



INCREASING EFFICIENCY AND RESILIENCE OF CLIMATE CHANGE MITIGATION AND ADAPTATION BY EMPOWERING WOMEN

Dr. Fatima Denton

Director - United Nations University –Institute for Natural Resources in Africa (UNU-INRA)



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Outline

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Gender related structural challenges

3

A case for action – Agriculture and CIS, Aquaculture, Waste management and other livelihoods

4

UNU-INRA's contributions



Nowhere in the world is the climate change and development more closely linked than in **Africa**.



Resilience is the ability to absorb shocks, bounce back and self-organize



Women are increasingly challenged due to the frequency, pace and scale of extreme events.

**Environmental management is
highly gendered.**

Women and men bring different experiences and different knowledge and capabilities when it comes to **coping** with or **adapting** to **climate change impacts**.

A litany of challenges....

- 1 High reliance on biomass and biofuels Migration.
- 2 Poor agricultural policies – fewer access to inputs, information
- 3 Responsible for the management of post harvest loss
- 4 Weak and ineffective governance systems
- 5 Post conflict situations
- 6 Post recovery from floods and other extremes

Environmental management =

Ownership of resources

Distribution

Control

Management

Essentially about the reliance on natural resources.

Gender related inequities will affect several of the SDGs directly and indirectly and delay food security.

Case for Action - Agriculture

- Employs about **70-75 %** of the African population.
 - Contributes about **30% to Africa's GDP**
 - About **50% of total export** value.

Yet **agricultural productivity**, averaging around 1.5 tonnes per hectare, is the **lowest in the world**.

Indeed, **less than 10% of Africa's arable land** is currently used for **food production** and only **6% of arable land is irrigated**.

Women's vulnerability

- 1 Less likely own land.
- 2 Less likely to control productive resources.
- 3 Too little understanding of technology, infrastructure and markets – critical for agricultural production.
- 4 Difficulties related to post disaster recovery strategies and poor buffer potential.
- 5 Limited adaptive capacity due to access to information and less control of productive levers.
- 6 Combined with structural problems related to time poverty , higher incidence of poverty and primary care givers.



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Climate Information Services

“the packaging and dissemination of climate information to specific users – are vital in supporting Africa’s response to climate change.”

Accurate and accessible rainfall information helps farmers decide not only when to plant and harvest, but when to dry the crops and look out for the outbreak of pests and diseases that can ruin yields.

Working with information in this way, farmers increase their chances of boosting productivity and avoiding post-harvest losses.

Fact sheet – Agriculture



Women
invest 90% of
their income
into their
family's
well-being.

If women had the
same access to
productive
resources as men,
they would increase
the yields of farms
by **20%-30%** and
reduce hunger by
up to 17%.

Women
grow 70%
of Africa's
food.



Africa's annual
food import
bill of \$35
billion,
estimated to
rise to \$110
billion by 2025.

Fact sheet - Energy



Only seven countries in Africa have electricity access rates exceeding **50 %**

Around **600 Million Africans** without access to electricity. Household electrification is the lowest globally, averaging at **42 % in 2016**.

Women and girls bear the main burden of biomass collection.

83% of women with solar lanterns reported increased control over financial decisions while 63 % felt more respected in the community.

72% decrease in perinatal deaths when using solar suitcases in hospitals in Uganda. Midwives and doctors perform obstetric procedures throughout the night.



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The case for improved access to CIS for women

1

Women make up an estimated 43% of the agricultural labor force in developing countries (FAO). Agriculture is the most important source of employment for women by in sub-Saharan Africa and south Asia.

2

But compared to men, women are much more vulnerable to environmental shocks such as climate change due to multiple vulnerability and higher incidence of poverty.

3

Improving women's access to CIS (and other communication technologies in general) can significantly boost their ability to successfully adapt to environmental shocks such as climate change and effectively manage the associated risk.

4

By improving women's access to, and use of, CIS, they can play important roles in household climate change adaptation planning.





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The current state of women and CIS provision



Women are overwhelmingly left out of the communication channels, including CIS, that are critical to their ability to adapt to environmental shocks such as climate change.



According to a study in Ghana, of the 51% respondents who used CIS, 17% were women while 34% were men. Men are more likely to have access CIS on mobile phones than women.



Although climate information services may be made available to household members, it does not necessarily lead to women receiving this information



There are several barriers to inhibiting women's access to CIS and enhancing their adaptive capacity and contribution to reduced climate change impacts

Barriers to women in developing countries accessing CIS

In many ways, barriers to women's access CIS/ICTs are related to gendered control over assets, e.g. income or resources, within the household. Men largely control how household income is used.

Women are less empowered to spend household income on ICT devices and services that they deem useful for understanding their environment.
A more significant number of men (35.3%) than women (20%) had access to mobile phones.

Women often face financial obstacles to acquiring new technologies such as computers and mobile phones (poor access to the platform).

Expensive call charges (linked to poor access to finance).

Limited or no formal education - educational barriers such as illiteracy and numeracy (e.g. language). Illiteracy more prominent among women than men in developing countries.

Limited training in the use of electronic gadgets for CIS.

Limited access to finance, extension services, and farm resources



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What should be the way forward?

Need to deliver CIS in languages more likely to be understood by women (especially local language instead of English or international languages). In order for women to be able to receive, process and utilize the information.

Context-dependent hybridization of traditional methods of communication, familiar to communities, and modern technologies, which can be useful in sharing new scientific, climate knowledge with farmers.

Gender-specific needs for climate change adaptation, must be mainstreamed into the design of climate information services to improve the equity and effectiveness for both men and women farmers.

Design of CIS must consider gender-specific needs, e.g. different dissemination channels that address the constraints/barriers experienced by women.



Waste



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Women of Waste (WOW) is an informal group advocating for the role of women in waste management and promotes spaces of dialogue, communication and encourages participation.

Sustainable toilet options: **Loo Works** aims to strengthen the sanitation value chain and eliminate the need for unsafe sanitation practices.



Kor.Le.Kour, an accessories brand which makes jewellery from recycled glass in Ghana.

Women in aquaculture



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A new fish-smoking technology, the FTT-Thiaroye (or the FAO-Thiaroye fish processing technique) has been introduced in many African countries to control smoke and contaminants produced during the smoking process.

The West African Agricultural Productivity Program (WAAPP) developed by The West and Central African Council for Agricultural Research and Development (CORAF) aims to empower women through aquaculture development by providing job assistance in the fishery industry.

The West African Fisheries Renewable Programme, developed by the Western Region Coastal Foundation (WRCF) is seeking to restore Africa's depleted fish stocks

Feed the Future is an initiative that integrates nutrition and gender issues to improve the resilience of vulnerable households in targeted communities.



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

Green jobs



Community-based tourism venture (Kenya)

Women in the coastal Kenyan town of Gazi have established a community-based tourism venture that profits from the value of the mangroves.

Livelihood

The Adaptation Learning Programme (UNFCCC) focuses on integrating women's empowerment into community-based adaptation.

FAO supports countries in addressing gender issues into their National Adaptation Plans through the Nap-Ag Programme¹⁵.

FAO's Dimitra programme is a participatory information and communication project which contributes to improving the visibility of rural populations, women in particular.

The Women's Empowerment for Resilience and Adaptation Against Climate Change aims to support women's equal control over factors of production and participation in the development of sustainable development and climate change adaptation processes.

Blue Ventures (Madagascar)
Integrates sexual and reproductive health services with sustainable coastal livelihood and resource management initiatives

The Africa Adaptation Program (AAP) addressed women's roles in climate change in Nigeria



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Innovations

M-Farm Ltd is a software solution and agribusiness company developed by three young African women entrepreneurs that help 6 400 farmers in Kenya by providing them up-to-date market prices through cell phone based technology.

Solar Sister trains and supports women to deliver clean energy directly to homes in rural African communities.

Rachael Nabunya Kisakye, project engineer at the Ugandan company Tusk Engineers, has developed a bio-latrine.



AD+GEN knowledge coalition

Gender and Climate Change Network in Africa works on three levels of resilience building (knowledge, organizational and planning and Innovation) and 3 transitions.



1. Knowledge transition

The skills required for greater resilience to managing extreme events and CC and CV. This will bring together indigenous and scientific knowledge and serves as a 'what works' knowledge platform.

2. Business transition

The entrepreneurial advice and support that will bring current adaptation projects to scale, bring solutions to infrastructure and market barriers.

3. Innovation transition

Identify new and existing innovations that will boost agricultural productivity, create green jobs and showcase good farming techniques.

Takeaways

1

Africa has a high exposure to produce risks associated with climate change – women can be bring greater resilience to climate impacts if they are given the opportunity, capabilities and information.

2

Gender related inequities will derail the achievement of the SDGs - women make up half the population and will enable the realization of key goals.

3

The development industry has been risk averse where women are concerned – a history of micro projects – transformational and resilient development will come full circle when women concerned are given scale.

4

Africa is growing rapidly in demographics terms and transforming slowly in human development terms –women represents the single largest untapped potential that the African continent has – they are a resource – and if properly empowered can become active agents of change.

Thank you .

For more information contact:

International House
Annie Jiage Road
University of Ghana, Legon Campus
Accra, Ghana.

T: +233-302-500396
F: +233-302- 500792

email: inra@unu.edu

www.inra.unu.edu



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