



"We need to ensure that the energy, skills, strength, values and wisdom of women become an integral part of the remodeled economic infrastructures now being developed by global leaders. Empowering and investing in women is part of a global solution for us all, now and in the future."

Graça Machel, African elder, activist and former First Lady of Mozambique and South Africa¹

A woman in Kenya sells produce at the market. ©thisisexcellent, Flickr.

1 Introduction

This book makes the bold claim that empowered women and men are better, more successful farmers who can make the most of the opportunities around them. We argue that there is a causal relation between more equal gender relations in the household and in the community, and better agricultural outcomes. The one underpins the other. This is a radical thing to say, because it means that the standard development interventions – more extension services, better information, more fertilizer, better machinery – will not fully achieve their goals unless women and men are on equal footing, able to make rational economic decisions unhindered by gender norms that limit what is “appropriate” for women or for men to do, or to be.¹

Empowering women as decision-makers in all areas of their lives is challenging and exciting. It is a key to poverty reduction. Transforming gender relations will help to make smallholder agriculture and associated development efforts more effective and efficient, with knock-on effects for a variety of development outcomes.

Of course we do not want to transform gender relations just to improve agricultural outcomes. We expect much more. We believe that women have the right, like men, to be enabled by their society to imagine, to wonder and ... to know.² Amartya Sen, in his rejection of instrumental approaches to development, says:

Human beings are the agents, beneficiaries and adjudicators of progress, but they also happen to be – directly or indirectly – the primary means of all production. This dual role of human beings provides a rich ground for confusion of ends and means in planning and policy-making. Indeed it can – and frequently does – take the form of focusing on production and prosperity as the essence of progress, treating people as the means through which that productive process is brought about (rather than seeing the lives of people as the ultimate concern and treating production and prosperity merely as means to those lives).³

We agree with Sen. People are our ultimate concern. We are convinced that transforming gender relations in agriculture will enable women, men, and their children to live richer, more meaningful lives in the ways that they choose. We want this book to be a contribution to making that happen.

Our whole book is about strategies for empowerment. But what does gender equality involve? Genuine equality means more than parity in numbers or laws on the books; it means expanding freedoms and improving overall quality of life so that true equality is achieved without sacrificing gains for men and women. It is increasingly recognized that fostering gender equality involves working with men and boys as well as women and girls to bring about changes in attitudes, behaviours, roles and responsibilities at home, in the

1 Chapter 1 title page quotation: As quoted in Sachikonye, T. K. (2012). Why we must empower women. *NewsDay Zimbabwe*, 12 August. <http://www.newsday.co.zw/2012/08/10/2012-08-10-why-we-must-empower-women/>.

2 To paraphrase Nussbaum, M. and Sen, A. (1993). Introduction. In *The Quality of Life*. M. Nussbaum and A. Sen (eds.). Clarendon Press. At p.1.

3 Sen, A. (2005). Development as Capability Expansion. In *Readings in Human Development: Concepts, Measures and Policies for a Development Paradigm*. S. Fukuda-Parr and A. K. S. Kumar (eds.). Oxford University Press, USA, New York. At p.3.

workplace, in the community, in business and in society at large.⁴ Following from this, it is useful to ask: What do empowerment and disempowerment look like in context? Below we present an example, the story of Apiyo, a Kenyan woman farmer. It shows that some people reach the limits of their ability to change their lives more quickly than others might. In Apiyo's case, the limits to her power are fundamentally framed by the fact that she is a woman living in a specific society. Her gender determines her rights to resources and to assistance in her community. At the same time, like so many other women in Africa, she is full of hope and potential. Although Apiyo has a hard life, she is working actively for a better future by joining a women's group, developing her capacity and linking to a variety of government and private service providers.

Apiyo's story

Apiyo is in her early 50s and is a member of the Luo ethnic community in western Kenya, like the paternal family of Barack Obama, whose ancestral home is near Apiyo's. While in Kenyan cities and towns, people marry much as in the West, in many rural areas, the Luo practice virilocal marriage, which means that the wife moves to her husband's village upon marriage. A typical rural Luo wife is fully dependent on her husband for access to all farm resources, including land and machinery. He usually takes all the decisions on what to grow, when to plant, and what and when to sell.

Should the husband die, one of his brothers or close relatives can inherit his widow – a custom called “tero”.⁵ But the woman can also be left entirely bereft, particularly if none of the relatives wants to inherit her. The local people have a saying, “*A wife is next of skin, not next of kin.*” This means that she is not regarded as really “belonging” to the local community, and is therefore not entitled to any resources in her own right. In Apiyo's case, the worst happened. Her husband died, leaving her with nine children. Although he arranged for her to have the title to his land upon his death, this was not enough. Five of the children died of malnutrition within a short period because Apiyo could not call upon anyone to help her with the farm. She had no kin and no other income, and simply could not feed her children properly.

Today, Apiyo farms her 2.5 acres alone, growing cassava, maize and vegetables. She complains of a fast, irregular heartbeat and breathlessness, and comes across with a mixture of pride and worry. But she has joined the Nyi-Loka Women's Group to try and change her life. This is how the members of the Nyi-Loka Women's Group explain what they do:

We all come from the Southern Nyanza, which is far away, about 200 kilometres from here. Our friendship started at funerals. We realized that several of our

4 See, for example, USAID (2012). *Gender Equality and Female Empowerment Policy*. U.S. Agency for International Development, Washington, DC. <http://blog.usaid.gov/2012/03/translating-words-into-action-usaids-gender-equality-and-female-empowerment-policy/>. Also: The World Bank (2011). *World Development Report 2012: Gender Equality and Development*. Washington, DC. <http://go.worldbank.org/6R2KGVEXPO>. And: Sida (2005). *Policy Promoting Gender Equality in Development Cooperation*. Swedish International Development Cooperation Agency, Stockholm.

5 For a in-depth discussion of Luo widowhood practices, see Gunga, S.O. (2009). The politics of Widowhood and Re-Marriage among the Luo of Kenya. *Thought and Practice: A Journal of the Philosophical Association of Kenya*, 1(1). 165–78. DOI:10.4314/tp.v1i1.46313.

fellow women had married men here. In some cases the husband had died and the children could not go to school. We did not want to face the same situation. We became conscious of being alone. We began to gather together. Since many of us have lost husbands, we thought: why not help each other? When we started we were six people. Now we are nineteen.

There are three reasons for the **secret of our success**. First, we love each other. The distance from our family home makes us feel solidarity with one another. Second, we have clear objectives for our group. We aim to cover emergency situations. For example, if a relative dies back home, we make sure that there is enough money to go to the funeral. We have an emergency kitty for such costs. We also have a savings scheme called a merry-go-round to cover other expenses. Third, we are securing our livelihoods by developing farming and catering projects. To do this we have collaborated with the Ministry of Agriculture and Jaa Marafuku (a Ministry of Agriculture fund). This has enabled us to gain experience in different farming activities. We were given 40,000 Kenyan shillings for capacity-building from Jaa Marafuku to pay for private facilitators/extension workers with farming skills (equipment, stationery, facilitator allowances). We are also part of a food security network trained by the Food and Agriculture Organization at farmer field schools. In the farmer field school we learned many things like catering services, food preservation, and beekeeping. The Nyi-Loka Women's Group offers catering services, for example at parties and at funerals. Finally, we rent an acre of land that costs 2,000 Kenyan shillings per year which we work collectively, and we sell the produce together. Our aim is to buy our own land, since we have to change our rented field each year – the male owners always take over the land when we have improved it. However, buying our own field will be very expensive.



Children of the Luo ethnicity at play in Kisumu, Kenya. © US Army Africa, Flickr.

Apiyo's story is personal to her, but she has much in common with millions of other African women farmers. Her effectiveness as a farmer is limited by the fact that as a woman, she cannot access key resources by herself – she can only obtain them through marriage. Her husband tried to secure her future by giving her title to the land, but in the face of entrenched community norms that work against women's independence, his plans for his family's security were defeated, and five of their children died. Having land is important, but it is not enough – community support, money and extension services are vital to making that land productive. Millions of women are just as vulnerable as Apiyo. When their husband dies, they may lose their land, and some become destitute, and have to do sex work or move to urban areas to try and secure a living.

In many ways Apiyo is lucky, even though she remains extremely poor. She is not completely alone. Being a member of the women's group is really helping her. Apiyo's story shows that people in great poverty work actively to change their lives, but the gender relations of the society within which they live present huge barriers to escaping poverty for good.

The data

Across this book, we provide data and analysis to show that women must be empowered to become better farmers in order to raise levels of productivity and production and achieve the dramatic improvements in food security and nutrition that are so urgently needed in sub-Saharan Africa. We argue that women farmers are often not as efficient as they should be because gender relations frequently do not allow them to be effective decision-makers. In many African countries, women and men farmers operate separate farm businesses, but men may decide how to spend some or all of the profits from the women's businesses. This reduces the ability of women to generate working and investment capital, so their businesses often stay small, making women unattractive value chain partners.

Men frequently control key productive assets such as ploughs, which can mean that their fields are worked first. Women may also be required to work on men's fields and in men's businesses before tending to their own. Sometimes women find it hard to implement the training they have received because they need to obtain the agreement of their partners to make changes – which may not be forthcoming. All this means that women's fields may be ploughed last, be planted too late to maximize the growing season, and be harvested later than the optimal time. This affects food security because in many sub-Saharan African countries, women are the main growers of staple crops – even those considered “male crops”.

The FAO's State of Food and Agriculture Report 2010–2011 cites a wide array of studies from across Africa that show the impact of gender inequalities on agricultural productivity, especially because of differences in inputs (fertilizers, tools and equipment, etc.). For example:⁶

- In Kenya, men producing maize, beans and cowpeas achieve higher gross value of output per hectare than women, and the difference is accounted for by differences in

6 FAO (2011). *Women in Agriculture: Closing the Gender Gap for Development*. The State of Food and Agriculture 2010–2011. Food and Agriculture Organization of the United Nations, Rome, Italy. <http://www.fao.org/publications/sofa/2010-11/en/>. See Chapter 4: Gains from closing the gender gap (pp.39–45), which includes citations for all the studies.

inputs. A study in western Kenya found female-headed households had 23% lower agricultural yields than male-headed households, and attributed the difference to less secure access to land and lower education levels. Another study in western Kenya found that women smallholders' maize yields were 16% lower than men's, largely because they used substantially less fertilizer.

- A study in Malawi found women's maize yields were 12–19% lower than men's, but when they were able to match men's fertilizer use on experimental plots, they achieved the same yields.
- In Nigeria's Osun State, women achieved 66% lower rice yields than men, again due to differences in inputs. Similarly, in Ondo and Ogun States, women smallholders achieved lower cassava yields than men because they used fewer inputs and bought lower-quality or more expensive inputs.
- A study in Ghana found women were as efficient as men in maize and cassava production, but their yields and profits were lower because they could not maintain the fertility of their land.



A farmer in Kenya applies fertilizer to maize. Photo by B. Dos © CIMMYT, Flickr.

The FAO report goes on to argue that if women had the same access to productive resources as men, they could increase farm yields by 20–30%.⁷ Closing the gender gap in agricultural yields worldwide could thus lift 100–150 million people out of hunger.⁸ Yet it is obvious that this will not *just happen*. Improving women's access to resources is a massive task which requires deliberate, planned and radical transformation in gender relations.

Transformation is worth the effort. Empirical studies show that production and productivity levels increase where there is more equity in asset distribution. This has been known for a long time. A 1983 study in Cameroon, for example, found that labour was not allocated efficiently across men's rice fields and women's sorghum fields.⁹ Research in the 1990s in Burkina Faso, using an extremely detailed agronomic panel data set, showed that plots managed by women had significantly lower yields than similar plots managed by men

7 FAO (2011), *op.cit.*, at p.5.

8 The FAO estimates that closing the gender gap would increase agricultural output in developing countries by 2.5–4%, and this could reduce the number of undernourished people by 12–15%. See FAO (2011), *op.cit.*, Foreword.

9 Jones, C. (1983). The mobilization of women's labor for cash crop production: A game theoretic approach. Cited in Doss, C. R. (1999). *Twenty-five Years of Research on Women Farmers in Africa: Lessons and Implications for Agricultural Research Institutions – With an Annotated Bibliography*. Economics Program Paper No. 99-02. CIMMYT, Mexico City, Mexico. <http://impact.cgiar.org/pdf/246.pdf>.

planted with the same crop in the same year. The yield differential was attributable to significantly higher labour and fertilizer inputs per acre on plots controlled by men.¹⁰ In each case, men ultimately decided how labour and inputs should be allocated on both male-managed and female-managed plots. Indeed, in many smallholder farming systems in sub-Saharan Africa, women work on the men's plots and may indeed have to prioritize those plots before turning to work on their own. In some cases, reciprocal labour schemes exist, but these are not necessarily equal.

Improving the ability of women to maximize production is critical to achieving well-being. Women in sub-Saharan Africa have the highest average agricultural labour force participation in the world, an estimated 62.5% in 2012, compared with 36.4% globally.¹¹ In Ghana, for example, women produce 70% of the nation's food crops, provide 52% of the agricultural labour force, and contribute 95% of the labour for agro-processing activities and 85% for food distribution.¹² In sub-Saharan Africa as a whole, women made up 43.8% of the economically active population in 2010, and 65% of those women were in the agricultural sector¹³ – by our calculation, almost 100 million women – though there is national variation, with women providing 70% of agricultural labour in Kenya, for example.¹⁴ This also highlights the importance of closing gender gaps: an analysis in Kenya found that the increased yields that would result from ensuring that women had the same access to agricultural inputs as men (22%) would translate to a one-off doubling in Kenya's growth rate, from 4.3% (in 2004) to 8.3%.¹⁵

Men and women often “control” different crops – meaning that they are ones responsible for selling or otherwise using those crops, including for household consumption. For instance, maize is considered a “male crop” when it is sold at market, because men are responsible for selling it, even though women may have contributed the bulk of the labour required for its production. Groundnuts have traditionally been considered a “female crop” in many parts of Africa because of their centrality to the family diet. However, when “female crops” become attractive in the market, ownership often switches to men.

Numerous studies show that resources and incomes controlled by women are more likely to be used to improve child health, nutrition and education. Measures to increase women's influence within the household, such as education, are associated with better outcomes for children, thus contributing to the achievement of the Millennium Development Goals

10 Udry, C. (1996). Gender, agricultural production, and the theory of the household. *Journal of Political Economy*, 104(5). 1010–46. <http://www.jstor.org/stable/10.2307/2138950>.

11 This is down from 70.8% in 1992, a far steeper drop than for men (from 64.4% in 1992 to 61.8% in 2012). See ILO (2012). *Global Employment Trends for Women 2012*. International Labour Organization, Geneva, Switzerland. http://www.ilo.org/global/research/global-reports/global-employment-trends/WCMS_195447/lang-en/. At p.57, Table A8.

12 Post-harvest processing activities include husking maize, extracting vegetable and palm oils, grinding nuts, and smoking fish, among other tasks. See African Development Fund (2008). *Ghana Country Gender Profile*. <http://www.afdb.org/en/documents/project-operations/country-gender-profiles/>.

13 FAO (2011), op.cit.

14 Ellis, A., Cutura, J., Gillson, I., Manuel, C., Dione, N. and Thongori, J. (2007). *Gender and Economic Growth in Kenya: Unleashing the Power of Women*. The World Bank, Washington, DC. <http://hdl.handle.net/10986/6810>. At p.xxiii.

15 Ellis et al. (2007), op. cit., at p.19.

(MDGs). Research by the OECD Development Centre shows that women's control over resources, their level of decision-making power in the family and household, and their degree of control over their own physical security are all factors in the bottlenecks that hamper further progress across all the MDG targets.¹⁶ Countries where social institutions are highly discriminatory towards women tend to score poorly against the human development targets used to track progress towards achieving the MDGs. Box 1.1 presents some of the associations between women's lack of control over assets, weak decision-making power, and weak development outcomes.¹⁷¹⁸

BOX 1.1 Gender and the Millennium Development Goals¹⁷

MDG 1: Eradicate extreme hunger and poverty

Countries where women lack any right to own land have, on average, 60% more malnourished children. In Ghana, a 1% increase in the share of assets owned by rural women results in 2.8% increase of monthly expenditure on food.¹⁸

Where women lack any access to credit, the number of malnourished children is 85% above average.

MDG 2: Achieve universal primary education

The lack of women's decision-making power in the family and household limits their ability to make choices to safeguard the health, education and welfare of their children. Net enrolment in primary education is generally lower in countries with high levels of early marriage. In the countries where more than half of 15–19-year-old girls are married (Democratic Republic of Congo, Niger, Afghanistan, Congo, Mali), fewer than half of primary school-aged children, on average, attend school.

Other MDGs:

Where women's roles and decision-making power in the household are restricted, they have less ability to influence decisions regarding their children's welfare and well-being. This is reflected in the fact that under-5 mortality rates (an indicator for MDG 4) are, on average, higher in countries with family laws that discriminate against women.

The prevalence of HIV in the population aged 15–24 years (an indicator for MDG 6) is on average greater in countries where women have few rights in relation to inheritance or parental authority, and where polygamy is more prevalent.

Where women have few land rights, the proportion of the population with access to safe drinking water (an indicator for MDG 7) is on average lower as well.

16 OECD Development Centre (2010). *Gender Inequality and the MDGs: What Are the Missing Dimensions?* 'At Issue' brief. Organisation for Economic Co-operation and Development, Paris. <http://www.oecd.org/development/poverty/49016646.pdf>. OECD Development Centre (2010). *Gender Inequality and the MDGs: What Are the Missing Dimensions?* 'At Issue' brief. Organisation for Economic Co-operation and Development, Paris. <http://www.oecd.org/development/poverty/49016646.pdf>.

17 Unless otherwise noted, information in this box is drawn from OECD Development Centre (2010), op.cit.

18 Doss, C. (2006). The Effects of Intrahousehold Property Ownership on Expenditure Patterns in Ghana. *Journal of African Economies*, 15(1). 149–80. DOI:10.1093/jae/eji025. Doss, C. (2006). The Effects of Intrahousehold Property Ownership on Expenditure Patterns in Ghana. *Journal of African Economies*, 15(1). 149–80. DOI:10.1093/jae/eji025.

This book is packed with examples which show how policies and programmes that foster gender equity in agriculture improve not only women's lives, but overall well-being and agricultural production. It sets out an “empowerment pathway” which explains how action should be taken on several levels – the personal, community and the overall enabling environment – to ensure change is sustainable.

Overview of the book

Chapter 2 explains our conceptual framework. We place empowerment at its heart, and we show that no single intervention is enough to achieve gender equality and sustainable growth. We have to develop complex interventions, either directly or in partnership, to empower women at all levels. Otherwise, gains will not be secured.

Chapter 3 discusses the institutional settings which can encourage greater gender equity, including the role of gender in agricultural research and the use of gender audits within implementing institutions. It also provides a policy-level case study from Ghana on how to develop gender-responsive budgeting in the agricultural sector.

In **Chapter 4** we recognize that better data and better analyses have helped to create deeper understandings of how inequitable gender relations hinder effective agricultural development. This has led to a number of significant global publications which argue that developing **gender-centred policies** will ensure higher production and productivity in agriculture and generate a large number of social benefits. Within 18 months, the World Bank's World Development Report 2008,¹⁹ the International Assessment of Agricultural Science and Technology for Development,²⁰ and the *Gender in Agriculture Sourcebook*²¹ all made the same case for radical change. Their message has been reinforced by many sources since, including in the World Development Report 2012, which focused on gender equality.²²

In **Chapter 5** we highlight the use of household methodologies, enriched by a growing insight in the development and research communities that the long-held assumption of households as cohesive units, with shared assets, needs and goals, does not always match reality. Rather, in many parts of sub-Saharan Africa, women and men often lead separate lives even within the same household, with access to different resources and different production and consumption activities.²³

19 The World Bank (2007). *World Development Report 2008: Agriculture for Development*. Washington, DC. <http://go.worldbank.org/2DNNMCBG10>.

20 See McIntyre, B. D., Herren, H. R., Wakhungu, J. and Watson, R. T. eds. (2008). *Agriculture at a Crossroads: International Assessment of Agricultural Knowledge, Science and Technology for Development*. Johannesburg. <http://www.unep.org/dewa/Assessments/Ecosystems/IAASTD/tabid/105853/Default.aspx/>.

21 The World Bank, FAO and IFAD (2009). *Gender in Agriculture Sourcebook*. The World Bank, Food and Agriculture Organization of the United Nations, and International Fund for Agricultural Development, Washington, DC. <http://go.worldbank.org/5Z9QPCC7L0>.

22 See The World Bank (2011). *World Development Report 2012: Gender Equality and Development*. Washington, DC. <http://go.worldbank.org/6R2KGVEXP0>.

23 Doss, C. R. (1999). *Twenty-five Years of Research on Women Farmers in Africa: Lessons and Implications for Agricultural Research Institutions – With an Annotated Bibliography*. Economics Program Paper No. 99-02. CIMMYT, Mexico City, Mexico. <http://impact.cgiar.org/pdf/246.pdf>.

Chapter 6 examines a variety of strategies to improve women's say at the community level, ranging from working with progressive decision-making structures in customary systems in Zambia, to grassroots women's organizations in Kenya, to men's organizations working for women's equality, again in Zambia.

Chapter 7 continues the policy discussion by looking at ways to improve women's access to land and productive inputs. Very different case studies from Kenya and Zimbabwe show the importance of combining work at the policy level with the work of advocacy networks and grassroots women's groups to achieve long-lasting change. Each study demonstrates that land reform is only the start of the journey. Much more needs to be done.

Chapter 8 examines ways to improve women's capacity to access and thrive in agricultural value chains, and to ensure that value-chain interventions adequately account for gender issues. The discussion is illustrated by case studies from Kenya and Zimbabwe.

Chapter 9 deals with the specific role that gender plays in "climate-smart" agriculture and, more broadly, in the development of strategies for mitigation and adaptation to climate change. This is a very new and poorly researched area, and there is little empirical evidence to date of effective strategies. However, all our understanding of gender relations suggests that if "climate-smart" agriculture is to succeed, it is critical to involve women from the start of any intervention.

The book ends with a brief overview of the larger themes that arise in the book, and some discussion of areas which need further research and further experimentation.