



AGRICULTURE GLOBAL PRACTICE

THE FRUIT OF HER LABOR

PROMOTING GENDER-EQUITABLE
AGRIBUSINESS IN PAPUA NEW GUINEA

COFFEE SECTOR

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WORLD BANK GROUP



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I. BACKGROUND AND CONTEXT

The World Bank Group recently completed a study of gender issues in three agribusiness supply chains in Papua New Guinea (PNG), including coffee. It found women to be key to ensuring quality in agriculture. Therefore, it recommends that if PNG wants to export better quality coffee, it needs to focus on the contribution of women; improving their skills and capacities, and giving women a greater share of the benefits.

Agriculture accounts for approximately one-third of GDP, and the sector is dominated by smallholders.

Photos by Conor Ashleigh and World Bank

The **coffee** industry in PNG is a major contributor to national income and employment. Almost three million people depend directly or indirectly on coffee for their livelihoods.

The industry is made up of about 400,000 households, 680 blocks, 7 plantations, 17 registered exporters, 59 registered processors and over 6,000 roadside buyers.

Productivity is low, with yields on average 30-50 percent of their potential, and quality has also been deteriorating. *Arabica* coffee comprises more than 95 percent of production and exports, while *robusta* accounts for less than 5 percent. On a global scale, PNG is a modest exporter, ranking 13 among 39 *arabica* exporters, or about 1 percent of world market share.

This document summarizes the main findings and recommendations relating to the coffee sector from the joint World Bank-IFC report *The Fruit of Her Labor: Promoting Gender-Equitable Agribusiness in Papua New Guinea*.

The Fruit of Her Labor report and sector summaries were prepared by consultants C. Mark Blackden (mblackden@comcast.net) and Maxie Makambo Dominic (makambo020368@gmail.com), under the overall guidance of Anuja Utz (autz@worldbank.org) and Amy Luinstra (aluinstra@ifc.org).

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II. SUMMARY OF PRINCIPAL FINDINGS

The main findings of the analysis are:

- » **Women are key to quality.** Women play an important role in time-critical and quality-relevant tasks in coffee production, harvesting, and processing.
- » **Labor dynamics affect outcomes in the sector.** Much labor is allocated for “social” purposes, and labor shortages exist, especially at critical production/processing times. Labor constraints are especially apparent when the gender division of labor is explicitly taken into account.
- » **Critical services are lacking.** Provision of services, including inputs, extension, training, and finance, is limited and poorly targeted. Gender-specific tasks and needs are insufficiently integrated into the design and delivery of extension and training services.



III. KEY ISSUES IN THE COFFEE SECTOR

A) Quality

Women provide substantial labor in coffee cultivation. More important than the amount of labor women provide, analysis of the coffee supply chain indicates that the specific tasks women undertake have a substantial bearing on the quality of the final product.

Women are directly engaged at critical stages of coffee production and processing: picking (often strip picking) cherry, pulping, fermenting, and drying. These are time-critical tasks: they must be undertaken promptly in relation to harvesting, and for a specific amount of time. These tasks substantially determine the quality of the coffee delivered to the exporter.

The recent IFC baseline study for the coffee growing areas in the two Highlands provinces supported by the Productive Partnerships in Agriculture Project (PPAP) (Murray-Prior 2014) shows men's and women's perceptions of their role in various coffee-related and other tasks (Table 1). Of note is that women see themselves as having more of a role than men in weeding, picking, milling, and drying; as being involved in selling (albeit not to the same extent as men); and as having a role in land clearing. These perceptions also bear out the disproportionate burden of domestic work that falls on women.

TABLE 1: PERCEPTIONS OF ROLES IN KEY COFFEE AND DOMESTIC TASKS (PERCENT)

Activity	Men	Women
Land Clearing	78	76
Planting	73	48
Weeding	61	77
Picking	53	83
Wet Milling	48	58
Drying	49	62
Selling	82	61
Domestic Chores	25	96

Source: Murray-Prior 2014.

Three inter-related issues affect women’s ability to contribute to improving the quality of coffee. These are:

- » **Incentives:** The economic incentives for women either to allocate sufficient labor to these quality-defining tasks, or, equally importantly, to do them well, are low. There is a substantial gap between the work done by women in the coffee sector and the benefit they obtain. In fact, as one study notes, although average returns to labor were found to be higher for coffee than in food production, women persevered with the heavy and less rewarding work of planting, harvesting, and carrying food crops because the incentives were better. They exercised more personal control over production, could intentionally produce a surplus over subsistence requirements for sale, and were able to control and spend most of cash earned from selling food crops (World Bank n.d.).
- » **Knowledge and Information:** Women’s access to the knowledge and skills required to carry out these tasks is extremely limited as gaps in education, literacy, skills, and participation in extension and training activities persist.

There are important gender differences in access to resources and knowledge to carry out coffee operations (Table 2).

- » **Socio-Cultural Dynamics:** There are important gender-specific dynamics at work in PNG society that differentially affect men’s and women’s capacity to exercise economic agency. PNG society is largely patriarchal, and, even in matrilineal regions, men are seen as household heads and primary decision-makers.

TABLE 2: GENDER DIFFERENCES IN ACCESSING KNOWLEDGE IN KEY AREAS OF COFFEE CULTIVATION

Item	Men	Women
Training in post-harvest processing (percent receiving)	57	11
Training in coffee nursery (percent receiving)	54	8
Training in coffee marketing (percent receiving)	56	12
Rating of usefulness of post-harvest training (5=best)	4.4	3.6
Topic information on post-harvest processing (percent accessing)	38	9
Overall training (percent receiving)	50	10-15

Source: Murray-Prior 2014.

B) Labor

Labor issues have far-reaching implications for the performance of the sector. Of particular importance are gender differences in labor allocation and in rewards to labor, and the ways in which social and economic factors intersect in determining labor use.

- » **The economic potential of the coffee sector is poorly understood by smallholder farmers.** Because coffee earnings are seasonal, farmers see coffee as a “mechanism to facilitate livelihoods,” and not as an enterprise seeking maximum output and return (in some instances leading smallholders to replace coffee with fresh produce).

If you can give a community an opportunity to be part of what is happening, they become very innovative. People need to see that there is opportunity.

–Theresa Arek, Director, Amruqa.

- » **Much labor is allocated for social purposes.** Social factors and obligations, including church and community work, are at least as important as economic ones in determining labor use, whether for coffee cultivation or other economic activities. Consequently, relationships along the supply chain can be seen to have at least as much to do with clan and culture as with product characteristics and market dynamics.

TABLE 3: LABOR ALLOCATION BY TASK AND SEX,
1993 (HOURS/WORKER/DAY)

Task	Male	Female
Food	1.21	4.31
Coffee	0.67	0.96
Household	0.41	2.69
Total	2.29	7.96

Source: Overfield 1998.

- » **Farmers experience labor shortages:** Households do not have enough labor to do all the things they need to do, or to do the things at the right time and in the right way.

Data from the 1990s indicate that the division of labor is unequal: women work nearly 3.5 times as much as men, especially when household work is included, on which women spend 6.5 times as much time as men do. Even in the coffee sector, where there is the greatest parity in labor allocation, women still allocate nearly half as much time again as men do (Table 3). Moreover, it is specifically during the “flush” period from April to August, when coffee is harvested, that the female labor constraint is most apparent (Overfield 1998:55).

C) Services

Provision of services – including inputs, extension, training/capacity-building and finance – is limited and poorly targeted, and gender-specific tasks and needs are insufficiently integrated into the design and delivery of extension and training services. In addition to the limited reach and focus of extension services, other key services are often not available to smallholders. Input supply is weak and inconsistent. There is limited access to financial services, and important gender-specific barriers persist, as women tend not to own the land, fixed assets, or other resources that are needed to meet collateral requirements.

Certification schemes pursue a range of social and environmental sustainability goals. For the most part, gender issues are not especially prominent in certification schemes, though opportunities exist to promote more gender-responsive schemes. The PPAP baseline survey indicates that 13 percent of households claim to have any knowledge of certification (2 percent have “strong” knowledge). Around 8 percent reported having certification for their coffee, and of these, half expressed little or no interest in continuing. Half of the households surveyed were not interested in paying for certification, a finding which suggests, according to the baseline survey, that the benefits of certification are not sufficient to justify paying for it.

Beyond these sector issues, broader systemic issues persist in PNG and affect sector performance. In addition to the well-documented issues of poor or non-existent infrastructure, especially transport and communications, PNG suffers from pervasive insecurity and violence, including domestic violence, which disproportionately affect women and their ability to operate as economic agents in the sector. Lack of information, knowledge, communications and services (including education and health), more generally, is a further systemic barrier to gender-equitable agribusiness.

IV. PRINCIPAL COMMENDATIONS FOR STAKEHOLDERS IN THE SECTOR

All stakeholders have a role to play in improving outcomes for women in the sector. Key actions identified include:

- » **Incentives:** Improve the capacity of women to benefit directly from the income earned in the coffee sector by facilitating direct payment systems, by aggregating production through cooperatives, and by supporting training and sensitization efforts (including through personal viability–PV–training) aimed at shifting cultural norms relating to women’s economic contribution.
- » **Knowledge:** Improve quality through better training in production and processing techniques. Re-focus extension and training messages toward the quality-enhancing tasks for which women are responsible. Adopt a specific target (30-40 percent) for female participation. Consider establishing quality protocols at each step of the supply chain, outlining the critical steps (and who does them) involved in maximizing quality. Ensure that these protocols are integrated into extension and training packages. Analyze labor dynamics in the sector, through commissioning time use surveys and research on the gender division of labor for key tasks, including domestic work and returns to labor.
- » **Certification:** It is estimated that around 5 percent of PNG coffee exports are “specialty” coffees, and this is an important entry point in the sector. It is critical to examine the extent to which certification schemes in the coffee sector (Rainforest Alliance, 4C, UTZ, Fair Trade, Organic) include gender equality provisions in capturing “social” co-benefits, how these provisions are being implemented, and how compliance is monitored.

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