katrine Danielsen (2012) *Gender Equality, Women's Rights and Access to Energy Services: An Inspiration Paper in the Run-up to Rio +20*, http://www.kit.nl/gender/wp-content/uploads/publications/1975_Gender%20Rights%20and%20Energy%20Report%20final.pdf

⁷ Southern African Faith Communities' Environment Institute (2015) Annual Report 2015, <http://safcei.org/wp-content/uploads/2016/06/SAFCEI-Annual-Report-20151.pdf>

⁸ WoMin research to be published in November 2016

SECTION 2

Energy sources and the impacts of extraction⁹



Energy gives us the power we need to take care of ourselves and of others, to learn, to work, and to produce things. Energy is essential to life. Energy is something we all have. We use energy in many different forms to meet our needs. Our bodies get energy from the food we eat. Our food is cooked with heat energy – using wood or other fuels (such as cow or camel dung), gas, liquid fuels (such as kerosene / paraffin), or electricity. Energy is also found in other liquid fuels such as petrol (gasoline) or diesel which are mostly used for transport such as buses, trains, and cars. Energy from wind can be harnessed to pump water, and energy from running water can be used to crush grain and drive machinery.



We use energy to warm, cool, and light our homes. In agriculture, human energy is used to plant crops and farm the land, and animal energy is used for ploughing. When oil was discovered, machines such as tractors replaced animals and people. Tractors got the work done more quickly and were seen as more efficient.



When technology developed, resources such as wood, coal, oil, gas, sunshine, wind, tides and running water could be turned into electricity. This new form of energy allowed for new activities and new services that were not possible before.

Today electrical energy is used in hospitals for important devices such as blood banks, medical equipment, and life support systems. Schools, clinics, and industry use electrical energy for lighting, heating, technology such as computers, machines for production, and air-conditioning. Today there are even some electric vehicles, and many trains run on electricity. Radios and televisions use electricity, and we use electricity for communications, such as charging cell phones.



However, whilst providing all these benefits, the production and use of energy may be harmful to people and the environment. Current energy production is based mainly on fossil fuels such as coal, oil, and natural gas. The mining and use of these fossil fuels pollutes the environment. Fossil fuels based energy production and current energy use cause two-thirds of GHG emissions¹⁰ which result in global warming and climate change. Additionally, industrial processes (including mining) contribute significantly to ill-health and deaths. 'The World Health Organization, in conjunction with the World Bank, estimates that 23% of deaths in the developing world are attributable to environmental factors, including pollution, and that environmental risk factors contribute to more than 80% of regularly reported diseases.'¹¹

The impacts of these processes on people and the environment are significant as we highlight in the following sections.



⁹ Draws from WoMin (2016) *Understanding Energy Women Building Power* information booklet

¹⁰ International Energy Agency (2015) *Energy and Climate Change: World Energy Outlook Special Report*, <https://www.iea.org/publications/freepublications/publication/WEO2015SpecialReportonEnergyandClimateChange.pdf>

¹¹ Annette Prüss-Üstün & C Corvalán (2006) *Preventing Disease through Healthy Environments. Towards an Estimate of the Environmental Burden of Disease*, Geneva: WHO

What is electricity?

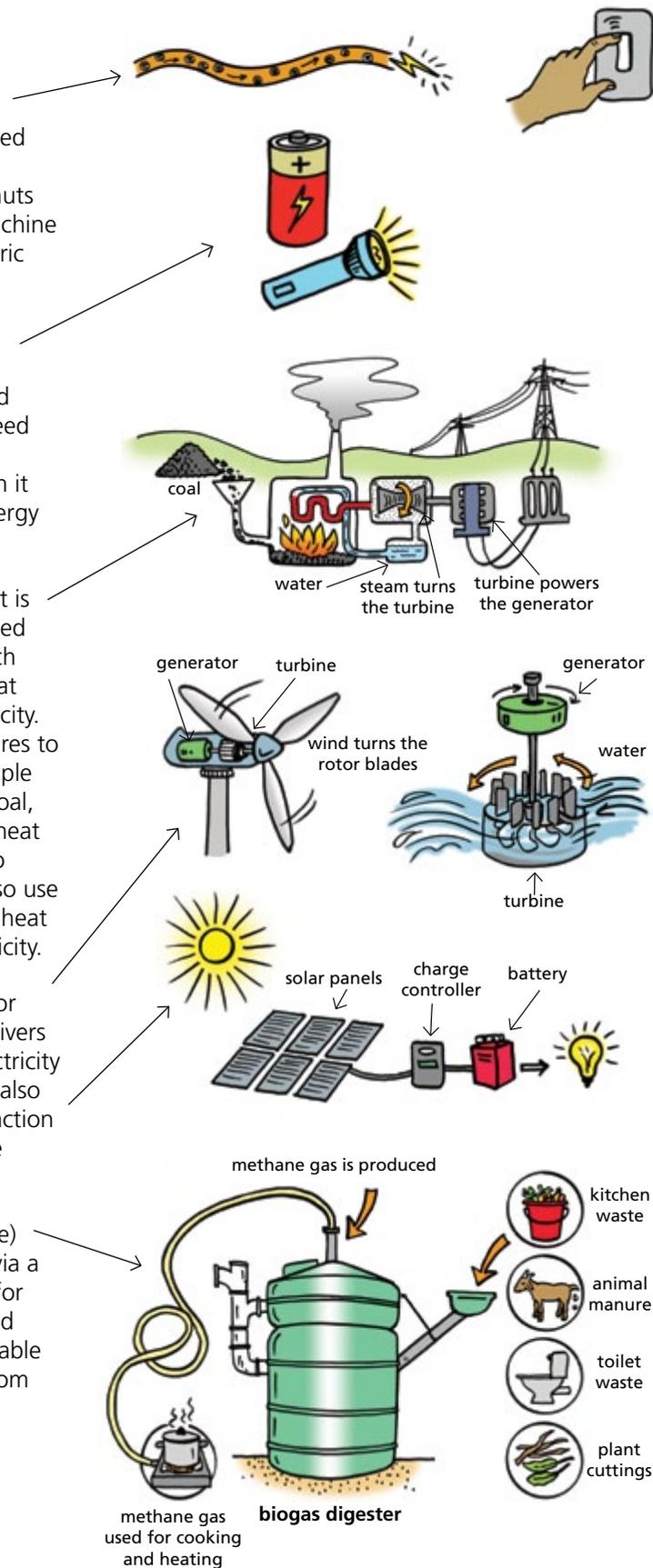
Electrical energy, called electricity, is a flow of very tiny particles called electrons through metals like copper, which are called conductors. If we interrupt the flow of electrons with a switch which opens or shuts the flow, the current will stop and the machine using electricity will be switched off. Electric energy itself cannot be stored except as another form of energy.

It is possible to store electrical energy in chemical batteries which can then be used to start the electrons flowing when we need electricity. For example, an electric torch battery stores energy and when we switch it on, the electrons flow and the electric energy turns into light energy.

A piece of coal is an energy store. When it is burnt in a power station, the heat produced heats water, which turns into steam, which turns a turbine. A turbine is a machine that uses the flow of steam to generate electricity. The electrons flow down the electricity wires to where electric energy is needed, for example to switch on an electric light. Instead of coal, we can use nuclear, gas, or oil fuels. The heat from all these fuels can change water into steam and generate electricity. We can also use the heat of the sun focused by mirrors to heat water to make steam and generate electricity.

We can also use the movement of wind, or water (the waves or running water from rivers or dams) to turn turbines to generate electricity without needing to make steam. We can also use the sun's light to cause a chemical reaction which makes the electrons flow along the wires without the need for a turbine.

Organic material (plants and human waste) can be safely treated to generate biogas via a biogas digester. The gas can be used directly for cooking and heating, and can also be used to generate electricity. But you get less usable energy from the electricity than you do from using the gas directly.





Renewable and nonrenewable energy

Energy sources are divided into nonrenewable and renewable energy sources. Both are used to generate the electricity we use today.

Nonrenewable energy cannot be replaced in a short period of time. These include fossil fuels (coal, oil, and natural gas) and nuclear energy (produced from uranium). There are limited supplies of coal, oil, uranium, and natural gas that can be mined, and once existing supplies are used up they cannot be renewed. Industrialised economies have been built on fossil fuels, using these as the main energy source.

Renewable energy is generated from natural resources such as wood, sunlight, wind, rain, tides, waves, biogas, and geothermal heat. These resources do not run out in the short term. Renewable energy technologies use the power of the sun, wind and water (ocean waves or river flows) to spin turbines to make the electricity we need in our societies today, and can also be used directly as heat energy or gas. Renewable energy can replace fossil and nuclear energy to combat climate change, and reduce pollution impacts on communities.



Non renewable energy sources

Fossil fuels: coal, oil, and natural gas

Oil, coal, and natural gas were created millions of years ago, from plant and animal materials that were once alive and were turned into fossils over time. Oil and natural gas are pumped from deep below the earth's surface and sometimes from under a seabed. Oil and natural gas are stored in large tanks until transported. Natural gas is lighter than air, is mostly made up of a gas called methane, and is highly flammable.

Coal is a hard, black coloured rock-like substance. There are three main types of coal – anthracite, bituminous, and lignite. Anthracite is the hardest and has a higher energy content; lignite has the least energy and is considered the poorest quality.

Nuclear energy

Nuclear energy is released from inside tiny atoms of uranium. Uranium is mined and the uranium ore is then refined to produce nuclear fuel which is then used to generate electricity.



<https://www.cartoon-stock.com/cartoonview.asp?catref=sgen127>



Renewable energy sources

Water

Moving water (streams, rivers, and oceans) can be a source of electricity – referred to as hydroelectric power – and can be a source of mechanical power to drive machinery. While hydropower accounts for one-fifth of the current power supply in the world, less than 10% of its potential has been utilised. New hydropower capacity in the DRC, Ethiopia, Mozambique, and Guinea is part of the agenda for energy development in Africa.



Geothermal energy

Geothermal energy comes from the natural heat of the earth. In some cases, this means tapping extremely hot temperatures via steam at great depths. In others, it involves the use of moderate temperatures at shallow depths. These are known as 'heat sinks' and are valuable for their use in creating energy. The second largest source of existing geothermal power supply globally is in East Africa, mainly in Kenya and Ethiopia.



Biomass

Biomass comes from plants, firewood from trees, ethanol from corn, and biodiesel from vegetable oil. In rural areas, animal waste, and plant material have been used for centuries for cooking, heating houses and providing light. Biomass is used to produce biofuels. Biofuels include vegetable oil, jatropha, soy, and rapeseed which when processed can run agricultural machines and other vehicles. They can replace fossil-based oils in transport. Ethanol or alcohol fuels are produced from wheat, corn, sugar beets, or sugar cane.



Wind

Wind energy can be used to turn the blades of a windmill to pump water. Wind energy can also turn the blades of a wind generation turbine to make electricity. Energy generated by wind can be used as an alternative to fossil fuels. Wind turbines can be built at different scales, from small wind generators on the top of buildings to large offshore power generators.



Solar

Energy from the sun, referred to as solar energy, can be used in many ways. Solar ovens can be used to cook food. Solar water heaters provide hot water. Electricity can be generated using the sun's energy. Solar power can provide enough electricity for one home or can produce sufficient electricity to feed into the national grid for industry.



Impacts of extraction of nonrenewable energy sources on people and the environment

The extraction, transportation, processing and burning of fossil fuels harms the environment and the planet, and has devastating social impacts.

The extraction and use of coal, oil, natural gas, and uranium contributes to environmental pollution, and ill-health amongst workers and communities living around mines, and industrial plants. The combustion of fossil fuels generates sulphuric, carbonic, and nitric acids, which fall to the earth as acid rain. We can see the effects of acid rain in the corrosion of tin roofs, and on soils which become infertile with continued exposure. Fossil fuels also contain radioactive materials, mainly uranium and thorium, which are released into the atmosphere creating environmental damage and exposing humans and the environment to radiation. Nuclear radiation remains harmful for hundreds of thousands of years. Heavy metals such as mercury, also emitted by fossil fuels, are harmful to the brain and other parts of the human body.



Coal mining methods, such as strip mining, have significant negative environmental impacts on land, water and air, and offshore oil drilling poses a risk to aquatic organisms and the livelihoods of fisherfolk. Oil refineries also have negative environmental impacts, including air and water pollution. The transportation of coal requires the use of diesel-powered locomotives, while crude oil is usually transported by tanker ships, which requires the combustion of additional fossil fuels. Uranium is mined in many African countries for supply to power stations in other parts of the world. But it is people in Africa who bear the environmental and health costs of uranium mining, amidst an increasing push by TNCs to increase the numbers of nuclear power stations in Africa.



South Africa is the only country in Africa with nuclear power stations, and it has two of them. Nuclear energy power plants are very expensive to build. Nuclear energy requires high levels of expensive regulation, and is closely associated with military use. Nuclear energy plants produce toxic waste that has to be stored for more than one hundred thousand (100,000) years. Toxic waste releases radioactivity which affects workers and surrounding communities. Nuclear accidents are devastating to surrounding communities who carry the impact forever.



The extractives industries cause devastating social impacts, such as land and water grabs, forced relocations of communities, social dislocation and destroyed livelihoods. Women as the primary producers of food for rural households are particularly affected by the loss of land and other natural resources, such as forests and water bodies, so critical to complex rural livelihoods. Social dislocation and loss of livelihoods often leads to the rise of prostitution and transactional sexual relations, and increased levels of interpersonal violence, particularly violence against women.



Source: Bobby Marie and Andrew Lindsey from *Understanding our Economy and Society*, 2004

Renewable energy for people and not for profit



Renewable energy offers a cleaner, safer source of energy. However, renewable energy in itself does not equal justice. Renewable energy technology development in the hands of corporations simply means they continue exploiting people and the environment in order to make profits. Corporate-controlled renewable energy projects in India, Mexico, and Italy have moved communities off their land, have endangered birdlife (in the case of windfarms) and do not guarantee affordable or free energy access for surrounding communities.

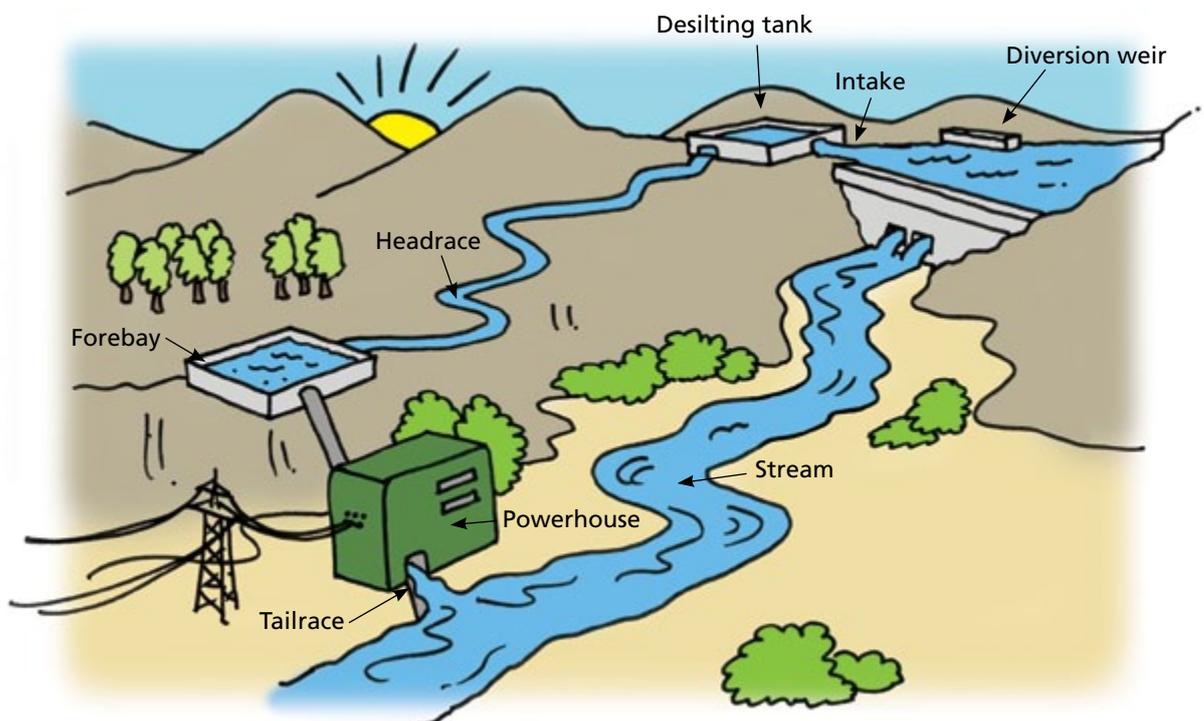


Hydropower accounts for one-fifth of the current power supply in Africa. The total hydropower potential for Africa is equivalent to the total electricity consumed in France, Germany, the United Kingdom, and Italy put together. But only around 5% of Africa's hydropower potential has been exploited. New hydropower capacity in the DRC, Ethiopia, Mozambique, and Guinea is part of governments' and the SE4All agenda for energy development in Africa.



However, mega and large dams displace people, damage the environment, are expensive, and usually do not benefit local communities. Peasant communities are often forced to move and their lands are flooded. Downstream, communities experience reduced water flow which impacts negatively on land and water-based livelihoods. Dams undermine the normal water flow and disrupt the life cycles of fish and other aquatic species. Countries dependent on hydropower can run short of power in droughts, which is increasingly common.

Mega dams produce methane, which is more harmful to the environment than carbon. The process of decision-making related to mega dam building is undemocratic and lacks transparency. Hydropower generated on a small-scale and through run-of-river schemes – which do not involve large water storage – generates fewer environmental and social costs and is preferred.



Run-of-river hydro scheme



African governments and the SE4All are promoting biomass in Africa because the region is rich in biomass resources and has abundant land for biomass production. In 2012, 80% of the African population used biomass.¹² Biomass could generate employment and requires simpler technology. However, biomass also has negative impacts. The smoke from burning biomass causes respiratory diseases which affect mostly women and children. This is because they are primarily responsible for the preparation and cooking of food in rural households. Fuel-efficient technologies reduce this risk.



The problem with biofuels at a large-scale is that agricultural land is turned over to crops grown for fuel, leading to food price increases and food insecurity due to food crop shortages. For this reason, WoMin rejects any form of biomass energy production which is not localised, small-scale and protects food crops. Limited amounts of biofuels can be made from local waste, or from problematic plant life such as algae, for local use without negative impacts.

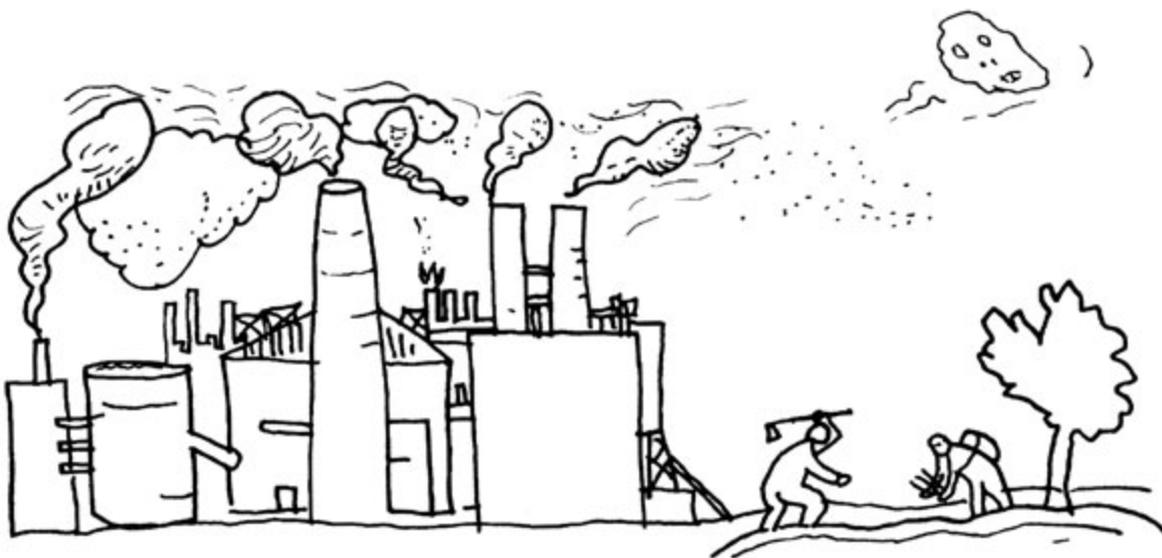


Wind energy is a more desirable alternative when compared with fossil fuels, but it will only be just and fair if it is subject to community and worker control through cooperative or collective ownership; and if it benefits the majority of people, and women specifically. This requires a radical shift from corporate control, dominance and ownership of research, production and implementation. Turning blades can disorientate birds and kill bats leading to environmental harm. And once large amounts of wind energy are connected to a grid, technology upgrades to the grid are needed. However, correctly placing turbines can avoid harm to birdlife and bats, and localised 'smart' grids are relatively simple to establish.

Solar energy can be used to mitigate climate change and is an important alternative to fossil fuels for meeting a range of needs, from direct use of the sun (for heating and cooking for example) to generating electricity on different scales – from small domestic use to large-scale use for local community industry.

Geothermal energy, energy from the natural heat of the earth, is a potential option in East Africa where the second largest source of existing geothermal energy supply in the region is Kenya and Ethiopia.

Without a shift in how it is researched, produced and used, renewable energy will not equal justice for poor communities. We need a shift away from corporate control to people's ownership and control of renewable energy. We need production processes which do not exploit workers, displace people or ruin the environment.



Source: Bobby Marie and Andrew Lindsey from *Understanding our Economy and Society*, 2004

SECTION 3

The economy, energy and the limits of a growth-oriented development model

How did we get to this point that Africa and the Global South experience such high levels of energy poverty and suffer such drastic effects of energy inequality? To answer this question, we need to take a brief journey into Africa's colonial past, and then look at how relations of exploitation continue between African countries and their former colonial powers, even today. In the current period exploitation continues through policies shaped by the dominant economic model of neoliberal capitalism. We highlight that these policies fuel a development model that has been referred to as 'maldevelopment'.



Source: Bobby Marie and Andrew Lindsey from *Understanding our Economy and Society*, 2004

A brief journey into the past

In the precolonial period, most African economies were agricultural. There was limited mechanisation, a limited division of labour and not much social differentiation or inequality between people. Land, like other natural resources, was communally owned and under the stewardship of traditional leadership structures which often included women.

Traditional African systems of production ensured that natural resources were used in ways that met human needs without undermining the integrity, stability, and beauty of natural biotic systems. Wind, water, tide and muscle from both humans and animals were provided as main sources of energy. Wind power in the form of windmills, water power in the form of water wheels, and wood and charcoal were the main fuels used for cooking, heating and other domestic uses.

While there were costs related to the use of traditional fuels – such as harm to the health of those who inhaled the smoke from wood burned indoors – there was nothing like the high levels of pollution and environmental damage we see today as a result of mining and industry.

This way of life changed with the arrival of British and European colonialists who turned Africa into a source of energy for the needs of industry and a source of food for people in their home countries. The industrial revolution had taken place in Europe, and the colonising countries and their corporations required sources of energy much greater than before. They found this source in their colonies in Asia, Africa, Central and South America. Political domination enabled them to commandeer these resources.



In the process, African traditional economies were destroyed, and sources of energy were grabbed by corporations headquartered in Europe. Africa essentially became a source of raw materials for industry and wealthy lifestyles outside Africa. Mass deforestation took place, and various raw materials, as well as food, was shipped from African countries to Britain and Europe.

http://www.hiiraan.com/images/2015/Feb/2015221635601295445729220Land_Grab.jpg

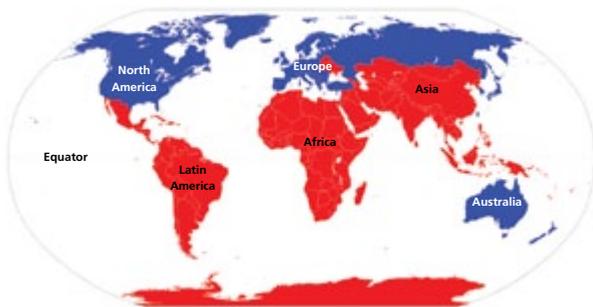
The industrial revolution provided the equipment to further mine or drill the already visible deposits of coal and oil. Fossil fuels and its products became an essential part of the industrial economy.

Colonialism is the domination of one country by another through the establishment of / grabbing of state power to guarantee political domination and exploitation of the labour and resources of the colonised country. Colonisation began as a result of changes in the mode of production in Europe especially during the industrial revolution. The industrial revolution ushered in a new process of production in place of the earlier feudal economy.

Neoliberalism is a small-state economic ideology based on promoting 'rational self-interest' through policies such as privatisation, deregulation, globalisation, and tax cuts.¹³

Neoliberal capitalism sees the market as the main distributor of resources and people as consumers, who buy and sell and who are in competition with each other. It is a system in which a country's trade and industry are controlled by private owners for profit, rather than by the state for public benefit.

Globalisation is a 'shorthand way of describing the spread and connectedness of production, communication and technologies across the world. That spread has involved the interlacing of economic and cultural activity' on a global scale.¹⁴ The dominant system has appropriated the term 'globalisation' to refer to a form of 'international economic integration which privileges ... the rights of investors and lenders, those of people being incidental'. In contrast, social movements and activists that contest this dominant paradigm imagine and build 'a different form of international integration, which privileges the rights of human beings'.¹⁵



The Global North includes Australia, Canada, Israel, Hong Kong, Macau, New Zealand, Japan, Singapore, South Korea, Taiwan, the United States, and all of Europe (including Russia).
The Global South includes Asia (with the exception of Japan, Hong Kong, Macau, Singapore, South Korea, and Taiwan), Central America, South America, Mexico, Africa, and the Middle East (with the exception of Israel).



Source: Bobby Marie and Andrew Lindsey from *Understanding our Economy and Society*, 2004

The colonial powers took land forcibly for commercial agriculture and industrial development. They forced African people into serving them as sources of cheap and unpaid labour. Peasant farmers lost their land and were forced to work in factories, mines and commercial farms. Large numbers of African people were captured and sold as slaves in the transatlantic slave trade.

African women lost their agricultural land and the natural resources they depended on for survival, and their position in society was worsened. Before colonial rule women in most societies were the main agricultural producers and healers. This position in society gave them status and authority. The shift to commercial agriculture and to mining and extraction of raw materials undermined the role of the traditional economy and hence undermined the position and status of women in society.

¹³ <http://anotherangryvoice.blogspot.co.za/2012/09/what-is-neoliberalism-explained.html>

¹⁴ <http://infed.org/mobi/globalization-theory-and-experience/>

¹⁵ <https://en.wikipedia.org/wiki/Globalization>

Neoliberal capitalism and 'maldevelopment'

African countries gained independence mainly through struggles for liberation in the 1950s and 1960s. But the newly independent African states found they could not be totally free as they were tied to the economies of their former colonisers.¹⁶ Added to this, many leaders of the newly independent countries actively enabled the former colonial masters to continue their exploitation of African economies and people.¹⁷ Those leaders who were seen to challenge the colonial powers were overthrown or assassinated, as in the cases of Thomas Sankara of Burkina Faso and Patrice Lumumba of the Congo (now DRC).

After a decade or two of independence, many African countries adopted neoliberal capitalist economic policies. In many cases countries were forced by agencies such as the World Bank and the International Monetary Fund (IMF) to adopt these policies, which are until today, controlled by the former colonial powers, and countries like the United States.

Neoliberal capitalism sees the state as having a very limited role in distributing goods and services. With neoliberal policies the main distributor is the market. This means that companies become the main actors who produce and distribute goods and services, and people in the country become consumers who buy the services they need from these profit-making companies. Services that are essential to human life and well-being – such as water, energy, healthcare, housing, and education – are sold by private companies for profit. Government's role is simply to create legal reforms and provide a supportive environment so that companies can make their profits with ease. Governments, in this role, serve the interests of profit-making companies instead of serving the people. Governments help a few to enrich themselves while the majority of the country's people find it increasingly more difficult to gain access to water, energy, education, healthcare and other basic needs because they do not have the money to pay for these necessary services.

In Africa, neoliberalism initially took the form of structural adjustment programmes (SAPs). These programmes reduced the civil service through massive retrenchments, made permanent workers casual or part-time, privatised public enterprises and introduced fees for basic necessities that were previously free or obtained locally for little or no cost.



https://scottlong1980.files.wordpress.com/2014/07/polyp_cartoon_imf_structural_adjustment11.jpg?w=584&h=340

¹⁶ Stephen Ocheni & Basil C Nwankwo (2012) Analysis of colonialism and its impact in Africa, *Cross-Cultural Communication* 8(3): 46–54

¹⁷ Stephen Ocheni & Basil C Nwankwo (2012) Analysis of colonialism and its impact in Africa, *Cross-Cultural Communication* 8(3): 46–54

Today Africa continues to be a source of raw materials and food for the richer nations of the world in the Global North. Africa continues to produce fossil fuels and many other commodities for export while the majority of its people continue to live in abject energy and food poverty.



Source: Bobby Marie and Andrew Lindsey from *Understanding our Economy and Society, 2004*

Neoliberal policies continue into the present with user fees, the market as the main distributor and the state in a limited role. Without the means to pay for services people have to find ways to meet their and their families' basic needs and the burden to find water, healthcare, food, and energy fall on women's shoulders. Women have to work harder and longer hours to fetch water from rivers, or to care for the sick in the home in the absence of affordable healthcare services.

The burden of making up for the lack of these services falls to women because of the division of labour which places the responsibility of work in the home on women. In most societies it is women who are expected to cook, clean, care for the elderly and the sick in the home. This work is unpaid and women are expected by their families, by corporations, and by the state to 'step up' when there are cuts in these services. Companies and the state benefit from this 'free' labour women provide and women pay the cost in many ways including in negative impacts on their health.

The current model of development has negative outcomes on people, society, and the environment. Those who believe that the present system of economic development is unjust and exploitative have come up with the term 'maldevelopment' as the best way of understanding this model of economic development. The emphasis of 'maldevelopment' is on western cultural forms of production, greater use of expensive and inappropriate technology, and on models of production which only see profits for a minority.

With 'maldevelopment', subsistence agriculture is not valued, and women are not valued. African women's perspectives and work to reproduce and sustain life and ensure harmony with nature are destroyed and undermined under 'maldevelopment'.



Source: Bobby Marie and Andrew Lindsey from *Understanding our Economy and Society, 2004*

The poverty crisis of Africa and the Global South in general arises from the growing scarcity of water, food and energy caused by 'maldevelopment'. This poverty touches women most severely, because they are the poorest among the poor and because their work ensures the survival of their families in the home.

Neoliberal capitalist policies resulting in 'maldevelopment' are also causing one of the major catastrophes of our times – climate change – as we discuss in the next section.

SECTION 4

Climate change, the planetary emergency situation, and Africa's experience

A defining challenge of our present and of our future is climate change. Climate change has already resulted in disaster, especially in the Global South. It has resulted in a large number of deaths, in increased hunger and spread of disease, with women and children being the worst affected. Conflicts increase as people fight for control of scarce water and arable land. Whole communities are being displaced and the survival of whole nations, such as small island states, come under threat.

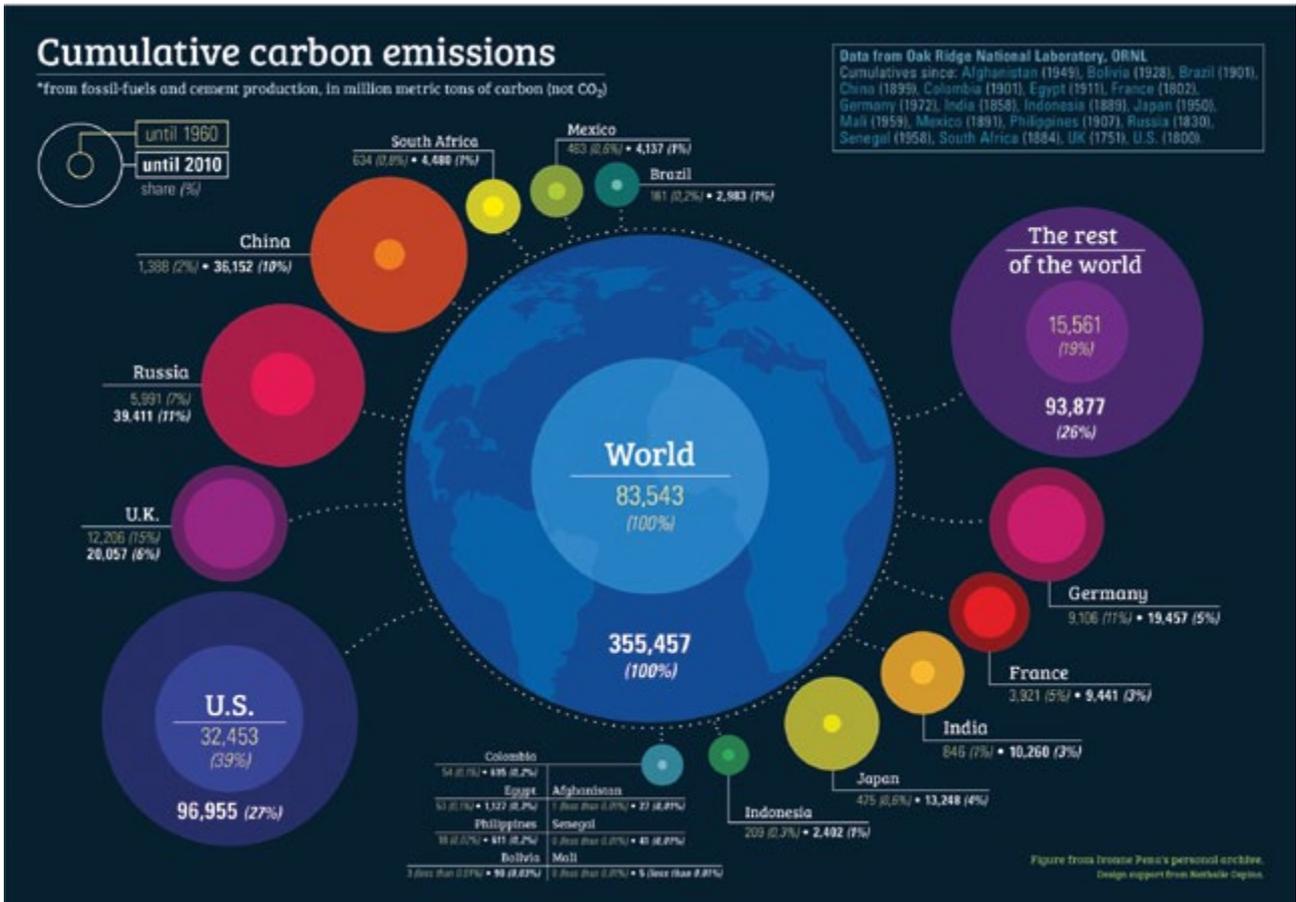


Climate change and the above mentioned disasters are directly connected with neoliberal capitalism. Climate change is largely the result of uncontrolled pollution, mostly caused by overproduction and overconsumption of the middle classes and elites in the Global North and South.

Carbon and other emissions caused by these industries enter the air and have disastrous effects on the environment, economies and the well-being of people. Rising levels of these emissions called GHGs, and other heat trapping gases in the atmosphere warm the earth. The warming of the earth is referred to as global warming. This produces rapid, disruptive changes including rising sea levels, melting snow and ice, extreme heat events, fires, droughts, extreme storms, rainfall, and floods.

Climate is the average temperature in a place over a period of time. It is the regular patterns of temperature, rainfall, wind, snow, humidity, and seasons. Climate patterns play an important role in shaping the natural ecosystems, human economies, and cultures.

Climate change affects hardest those least responsible for creating this crisis. It is the industrialised nations in the Global North that contribute most to climate change. But it is people in the Global South who face its worst impacts. This can also be seen as a form of environmental racism, as it is poor people in the Global South and people of colour who suffer the most.



The so-called Annex 1 countries (the 43 top wealthiest countries mainly in Europe, North America, and Australia) have historically emitted up to 80% of the GHGs that have led to climate change globally. They have contributed the most to climate change but they make up only about 20% of the global population. Those in power do not question the current model of industrial production geared to serving the profit interests of corporations and the consumerism of the middle class and elites in the Global North who emit the larger share of GHGs. They are not willing to change the existing models of neoliberal capitalism and 'maldevelopment' as they benefit from this.

Yet these models need to be challenged. Climate change cannot be addressed by the same frameworks that got the world into this crisis in the first place. Solutions to climate change cannot be market-driven, self-centred and top-down. Solutions should be people-centred, community-based, women-driven and shaped by decentralised processes of problem solving. Rural and peasant women from Africa and other parts of the globe should be central to climate solutions

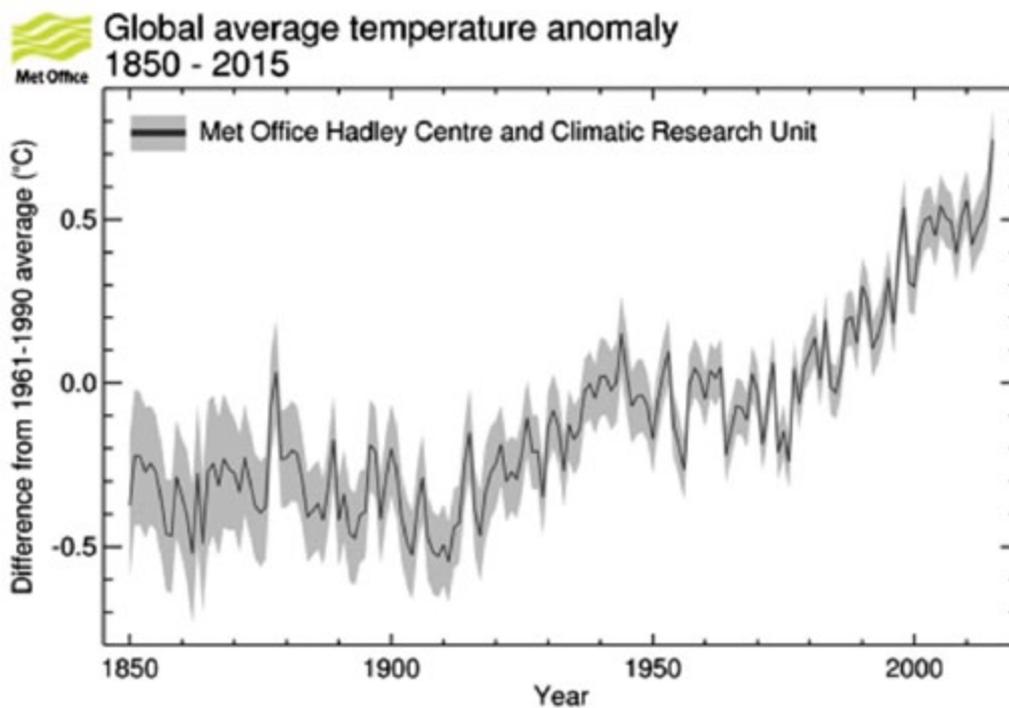


The catastrophic impacts of climate change

Across the world poor people are hardest hit by climate change and environmental degradation. This is because they tend to depend more heavily on land and natural resources for survival, and because they have fewer means to deal with the impacts of climate-related catastrophes. Climate change affects their livelihoods, the economy, agriculture and food production, caregiving, migration, work, settlements, etc.

Because of unequal gender power relations, climate change has more adverse effects on women and girls than their male or boy counterparts. In almost all societies women have less access to resources and decision-making power than men, and women are expected to do the unpaid work of cooking, cleaning, and caring for the family. Having less access to resources means poor women are generally poorer than even poor men. Having the responsibility to secure water, food and energy for cooking and heating means that when these resources are not easily available women have to walk long hours and face considerable danger in accessing water, and sources of fuel. Having less decision-making authority limits women's coping capacity.

Climate change is real and is happening faster than earlier understood. We know this from comparing average temperatures over time. Average global temperatures have been recorded since 1850, at a time when there was very little industry. When we compare mean global temperatures over time we see that in 2015 temperatures reached 1°C above 1850 levels for the very first time. We also see that the average global temperature in 2015 was 0.75°C higher than the long-term average between 1961 and 1990, and is also much higher than the 0.57°C in 2014, which at the time was seen as record-breaking. At the time of writing, 2016 is expected to set another heat record. These recordings of temperature are taken by the National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA) of the US, as well as by the UK's Met Office Hadley Centre. The following table shows the UK Met Office¹⁸ readings over time.



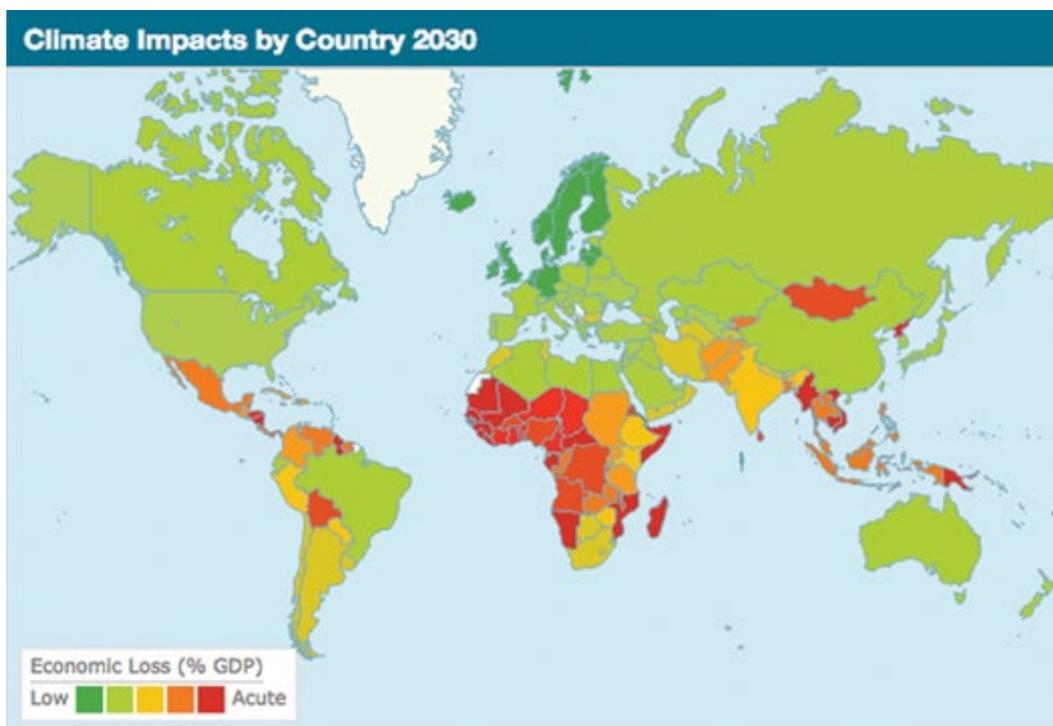
¹⁸ UK Met Office. 2015: the warmest year on record, say scientists. <http://www.metoffice.gov.uk/news/releases/archive/2016/2015-global-temperature>



Climate change leads to deaths, hunger, and disease

Climate change results in reduced access to potable water, decreased crop and wood-fuel yields, and reduced arable land. Flooding and the contamination of water leads to an increase in the prevalence of diseases such as malaria and diarrhoea. This was confirmed in a study commissioned by 20 governments¹⁹ (the Vulnerable Twenty Group) whose countries are most threatened by climate change. The study reported 400,000 deaths in one year in these countries, due to climate change;²⁰ 90% of these deaths were in developing countries, and most were in Africa where one thousand children die every year.

Another major cause of deaths according to this study, was air pollution and indoor cooking smoke – women usually cook with wood in poorly ventilated structures and pollution from the smoke is made more severe by general environmental degradation resulting from climate change.



<http://www.thecvf.org/web/publications-data/climate-impacts/>

The burning of fossil fuels generates not only climate changing gases, but also a wide range of other pollutants, that impact directly on local communities, their land, air and water, resulting in even more negative health, food and water security outcomes.

As global warming intensifies these harmful impacts are expected to rise and the death toll could reach 700,000 a year by 2030 in the 20 countries involved in the study.

¹⁹ The original V20 members are Afghanistan, Bangladesh, Barbados, Bhutan, Costa Rica, Ethiopia, Ghana, Kenya, Kiribati, Madagascar, Maldives, Nepal, Philippines, Rwanda, Saint Lucia, Tanzania, Timor-Leste, Tuvalu, Vanuatu, and Vietnam

²⁰ CVF (2012). *Climate Vulnerability Monitor: A Guide to the Cold Calculus of a Hot Planet*, <http://daraint.org/wp-content/uploads/2012/09/CVM2ndEd-FrontMatter.pdf>



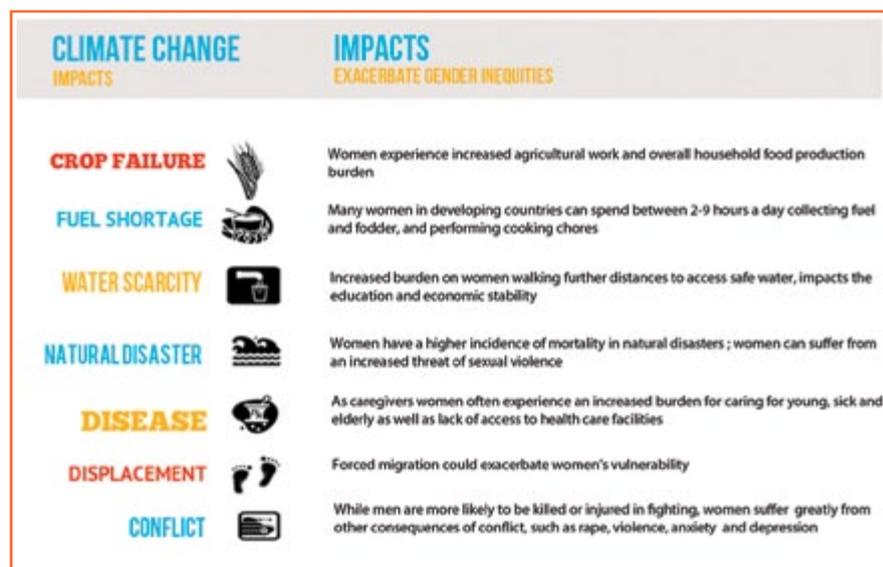
Climate change leads to the displacement of millions of people

Floods, rivers drying up, drought, crop failure, and dying forests have led to the displacement of communities. Rural women are the most affected by displacement with studies by UN agencies showing that of the 26-million people displaced by climate change since 2010, 20-million were women.²¹

Climate change is expected to lead to the displacement of many more millions of people in the coming years. Global warming is expected to lead to rising sea levels which will put land and territories close to the sea under water. Climate exile is already a reality in a number of small island nations. The Carteret Islands, a part of Papua New Guinea, began evacuating its 2,700 inhabitants in 2009. The Maldives government is trying to find a suitable place to move its 380,000 residents before rising sea levels overwhelm its 26 atolls.²² Bangladesh is another country facing the challenges of the rising oceans.

In other areas global warming is expected to make farming and other traditional livelihoods impossible, and people will most likely be forced to move from these areas to guarantee their survival. The Horn of Africa, for example, is dealing with drought and desertification.

Most rural residents in Somalia, Ethiopia, and Eritrea who engage in subsistence agriculture are already severely affected by decreasing crop yields.



http://www.wedo.org/wp-content/uploads/GenderImpacts_Graph-WEDO.jpg

One UN study estimates that 330-million people will be displaced if global temperatures increase by 3°C to 4°C.²³ Other studies conducted by various non-governmental organisations (NGOs) expect higher numbers of people will be displaced. International law does not currently protect environmental refugees so the plight of these many hundreds of millions of people is uncertain.

The findings of UN studies on displacement make it clear that poor women will represent the greatest proportion of those displaced. The studies also make clear that poor women will have to deal with food insecurity and violence, including sexual violence, caused by displacement and precarious lives in camps and refugee settlements.

²¹ Gender and the Climate Change Agenda (2010) *The Impacts of Climate Change on Women and Public Policy*. London: Women's Environmental Network; see also Jennifer Hattam (2010) Global Warming Hits Women Hardest, *Business / Corporate Responsibility* (3 March 3), <http://206.41.125.21/showthread.php?p=1545940>

²² Elliott Negin (2015) *Think Today's Refugee Crisis is Bad? Climate Change will Make it a Lot Worse*, Huffington Post, http://www.huffingtonpost.com/elliott-negin/think-todays-refugee-cris_b_7691330.html

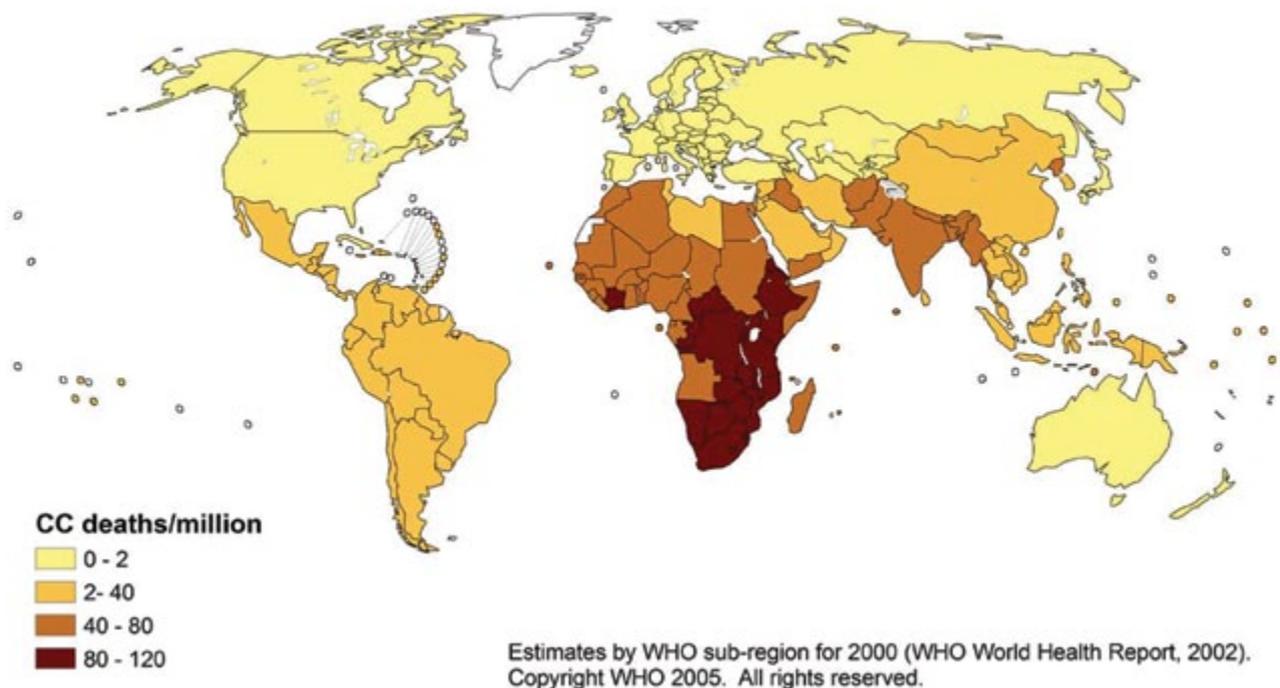
²³ UNDP (2007) Human Development Report 2007/2008, *Fighting Climate Change: Human Solidarity in a Divided World*, http://hdr.undp.org/sites/default/files/reports/268/hdr_20072008_en_complete.pdf

Major threats to health, livelihoods, well-being and life

The UN's Intergovernmental Panel on Climate Change (IPCC) has concluded that no other continent would be as severely struck by climate change as Africa. This would be so even though Africa accounts for less than 4% of the world's annual GHG emissions responsible for global warming.

Africa as a continent is extremely vulnerable to climate change because of its geographical position, widespread poverty, and existing low levels of genuinely sustainable development. These factors also mean that African countries have limited capacity to adapt to the ravages of climate change.

Deaths from climate change



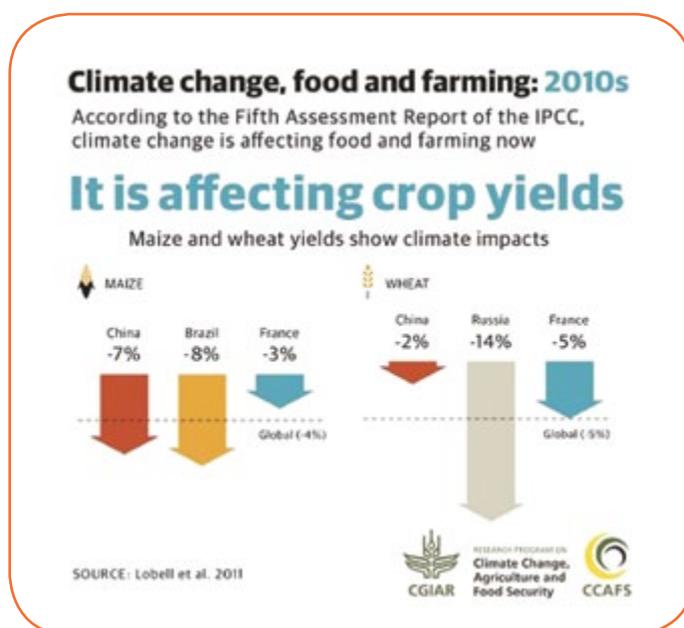
As the hottest continent, Africa is expected to warm up to 1.5 times faster than the global average, according to the IPCC.²⁴ This will drastically affect food production, rainfall and associated water access, livelihoods and other dimensions of life, and render large areas of already vulnerable territory uninhabitable.

IPCC figures show that rising temperatures and unpredictable rains will make it harder for farmers to grow certain key crops like wheat, rice, and maize. IPCC predicts that by 2050, yields for maize in Zimbabwe and South Africa could decrease by more than 30%. Other crops on which many Africans subsist will also be affected, especially those grown in non-irrigated (dryland) conditions.

It is estimated that by 2050 between 75-million and 250-million people in Africa will be under severe water stress and in some countries agricultural production will be reduced by 50%. This is already being borne out by the El Nino drought in southern Africa, the most severe in 35 years. The El Nino weather phenomenon is deepened, extended and made more severe because of climate change.

²⁴ IPCC (2007) *Climate Change 2007: Impacts, Adaptation and Vulnerability*, https://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4_wg2_full_report.pdf

A study published in 2000 predicted that by 2100, Chad, Niger, and Zambia could lose practically their entire farming sector due to climate change.²⁵ Even without climate change, there are serious concerns about agriculture in Africa with a number of countries already facing semi-arid conditions that make agriculture challenging.



Climate change impacts on agriculture translate into particular hardship for women farmers who currently account for 45% to 80% of all food production in developing countries. Women make up about two-thirds of the agricultural labour force in developing countries, and between 70% and 90% in many African countries.²⁶

The IPCC reports that by 2025, 250,000 children in Mali are expected to suffer stunting, or chronic malnutrition, and that 'climate change will cause a statistically significant proportion' of these cases. By 2050, the population of sub-Saharan Africa is expected to more than double to 1.9-billion, which will present the challenge of feeding even more people even as agricultural production faces huge challenges.

Africa has close to 320 coastal cities, with an estimated population of 56-million people (2005 estimate) living in low elevation coastal zones (less than 10 metres above sea level). Towards the end of the 21st century, projected rising sea levels will affect these low-lying coastal areas. Further, pollution from fossil sources also results in the acidification of the ocean, which has already begun to show harm to sea life, thereby affecting fisherfolk in ocean coastal areas.

Climate change thus threatens Africa's economic development, long-term prosperity, and the survival of the majority of its population.



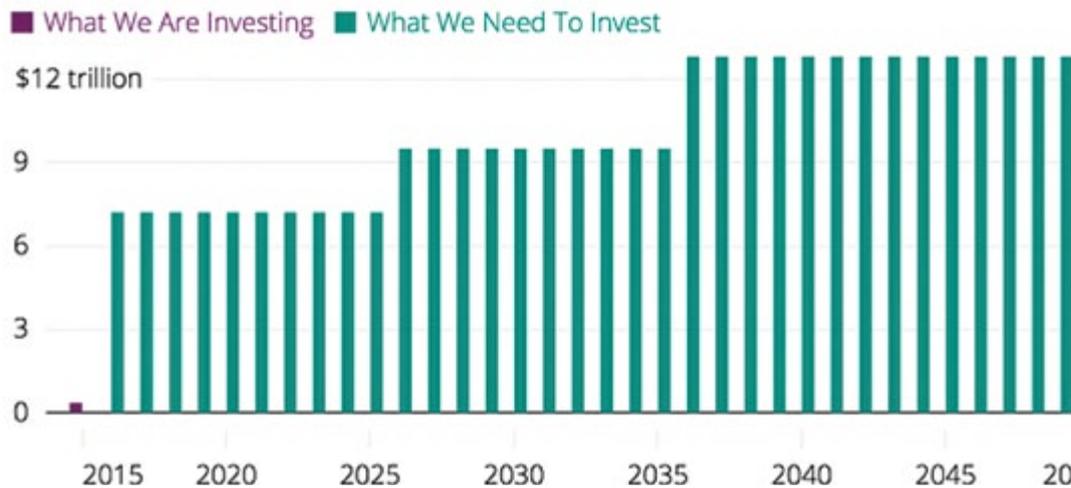
²⁵ Robert Mendelsohn, Ariel Dinar & Arne Dalfelt (2000) *Climate Change: Impact on African Agriculture*, ipcc-wg2.gov/nj-lite_download.php?id=6504

²⁶ UN Women Watch (2009) *Women, Gender Equality and Climate Change*, http://www.un.org/womenwatch/feature/climate_change/downloads/Women_and_Climate_Change_Factsheet.pdf

Financial resources are needed to address these impacts

African countries will need enormous financial resources to address the ravages of climate change. These are resources they simply do not have. According to the African Development Bank, African countries will need US\$20–30-billion for climate adaptation every year for the next two decades.²⁷

The Massive Climate Finance Gap



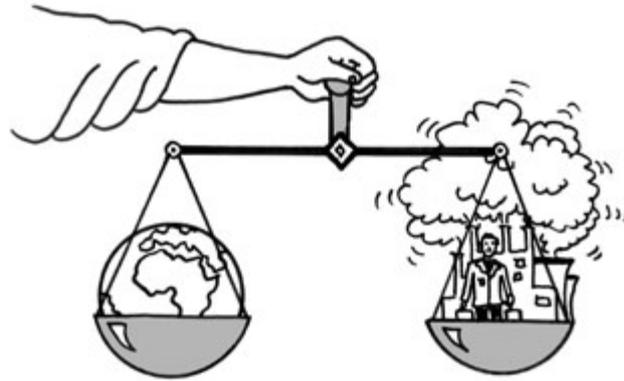
The principal intergovernmental body to tackle climate change is the UN Framework Convention on Climate Change (UNFCCC) established in 1992 during the Earth Summit in Rio de Janeiro, Brazil. Every year the UNFCCC holds a high-profile Conference of the Parties (COP), which is attended by 196 member states.

International discussions on climate change within the UNFCCC and at COP 21 have not made clear how powerful countries in the Global North will respond to the crisis faced in Africa, nor have these discussions made clear how the international community will address climate-induced displacement of people, if at all. At COP 21, African negotiators lobbied for firm financial commitments as well as agreements to curb emissions. However, agreements reached at COP 21 did not make clear whether and how developing countries will be provided with financial support to respond to climate change, and there were no commitments on compensation for loss and damage suffered as a result of climate impacts.

That the Global North has a responsibility to address the crisis in Africa is very clear – it was their actions through colonialism in the past, and neoliberal ‘maldevelopment’ today that contributes to the crisis in Africa, as we highlighted in Section 3. However, the historic responsibility and obligation of developed countries to reduce their emissions was diluted in the adoption of voluntary pledges, called Intended Nationally Determined Contributions (INDCs) at the COP 22 in Paris. The focus has shifted to current emissions, rather than historical ones and this transferred the burden of action to developing countries, in particular to China and India, leaving the powerful countries of the Global North off the hook.

²⁷ African Development Bank (2011) *The Cost of Adaptation to Climate in Africa*, <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Cost%20of%20Adaptation%20in%20Africa.pdf>

The responsibility of wealthy countries to Africa and the Global South is referred to as 'climate debt'. Climate debt has two aspects, an emissions debt and an adaptation debt. The emissions debt comes from the huge carbon footprints of wealthy countries, that is the large amount of carbon dioxide they release into the atmosphere. The overuse of their share of the atmosphere substantially diminishes the earth's capacity to absorb GHGs. The adaptation debt of wealthy countries comes from the negative effects of their excessive emissions, which contribute to escalating losses and damage and limits the development opportunities for poor countries. The sum of the emissions and adaptation debts constitutes the 'climate debt' of wealthy countries.²⁸



Climate politics – the domination of the Global North and big business

Solutions pursued by governments and big business fail to address the root causes of climate change that relate to the existing pattern of 'maldevelopment'. Both governments and big business focus on profit-making from existing forms of production that places profits above all else, even if this means destroying people and the planet.

The real solution to the catastrophe of climate change is two-fold: first, to stop any new fossil fuels extraction; and second, to get the Global North to reduce its overconsumption. This will result in a deep cut in emissions, reduce pollution,

and avoid a runaway temperature increase. These solutions require a shift away from a fossil fuels based and consumerist, capitalist economy. It requires urgent action by the owners of oil corporations, coal power plants, agri-chemical companies, the airlines, and other corporations responsible for emitting most of the GHGs that causes global warming. It requires that these corporations 'keep the oil in the ground, the coal in the hole, and the gas under the grass'. It requires firm decisions by our governments, including the intergovernmental UNFCCC, and binding enforceable agreements to slash carbon emissions.

GOING THROUGH LIFE WITH FREE-MARKET BLINDERS ON...



²⁸ Matthew Stillwell (2012) Climate Debt: A Primer, *Development Dialogue No. 61: Climate, Development and Equity*, Uppsala: Dag Hammarskjöld Foundation

But it is clear that rich countries and big business are not interested in these solutions. Big business has intervened in international climate discussions to make sure the measures put in place will serve their interests. They have made sure these measures are market based, and that they will be allowed to continue mining and extraction, and promote continued overconsumption by the North.

Poor and developing countries are often bribed, bullied and betrayed in international meetings and negotiations of the World Trade Organization (WTO), the UNFCCC, and international financial institutions (IFIs). Rich countries get the results they want in such processes. This is because of the unequal power relations between rich and poor countries, as well as between and amongst civil society, state and big business (national monopolies and TNCs).

The hypocrisy of big business in multilateral international platforms

Big business lobbies hard at the annual UNFCCC COP to influence the outcomes of negotiations, and to prevent policies that will hinder their profits at all costs. The success of big business in influencing outcomes is clear. Despite the inclusion of climate change in policies after the 1992 Earth Summit and despite over 20 years of meetings, the total global human-made GHG emissions have continued to increase.²⁹ The UNFCCC and COP processes are not even meeting their own very basic objective of stabilising GHG emissions that are causing climate change.



<http://www.commondreams.org/news/2015/05/27/meet-corporate-villains-sponsoring-cop21-climate-talks>

²⁹ Figures from the IPCC 5th Assessment Report show the annual GHG emissions growth in an average of 1.0 gigaton of carbon dioxide equivalent per year during the years 2000 to 2010 as compared with 0.4 gigaton per year in the period 1970 to 2000.

Big business lobbies through partnerships with national and UN programmes dealing with climate and the environment, and through sponsoring studies that downplay the harmful environmental impacts of corporations. Big polluters like Monsanto, Shell, BP, and Volkswagen – affiliated to the World Business Council for Sustainable Development (WBCSD) – present themselves as key players in solving climate change. The reality, however, is that these very companies continue to produce significant pollution that causes climate change.

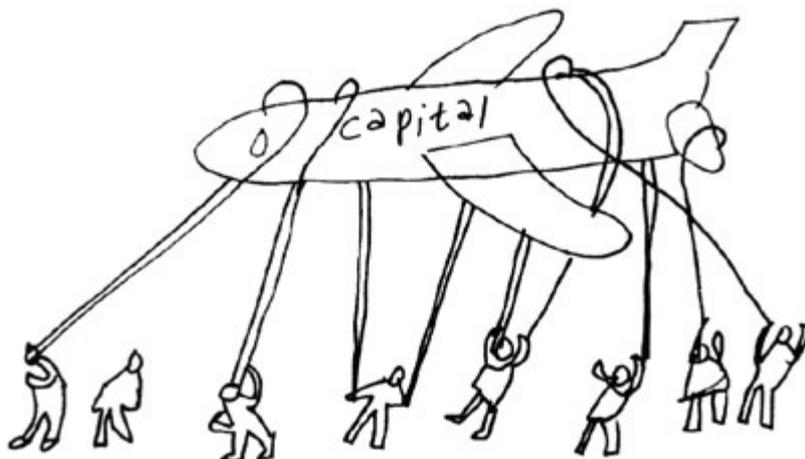
Apart from being the most affected by climate change, people in the Global South are also the most affected by its false solutions. Solutions advanced by governments and big business, such as agro fuels, mega-dams, genetic modification, tree plantations, and carbon-offset schemes are profit-making schemes. These solutions are supposed to address climate change, but in reality they produce more emissions.

At COP 20 in 2014, Bolivian president Evo Morales criticised delegates for having little to show for over two decades of climate change negotiations other than ‘a heavy load of hypocrisy’. Morales noted that climate change was used by wealthy countries as an escape valve to avoid discussing basic issues such as the model of capitalistic development.³⁰

At COP 21 in 2015 delegates acknowledged that the Copenhagen target of 2°C of global warming is too high and already dangerous.³¹ In line with this concern the Paris Agreement Preamble of COP 21 set out aspirations to keep the world’s temperature below ‘2°C or not more than 1.5°C’. However, there were no agreed actions to ensure this and quantified emissions targets were off the negotiating table. Instead, the agreement allows, and even encourages, large corporations to continue burning oil, coal and gas, which will cause excessive heat to the planet for decades to come.

According to the UN Environmental Programme (UNEP) report, if governments meet their current national commitments to lower emissions as agreed in the INDCs, this would mean a 2.7°C increase in global temperatures above pre-industrial levels.³² This is well beyond the ‘acceptable’ range. Added to this, mechanisms to review implementation of national commitments and their effects should be more frequent than the five-year period set by the current agreement.

Of even greater concern is that these mechanisms only come into force in 2020. Huge amounts of additional carbon will have been pumped into the atmosphere by then, making it impossible to limit global warming to 2°C, let alone 1.5°C.



Source: Bobby Marie and Andrew Lindsey from *Understanding our Economy and Society*, 2004

³⁰ Telesur (2014) *Evo Morales Slams Richest Countries over Global Warming*. <http://www.telesurtv.net/english/news/Evo-Morales-Slams-Richest-Countries-over-Global-Warming-20141209-0019.html>

³¹ Climate change impacts differ in every country; a 3°C global average increase could mean a more than 6°C temperature increase in Africa and a more than six-fold increase in the frequency of climate-induced calamities that are already ravaging climate vulnerable countries

³² UNEP (2015) *The Emissions Gap Report 2015: A UNEP Synthesis Report*, http://uneplive.unep.org/media/docs/theme/13/EGR_2015_301115_lores.pdf

SECTION 5

Finding just solutions to energy poverty and the impacts of climate change



Solutions to energy poverty, and to alleviating the problems of climate change need to be grounded in a different logic from the exploitative economic system that led to these problems in the first place.

In earlier sections we highlighted the extent of energy poverty in Africa. This lack of access to safe and clean energy is a major constraint for personal, social, and economic development. Solving energy poverty is therefore a key step to addressing poverty in Africa. However, it is essential that energy poverty is addressed through clean, efficient, and democratically controlled energy production and use.

How to provide safe sources of energy to the large numbers of people who have no access to adequate energy, without causing greater harm to people and the environment, is a huge challenge. The way we currently produce, distribute and consume energy is unsustainable, unjust and harms communities, workers, the environment and the climate. We also need to think beyond electricity as a source of energy. In addition to electricity we should include in our solutions locally generated safe and free energy resources for all, especially women.

Much of the discussion on providing for household needs focuses on a supply of electricity. This assumes a level of affordability, and often forces people into a more cash-based economy. It is critical that safe and clean energy for all, especially for women, is based on multiple sources of local energy, not only electricity. Non-electric sources should be used directly for energy, and not just converted into electricity.

In finding solutions to energy poverty we need to ensure energy justice – that is the democratisation of energy planning and decision-making. We need to find ways to roll back the power of corporations and their friends in government, so that communities and rural women, and not corporations and government elites, are in control of decision-making about energy and development more generally.

We need to transform where most of our energy comes from. The move to renewable sources of energy is key since fossil fuels based energy production and use currently account for around two-thirds of GHG emissions.³³ We need to transform the conditions under which energy is produced, so that decent work is created and people's livelihoods are supported. We need to make sure energy provision is more democratic. All of this means that the energy sector must be at the heart of global action to tackle climate change which results from the current exploitative economic system.



Climate Our Future from People's Climate March by Reuters.

³³ International Energy Agency (2015) *CO2 Emissions from Fuel Combustion*, <https://www.iea.org/publications/freepublications/publication/CO2EmissionsFromFuelCombustionHighlights2015.pdf>

Mini grids maintained by a local community

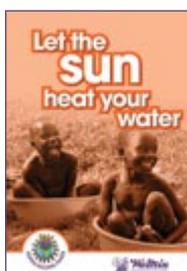
While we need to think beyond electricity we also need to look at how electricity provision can be made more efficient and more democratic. We need to move to smaller electricity grids which can be run and maintained by a local community. Large grids are not very efficient as electrical energy is lost along the way because of inefficiencies in transmission technology. It is estimated that 28 of 100 units of electricity are lost along the wires from the power station to people's homes in sub-Saharan Africa.³⁴

Electricity grids move electricity from large-scale generation projects to where the electricity is needed. Our cities, towns and rural landscapes are often crisscrossed with power lines that carry the electricity from where it is produced to where it is needed. These electricity transmission lines are built to carry large amounts of electricity to be used in industries such as mining. In a local town, the power lines are built to carry much smaller amounts of electricity for household use. The towers we see across the land carrying cables and the wires that connect towns and households are part of what is usually called the national electricity grid. These are usually 'owned' and managed by central government.



<http://e4sv.org/transforming-rural-communities-through-mini-grids/>

See the Women Building Power information booklets³⁵ for examples of simple solar technologies that can be built to heat and clean water, cool food, and cook with less energy.



A different, more efficient, way of using electricity is to establish smaller electricity generation plants close to where the needs are, to reduce the wire losses along the way. The users of that electricity can be connected into a network, called a 'mini grid'. Mini grids are local grids, and local power stations could be owned, run and maintained by a local community. In time and when more power is needed, mini grids could be linked to each other and to the national grid.

A stable and secure supply of electricity can be achieved using many decentralised power plants. It is less risky to have many smaller generation plants. If there is a problem with one of the many smaller power plants, some power will be lost but the other power stations will carry on generating electricity. In the case of one large central power plant, if there is a problem with the plant there will be no power.

Because of the losses of energy along the wires described above, it is not always wise to use electricity for all our energy needs. Using different energy sources for different needs also makes us more energy secure. For example, using gas to heat your home and cook is very efficient. And if there is a problem with your electricity supply you will still be able to cook and have a warm home. Designing homes that are cool in summer and warm in winter can save energy and make life more comfortable, especially in households with limited income to spend on energy. Using the power of the wind and the sun directly can also lessen the daily burden of women with regard to energy needs.

³⁴ T&D World Magazine (2015) *Electricity distribution and power challenges create investment opportunities*. <http://tdworld.com/overhead-distribution/electricity-distribution-and-power-challenges-create-investment-opportunities>

³⁵ <http://womin.org.za/>

The question of funding

In many cases governments give lack of funding as the reason for slow change in moving to renewables, and in meeting targets set in intergovernmental fora such as COP 21, and the SE4All effort.

To address immediate and long-term impacts of climate change and to help them in climate change mitigation and adaptation, developing countries require the transfer of finance and technology from national, regional, and international entities.

Funding is also needed to meet the UN Sustainable Development Goal 7 (SDG7) target of ensuring access to affordable, reliable, modern, and sustainable energy for all by 2030.



Source: Bobby Marie and Andrew Lindsey from *Understanding our Economy and Society*, 2004

Some of this need was to have been met through the Green Climate Fund (GCF) set up as a system of climate aid at COP 16 in 2010. However, only a handful of countries have honoured their commitments to the fund. A total of US\$100-billion a year since 2010 should have been available to help developing countries cut GHG emissions and cope with the effects of global warming until 2020. During COP 21 in 2015 it was disclosed that only US\$62-billion had been provided from developed country governments, development banks such as the World Bank, and private sector institutions. The US is the most significant donor country that reneged on its promised US\$3-billion contribution. Other developed countries are also reluctant to fulfil their commitments.

Instead of money flowing directly through the GCF, contributor countries prefer to funnel their funds through channels they control, like their own bilateral agencies (for example, the US through USAID; Japan through JAICA, etc) or through dedicated World Bank funds.

Apart from lack of commitment from donor countries, there is also the problem of transparency. The fund has no information disclosure policy and no accountability mechanism for funding approval. For example, indigenous communities in Peru were not adequately consulted before the approval of US\$6.2-million for the Peruvian wetlands programme, which will affect their territories. They were not consulted and there was no mechanism to seek their approval.

While funding is necessary, and a part of the debt wealthy countries owe to the Global South, in our view the greater reason for slow change in meeting the goals set by these intergovernmental and UN processes is that they are located within the current exploitative economic paradigm. The notion of free local energy (for example) is not even being discussed within these processes. The emphasis is still on profits for companies, and people – especially women – should pay for energy they cannot afford.

We advocate that funds be made available without the requirement that solutions be market-based and within the logic of an unjust and inequitable energy and economic system.

SECTION 6

Transformed energy systems from an African ecofeminist perspective

African women need to be at the forefront of developing energy alternatives. Existing and potential responses to the energy question from the perspective of African women include three approaches: the Welfare approach, the Women as Renewable Energy Entrepreneurs approach, and an Energy Transformative approach.

In this section we highlight the limitations of the first two approaches – the Welfare and Women as Entrepreneurs approaches, and we advocate Energy Transformation as the preferred approach to meet the needs and interests of poor women.

The Welfare approach

Interventions under a Welfare approach support women to better perform their energy work. They improve women's lives in practical terms. They save women's time and energy. Interventions such as subsidies for solar water heaters and the use



of hot boxes for cooking save women's time in fuel collection. Interventions such as fuel-efficient stoves improve the air quality and therefore women's health.

While these are important interventions, the Welfare approach fails to recognise the extent of women's work and women's contribution to the energy economy, and does not challenge the unequal and highly exploitative division of labour within the family and community. A just division of labour would require men to take on housework responsibilities, including energy work.

Very importantly, the Welfare approach fails to acknowledge the impact of the dominant and destructive fossil fuels based energy systems on women, their bodies and their labour. It fails to consider the extra unpaid labour women and girls have to perform to deal with the huge costs of water, air and soil pollution on food production, labour productivity and health. These costs are all carried by women's unpaid labour. The Welfare approach does not ask questions about who benefits and who pays the costs of the dominant energy system. And it does not address wider questions linked to the production and control of energy.

So while interventions designed within the Welfare approach are important in saving time and energy, they need to be linked with an agenda that seeks broader change for women's roles and tasks and broader change of the present unjust energy system.

Some examples of Welfare approach interventions

In Burkina Faso, from 2000, the UNDP addressed problems of 'gender energy poverty' through a mechanism of a simple diesel engine (that can run on biofuel, for example jatropha oil) which powered a variety of machines and tools, generated electricity for lighting and refrigeration, and pumped water. Installation, management, and maintenance of the machines were community-based, with registered women's associations responsible for these activities.³⁶ This innovation reduced the time women devoted to domestic and subsistence agriculture and processing work by between two and six hours per day.

Access to simple energy technologies enables women to increase their incomes and enable young girls, previously burdened with labour-intensive chores, to attend primary school.³⁷



The Women as Renewable Energy Entrepreneurs approach

The Women as Renewable Energy Entrepreneurs approach is founded on the idea that supporting women to take advantage of emerging micro-scale opportunities linked to renewable energies will 'empower' women and change their lives.

Advocates of this approach empower women to become small business owners (entrepreneurs) in alternative small-scale renewable energy technologies. The types of products that women sell include cooking stoves, solar lanterns, cell phone chargers, and biogas digesters. Women who sell the technology obtain an additional source of income, and women who can afford to pay for these basic technologies are 'relieved' of some of their energy work burdens.

National and international organisations supporting the Women as Renewable Energy Entrepreneurs approach assist women in communities with the technology, business skills, and financial support they need to run their businesses.³⁸ The simple renewable energy technologies and entrepreneurship support reduces the burden of work on women and increases household income.

³⁶ UN Womenwatch. *The Multiplatform Project: A Multidimensional approach to reducing rural poverty*. <http://www.un.org/womenwatch/feature/ruralwomen/undp-good-practice.html>

³⁷ See <http://self.org/benin/>

³⁸ Koclar, G and Carlson, B (2014). *Empowering women through clean energy stretches from India to Africa*. <https://www.usaid.gov/news-information/frontlines/powertrade-africa/empowering-women-through-clean-energy-stretches-india>

However, this approach has serious flaws. It accepts the existing unequal and exploitative economic system, and even promotes it. It accepts the existing division of labour in which women are responsible for meeting household energy needs, and fails to question the power structures, which cause energy poverty for the majority of Africans. Nor does this approach address the current energy model and its impacts on people, environments, and ultimately the planet. The approach seeks to achieve minor benefits for a few within a wider system of inequality and injustice, which is not critiqued, exposed or challenged.



Some identified benefits of women's access to energy at the small-scale level



Access to energy, even at a micro-scale as discussed, allows women to meet, share, relieve some of their work burdens, and have more time to move beyond their traditional roles. Women can engage in productive activities outside the home, and girls can go to school.

With their knowledge of domestic energy issues, women can form cooperatives to produce, use and even market energy products such as hot boxes, biogas digesters etc.

Localised micro-energy efforts which aim to relieve energy poverty and provide a platform for women's organising are important but must be linked to a wider agenda of transforming a corrupt, damaging and harmful dominant energy system in which only a few benefit. This is the focus of what we call the Energy Transformation approach.



The Energy Transformation approach

The Energy Transformative approach demands that African women – the majority of women most impacted by energy poverty – be heard, participate and take a leading role in energy decision-making, control and governance at all levels – from the local to the global. This approach demands that women participate equally with men in planning future energy systems.

At present the interests of the powerful – the corporations, elites, and middle-class citizens, and men in these different categories – dominate decision-making about energy priorities. Energy priorities are gendered (with men given priority over women) and classed (with the rich given priority over the poor). Women's energy burdens and the high risks and impacts women carry of traditional and fossil fuels based energy systems are not seen as priorities in most discussions on energy. Household energy security is not addressed in most discussions on energy.

If those women who are most affected by energy poverty are actively involved in decision-making this will ensure their needs around domestic, household energy security receive more attention from government, or at least the equivalent to the attention given to energy planning for industry.

In their current role, peasant and working-class women – poor women – carry the burden of energy poverty. They have a wealth of knowledge based on experience about how fossil and nuclear fuels cause health problems, pollute drinking water, and destroy the land needed for food security. Women safeguard, steward and use these valuable resources to support their livelihoods and well-being and those of their families and their communities. It is this knowledge and perspective on development that makes these women and not the current decision-makers the 'experts'.

We need a major shift in national energy planning to an open, democratised, and transparent process that enables women to participate meaningfully, rather than the current energy planning driven by the interests of corporations, financiers, and their political allies in our governments.



Such an energy governance system means that the power of the corporations – those dominating the fossil fuels sectors and the new emerging renewable energy arena – who are only interested in profit will need to be challenged and curtailed.

Source: The Guardian: *Too big and too scary, but the global fat cats can be chopped down to size*, Nesrine Malik. Illustration by Andrzej Krauze.

The key ideas of an Energy Transformative approach

An Energy Transformative approach sees access to energy as a fundamental right and not a privilege. In order that all people across the world can enjoy this right there is need to change the system of production and use of energy. This requires a bigger role for national planning. Energy, climate change mitigation, and national security should be the responsibility of the state and should not be entirely addressed through foreign investments.

Effective change in the processes of designing and implementing energy-generating projects rests on the assurance that the excluded and marginalised sectors have a definitive say in energy governance. Officials, development planners, and the wider public need to understand the link between the climate system, human society, environment, energy, food, water, land and people-centred economic development. Nature and energy resources are common goods which we all have a vested interest in. They cannot be left to the mechanics of the market that only serve the interests of the few. As part of the struggle for a just energy system, it is critical that we challenge corporate takeover of law and policy-making.





Requirements of an Energy Transformation approach

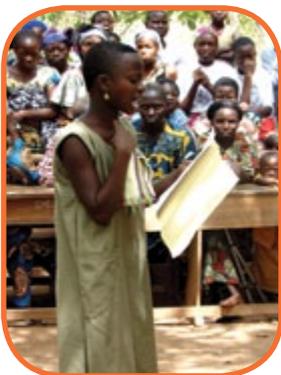
- **A just transition away from fossil fuels** and to a new energy system which prioritises ending energy poverty for the majority of African women and their families in ways that respect and protect people, environments, and the planet.
- **The prioritisation of the needs and interests of women and men in households and communities**, and not the interests of private corporations such as the mining industry.
- **Energy democracy**, ensuring the poor and especially poor women's participation in planning and oversight of energy decision-making. This requires support to women's organising, actions and a shake-up of male power at the household, community and national levels.
- **Women's participation** at all levels of the renewable energy sector, and not just a few elite women acting for corporations or political parties.
- **Shifting external costs of energy production** to the producers and away from women who currently bear this burden.
- **Addressing human rights abuses and conflict** related to energy injustice, including climate change-related conflicts, which worsen existing gender inequalities and create more violence and insecurity for women and girls.



Women speak out!

Women from more than nine African countries, meeting in the Niger Delta, Nigeria in October 2015, agreed that energy justice means:

- Leaving all known fossil fuel reserves in the ground!
- Monitoring air and water pollution of energy impacts at community level, to expose environmental impacts and the impacts on women and to demand redress from governments and corporations.
- A rapid global transition from fossil fuels as the primary source of energy to a transformed renewable energy system which:
 - improves the quality of women's lives at the household level
 - enables women to own, produce and control the means of energy production, instead of being passive consumers
 - empowers women to enter technological careers and provides mentorship to enable them to become role models for other women.
- Women enjoy full equality with men in all parts of the energy cycle including the household, community, cooperatives, and the decision-making processes.
- Women participate in making decisions and women's voices are heard in all energy justice related areas and in implementing and enforcing declarations, laws, policies and programmes at local, national, sub-regional, regional, and international levels.
- Women build a women-led Africa-wide campaign for climate, food and energy justice which aims to strengthen an African sisterhood and deepen our regional movement for total transformation of the dominant development paradigm.



SECTION 7

Building a movement for a gender just transition

In this paper we call for energy justice and a total transformation of the energy system. We highlight that the current energy system is unequal, unjust, leads to energy poverty and has to change.

Climate justice activists refer to some of the shifts we are calling for as the 'just transition'. WoMin brings an explicit feminist orientation to the needed development transition, calling for a **gender just transition**.

Womin's call for a **gender just transition** is being further clarified and advanced through a women's rights, women-led and grassroots-driven regional campaign. The campaign aims to support women's movement-building and organising towards a future in which African women enjoy climate, energy, food, gender, and development justice. It seeks to bridge the gap between theory and practice, and to work on a range of levels.



The campaign includes clarifying our ideas through the Women Building Power series of booklets and papers. This paper, which focuses on understanding the current energy system and possible alternatives, forms part of the Women Building Power series.

The campaign also includes participatory action research which will enable women to carry out social investigation into their own issues and articulate the problems from their own perspective. Women's organising and movement-building, supported by participatory action research, assists in engaging grassroots women in critical analysis and organising for action to improve their situation.

As we have noted in this paper women, the working class, and peasant families and communities suffer the worst impacts of both climate change and energy poverty. We highlighted that climate change affects hardest those least responsible for creating this crisis. That while the industrialised nations in the Global North are responsible for climate change, historically emitting up to 80% of the GHGs globally, it is people in the Global South who face its worst impacts.

The drivers of climate change are not just the emission of GHGs. Climate change is also driven by social forces like patriarchy and racism that marginalise women, and black working-class and peasant women in particular, and undermine their solutions and voices in decision-making on energy, climate and general development.

Climate change discussions are dominated by governments, global corporations and the elites in the Global North and largely bypass poor women in Africa who struggle with energy poverty. These elites ignore the crisis of energy poverty which affects the lives of millions of people, especially women, in African countries.

Most mainstream northern-oriented climate movements have been loud and insistent in their calls to stop the use of fossil fuels and develop renewable energy solutions, in order to address climate change. However, these calls fail to address the wider and inter-linked question of energy justice for the world's people. Climate justice is an empty call without gender, energy and development justice for poor women. It would be true to say that the mainstream discourse, even amongst NGOs, is not focused on systemic solutions, but in a 'business as usual' scenario, albeit with renewable energy.

While we support replacing fossil fuels with renewable energy solutions, the issue is not just about this. It is also about the use of the energy that is produced. Even if we achieve the production of 100% clean and renewable energy, if we use this energy for increased industrial production of wasteful goods that end up in landfill sites shortly after production we will never address the problems associated with climate change.

What is needed is a transition to a different system of energy production, ownership and use. We need to change how decisions are made about what energy is required, where that energy is needed, the shape and form of that energy, and the need to make great efforts to provide cheap or free energy for people.

We need a total transformation in the way we think about development, and the underlying motive shaping development processes. Under a capitalist system, the driving motive is profit for a few. This logic shapes our laws, policies, plans and investments, including those in energy. Under what we call neoliberal capitalism the market has become dominant. This means we must buy or pay for what we need. This assumes a level playing field where everyone can afford to pay. This is not true. Most people cannot pay for what they need.

Under neoliberal capitalism the state has been weakened, and has been forced to retreat from people-centred development. It is left to corporations to provide the services that were in the past provided by governments. Services once considered part of the public good and essential to people's well-being, are now sold by corporations who profit from these services. Energy, alongside healthcare, food, education and water, are now sold for profit.



Source: Bobby Marie and Andrew Lindsey from *Understanding our Economy and Society*, 2004

We need a radical shift to a paradigm which places people and care at the centre of development. With this new logic, development – who makes decisions, what strategies, plans, laws and policies are developed – will look very different. The people involved in making development decisions will also be very different. Ordinary people, especially women, peasants and the working class, and their nominated or elected representatives, will make decisions which are in their best interests.

Unless we do these things African women alongside their compatriots around the world will not enjoy safe, clean and adequate energy.

We need to ensure:

- Development decision-making will be deeply democratised and inclusive of all voices.
- Common and public goods (land, forests, water, the internet etc) will be protected and restored to people.
- Governments will provide and manage affordable and accessible public and social services, including renewable energy.
- Decent and safe work will be created producing and maintaining equipment in new renewable energy sectors that are not fossil fuels or nuclear driven. Livelihoods will be supported in existing areas of production. Need-centred consumption and subsistence will involve the majority of people. Examples here include agro-ecological farming for local food security, the local beneficiation of farming produce, locally owned tourism, and related services in infrastructure and financing.
- Maximum support for and investment in what we call the care sector or care economy, that is, the vast array of work women all over the world do on a daily basis to sustain and reproduce life and maintain and restore ecosystems upon which humans depend. This work requires recognition, state support, and redistribution within families and communities.



More about the women-led women's rights Fossil Fuels Energy and Climate Justice African Campaign

- The intent is to build a campaign rooted in grassroots struggles led by women, and which supports women's organising and movement-building as defined in specific localities and at the national and global levels, and which unifies women's struggles across localities and countries through a common set of political demands to be pursued at different levels of the campaign.
- The main objective of the campaign is to support women's movement-building and organising towards a future in which African women enjoy climate, energy, food, gender, and development justice. The declaration from the October 2015 Niger Delta meeting³⁹ outlines what these different forms of justice mean in practice.
- Over the next 18 months to two years WoMin and its allies will define a political agenda (the changes we want to achieve) for the entire campaign which is grounded in the demands of women at the local and national levels. We will not impose a political agenda from above but will build this from below. This common political agenda is critical to provide a unified frame for our organising at the local, regional, national, and international levels.
- The campaign is NOT working to build the identity and profile of a single organisation. Hence, WoMin will play a leading role in building and sustaining the campaign, but the campaign is not a WoMin campaign. If the campaign is to build organisation and movement, including creating new intersections between organisations and struggles, it needs to be a political platform of partnership between and amongst many organisations. The partners will look different in each context and the nature of the platform and its relationships will hence look different, but the principle of wide collaboration and ownership is a critical one that will guide the campaign at all moments.
- A specific focus of the campaign is the energy alternatives read from the perspective of the majority of African women. In the coming years, the campaign will support informed local visioning and solutions through feminist participatory action research on energy; systemic national policy analysis and alternatives for macro-level consideration; and broad women's organising through women's energy assemblies. All elements of this energy organising strategy will weave together and be mutually supportive.



³⁹ See <http://womin.org.za/images/docs/energy-food-climate-justice-niger-delta-declaration.pdf>

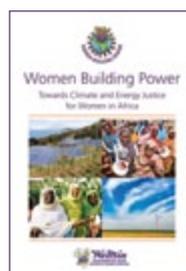
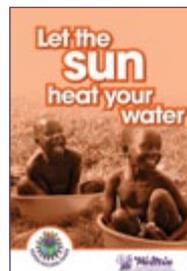
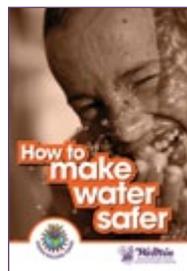
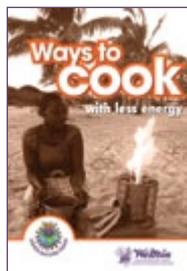
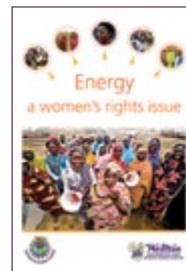
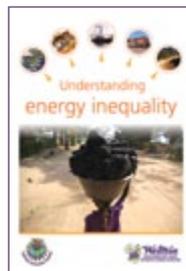
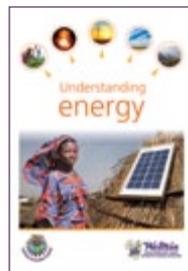


A note on this research series – Women Building Power

Under the Women Building Power knowledge hub of the African women-led women's rights fossil fuels energy and climate justice campaign we are producing two series:

(a) practical energy resources to support grassroots women both respond to energy poverty and organise for the wider systemic changes needed to achieve energy and climate justice; and

(b) popular papers, based on in-depth research, addressing the energy question beyond the local and mainly oriented to supporting campaign positioning and strategy. In this first paper we provide a sweeping overview of energy and climate in Africa from an ecofeminist perspective. Some of the papers to be published under this series in the next year to two years include: national energy policy analyses linked to the macro development agenda, and trajectories related to the extractives industries in a minimum of four countries; a geopolitical ecofeminist analysis of renewable energy policy and key investment frameworks in Africa and study cases/stories of alternative energy systems and their financing.





WoMin

**AFRICAN WOMEN UNITE AGAINST
DESTRUCTIVE RESOURCE EXTRACTION**

WoMin is an African gender and extractives alliance. We work with more than 50 allies in 14 countries across East, Southern and West Africa.

The WoMin African Gender and Extractives Alliance

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