

The role of gender in crop value chain in Ethiopia:

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Abstract

This paper has demonstrated that site-specific commodity-based gender analysis is essential for understanding the different roles of women and men in the production of specific commodities, marketing and decision-making, and their share in the benefits; identifying potential barriers for women's and men's participation in market-led development initiatives and technology adoption. The gender analysis findings of the IPMS project across PLWs illustrate how this type of analysis potentially helps to explore challenges and to spot out the entry point for promoting gender equality and women's empowerment through increasing women's access to skills, knowledge, assets and increasing women's participation in market-oriented agricultural production and their control over the benefits.

1 Introduction

Rural women in Ethiopia represent a tremendous productive resource in the agricultural sector. They are major contributors to the agricultural workforce, either as family members or in their own right as women heading households. There have been recent policy initiatives to strengthen the position of women in the agricultural sector. In 2005, the Plan for Accelerated and Sustained Development to End Poverty, 2005/06 to 2009/10 (PASDEP) was launched to safeguard rights such as access to land, credit, and other productive resources, and to protect women from other deprivations, such as longer working days, violence and discrimination, and, in the same year, the Federal Rural Land Administration Proclamation took strides to secure women's landholding rights.

However, despite these recent initiatives, a mixture of economic constraints, cultural norms and practices continue to limit women's contribution to household food security and, to a lesser extent, inhibit the commercialization of the sector. Gender roles and relationships influence the division of work, the use of resources, and the sharing of the benefits of production between women and men. In particular, the introduction of new technologies and practices, underpinned by improved service provision, often disregards the gendered-consequences of market-oriented growth and many benefits bypass women.

Not only do these circumstances have implications for issues of equality but also may be detrimental to the long term sustainability of development initiatives. PASDEP also recognizes this opportunity and envisages 'unleashing the potential of Ethiopia's women' as one of the eight strategic elements to be targeted during its implementation, setting targets to involve directly 30% of women farmers in male-headed households and 100% of women in female-headed households in rural development activities by 2010

This paper discusses gender issues in the context of the Improving Productivity and Market Success (IPMS) of Ethiopian Farmers' Project being implemented by the International Livestock Research Institute and the Ministry of Agriculture and Rural Development. IPMS, a five-year project funded by the Canadian International Development Agency (CIDA), works at the federal, regional and *woreda* (administrative district) levels on institutional strengthening, capacity building and knowledge

management. The project conducts action research at the *woreda* (administrative district) level through 10 pilot learning *woredas* (PLWs) located in 4 regions of the country (Tigray, Amhara, Oromia and Southern Nations, Nationalities and People’s Region (SNNPR)) PLW activities focus on promoting priority marketable commodities (crops and livestock) in support of a market-led integrated agricultural strategy through: promoting participation by input suppliers, rural finance and farmer organizations in commodity value chains and stimulating innovation in the chains; improving service delivery systems; and strengthening market linkages.

From the outset, IPMS has recognized that an understanding of the gender context and identifying opportunities for supporting gender equality through market-led agricultural development initiatives will be central to successful project implementation and sustainability. Consequently, the project has developed a gender strategy¹ with the purpose of promoting gender equity in market-led agricultural development opportunities as a step towards achieving gender equality.

One of the early activities to implement the strategy was to conduct a gender analysis of the project’s priority commodities, technologies and services at the *woreda* level. The study had three objectives:

- to increase the understanding of the different roles of women and men in crop production, marketing and decision-making, and their share in the benefits;
- to identify potential barriers for women’s and men’s participation in market-led development initiatives and technology adoption; and
- to identify what actions may be required by the project in order to overcome some of these barriers.

The findings presented in this paper are based on qualitative studies undertaken by IPMS Research and Development Officers (RDOs) and the gender team of the project in the 10 PLWs (see Figure 1).

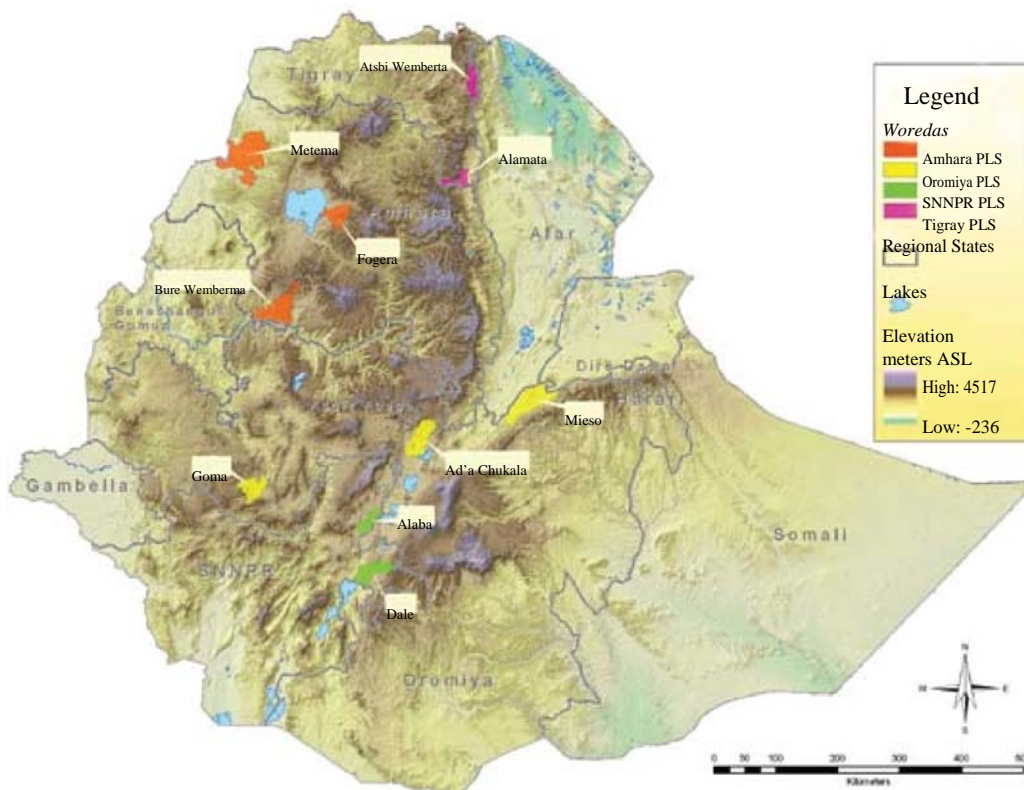


Figure 1. *IPMS pilot learning woredas.*

The fieldwork was conducted between 2005 and 2007 with groups of women and men farmers in four communities in each PLW. Groups typically comprised between 10 to 26 people, of whom one-third to a half were women. Information was gathered using a range of participatory methods, including a gender analysis of division of labour in production and marketing, access and control of resources and benefits decision-making, social capital and technology pathways; and wealth ranking in rural communities.² Attempts have been made to strengthen the validity of this qualitative data by conducting the survey in two to four communities in each *woreda*, with a total of 34 communities in all (the full list of communities participating in the study is presented in Annex 1).

The findings from the study have provided the basis for conducting a national level workshop on integrating gender into the IPMS project, organizing stakeholder workshops at the *woreda* level to develop gender-sensitive PLW action plans, undertaking gender-focused research, and identifying gender-sensitive indicators for project monitoring.

2 Gender characteristics of rural populations

This section reports on some of the main gender characteristics of rural populations in terms of workloads, rural livelihoods and female-headed households (FHHs).

2.1 Workloads of rural women and men

In most rural communities in Ethiopia, women work from dawn to dusk and, in contrast with men, have little time for leisure or socializing. Women are not only the major source of labour in the agricultural sector, they are also responsible for the vital tasks of caring for children, the sick and the elderly as part of their household responsibilities. Despite their immense contribution to society, women's productive, domestic and community-related activities seem to be undervalued, are often misunderstood and are rendered invisible from official discourse and national statistics.

The overall length of the working day for women does not vary much between the wet and dry seasons. They work for between 10–12 hours per day, half of which is spent on household tasks such as fetching water and firewood, preparing and cooking food, and caring for children. In rain fed farming systems, men's workload is lightest during the dry season because they participate to a very limited extent, usually, in household tasks. In contrast, members of households with access to both rain fed and irrigated lands are busy throughout the year. The busiest time for men with access to irrigated land is usually towards the end of the rain fed season, when they are harvesting, threshing and winnowing their rain fed crops and are simultaneously starting to prepare the land for cultivating irrigated crops.

2.2 Rural livelihoods

In addition to working in the home and on the farm, rural women engage in a diverse range of off-farm livelihood activities. These partly reflect the local farming systems and are also influenced by resource endowments and wealth (Table 1). Women from rich and

middle wealth households often trade in agricultural products, whereas poorer women work as casual labourers on farms and in the homes of richer households; they also harvest natural resources for resale (fuel wood, sorghum stalks and grass) or engage in low input activities such as cotton spinning or making *injera* for sale.

Men also undertake a wide range of off-farm activities, the nature of which is closely related to wealth (Table 2). Rich men are often involved with activities requiring capital such as trading in agricultural products, investing in processing equipment or property, or money lending. Poor men typically engage in casual labouring, harvesting and selling natural resources, or migrating temporarily for work.

Table 1. Women's off-farm livelihood activities

PLW		Household wealth		
		Rich	Middle wealth	Poor
Tigray	Atsbi-Wemberta	Processing and selling roasted barley, flour Marketing vegetables	Processing and selling roasted barley, flour Marketing vegetables	Processing and selling roasted barley, flour Marketing vegetables
Amhara	Bure	None	None	Fuelwood and charcoal selling Petty trading Casual labouring Brewing and selling local alcohol
	Fogera	Storing and reselling seed	Trading in rice	Selling fuelwood Cotton spinning Casual labouring
	Metema	None	Running small hotels Selling local beer	Cotton spinning Domestic help in richer households
Oromia	Ada'a Liben	Petty trading	None	Running local drinking houses Selling <i>injera</i> Selling dung as fuel
	Goma	None	Petty trading	Casual labouring Domestic help
	Miesso	Selling milk, butter, eggs	Selling fuelwood, sorghum stalks, grass Trading	Selling fuelwood, sorghum stalks, grass Selling <i>injera</i>
SNNPR	Alaba	Trading Making handicrafts	Trading Making handicrafts	Making handicrafts
	Dale	Trading in dairy products, grains, salt, coffee	Trading in dairy products, grains, salt, coffee	Casual labouring

NB: Data not available for Alamata *woreda*.
Source: IPMS gender survey.

2.3 Female-headed households

Households headed by women are common in rural Ethiopia. The proportion of FHHs and their classification by wealth, based on community estimates during the fieldwork, is presented in Table 3. On average, women head between 15% to 30% of households in the PLWs. FHHs are very vulnerable and they are typically found among the poorer households in each community. Nevertheless, some are also found in the rich or middle wealth groups. This is illustrated in Figure 2 that presents the distribution of households by wealth and sex of household head, averaged across nine PLWs.

Table 2. *Men's off-farm livelihood activities*

<i>Woreda</i>		Household wealth		
		Rich	Middle wealth	Poor
Tigray	Atsbi-	Salt trading	Salt trading	Salt trading
	Wemberta	Migrating for work	Migrating for work	Migrating for work
Amhara	Bure	None	None	Fuelwood and charcoal selling Grain trading Casual labouring
	Fogera	Lending money Storing and reselling seed	Trading	Casual labouring Livestock herding Seasonal employment Migrating for work
	Metema	Sesame oil processing Grain milling Trading in cotton and sesame Renting out houses	Loading and unloading trucks Weaving shema (a traditional cloth woven from locally spun cotton) Transporting construction materials with donkey carts	Loading and unloading trucks Selling firewood and animal feed (grass)
Oromia	Ada'a Liben	Cattle trading	Cattle trading	Casual labouring Charcoal making Petty trading
	Goma	Producing honey Trading	Producing honey Trading	Casual labouring Producing honey
	Miesso	Grain trading Flour mills Cattle trading Owning and running kiosks	Carpentry Cattle trading Casual labouring	Casual labouring
SNNPR	Alaba	Trading	Trading Casual labouring	Casual labouring
	Dale	Lending money	Trading in dairy products, grains, salt, coffee	Casual labouring Migrating for work

NB: Data not available for Alamata *woreda*.
Source: IPMS gender survey.

Table 3. Incidence of female-headed households and their wealth distribution by PLWs

Region	Woreda	Distribution of the total community among wealth groups			FHH as percentage of total population (%)	Distribution of FHHs among wealth groups in community		
		Rich HH (%)	Middle HH (%)	Poor HH (%)		Rich HH (%)	Middle HH (%)	Poor HH (%)
Tigray	Alamata	3	27	70	35	0	25	75
Amhara	Bure	20	35	45	20–30	15	28	57
	Fogera	16	53	31	16–36	5	19	76
	Metema	13	44	43	16	8	18	74
Oromia	Ada'a Liben	17	37	46	5–34	11	39	50
	Goma	20	43	37	20	13	30	57
	Miesso	15	33	52	18–30	0	2	98
SNNPR	Alaba	12	13	75	No data	9	15	76
	Dale	3	35	62	7–26	10	56	34

NB: Data not available for Atsbi-Wemberta woreda.

Source: IPMS gender survey; community estimates during fieldwork.

Percentage of HHs in a community 80

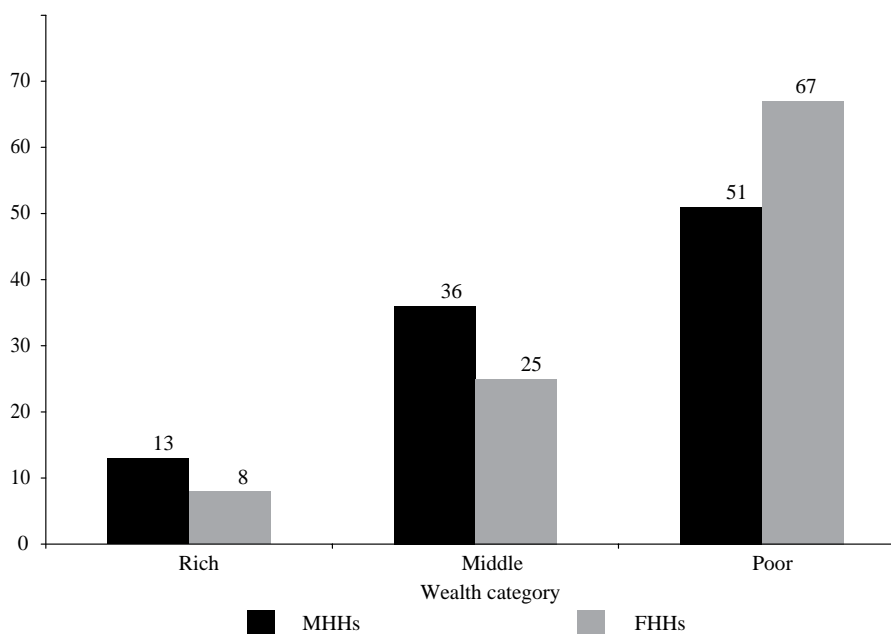


Figure 2. Distribution of male and female-headed households by wealth category

It is important to understand the specific challenges facing FHHs because they form part of the priority target group for market-oriented development activities. In addition to the constraints facing women in general, in terms of accessing inputs, services and information for example, FHHs face additional constraints which prevent them from that reach men. It is often assumed there is a trickle across of ideas, skills, knowledge and at least some share of the benefits arising from productive activities from husbands to wives.

3 Overview of gender workloads and share of benefits

The division of farm tasks between women and men varies according to the enterprise, the farming system, the technology used, and the wealth of the household. Control over the benefits of production also varies between women and men, partly reflecting their labour input, but also reflecting the use of produce in the home or for sale, cultural norms regarding ‘women’s’ and ‘men’s’ enterprises, and the dominance of men as the household head and, consequently, are entitled to the most important resources like land.

Generally men are the key players in crop production, and are also the principal beneficiaries in terms of control over the income generated through the sale of produce (this is represented by the top left hand cell in Table 4). Men also control the income from several enterprises in which the workload is shared, such as teff and sorghum in Alamata, or cotton and sesame in Metema.

There are several crop enterprises in which women and men share both the workloads and the benefits (bottom right hand cell in Table 4). In contrast, there are very few enterprises in which women dominate both the workloads and the control of the benefits; the exceptions are pepper in Fogera and poultry in several sites. However, women control the income arising from joint endeavors, such as fruit trees in Alamata, Fruit in some area of Goma.

However, it is almost impossible to draw general conclusions about the division of labour and the share of the benefits between women and men. There are significant inter- and intra-regional variations. For example, pepper is exclusively a women’s crop in Fogera, yet men dominate production in Alaba. Similarly, while men dominate vegetable activities in Atsbi-Wemberta, the activity and benefits are shared in Bure. In Goma, men dominate the benefit of fruit production in one *kebele* while women dominate it in the others.

Table 4. Gender analysis of workloads and benefits of priority crop and livestock enterprises

Control of		Workloads	
benefits	Men dominate	Women dominate	Share
Men	Teff (Alaba)	–	Teff, sorghum (Alamata)
dominate	Sorghum, maize (Miesso—rich HHs)		Cotton, sesame (Metema)
	Noug (Fogera)		Teff (Ada’a Liben)
	Pepper (Alaba)		Wheat (Ada’a Liben, Bure—rich HHs)
	Haricot beans (Alaba, Dale)		Faba beans (Ada’a Liben, Bure—rich HHs)
	Irrigated vegetables (Atsbi-Wemberta)		Chick-peas (Ada’a Liben)
	Coffee (Dale, Goma)		Onions, garlic, rice (Fogera)
	Multipurpose/forage trees (Alaba)		Onions (Bure)
			Potatoes (Bure—rich HHs)
			Pepper (Bure)
			Fruit (Genji Elbu in Goma)
Women	–		Fruit trees (Alamata, Genji Elbu in

Pepper (Fogera)

dominate		Goma)
Share	Sorghum, maize (Miesso— middle wealth and poor HHs) Eucalyptus (Fogera)	Faba beans, field peas, lentils (Atsbi- Wemberta) Faba beans (Bure—middle HHs) Potatoes (Bure—middle and poor HHs) Fruit trees (Dale, Goma, Bure)

The shaded areas represent equity of labour input and control over benefits.
Source: IPMS gender survey

There are also variations reflecting the wealth of the household. In Miesso, for example, men perform all the tasks associated with the production of sorghum and maize, with limited assistance from their wives. Yet it is only in the rich households where men control the income, whereas in middle wealth households the proceeds are shared and in poor households, women control the income. Generally, the gender division of labour is generally less marked in poorer households and income tends to be shared more equitably.

Hence it is necessary to conduct site and commodity specific studies to fully understand gender roles and relations, and the challenges and opportunities they pose for market-led agricultural development. The following sections examine the gender division of labour for specific crops, and gender roles in marketing and sharing of the benefits of production.

3.1 Gender division of labour in crop production

A detailed analysis of gender disaggregated data by site for cereals (teff, wheat, sorghum, maize, rice), pulses (faba bean, haricot bean, field peas, lentils), oil and industrial crops (cotton, sesame and noug), vegetables (peppers, onion, garlic) and trees (coffee, fruits, fodder and eucalyptus) is presented in Annex 3.

Although the division of tasks varies between commodities and between locations, it is possible to make some broad generalizations regarding the typical division of labour between women and men in crop production. Men are typically responsible for the heavier manual tasks such as land preparation and tillage with oxen. Men play a dominant role in seed selection, reflecting their better access to information (Box 1). They also perform the skilled jobs of broadcasting seed and fertilizer. However, once a household adopts row planting, any family member can plant. Men are usually responsible for threshing and winnowing cereal crops.

Box 1: Gender inequity in haricot bean production and benefits, Alaba special woreda

Haricot beans are one of the lowland pulses produced for home consumption and sale in Alaba special *woreda*. Haricot beans are grown twice a year during both rainy seasons, using small scale production. The average land holding per household is 1.5 ha and the average land allocated for haricot beans ranges from 25% to 50% of the total. During the main rainy season, haricot beans are intercropped with maize.

The introduction, demonstration and up take of technologies associated with haricot beans are dominated by men. They gain knowledge and skills from training organized by NGOs and government, orientation from experts in government and the private sector, visits and informal sources. In contrast, women rely on informal sources alone for acquiring knowledge and skills and consequently have little or no information about new haricot bean varieties and technologies. Therefore, men dominate the decisions about which types of seed to grow and what technology to use.

There are two types of haricot beans grown in the area. The white beans are mostly improved varieties and the red beans are mostly local with a few improved types. Men prefer white (Mexican and Awash) varieties because they fetch better prices and they are only grown for sale (including export). Women prefer the local haricot beans (Red Wolayita) because they are mainly consumed at home, although they can also be exported but the price is low.

Men and women share the workload in haricot bean production. Men are more responsible for land preparation, tillage, seed selection and sowing. Women are also involved in sowing seeds but not in seed selection because they lack the knowledge and skill; they also support the men during land preparation and tillage. Women are more responsible for threshing, winnowing and storing. Both are involved in weeding, harvesting and day-to-day management.

The income benefit of haricot bean production is realized through marketing. The volume of haricot beans sold by men and women varies between households. Women may sell up to 20 kg per season, often in small amounts when cash is needed at home, while men sell between 100–600 kg and control the income. Women have control over the beans left at home for consumption. The inequity is that while the workload is shared between men and women at many stages of haricot bean production, the right to access the benefits is very limited for women

Source: Abebe Shiferaw RDO, Alaba

Women are often involved with activities that require dexterity and attention to detail, such as raising seedlings in nurseries, transplanting and weeding. They are also involved with activities closely associated with their household responsibilities, such as storage, processing and adding value.

When timeliness is of the essence, particularly weeding and harvesting, women and men work together with other household members. Richer households often overcome labour peaks by hiring labour whereas middle wealth households are more likely to participate in reciprocal labour groups and festive working groups, as well as hiring labour and calling on relatives. The poor may also belong to reciprocal labour groups but they often have no alternative to using family labour. Women support these activities by providing

refreshments for the groups of labourers.

Inter-regional differences in the division of labour are best illustrated by pepper production. In Fogera, women do most of the activities associated with growing peppers (Box 2), whereas in Alaba most of the operations are performed solely by men while in Bure the activities are shared.

Box 2: Women's role in pepper production and marketing, Fogera woreda

In Fogera *woreda*, pepper is a cash crop and is grown on areas of up to 0.25 ha. The seedlings are first raised near water sources and, after two months, are transplanted in land close to the home, in the backyard or in a main field nearby.

Most of the main farm operations are undertaken by women, including seed selection, fertilizing, harvesting, processing, storing and day-to-day management. Men assist with nursery and planting; they have sole responsibility only for tillage. Unlike other field crops, pepper production needs special care and is very labour intensive. The crop must be free from weeds and requires hoeing at least two or three times to remove any weeds and to loosen the soil; this work is done by women. The peppers are harvested as they mature; there are at least three rounds of picking to finish the entire harvest. The pepper is dried on a clean and compacted floor at home and stored until marketing.

A household, on average, consumes not more than 40 kg of pepper per year. For a family who harvests 200–250 kg of pepper from 0.25 ha, between 160–210 kg will be available for sale. The role of women in marketing pepper in Fogera may be explained by two main reasons: they are familiar with handling the product because they use the pepper in preparing food at home; and pepper is easy to transport and the market price is favourable. Women take up to 20 kg per market visit. They sell pepper almost throughout the year when they need cash for the household.

Source: Tilahun Gebeye, RDO, Fogera PLW

With regard to tree crops (such as coffee or fruit trees), men tend to do most of the heavy manual labour, including land clearance, tillage, nursery, weeding and pruning. Wives assist with manuring, soil conservation, harvesting and management, depending on the region. Women's participation is greater when the trees are planted close to the home.

3.2. Gender roles in marketing and sharing the benefits of production

The nature of market engagement differs significantly between women and men and is also influenced by the wealth of the household. Men from rich and middle wealth households often sell major cash crops in bulk on an intermittent basis and may travel to more distant markets to secure higher prices (Box 6). They have the advantage of accessing transport to travel further a field (using cart or pack animals) and may be less pressed for time; however, one major downside of this increased mobility and access to cash income is the very real risk of HIV infection through unprotected sexual intercourse with an infected individual. In contrast, poorer farmers and women tend to accept prices at local markets which they can reach on foot. Women and the poor are more likely to

sell directly to consumers, whereas men and more wealthy households sell to private traders and cooperatives.

In many instances, sales are triggered by the need for cash—especially in middle wealth and poor households to repay debts or to pay hired labourers or school fees— and to cover food deficits in poor households. The poor may have acquired the seed on loan and have to share the crop with the person who supplied them with seed (for example, haricot beans in Dale) or have to sell the crop to their money lenders (coffee in Dale). Therefore the poor farmers including female headed household forced to sell their crop produces immediately after harvest when the price of the crop produces usually low.

Box 3: Examples of market engagement by men and price responsiveness

Rich farmers travel from Metema to Gondar (about 170 km) once or twice per season, with a truck, to sell their cotton to the ginneries or sesame to exporters. They are sensitive to price changes and store their produce to wait for higher prices.

In contrast, middle wealth and poor farmers are concerned about the risk of fire in their cotton stores and often have an urgent need for cash so they sell soon after harvest to private traders locally, transporting their produce by donkey cart.

In Alamata, rich and middle wealth farmers selling teff and sorghum look for better prices if the prices available at the local markets are low, whereas poorer farmers tend to accept the local prices.

Rich and middle wealth farmers in Dale sell haricot beans in bulk, possibly holding some of their produce back while waiting for prices to rise but their ability to do this is tempered by storage problems. Farmers selling haricot beans in Alaba noted their ability to be price responsive is hampered by a lack of price information and technical support.

Source: IPMS gender survey.

Women generally have little control over the income benefits of production. Table 6 shows the relationship between the gender control over the benefits and different levels of market orientation. In many instances, the outcome is location specific. Of 13 crop commodities produced principally for the market (where more than 80% of the produce is sold; see the extreme right hand column of Table 6), men control the income from 11 commodities, whereas women control the income from only two and they share also the benefits of two others. Of the 8 commodities that are produced both for the market and home consumption (middle column, where between 40–80% of the produce sold), men control six commodities, women don't control any of them except they share the benefits from two enterprises.

Table 6. Commercialization of production and control of income by sex

Enterprise	Average number of units in typical middle wealth household	Control of income by proportion of produce sold on market		
		Less than 40%	40–80%	More than 80%
Crops				
Cereals	Teff (Ada'a Liben)	1 ha		men
	Teff (Alaba)	0.5 ha	men	
	Teff and sorghum (Alamata)	0.5–1 ha		men
	Maize and sorghum (Miesso)	1–2.4 ha sorghum 0.2–0.6 ha maize inter-cropped with haricot bean	share	
	Wheat (Bure)	0.25–0.75 ha		men
	Wheat (Ada'a Liben)	1 ha		men
	Rice (Fogera)	0.5–1 ha		men
Pulses	Haricot beans (Alaba)	0.5 ha	men	
	Haricot beans (Dale)	0.2 ha		men
	Faba beans, field peas (Atsbi-Wemberta)	Not available		share
	Faba beans (Bure)	0.13–0.25 ha		men
	Faba beans (Ada'a Liben)	Not available		men
	Chick-peas (Ada'a Liben)	Not available		men
Lentils (Atsbi-Wemberta)	Not available		share	
Oilseeds and industrial crops	Cotton and sesame (Metema)	2–3 ha cotton 1–3 ha sesame		men
	Noug (Fogera)	0.25 ha		men
Vegetables	Pepper (Alaba)	0.25 ha		men
	Pepper (Fogera)	0.25 ha		women
	Pepper (Bure)	0.5 ha		men
	Irrigated vegetables (Atsbi-Wemberta)	Not available		men
	Onion (Fogera)	0.5 ha		men
	Garlic (Fogera)	Not available		men
	Potato (Bure)	0.25 ha	men	
Trees	Coffee (Dale)	0.2 ha		men
	Coffee (Goma)	0.5–0.75 ha		men
	Multi-purpose/eucalyptus (Alaba, Fogera)	100 eucalyptus trees	men (Alaba)	men (Fogera)
	Fruit trees (avocado) (Dale)	1–2 trees		share
	Fruit trees (papaya, mango) (Alamata)	A few trees		women
	Avocado/mango (Bure)	2 trees of each		share
	Banana (Bure)	Up to 10 suckers		share
	Avocado/mango (Goma)	Up to 6 trees of each		share

Source: IPMS gender survey.

As a result of the dominance of men in marketing, women sometimes resort to selling small quantities of the produce in secret, which can result in market inefficiencies (Box 4).

Box 4: Gender inequalities in marketing and its impact on market-oriented coffee development, Goma *woreda*

Almost all community members in Goma *woreda* derive their livelihood from coffee. Many of the operations associated with growing coffee, such as maintenance of the plantation, harvesting and drying, are labour intensive. Wives are an important part of the labour force but the decision when to sell and gain cash income from coffee is fully controlled by their husbands.

Men do not like to sell during the early part of the harvest season because coffee prices are very low. However, this time of the year is a very critical stress period for middle wealth and poorer households, in terms both of cash and food items for those who do not have enough land to cultivate food crops. As women are responsible for meeting the basic needs in their household, they are usually obliged to sell small amounts of coffee to merchants or multipurpose shops in their locality when their husbands are away, in order to raise some cash. In other cases, because men control all the cash income from the bulk sales of coffee, some wives sell in secret to acquire cash for their social obligations. However, the price women sell at is usually lower than the market price because the sale is secret, and they are not able to bargain for a better price.

In Goma, men sell coffee once in a year in bulk, with the volume varying considerably between households: rich households may sell up to ten times the volume of poor households (see Table below). Women sell a small amount every week, depending on the amount of produce they have in household and the wealth of the households. The total amount sold by a woman in a poor household is estimated to be about 50 kg (3–4 kg per week or 9–12 kg per month) throughout the harvest season; whereas the amount sold annually by a husband typically ranges from 100 to 300 kg. Men control around 90% of the income generated from coffee sales, particularly in the richer households.

Annual volume of sales of coffee by gender and wealth of household, Goma

	Households		
	Rich	Middle wealth	Poor
Volume sold by women	200 kg	100 kg	50 kg
Volume sold by men	2000–3000 kg	700–2000 kg	100–300 kg
Male control of income	90–93%	86–95%	50–83%

Usually the rich, followed by middle wealth households, have the opportunity to sell their coffee to cooperatives which start buying late in the season but at good prices. The poor usually sell their produce to traders who start purchasing immediately after harvest but at low prices; they do not have the capacity to wait until the market prices rise. Women also sell to traders and consumers because they sell in small quantities.

Many husbands are vaguely aware of the sales by their wives, because of changes in the quality

or quantity of household items, but they often choose not to find out the amount sold because it is relatively small. Some, however, are violent with their wives. Children may also sell coffee secretly, when their parents are not at home, and use the cash to buy personal items.

The secret sales of coffee by wives not only represent a loss in quality, if they harvest the beans secretly in a rush, but also a loss in household income if their coffee is sold at a low price. Overall the process will continue affecting both national and household economy unless gender equity is addressed, both in decision-making and sharing benefits from coffee production.

Source: Yishak Baredo, RDO, Goma PLW.

For some commodities, control over the income differs with the level of production. For example, when the volume of fruit production per household is small, women control the income. When production is more substantial, the income tends to be shared whereas when production is commercialized, men tend to assume control of the income (Box 5).

Box 5: Marginalizing women through the commercialization of avocado production, Goma

Avocado is grown throughout Goma *woreda*, traditionally on a small scale but in some *kebeles*, now on a commercial scale. In areas where avocado production is small, ranging from 10–60 kg per household annually, such as Limu Sapa and Bulbullo, women sell the fruit and control the benefits (see Table below). The same used to be true in Genji Elbu but as the crop has commercialized (with household production ranging from 170–800 kg per year); men have taken over selling the fruit and controlling the benefits, especially in the richer households.

Avocado sales by household wealth and sex

Kebeles	Avocado sales by household wealth (kg)								
	Rich HH			Middle wealth HH				Poor HH	
	W	M	Total	W	M	Total	M	W	Total
Bullbullo	10	–	10	12	–	12	15	–	15
Limu Sapa	–	–	–	60	–	60	–	–	–
Genji Elbu	–	800	800	50	600	650	20	150	170

Originally in Genji Elbu, women took the fruit to market but, as production increased, traders started going directly to the farms and purchasing the fruit while it was still on the trees. Men began to take over responsibility for marketing by looking for traders, negotiating with them and organizing the neighbours together in order to attract traders; finally they took over controlling the income.

Source: Yishak Baredo, RDO, Goma PLW.

3.3 Gender-based preferences for seeds

Women's preferences for crop varieties differ from that of men (Table 9). Women opt to produce types/varieties of crops which are mainly used for domestic consumption, whereas men prefer crop varieties which have high market demand and fetch high prices. For example, in Alaba, Dale and Ada'a Liben PLWs where chick-peas and haricot beans are considered to be priority commodities, men prefer to produce improved varieties (Shasho and Arerti for chick-pea) for the market while women prefer the local variety (Dima) which is suitable for household use. Poorer households tend to generally prefer less risky disease resistant and locally available crop varieties.

4. Gender-based access to inputs and services

Women and poor households access agricultural inputs mainly through the formal, government sources. There is limited private sector involvement in input supply and service provision, which mainly cater to the needs of the rich and middle wealth households. Generally, the main source of fertilizer and seed for both men and women is OoARD, the distribution is mainly controlled by the OoARD and occasionally through cooperatives.

The data demonstrate that men have access to all services like credit, extension and training, whereas women and men from poor households are marginalized in this respect. Rich and middle wealth households access credit from credit and savings associations, while the poor access credit through OoARD. Access to extension and training are discussed in section 5

5. Gender differences in technology adoption

Although both women and men benefit from improved technology availability and adoption, men tend to benefit more. Usually the rich and middle wealth households derive the most benefit from the introduction of new technologies. Adoption among poorer households is inhibited by an inability to afford the technology coupled with limited availability of credit or savings, and low levels of awareness. There are exceptions: for example, poor women in Alamata benefited most from the introduction of water harvesting whilst, in Atsbi-Wemberta, women and the poor benefited from improved fruits and vegetables varieties and rainwater harvesting. In some instances, the poor benefit indirectly through sharecropping, as in the case of the motor pumps for irrigation in Fogera. Generally, attention is required to ensure women and the poor are neither left out nor disadvantaged by these developments.

6. Gender accesses to sources of information

The sources of agricultural and non-agricultural information generally depend on the household wealth and on gender differences. Men depend mainly on formal information sources while women mostly exploit informal sources of information. Men from rich and middle wealth households get information from radios, development agents and

extension workers, NGOs, and farmers' conferences at the *kebele* and *woreda* levels.

In addition, they also have more possibility of accessing information through informal sources while they socialize with friends, from indigenous support and social networks like *ekub*, *idir*, *debo*, *afosha*, and from market places. Women get also information from neighbours while participating in indigenous self-help and social network associations, as well as through their husbands, school children and friends. The sources are mostly informal, indirect and sometimes provide incomplete information.

This pattern holds true across the PLWs, with the exception of Fogera where a few women have access to services and information through agricultural extension workers. In contrast, women farmers rarely get extension support that would enable them to enhance their knowledge and skills, and thereby improve the performance of their agricultural activities. The focus on men is based on the assumption that they will pass the knowledge acquired to their wives and other family members. But this does not happen in reality. Hence, women farmers usually have limited access to improved agricultural technologies and packages promoted by the extension system. This constrains their access to various inputs and services including knowledge, and limits their participation in market-oriented agricultural activities.

7. Gender accesses to source of knowledge and skills

Wealth status and gender differences also influence the kind of knowledge and sources of skill for farmers. Men farmers access formal sources to improve their skills and knowledge, even in areas where women do most of the activities. Men directly access knowledge from development agents, extension agents, farmers' conferences, and *kebele* meetings, although the degree and access differs between rich, middle wealth and poor farmers. Men also exploit indigenous sources to advance their knowledge, such as elders' meetings and councils, visits to distant localities, and socializing with colleagues and relatives

8. Decision-making

Decisions about enterprise mix and technology adoption, including seed selection, are mainly taken by men and in some cases, are negotiated between husbands and wives. The general trend appears to be one of male-dominated decisions in rich and middle households, and joint decisions in poor households. Only in female-headed households do women control the decisions; yet this still tends to be in consultation with their male relatives. It was noted that even though men appear to be in control of decision-making, they usually consult their wives and women have a strong influence on the outcome.

9. Implications for market-led development

Development initiatives should be designed with a gender perspective to ensure they are relevant to their context. For example, women generally are likely to be more responsive to activities that: can take place on a small area of land; can be undertaken close to the home (especially if they are caring for other household members, such as children, the elderly or the sick); do not require many resources, including labour; and do not expose them to too much risk if the venture fails.

As a result of market-oriented development, it is expected that workloads will increase for both men and women but in different magnitudes depending on what tasks they are responsible for, and whether there will be an intensification of labour in that particular task. Generally there is an imbalance between workloads and share in the benefits of production, and there is the very real risk that process of commercialization may further marginalize women.

Women may be also deprived of control over income from the limited range of commodities that they enjoy at present, unless these risks are understood and measures are introduced alongside efforts to increase production and productivity to ensure that they enjoy the benefits from any improvements.

Hence, any initiatives which aim to improve or adapt field activities need to conduct site- and commodity-specific studies to know who is the principal audience, who will bear the additional burden of work, who will be principal beneficiaries and how the marginalized groups can benefit

While designing development interventions for supporting market-oriented agricultural development, it is important to take account of gender differences in terms of accessing technologies and services. It is also relevant to provide access improved varieties which serve a dual purpose, both for home consumption and for sale in the market. Access to credit is critical to be able to use some of the modern technologies but often acts as a barrier for women and poor and, consequently, they tend to get left out of the technology development process. The analysis of information networking clearly demonstrates the gender dimension of accessing sources of information and opportunities for knowledge and skills development. This has serious implications for promoting agricultural development

Though women contribute a significant amount to the agricultural labour force yet they are not updated regularly about new farming practices and have few opportunities to develop their skills base. Instead they have to rely on information being passed on to them from men, or ideas gleaned through their informal networks. In turn, this will affect their productivity and their ability to innovate and fulfill their productive potential.

9. Conclusion

This paper has demonstrated that site-specific commodity-based gender analysis is essential for understanding the different roles of women and men in the production of specific commodities, marketing and decision-making, and their share in the benefits.

References

(PASDEP)