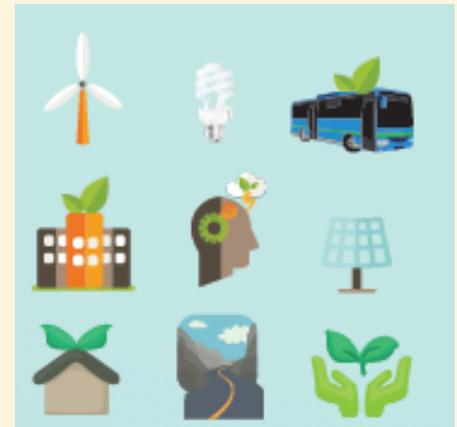




The Cost of the Gender Gap in Agricultural Productivity

Gender Global Environment Outlook:

Lessons from Malawi, Tanzania and Uganda



EMG Nexus Dialogue
High Level Political Forum
New York, 13-14 July 2017

Michael Stanley-Jones
UNDP-UN Environment
Poverty-Environment Initiative



Poverty-Environment Initiative



UNITED NATIONS

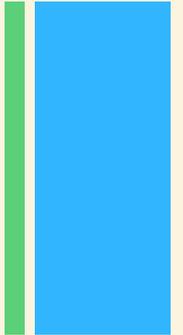
ENVIRONMENT MANAGEMENT GROUP



"Supporting the 2030 Agenda for Sustainable Development by enhancing UN system-wide collaboration and coherent responses on environmental matters"

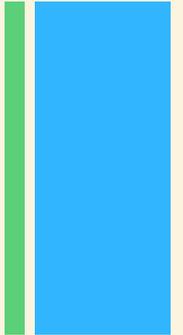


Global Environment Outlook (‘GEO’)



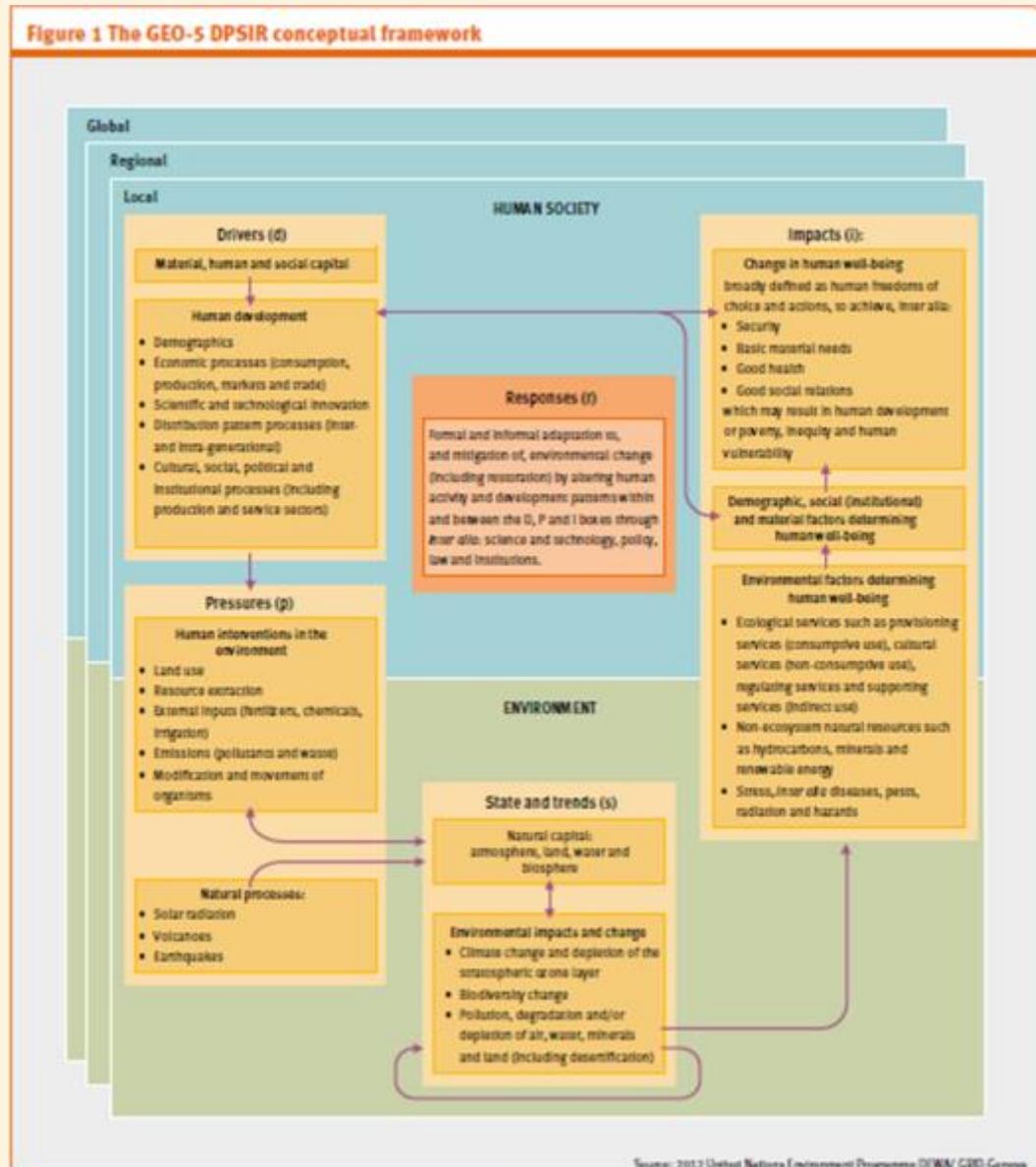
- UN Environment flagship **integrated assessment** of the state of the global environment
- Presents **environmental trends** on air, climate, water, land and biodiversity
- Looks at the **interactions between social, economic and environmental drivers** to assess the **effectiveness of different policy responses** in moving the world onto a more sustainable pathway

+ Sixth Global Environment Outlook



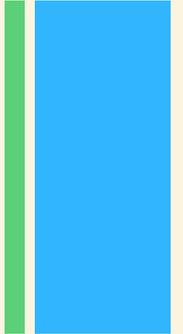
- 5th Global Environment Outlook (GEO-5) published in 2012
- Sixth Global Environment Outlook - ***Healthy People, Healthy Planet*** – due to be published in 2018
- Among the cross-cutting themes of GEO-6: ***Gender*** and ***Equity***

+ GEO-5 Framework





Gender in the Millennium Development Goals



- Millennium Development Goals gender target areas limited:
 - Maternal mortality and reproductive health
 - Primary and secondary education
 - Decent employment
- Gender targets separate from environmental sustainability goals and targets



Gender Global Environment Outlook Methodological Model

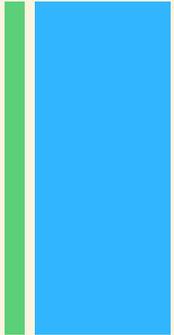
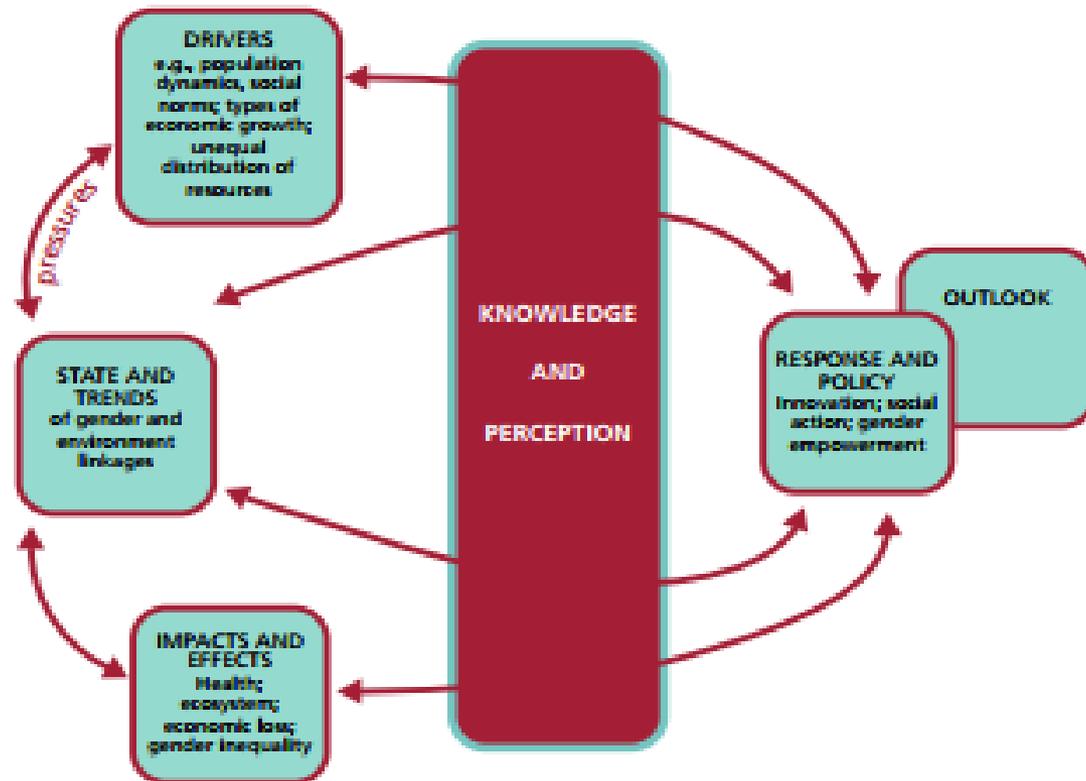


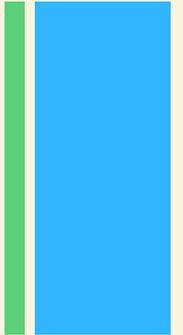
Figure 2.1: GGEO methodological model



Source: Seager (2014)



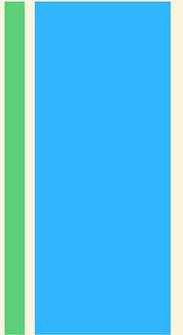
Gender-and-environment nexus



- The **holistic nature** of the gender-and-environment nexus requires:
 - analyzing different **dimensions of relationships** between humans and the environment
 - establishing **how environmental conditions shape the lives of women and men** in different ways
 - understanding that women and men are not only affected by, but also have **important roles to play in, enabling environmental sustainability**
 - **ignoring these issues** in environmental and climate policies and programmes is **recipe for failure**



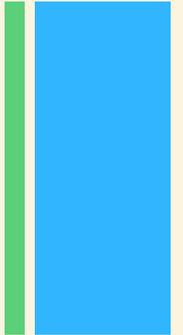
Gender & Equity in Sustainable Development Goals



- Includes a specific gender goal (**Goal 5: Gender equality**) and targets
- **Integrates gender targets** with other goals through explicit indicators or gender-disaggregated data and analysis
- Environmental targets with gender and equity components
- Ending hunger, achieving food security and promoting sustainable agriculture (**Goal 2**) depend on **an integrated approach** to environmental sustainability, poverty reduction, social equality and economic growth (**Goals 1, 5, 8 and 13**)



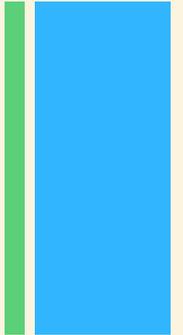
Agriculture + Environment + Equality = Livelihoods



- The livelihoods for the vast majority of local populations worldwide depend on natural resources
- 43.6% of Africa's land is dedicated to agriculture
- In Africa, agriculture contributes nearly 14.3% of GDP
- Over half the population of Africa (54%) derives its livelihood from agriculture
- 90% of Africa's rural population has agriculture as its main source of income



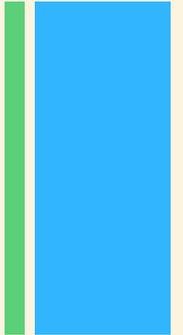
Gender Global Environment Outlook – Secure Land Tenure



- Almost ½ of agricultural workers in sub-Saharan Africa are women
- Secure land tenure is fundamental to women's economic, social and political empowerment, as well as to increased prosperity for their families and communities
- Security of tenure – rather than ownership per se – that is critical
- Women's participation in local institutions governing the use of natural resources is also critical for their sustainable management



Gender Global Environment Outlook – Discrimination harms productivity

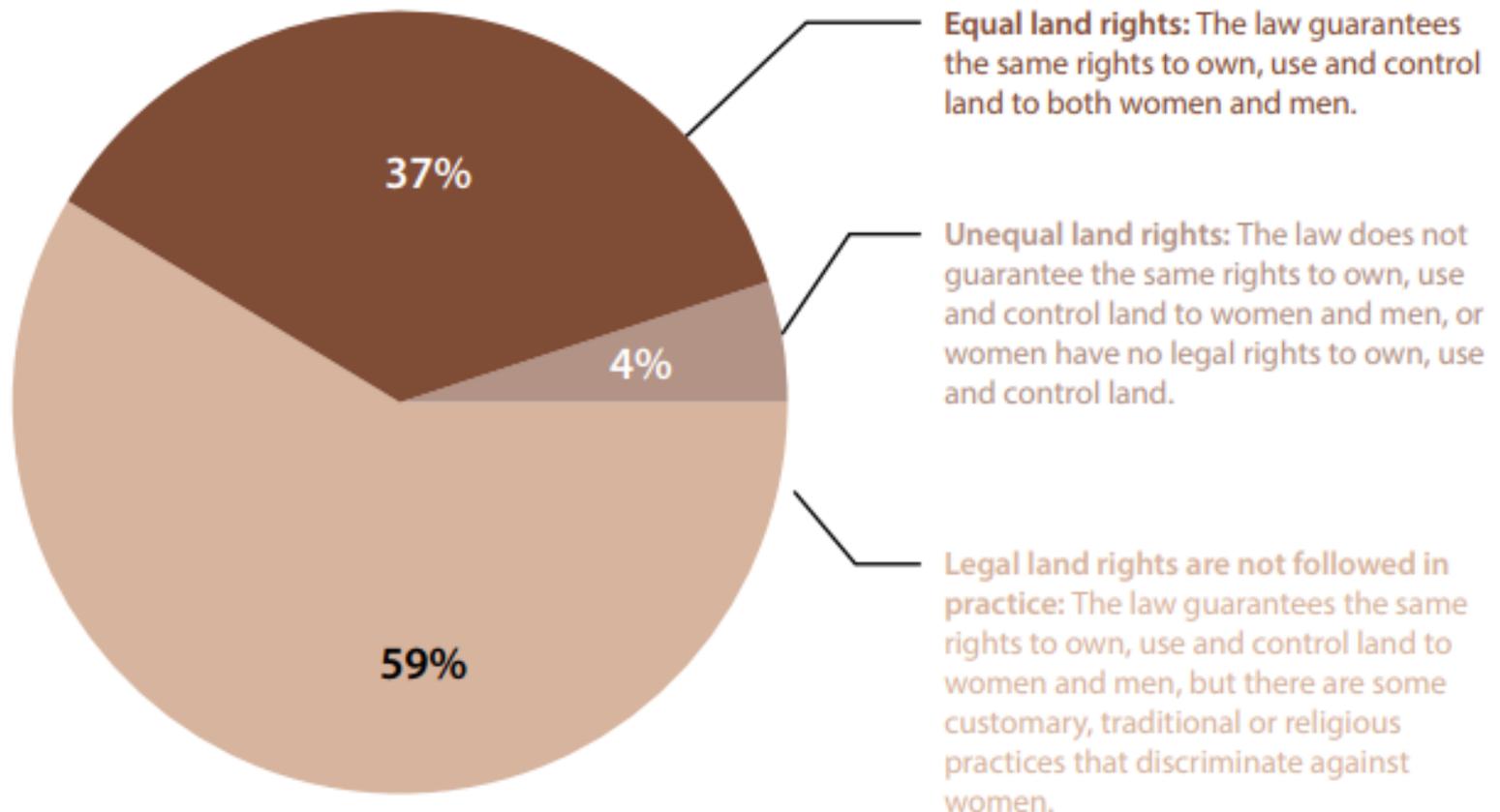


- Persistent restrictions imposed on access to natural resources by certain communities (and groups of people) are examples of the **structural inequalities** and **discriminations** that can potentially destabilize society
- **Productivity of women farmers tends to be lower than that of their male counterparts** due to prevailing inequalities in access to productive resources including land

(UN Women/UNDP/UNEP/World Bank 2015; FAO 2011)

+ Equal land rights (2014)

Figure 1.4: Proportion of countries falling under the three tiers of women's secure access to land



+ Integrated Approach to Agriculture

Agriculture is a key sector to advance **poverty reduction, gender equality & food security, climate & environmental sustainability, & economic growth**

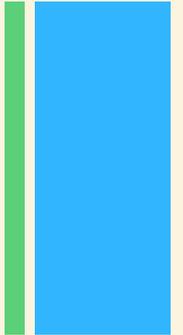
- Productivity below potential yields due to unsustainable land use and climate change
- Productivity among women farmers is lower than men
- Changing climate means that there is a shrinking window of opportunity for action, and it is imperative that climate smart approaches to agriculture helps close the gender gap
 - Inadequate understanding of climate and gender gaps result in gaps not being addressed or targeted by policies and programmes

- integrated approaches are needed!





Gender Global Environment Outlook – Selected Findings

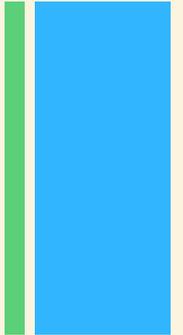


Roles women and men play in **ecosystem functions related to agricultural production** need to be better valued and **integrated in policy and planning**, particularly in

- agricultural diversity
- plant breeding
- pest control
- ecosystem management
- resilience



Gender Global Environment Outlook – Equal Access



- Gender equality is **essential for improved performance of the agricultural sector** through climate resilience, and thereby to increasing food and nutrition security for all, especially women and girls
- For women farmers to be more productive, they need **equal access to** environmentally and socially **sustainable agricultural inputs, markets**, and (in view of the rapidly changing climate) climate-resilient farming **technologies** and climate **information**

+ Integrated Approach to Agriculture and Gender

Pathway One: Better Evidence

- Generating evidence through machinery of government
- Consultative and interdisciplinary research
- Strategic dissemination and engagement





THE COST OF THE **GENDER GAP** IN AGRICULTURAL PRODUCTIVITY

in Malawi, Tanzania, and Uganda



UNDP-UNEP
POVERTY-ENVIRONMENT
INITIATIVE

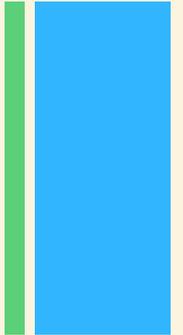


Empowered People.
Sustainable Progress.





How can we assess the gender gap?



Step 1

- Identify the plots managed by men and women and measure the difference in productivity by estimating what they actually produce based on national level data (in value per hectare)
- The difference = the **unconditional gender gap**

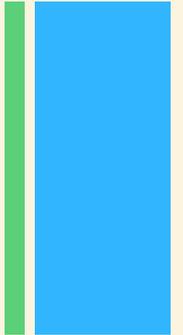
Step 2

- Look at what would the output be if women produced the same as men
- The difference = the **conditional gender gap**

Step 3

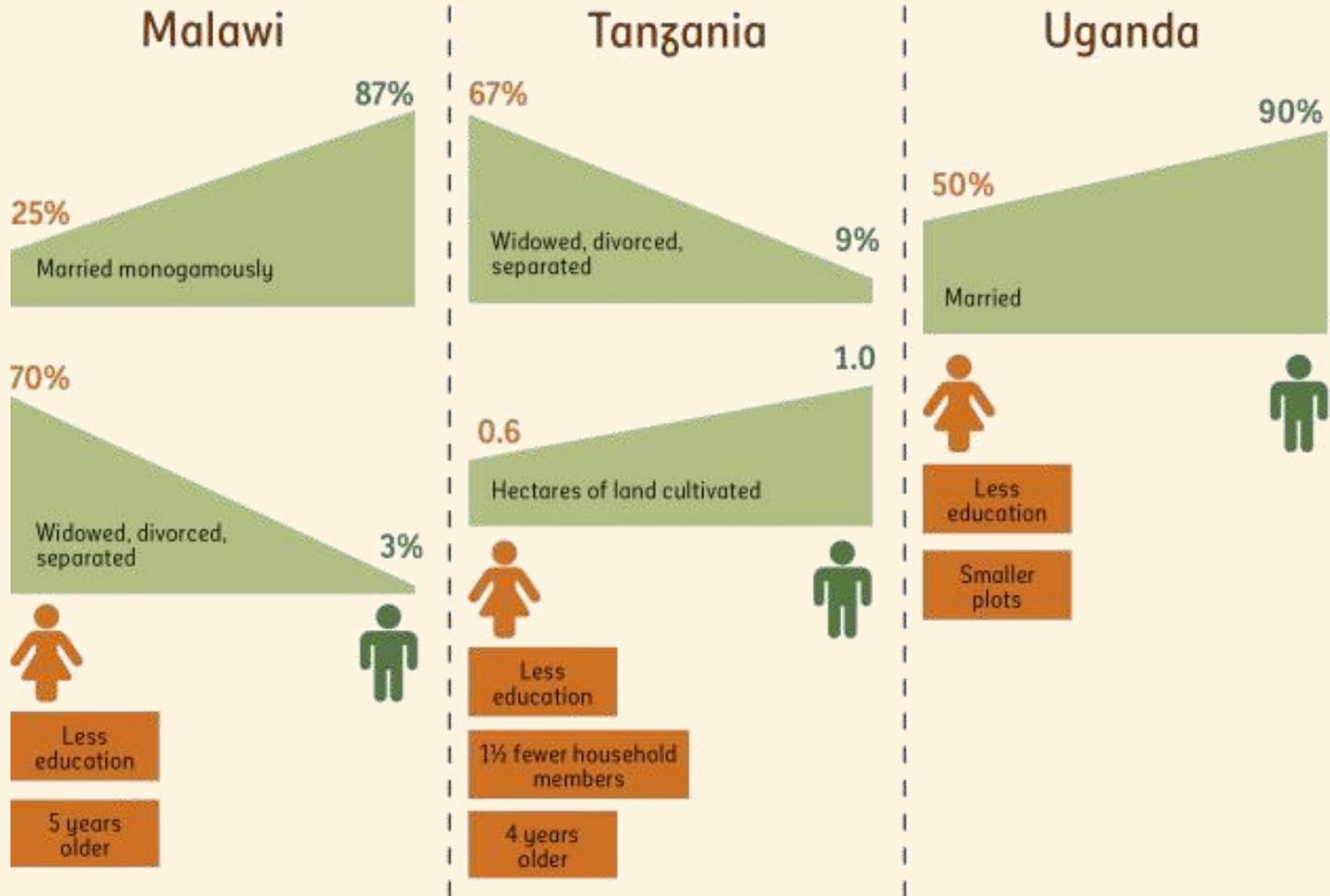
- Lastly, compute the size of the gender gap (in crop output) relative to agricultural GDP and national GDP (using multipliers) and estimate the potential poverty reduction impacts

+ Assumptions & Caveat

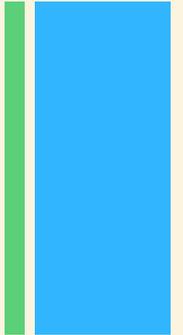


- Overall, these numbers are **conservative**
- The big caveat: These numbers are **gross gains**
- Any **costs associated with policies to close the gender gap are not accounted for**
- Quantifying in terms of GDP and poverty reduction **does not fully account for multidimensionality of poverty**, may miss gains among the social and equity dimensions

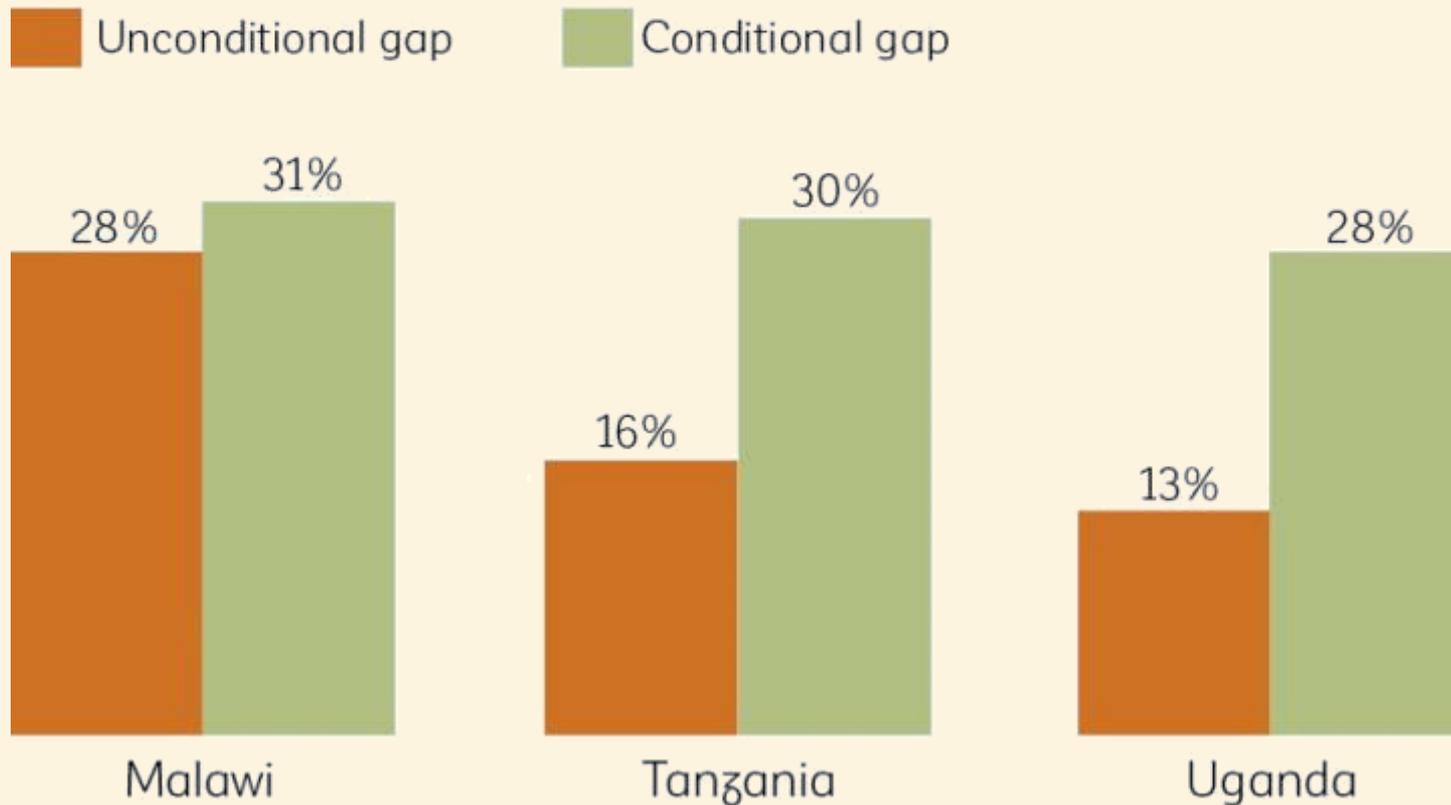
+ Woman Farmers

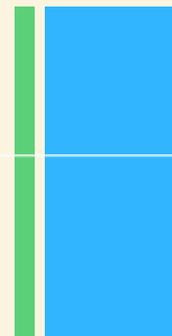


+ Size of the conditional gap - 28% - 31%



Unconditional and conditional gender gap in agricultural productivity in percentages





AGRICULTURAL PRODUCTIVITY GAP

CLOSING THE GAP CORRESPONDS TO

MALAWI
28%

7.3% increase in
crop production

\$90 million increase
in agricultural GDP

\$100 million increase
in total GDP

238,000 people lifted
out of poverty

TANZANIA
16%

2% increase in
crop production

\$85 million increase
in agricultural GDP

\$105 million increase
in total GDP

80,000 people lifted
out of poverty;
80,000 more people
adequately nourished

UGANDA
13%

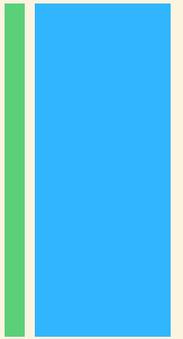
2.8% increase in
crop production

\$58 million increase
in agricultural GDP

\$67 million increase
in total GDP

119,000 people lifted
out of poverty

+ The annual cost of gender gap



+ Determinants of the gender gap



Determinant	Malawi		Tanzania		Uganda	
	% of Gap	\$ Millions	% of Gap	\$ Millions	% of Gap	\$ Millions
Quantity of male family labor	45.19	45	97.34	102	n.a	n.a
High value-crops	28.43	28	3	0.3	13.3	8.8
Agricultural Implements	17.76	18	8.18	8.5	9.02	6
Pesticide Use	0.97	0.9	12.03	12.6	4.45	2.9
Inorganic Fertilizer use	5.32	5	6.39	6.7	3.04	2
Wealth Index	3.29	3	-0.1	n/a	n/a	n/a

+ What are the main factors that determine the gap in Uganda?

13.3 % of the gap



9% of the gap



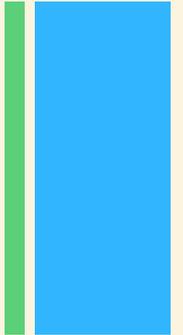
4.45% of the gap



3% of the gap



+ Potential Policy Priorities & Solutions



Priority 1: Improve the amount and labor productivity

- **Release women's time** in the household through childcare and improved access to efficient cook stoves and sustainable energy and enhance access to agricultural implements
- **Address prevalent cultural norms** that may prevent women from hiring male labor by sensitizing both men and women

Priority 2: Enable female farmers to grow high value crops *(Women may not grow higher-value crops due to labor or cash shortages or other priorities)*

- Increase the ability to **get into the market** - strengthening female farmer groups to scale up investments and **access markets** by reducing unit costs
- Better understanding what women want in terms of crop cultivation and learn from women that grow high value crops



Potential Policy Priorities & Solutions

Priority 3: Improving access to and use of agricultural implements

- Delivery, timing and **small discounts work better** than large subsidies & smaller packages of fertilizers (certified)
- **Training and communication** modes that takes into account women's differential mobility and time availability

“I see this report as a strong tool to use to inform policy and strategies that can enhance productivity in Malawi. It is also an important tool for us as a ministry to begin to translate the Sustainable Development Goals, and more specifically Goal 1 on eradicating extreme poverty for all people.”

- Mr Allan Chiyembekeza, the Minister of Agriculture, Irrigation and Water Development

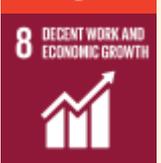
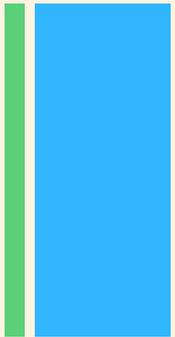


+ Policy impact in Malawi

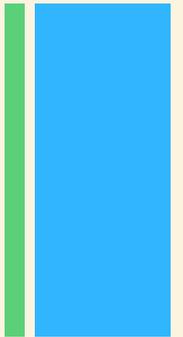
Informed by *The Cost of the Gender Gap*, other integrated evidence and technical inputs from Poverty-Environment Initiative, UN Women and other partners...

Malawi's new agricultural policy (September 2016) has a strong focus on:

- **Empowering women, youth and vulnerable.** The policy states that: *'Closing the gender gap and addressing the socio-economic barriers faced by the youth has the potential to boost annual agriculture GDP'* - it identifies concrete actions for implementation
- **Enhancing investments** in climate-smart agriculture and strengthen sustainable land, soil and water management including integrated soil fertility management, irrigation and sustainable use of agrobiodiversity

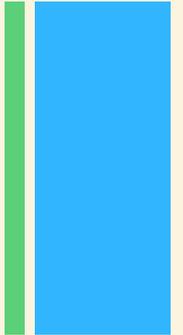


+ Takeaways



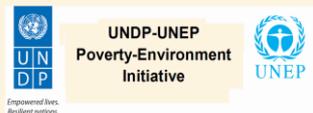
+ Opportunities for collaboration:

Economics, gender analysis, policy advocacy



UNDP–UN Environment Poverty-Environment Initiative, UN Women and Country Partners are furthering this work in 2017 in Malawi, Uganda, Rwanda and Ethiopia

- **Expand the work to more countries**
- Build on the existing evidence through **country field studies** to contextualize the findings & policy analysis
- Further explore the links between environmentally sustainable and **climate smart agriculture** and opportunities for closing the gender gap
- Capacity building and new tools to implement recommendations from the analysis:
 - Enhance **planning and budget tools** for an integrated approach to gender, climate and agriculture
 - **Develop innovative solutions for more gender and climate smart agricultural services**





UNDP-UNEP Poverty-Environment Initiative



Empowered lives.
Resilient nations.



European Union



Norwegian Ministry of Foreign Affairs



Spanish Ministry of Foreign Affairs and Cooperation



Swedish International Development Cooperation



UK Department for International Development

THANK
YOU!