

Gender in science, innovation, technology and engineering

# **FACT SHEET: AGRICULTURE**

Worldwide, women are central to agricultural production; they comprise 43% of the agricultural labour force in developing countries on average, and are more than half of this labour force in many countries, including Bangladesh and many East African countries<sup>1</sup>. Providing greater support for women in agriculture – by raising awareness about their roles and guaranteeing certain resources – could raise overall productivity and food production leading to higher household incomes and gains in the health and education levels of children and adults<sup>1</sup>.

# **ACCESS TO AGRICULTURAL RESOURCES**

Women's responsibilities in agriculture vary, but they are most commonly involved in weeding, harvesting, fertilizer application and in food processing and preparation; they are also often responsible for looking after poultry and dairy animals<sup>2</sup>. With the increasing migration of men to urban centres for employment opportunities, women continue to take on a larger number and greater diversity of tasks<sup>3</sup>: but despite their importance in agricultural production, they frequently do not have access to resources they need to increase their

output, such as land, credit, technology, information, training and education. It is difficult for women to move beyond subsistence-level farming into more economically-valuable market-oriented agricultural production. Access to land is particularly critical, as access to credit, water rights and other resources are often closely linked with land ownership. Women in developing countries own less than 20% of land on average<sup>1</sup>; in Africa, they own only 1% of land in total, and receive only 1% of all agricultural credit<sup>4</sup>.

# **The Productivity Question:**

Many studies of agricultural productivity have shown that women's yields are on average about 25% lower than those of men; but recently, a newer wave of research has shown that this 'productivity gap' disappears, or may even favour women<sup>3</sup>, when they are given equal access to land, inputs and agricultural services<sup>1</sup>.

# **GENDER IN AGRICULTURAL TECHNOLOGY**

The majority of agricultural tools and services are more accessible to men than women. Physical tools can often be too large, heavy or unwieldy for women to operate efficiently, may not be culturally acceptable for women's use, and are more suited to large-scale farming practiced by men<sup>5,6</sup>. Agricultural extension and technology dissemination programmes also tend to be oriented towards men; women participate in these programmes in very low numbers. One reason may be that staff of

#### **WOMEN AND FOOD SECURITY**

The need to address the specific concerns of women in agriculture is particularly imperative as a growing world population – expected to reach 9.2 billion by 2050 – combined with climate change and other environmental stresses will together contribute to declining crop yields, decreasing arable land per capita, and increasing difficulty in meeting worldwide nutritional needs<sup>1</sup>.



Providing women with equal access to agricultural resources could increase their output by 20-30%, helping to improve food security and reducing global hunger by as much as 12-19% according to current estimates<sup>1</sup>.

extension services are usually male, though studies have shown that women prefer and benefit more by learning from other women<sup>5</sup>. Efforts to mainstream gender analysis into agricultural technology dissemination programmes, particularly in rural areas, can improve women's participation.

# **EMPOWERING WOMEN THROUGH AGRICULTURE**

When women are able to have direct control over agricultural production and the income that derives from it, they often gain a greater say in both household and public decisions. With increased self-confidence and valuable knowledge and skills, they may become leadership figures in their communities. Women also tend to prioritize children's education and nutrition to a greater extent than do men, leading to overall social benefits<sup>1</sup>.

Sources: 1. FAO, The State of Food and Agriculture 2010-2011 2. FAO, The Role of Women in Agriculture, 2011. 3. Action Aid, What Women Farmers Need: A Blueprint for Action, 2011. 4. Action Aid, Investing in Women Smallholder Farmers, 2011. 5. Rathgeber for UN Women, Rural Women's Access to Science and Technology in the Context of Natural Resource Management 2011. 6. Carr, Marilyn with Maria Hartl, Lightening the Load. Labour saving technologies and practices for rural women 2010.