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Food and Agriculture Organization of the United Nations Organisation des Nations Unies pour l'alimentation et l'agriculture Продовольствен ная и сельскохозяйств енная организация Объединенных Наций Organización de las Naciones Unidas para la Agricultura y la Alimentación

# **CONFERENCE**

## **Thirty-seventh Session**

Rome, 25 June - 2 July 2011

The Vital Role of Women in Agriculture and Rural Development

#### **Executive Summary**

This document provides evidence on the vital role of women in agriculture and rural development. It demonstrates that eliminating the gap between men and women in access to agricultural resources and inputs would raise yields on women's farms by 20-30 percent and increase agricultural production in developing countries by 2.5-4 percent, which could in turn reduce the number of undernourished people in the world by 12-17 percent or 100-150 million people. The document also reviews policy recommendations and proven strategies for closing the gender gap in agriculture and rural development.

#### The Conference is invited to:

- Note that gender inequality in agriculture is a problem not just for women but for the agricultural sector, food security and society as a whole.
- Urge countries to eliminate all forms of discrimination against women under the law, both written and enshrined in practice, in access to land, financial services, rural employment, agricultural technology and public services.
- Encourage countries, donors and civil society to ensure that all agricultural programmes and
  projects take account of the different roles and responsibilities of men and women and the
  constraints they face in agriculture and rural employment.

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#### I. Introduction

1. Agriculture is underperforming in many developing countries, and one of the key reasons is that women do not have equal access to the resources and opportunities they need to be more productive. "The State of Food and Agriculture 2010-11, Women in agriculture: Closing the gender gap for development" (SOFA 2010-11)¹ presents an extensive body of evidence on the vital role of women in agriculture and rural development, the gender-specific constraints they face in accessing resources and opportunities, the potential benefits for the sector and society that could be achieved by reducing these constraints, and lessons-learned from policies, programmes and interventions aimed at closing the gender gap in agriculture.

- 2. SOFA 2010-11 finds that reducing the gap between male and female farmers in access to productive resources, assets and inputs could raise yields on farms operated by women by 20-30 percent. This would generate significant gains in agricultural production at national levels and could reduce the number of undernourished people in the world by 12-17 percent. Given that an estimated 925 million people in the world were undernourished in 2010,<sup>2</sup> gains of this magnitude could mean 100 to 150 million fewer people living in hunger. For countries where hunger is more common and women play a major role in the agricultural sector, the proportional gains could be even greater.
- 3. SOFA 2010-11 confirms that the Millennium Development Goals on gender equality (MDG 3) and poverty and food security (MDG 1) are mutually reinforcing. The conclusions are clear: (i) gender equality is good for agriculture, food security and society; and (ii) policies can make a difference governments, civil society, the private sector and individuals, working together, can promote gender equality in agriculture and rural areas.

## II. Women's Roles in Agriculture and Rural Labour Markets

#### A. Women in Agriculture

4. Women comprise an average 43 percent of the agricultural labour force of developing countries. The female share of the agricultural labour force ranges from about 20 percent in the Americas to almost 50 percent in East and Southeast Asia and sub-Saharan Africa (Figure 1). The regional averages hide wide variations within and between countries.

<sup>2</sup> Data for the number of undernourished is from: "The State of Food Insecurity in the World 2010. Addressing food insecurity in protracted crises", FAO, 2010.

<sup>&</sup>lt;sup>1</sup> Document C 2011/2 Add.1 presents a short summary of SOFA 2010-11. For more information, see the full publication at http://www.fao.org/publications/sofa/en/.

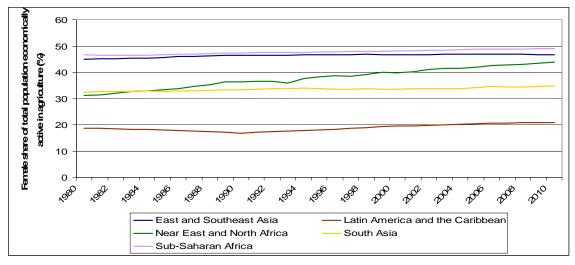


Figure 1. Female share of the agricultural labour force

Source: FAOSTAT.

- 5. One feature of modern agricultural value chains is the growth of contract farming or outgrower schemes for high-value produce. Evidence shows that women supply much of the labour under contract farming arrangements, but female farmers are largely excluded from signing contracts themselves because they lack secure control over land, family labour and other resources required to guarantee delivery of a reliable flow of produce.
- 6. Women are heavily engaged in the livestock sector. In particular women often have a prominent role in managing poultry and dairy animals. In some countries small-scale pig production is also dominated by women. The role of women in meeting the rising demand for livestock products may diminish as the sector becomes more commercialized because women often find it more difficult to start their own business and tend to lose control over profitable activities.
- 7. Available data shows that about 12 percent of fishers and fish farmers in the primary sector are women. In two major producing countries, China and India, women represented a share of 21 percent and 24 percent, respectively, of all fishers and fish farmers. Women play a particularly significant part in all regions in the processing and marketing stages.

#### B. Women in Rural Labour Markets

8. In most developing country regions, women who are employed are just as likely as, or even more likely than, men to be in agriculture (Figure 2). The major exception is Latin America, where agriculture provides a relatively small source of female employment and women are less likely than men to work in agriculture.

100% % of male and female employment, respectively 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Males Males Males Males Females Males Females Females Females -emales Sub-Saharan East and Near East and South Asia Developing Latin America countries Africa and the Southeast North Africa Caribbean Asia ■ Agriculture ■ Industry ■ Services

Figure 2. Distribution of Male and Female Employment, by Sector

Source: ILO, Key Indicators of the Labour Market (KILM, 6<sup>th</sup> Edition).

Note: The ILO, KILM data covers only a subset of the countries in each region.

9. In general women are less likely to work in wage employment than men. Women are also more likely to be in part-time and seasonal jobs. Moreover, the Rural Income Generating Activities (RIGA) data shows that rural wage-earning women are more likely than men to hold low-wage jobs and that there is a substantial gender wage gap in rural and urban areas of the countries covered by the RIGA dataset<sup>3</sup> (Figure 3).

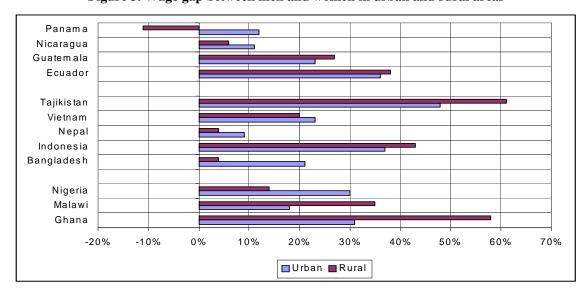


Figure 3. Wage gap between men and women in urban and rural areas

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<sup>&</sup>lt;sup>3</sup> Rural Income Generating Activities (RIGA) is an FAO project that has created an internationally comparable database of rural household income sources from existing household living standards surveys for more than 27 countries. Most of the surveys used by the RIGA project were developed by national statistical offices in conjunction with the World Bank as part of its Living Standards Measurement Study (LSMS). For more information see http://www.fao.org/es/ESA/riga/english/index\_en.htm.

Source: "Wage inequality in International perspective: Effects of location, sector, and gender", T. Hertz, A.P. de la O Campos, A. Zezza, C. Azzarri, P. Winters, E.J. Quiñones, and B. Davis, 2009, paper presented at the FAO-IFAD-ILO workshop on "Gender and rural employment: differentiated pathways out of poverty", 31 March-2 April 2009, Rome, FAO.

Note: The wage gap is calculated as the difference between average daily male and female wages as a percentage of the average male wage. A positive wage gap means men are paid more than women. The rural wage gap includes farm and non-farm employment.

10. Women dominate employment in many of the high-value agricultural commodity chains in sub-Saharan Africa and Latin America (Table 1). New jobs in export-oriented agro-industries may not employ men and women on equal terms, however they often provide better opportunities for women than exist within the confines of traditional agriculture.

Table 1. Employment in selected high-value agro-industries

Country	Commodity	Year of survey	Number of employees in the agro-industry	Share of Female Employees
Cameroon	Banana	2003	10,000	
Côte d'Ivoire	Banana and pineapple	2002	35,000	
Kenya	Flowers	2002	40,000 – 70,000	75%
Senegal	French beans	2005	12,000	90%
	Cherry tomatoes	2006	3,000	60%
Uganda	Flowers	1998	3,300	75%
Zambia	Vegetables	2002/3	7,500	65%
	Flowers	2002/3	2,500	35%
South Africa	Deciduous fruit	1994	283,000	53%
Mexico	Vegetables	1990s	950,000	90%
Colombia	Flowers	mid-90s	75,000	60-80%
Chile	Fruits	1990s	300,000	ca 46%
Dominican Republic	Fruits, vegetables, flowers, plants	1989-90	16,955	ca 41%

Sources taken from: "Are modern supply chains bearers of gender inequality?", M. Maertens and J.F.M. Swinnen, 2009, paper presented at the FAO-IFAD-ILO workshop on "Gender and rural employment: differentiated pathways out of poverty", 31 March-2 April 2009, Rome, FAO.

"Occasional Paper Gender Policy 1: The feminization of agriculture? Economic restructuring in rural Latin America", C.D. Deere, 2005, United Nations Research Institute for Social Development (UNRISD), Geneva, Switzerland, UNRISD.

## III. Documenting the Gender Gap in Agriculture

11. Agriculture is important to women, but female farmers have less access to the productive resources and services, such as land, livestock, human capital, extension services, financial services and new technology, required by agricultural producers.

12. Improving women's access to LAND and security of tenure has direct impacts on farm productivity, but, through strengthening women's status and influence in the household, has implications for improving household welfare as well. For example, strengthening land ownership by women in Nepal is linked with better health outcomes for children.<sup>4</sup> Women across all developing regions are consistently less likely to own or operate land (Figure 4); they are also less likely to have access to rented land, and they generally operate smaller plots than men do.

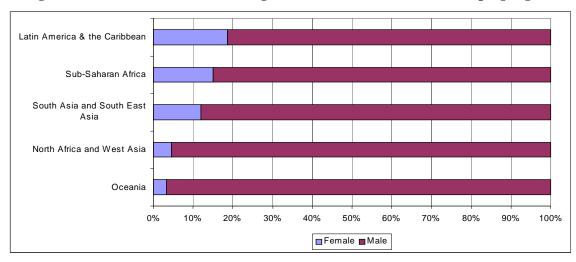


Figure 4. Share of male and female agricultural holders in main developing regions

Source: Elaboration based on data from the FAO Gender and Land Rights Database (<a href="www.fao.org/gender/landrights">www.fao.org/gender/landrights</a>).

Note: regional aggregates do not include all countries due to lack of data. See SOFA 2010-11 for country level data.

13. LIVESTOCK is another key asset in rural areas.<sup>5</sup> In many countries, livestock is one of the most valuable agricultural assets and draught animals are also the main source of power in many regions. The evidence shows systematic gender inequalities in livestock breeders. For countries covered by the RIGA data set, male-headed households have larger livestock holdings, on average, than female-headed households (Figure 5).

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<sup>&</sup>lt;sup>4</sup> See "Do women's land rights promote empowerment and child health in Nepal?", K. Allendorf, 2007, World Development, Volume 35, Issue 11, pages 1975-1988.

<sup>&</sup>lt;sup>5</sup> For additional information see "The State of Food and Agriculture 2009. Livestock in the balance." FAO, 2009.

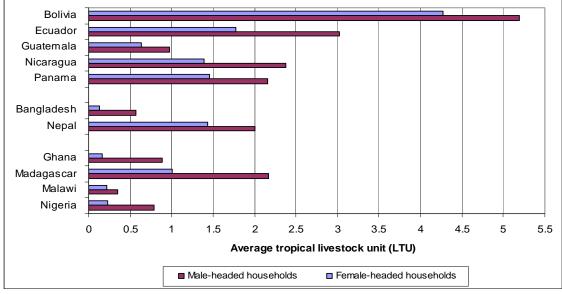


Figure 5. Household livestock assets in male- and female-headed households

Source: FAO, RIGA-team.

- 14. Gender specific LABOUR constraints due to household and community responsibilities and gender-specific labour requirements mean that women farmers cannot farm as productively as men, and make it more difficult for them to respond when crop prices rise. Female-headed households face more severe labour constraints than male-headed households because they typically have fewer members but more dependents. In some areas, male out-migration adds to the constraint already imposed by gender specific farming tasks.
- 15. The level of HUMAN CAPITAL available in a household is strongly correlated with measures such as agricultural productivity, household income and nutritional outcomes all of which ultimately affect household welfare and economic growth at the national level.
- 16. Gender differences in EDUCATION are significant and widespread and reflect a history of bias against girls in education. Despite this bias, human capital accumulation is one asset category for which the gender gap has clearly narrowed in recent decades. Although progress has been uneven across regions and important gaps persist, significant gains have been made in primary school enrolment rates for girls, and the gap between boys and girls has narrowed. Of the 106 countries committed to MDG 3 on gender parity in access to education, 83 had met the target by 2005.
- 17. EXTENSION SERVICES providing good and timely information on new technologies and techniques help farmers when deciding whether to adopt an innovation, and can lead to significant yield increases. Yet, the provision of extension services in developing economies remains low for both women and men, and women tend to make less use than men of extension services. Even when women have access to extension services, the benefits may not be obvious.
- 18. Also the way in which extension services are delivered can constrain the way women farmers receive information on innovations. Women tend to have lower levels of education than men, which may limit their active participation in training that uses a lot of written materials. Time constraints and cultural reservations may hinder women from participating in extension activities, like field days, outside their village or within mixed groups.
- 19. FINANCIAL SERVICES such as savings, credit and insurance provide opportunities for improving agricultural output, food security and economic vitality at household, community and national levels. There is a substantial amount of evidence showing that there is a significant gender

gap in the access to credit in many developing countries. Women also often get smaller loans and may not retain control over the use and/or income generated by the loan.

20. Many studies have shown that improving women's direct access to financial resources leads to higher investments in human capital in the form of children's health, nutrition and education.

21. Access to new TECHNOLOGY is crucial in maintaining and improving agricultural productivity. The use of purchased inputs depends on the availability of complementary assets such as land, credit, education and labour, all of which tend to be more constrained for female-headed than for male-headed households. The evidence points to significant gender differences in the adoption of improved technologies and the use of purchased inputs, such as fertilizer (Figure 6), across regions.

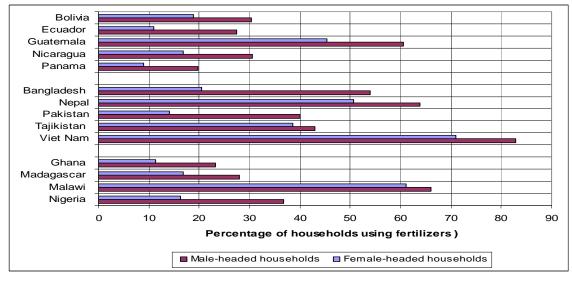


Figure 6. Fertilizer use by female- and male-headed households

Source: FAO, RIGA-team.

## IV. Gains from Closing the Gender Gap

#### A. Production Gains from Closing the Gender Gap

- 22. Many studies have attempted to assess whether female farmers are as productive as male farmers. Most of these studies found that male farmers achieved yields that were 20-30 percent higher than those of female farmers. The vast majority of studies found also that differences in yields were due to differences in input levels. Although most of these studies pertain to sub-Saharan Africa, similar input gaps are documented for all regions in SOFA 2010-11.
- 23. Closing the input gap on the agricultural land held by women would, assuming a gender yield gap of 20-30 percent, lead to an increase in agricultural output in the developing countries for which data are available by an average of 2.5 to 4 percent. Assuming the input and yield gaps are representative of other developing countries, this would imply global gains of a similar magnitude.<sup>6</sup>
- 24. Assuming the increased production were consumed domestically then closing a yield gap of 20-30 percent would reduce the number of undernourished people, in the 34 countries for which data

<sup>&</sup>lt;sup>6</sup> For details see "The State of Food and Agriculture. Women in Agriculture: Closing the gender gap for development." FAO, 2010-11.

are available, by 12-17 percent. An estimated 925 million people in the world were undernourished in 2010, so gains of this magnitude could mean 100 to 150 million fewer people living in hunger. For countries where hunger is more common and women play a major role in the agricultural sector, the proportional declines could be even greater.

#### B. Other Social and Economic Benefits of Closing the Gender Gap

25. Evidence from Africa, Asia and Latin America consistently shows that families benefit when women have greater status and power within the household. And when women have more influence over economic decisions, their families allocate more income to food, health, education, children's clothing and children's nutrition. Social safety net programmes in many countries now target women specifically for these reasons. These additional benefits have not been included in the estimated production gains from closing the gender gap.

## V. Closing the Gender Gap for Development

26. Closing the gender gap in agriculture is not easy and there is no simple "blueprint", but progress can be made and simple interventions can sometimes be very powerful. Carefully designed policies and projects can work within existing cultural norms, with public and private sectors, in ways that benefit both women and men. Since some assets are complementary and the constraints facing women are often mutually reinforcing, interventions need to be bundled and sequenced appropriately. Moreover it is impossible to separate women's economic activities from their household and community responsibilities, therefore a holistic approach is fundamental. Specific recommendations for closing the gender gap in access to land, rural labour markets, financial services, social capital and technology, include the following steps.

## A. Closing the Gap in Access to Land

- 27. ELIMINATE DISCRIMINATION UNDER THE LAW: Where statutory legal rights to land remain gender biased a key strategy is to review and reform all national legislation that relates to land and natural resources. Although land laws are the starting point, related legislation should also be considered.
- 28. RECOGNIZE THE IMPORTANCE AND POWER OF CUSTOMARY LAND RIGHTS: Legal rights are difficult to enforce if they are not seen as legitimate; thus recognizing customary land rights and working with community leaders is essential to ensure that women's rights are protected.
- 29. EDUCATE OFFICIALS AND EVALUATE THEM ON GENDER TARGETS: Local land officials may be unaware of gender equity laws and objectives or lack the mechanisms, tools and will to implement them. Gender-balanced employment in these institutions can also help.
- 30. EDUCATE WOMEN REGARDING LAND RIGHTS: Raising women's legal literacy, increasing the dissemination and accessibility of information and establishing supporting legal services are essential in promoting gender equity in land programmes.
- 31. ENSURE THAT WOMEN'S VOICES ARE HEARD: An important step towards helping women gain access to established rights is to have meaningful representation. Women's organizations can be effective in promoting local participation, building consensus and raising consciousness at all levels.
- 32. GATHER SEX-DISAGGREGATED DATA FOR POLICY DESIGN AND MONITORING: Gathering sex-disaggregated data can help improve the design and effectiveness of land-titling programmes.

<sup>&</sup>lt;sup>7</sup> Data for the number of undernourished is from "The State of Food Insecurity in the World 2010. Addressing food insecurity in protracted crises." FAO, 2010.

## B. Closing the Gap in Rural Labour Markets

33. TARGET WOMEN'S MULTIPLE TRADE-OFFS: Women face multiple trade-offs in the allocation of their time and without policies and investment in labour-saving technologies, labour market participation is often not an option, even when the opportunities are there. Moreover it is important that governments create a good investment climate through strengthening property rights and providing public goods such as roads, electricity and water.

- 34. REDUCE GENDER INEQUALITIES IN HUMAN CAPITAL: Better access to education and better quality education will help reduce some of the wage gap and allow women to diversify by widening the opportunities available to them. Skill building should address relevant skills and knowledge gaps and focus on extension services and vocational training.
- 35. CAPITALIZE ON PUBLIC WORKS PROGRAMMES: Informal labour is an important source of income for unskilled women in general and more so in times of crisis. Public works schemes can provide support to unskilled workers, including women.
- 36. STRENGTHEN WOMEN'S RIGHTS AND VOICE: Effective empowerment of women among the membership and leadership positions in organizations, such as producer organizations, cooperatives, workers' unions and out-grower schemes, is needed to ensure rural women have greater voice and decision making power.

## C. Closing the Financial Service Gap

- 37. PROMOTE FINANCIAL LITERACY: Financial institutions, governments and NGOs should offer financial literacy training to ensure that women can compare products and make decisions based on a clear understanding of the characteristics and conditions of the products available.
- 38. DESIGN PRODUCTS THAT MEET THE NEEDS OF WOMEN: Noticeable progress has been made in recent years in extending insurance products to small producers and to rural areas. More attention should be paid to the design of these products so that they address issues, such as health and life events, such as pregnancy and birth, death and marriages, which are particularly important to women.
- 39. PROMOTE A WOMEN-FRIENDLY AND EMPOWERING CULTURE: Lenders and other financial institutions should promote a gender-sensitive culture throughout their organization.
- 40. USE TECHNOLOGY AND INNOVATIVE DELIVERY CHANNELS: Technological innovations such as prepaid cards to distribute loan payments and mobile phone plans to make loan payments and transfer cash can help women overcome social constraints that restrict women's mobility or the people with whom they can interact.

#### D. Closing the Gap in Social Capital through Women's Groups

- 41. Building women's social capital can be an effective way to improve the exchange of information and the distribution of resources, to pool risks and to ensure that women's voices are heard in decision-making at all levels. Achieving scale through pooling resources can help women overcome some of the constraints that individual farmers face.
- 42. Self-help groups have also proven to be an effective method for connecting women with financial institutions. There is evidence that working through groups can help women retain control over the loans they receive and enhance the returns to investments in women-managed enterprises.

#### E. Closing the Technology Gap

43. The SOFA 2010-11 documented that rural women work very long days balancing a variety of tasks related to crop and livestock production, wage employment, childcare as well as food preparation and collecting firewood and water. Interventions through public infrastructure, for example, are likely to have important time-saving benefits for women and can help promote women's participation in more productive activities.

44. Farm tools that are predominantly used in operations dominated by women, e.g. weeding or post-harvesting, are often not gender-specific. Technologies are not gender neutral: women tend to be of lower weight and height compared with men and may not have equal muscular strength. An example of women specific technology is the long-handle hoe introduced in several African countries which eased women's burden of work as compared to traditional short-handle hoes. The fact that these hoes were resisted in some countries highlights the challenges facing technology developers. Greater involvement of women in agricultural research and higher education could also enhance the development of female-friendly technology.

- 45. Extension services are important for diffusing technology and good practices, but reaching female farmers requires careful consideration. In some contexts, but not all, it is culturally more acceptable for female farmers to interact with female extension agents. Hiring female extension agents can be an effective means of reaching female farmers. This preference is not universal, however, so in many cases properly trained male extension agents may be able to provide equally effective services. Male extension agents must be sensitized to the realities of rural women and thus the quality of information provided to women improved. Extension systems will also have to be more innovative and flexible to account for time and mobility constraints.
- 46. Farmer-field schools (FFS) have proven to be a participatory and effective way of empowering and transferring knowledge to women farmers. When targeting female participation in FFS, time constraints play a significant role. In order to increase the impact of FFS on women and to ensure their sustainability, it is important to consider ways to provide such training at a reasonable cost.

## F. Making Gender-aware Agricultural Policy

47. Virtually any agricultural policy related to natural resources, technology, infrastructure or markets will affect men and women differently because they play different roles and experience different constraints and opportunities in the sector. Good agricultural policy requires an understanding of the gender dimensions at stake. Because some agricultural and gender issues are location-specific, these may best be addressed through location-specific assessments and tailored policies and programmes. Because interventions may have gender-impacts that are difficult to predict, policies and programmes should include the collection of baseline data and rigorous monitoring and evaluation, and practitioners should be prepared to reformulate their activities in response to unforeseen developments. Making women's voices heard at all levels in decision-making is crucial in this regard.

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<sup>&</sup>lt;sup>8</sup> See "The potential for improving production tools and implements used by women farmers in Africa." IFAD, FAO, FARMESA, 1998, Rome, Italy.