



# Poverty and gender aspects of food safety and informal markets in sub-Saharan Africa

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## Key messages

- The poor are more prone to food-borne disease but can least afford to fall ill.
- Risk-mitigating measures need training, skills development and prerequisites
- Men and women dominate or are excluded from different segments of the food value chain, and this varies by culture and geography. As a result, women and men get different benefits from informal food markets and are exposed to different risks.
- In addition to socio-cultural roles affecting health, men, women, the old, the young and other groups may have different vulnerabilities to different diseases.
- Informal food production, processing and marketing are of high importance to women's livelihoods and offer new opportunities.

## The poor can least afford to fall ill

Everyone is part of the informal market. However, those supplying it are not there because they like operating informally but because they have to make a living. The poor not only dominate informal markets but are also the most vulnerable to disease. They only see a doctor if they cannot work any more, and this leads to a vicious cycle; they are not paid for the time they are not working and sometimes spend more than they can afford to receive treatment at a hospital. It is even worse if several members of the family are ill and not able to work. If they cannot afford medical

care, they are at risk of life-long disabilities or long-term indebtedness. Moreover, not being able to work in the fields can result in food insecurity.

The World Health Organization (WHO) quantifies the burden of disease by using metrics such as disability-adjusted life years (DALYs). One DALY can be thought of as one lost year of 'healthy' life. The sum of these DALYs across the population, or the burden of disease, can be thought of as a measurement of the gap between current health status and an ideal health situation where the entire population lives to an advanced age, free of disease and disability.

By calculating these metrics, the WHO determined that in 2012 the two leading causes of infectious disease burden were lower respiratory tract infections and diarrhoeal diseases. In countries with good data, it is often the case that livestock and fish products are the foods most commonly implicated in food-borne disease. Given that people share 60% of their diseases with animals, that is not too surprising. Moist, nutrient-rich foods like meat and milk also provide a better environment for bacteria to grow than dry foods like cereals or legumes.

But as well as being implicated in making people sick, livestock and fish also contribute to good health through the nutrients they supply. In poor countries, livestock and fish feed billions and provide them with energy and proteins. Fish account for more than half of the animal protein intake for the 400 million poorest people in Africa and South

Asia. Meat, milk, eggs and fish are important sources of the micro-nutrients and high quality proteins essential for growth and health.

## Women and men in informal markets

Almost two-thirds of the world's 925 million poor livestock keepers are rural women, and women often predominate in urban agriculture, which fits well with their traditional care-taking and house-holding roles. Women often have greater involvement in keeping poultry and small ruminants and men in larger animals; dairying is an interesting exception where the roles of women and men vary dramatically between cultures.

*In Africa, rearing cattle is traditionally the responsibility of the men and the number of cows is equivalent to the farmers' social status. Boys are trained from an early age to tend the family's cattle, like this one from a Touareg encampment in Niger (photo credit: ILRI/Stevie Mann).*



Animal slaughter is also often differentiated by gender, with women being responsible for killing poultry typically inside the homestead, but most slaughter of larger animals outside the home being done by men. Small-scale processing of animal products to make traditional products is frequently a woman's task while more modern, industrialized operations (such as dairy cooperatives) are often dominated by men, at least in managerial and ownership roles.

In Africa, the majority of perishable food, such as livestock and fish products and fresh vegetables, is sold in small-scale, traditional markets which may be called 'informal' or 'wet' markets. In most cultures, both women and men can sell and buy in these markets but there are often gender differences depending on the products and place.

Street food is another important part of the informal food sector. It is a source of inexpensive, convenient and nutritious food and is especially important for the poor who lack resources to prepare meals at home. Animal-source foods are among the most commonly sold street foods in most countries and often are derived from animals kept in cities. In most African countries, the majority of street food processors and vendors are women, while the majority of customers are men. As well as being one of the few livelihood strategies open to poor women, the street food sector is of great importance to the economy.

*Milk marketing in Mieso, Mirab Hararghe zone of Oromia Region, Ethiopia (photo credit: ILRI/Apollo Habtamu).*



Almost everywhere in Africa, women are responsible for preparing and cooking food for home consumption. This often includes acquiring the fuel needed for cooking, often wood, charcoal or animal dung. Pollution resulting from cooking over open fires or basic stoves has been linked to the deaths of 4 million people annually; women and children are most at risk.

## Why does food safety research need a gender perspective?

Women have an important role in producing, processing, selling and preparing food. These roles may have negative and positive impacts on their health, and also lead to differences in health outcomes for men and women. While some of this difference is attributable to biology (for example, women are more prone to autoimmune diseases, and pregnancy brings many risks to health), differences in health and nutrition states are also attributable to gender. In some cases, men or boys may experience worse health outcomes.



Gender refers to the socially constructed roles, behaviour, activities and attributes that determine the power relations between men and women. It is a central organizing principle of societies and often determines the processes of production and reproduction, consumption and distribution. Gender analyses take a close look at women's relationships with men and how these relations define women's roles, rights (access to and control of resources), division of labour, interests and needs. This analysis can help understand social determinants for undesirable health outcomes and hence help find ways to better prevent these.

## Different roles for men and women imply different benefits and risks

The different roles of men and women in dairy production and animal slaughter lead to different benefits and risks. For example, in West Africa where men dominate milk production, they are more at risk from zoonoses associated with

direct contact with cows during milking. On the other hand, in smallholder farms in Kenya where women are in charge of milking, the situation is reversed.

Given the important role of women in informal markets and the wide variation between men's and women's roles, risks and opportunities, it is clear that taking into account gender is important for understanding and improving informal food markets.

A gender perspective in food safety research can ensure:

- men's and women's differential exposure to agriculture-related risks are better understood, particularly as it relates to health outcomes;
- women have increased capacity to manage risks and are more involved in the surveillance of risks; and
- women directly benefit from interventions designed to reduce agriculture-associated diseases, taking into account roles and responsibilities that may put them at increased risk of exposure.

### *Box 1: Gender-based roles in animal-source food production in sub-Saharan Africa: Examples from research by the International Livestock Research Institute*

- In Ghana, men own the cattle and are responsible for milking, feeding and care while women and girls assist with collecting water and feeds and cleaning. Women are responsible for boiling, fermenting and selling the milk.
- In Mali, men are in charge of milk production, except for milk from small ruminants. Fulani herders are hired to take care of animals at the dairy farms of other ethnic groups. Male Fulani herders or the male children in the family milk the animals. Women do not milk animals but are responsible for preparing milk for home consumption and selling it in the market.
- In Kenya, women dominate informal urban smallholder dairy production and sale of milk. In some rural areas, depending on the ethnic group, men have a greater role in cattle production and marketing although women play important roles in feeding, watering and milking animals as well as selling of the milk. Butcher trade is largely dominated by men.
- In Abidjan, Côte d'Ivoire, where artisanal coastal fishing is a key livelihood activity, men are in charge of fishing but women handle the on-shore smoking and selling of the fish.

*Chickens for sale in Maputo's Xipamanine traditional market (photo credit: ILRI/Stevie Mann).*



Raw milk on sale in Côte d'Ivoire where 90% of it is produced by smallholders and 80% passes through the informal sector. In Uganda and Mali, raw milk produced by smallholders and sold by vendors or small-scale retailers accounts for an estimated 90% and 98%, respectively (photo credit: ILRI/ Sylvain Gnamien Traoré).



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