



Enset: a “Wonder Plant” or an Additional Burden for Women?

An Informal Sector Lens on the Burdens and Benefits of Women and Men in Sidama Region, Ethiopia



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Ensete Ventricosum, in short Enset, is commonly known as the 'false banana' or Ethiopian banana. Often, it is referred to as a 'wonder plant' because of its unique properties. It can be harvested any time, kept for years and serve to bridge periods of food shortage. Enset is generally associated with women's empowerment as it is considered 'a women's crop'. Indeed, women do most of the production and processing work. Enset is processed into many different products for different markets and seems ideal for women to be more integrated into the monetary economy. A closer look shows that, while the production of Enset has been researched, very little is known about the marketing and trading system since it predominantly takes place in the informal sector. It turns out that the trade in Enset products – where the highest margins are made – is in the hands of male collectors and brokers. Is Enset rightly associated with women's empowerment, or is it just an additional burden and responsibility for women?

The benefits of Enset

Enset (*Ensete Ventricosum*), with over 600 landraces, is mainly cultivated in the Sidama region of Ethiopia by over 5 million people and consumed by over 30 million people. It is referred to as 'a tree against hunger' and about 20–30% of the Ethiopians depend on it.

Enset is highly drought-tolerant, and a very suitable crop for families to cope with food shortages, while it requires minimal off-farm inputs. The Enset plant can grow up to ten metres. It takes four to five years to mature. All parts are utilised for different purposes apart from human food (Sirany et al., 2022): in cloths, for animal feed, fibre, construction material, medicinal and cultural practices.

From a mature Enset plant many different products can be produced such as:

- **Kocho** is a typical Ethiopian flatbread made from fermented starch obtained from decorticated (scraped) leaf sheaths and grated corms.
- **Bulla** is a white powder for porridge or pancakes. It is made from a liquid obtained when leaf sheaths and parts of the corm of Enset that are pulverized. The liquid containing starch is squeezed out from scraped leaf sheaths and the grated corm. This results in starch that can be turned into white powder.
- **Amicho** is boiled Enset corm or pieces of the rhizome. The preparation is simple like other root and tuber crops.

Did you know about Enset?

- Enset is called 'false banana' because its banana-like fruits are inedible.
- The products come from the corm/ roots.
- Enset in its domestic form is only grown in Ethiopia.
- It has many other uses beyond food.
- It tolerates drought better than most cereal crops.
- It is an essential food crop for about 20–30% of Ethiopians?

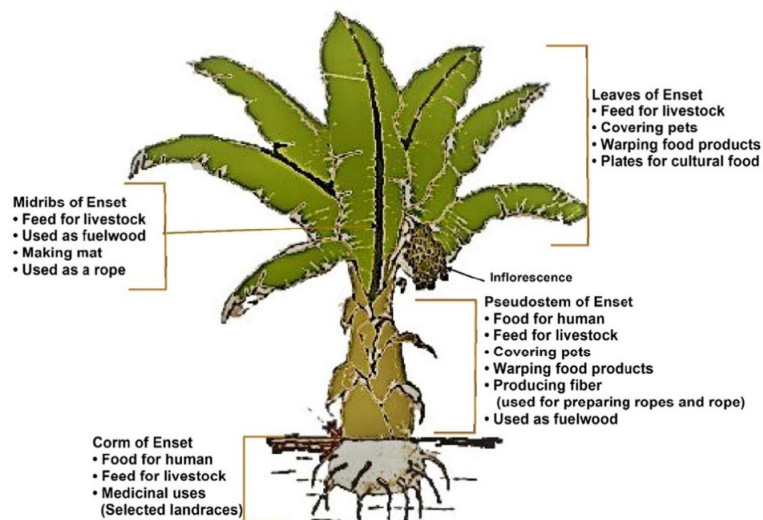


Figure 1: Parts of the enset plant and its material provisions (the enset plant picture modified from Brandt et al., 1997). In: Shale, Saito and Semissew (2021).

- The fibre by-product ***katcha*** is used for making ropes, twines and baskets, and dried leaves are used as packing materials. The leaves are used for lining thatched roofs and wrapping food. The midribs of the leaves are used for animal fodder (Robinson 2023).

Smallholder farmer families in the Sidama Region are highly dependent on Enset and its by-products. Enset is a staple food, which makes an important contribution to food and nutrition security (Woyesa and Kumar, 2022). It is used for human consumption, animal feed and shading other crops like vegetables and coffee (Zewdie, 2012). It is produced primarily for the quantity of carbohydrate, fibre, and starch-rich food in the false stem (pseudo stem) and the root corm (Niga, and Tsige, 2019). Compared with most of the major food crops, Enset has the highest energy content per kilogram of edible yield (Jacobsen et al., 2018). Fifteen enset plants can feed a family for an entire year, which makes it more productive per square metre than almost any cereal crop (Robinson 2023).



Figure 2: Kocho as a ball of fermented dough and flatbread.



Figure 3: Bulla in powder form and as porridge.

The burdens of Enset

Quite some development organisations and programmes focus on Enset as a wonder plant and key commodity, because it is associated with women’s empowerment and climate change adaptation. The benefits for women however are questionable.

The production of the different Enset products requires many rigorous labour-intensive and time consuming steps including planting, maintenance, harvesting and processing. Women in the region see these as one of the most cumbersome responsibilities they have. Although men are generally involved to some degree, for example in planting and weeding and occasionally in harvesting, social norms dictate that women are responsible for the bulk of the work. Enset processing is purely seen as a women’s task. The traditional production and processing methods that involve long processes of crushing, scraping and grating the different parts of the Enset plant are backbreaking and tiresome (see f.e. Figure 1, 5 and 6). Women’s participation in decision making and control of income is very limited. The tools and instruments that women use for processing are therefore often dull or otherwise inappropriate, which causes injuries and accidents (MacEntee, K. et al., 2013).

Through scientific research some attempts are made to make the processing less cumbersome and unhealthy. However, the marketing and commercialisation of *Kocho* and *Bulla* (the main Enset products), remain largely untouched. It turns out that marketing channels are highly dominated by male local collectors who sell to other male intermediaries and brokers before reaching retailers.

A closer look into the informal economy dimension in the Enset value chain can contribute to a more realistic image of the ‘wonders’ of Enset in the food system.



Figure 4: Preparation of Enset flatbread: Kocho.

The actors involved in processed Enset products

The main actors in the diverse Enset value chains are farmers and local processors (women), local collectors, wholesalers, retailers, and consumers.

Farmers and processors. Although men also perform some tasks in the cultivation of Enset, most of the production and local processing is done by women, both for home consumption and selling. *Bulla* and *Kocho*, the main products, are sold as dough, semi-dough, and in powder forms. Men are regarded as the household heads who are entitled to control sales and handle income. Social norms and traditional beliefs are the fundamental causes of women's disempowerment and household food insecurity (Visser and Wangu, 2021). Typically, men engage in the monetary part of the economy while women have to provide a disproportionate amount of unpaid labour. Their access to assets and market opportunities is limited, and this also affects their self-confidence (Van Dijk, and Nkwana, 2021).

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The informal marketing is highly dominated by men”



Figure 5: Woman in Sidama region busy crushing the Enset corm.

National market demand for *Kocho* and *Bulla*

The total *Kocho* production exceeds demand: national demand for *Kocho* is 4.18 Metric Tons (MT) versus a production of 7 million Metric Tons (a surplus of 2.82 MT).

For *Bulla*, the demand is higher than the production: demand of 550,000 MT versus a production of 350,000 MT (deficit of 200,000 MT).

Collectors and traders: *Bulla* and *Kocho* are sold through many different channels with a variety of intermediaries in the informal sector. Enset products may be sold directly by:

- Farmers directly to consumers;
- Farmers to one intermediary to consumers;
- Farmers to two or more intermediaries before retailing to consumers.

These intermediaries can be **local collectors** who collect small quantities from farmers to sell to other traders, who function as **wholesalers** selling to **retailers**. These wholesalers may also buy directly from farmers and use other intermediaries to reach retail markets. *Bulla* is common in the international market though there is no formal national and export procedure, whereas *Kocho* is only available in Ethiopia.

The popular *Bulla* and *Kocho* products in Addis Ababa city come from five different routes:

- Arba Minch-Sodo route,
- Hossana-Butajira route,
- Hawassa-Shashamane route,
- Wolkitie-Woliso route and
- Tepi-Bonga route.

Retailers: *Bulla* is found in supermarkets and in open markets but *Kocho* is found only in open markets and restaurants.

'Women's crop' doesn't mean women's empowerment

Some studies have been done to evaluate marketing channels and differences in profit share between value chain actors. Both for *Bulla* and *Kocho* value chains, Haile, Megerssa, and Negash (2020) show how profits are shared amongst producers, local collectors, wholesalers and retailers. The higher profit shares are for informal collectors and wholesalers. The Enset trading system, however, is complex and hard to capture in quantitative data, because of its informal nature and the reluctance of intermediaries to provide details about their informal business. The male domination of the trading system is in stark contrast with the huge labour burden of women. Even within producer households the profit margins are generally controlled by the male heads of household. A very limited number of women is directly selling in markets, where they face challenges when selling to male traders. This limits the contribution of the Enset value chain to women's income and empowerment.

Addressing gender inequality by unpacking the informal marketing system

Claims by projects, service providers and donors that the selection of a 'women's crop' for interventions automatically benefits or empowers women should be critically questioned. For Enset to fulfil its wonders, value chain development initiatives need to go beyond training and capacity building about better processing technologies, packaging techniques and adhering to local and international standards to expand market opportunities.

Projects and service providers need to deliberately challenge traditional gender roles and support change processes in this area, so that the burden of maintaining and processing Enset is more equally shared between women and men. Women need to see a return of their labour by controlling the income from selling the Enset products they produce. Social and cultural barriers that limit women's access to information and technologies need to be addressed to make the processing less burdensome.

The barriers women face in marketing of Enset products need to be addressed so they strengthen their negotiation power. To uncover these challenges, projects and service providers need to map the value chain with an informality lens. This will open up a lot of information on how value chain functions are fulfilled, from production, home processing, brokering, wholesale, packaging and semi-industrial processing, to retail. It will show that women dominate in the burdensome production and first processing steps, with limited revenues and autonomy, and that men dominate in all subsequent steps, which are less burdensome and much more profitable. By addressing these inequalities, the benefits and burdens of Enset can be much better balanced between women and men.

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A deliberate strategy is needed to address gender inequality in the value chains for Enset products”



Figure 6: Making of Enset bread: *Kocho* in a village in Southern Ethiopia.

References and further reading

- Alemu, S. H., Van Kempen, L., & Ruben, R. (2018). Women empowerment through self-help groups: The bittersweet fruits of collective apple cultivation in highland Ethiopia. *Journal of Human Development and Capabilities*, 19(3), 308-330.
- Guduro, Beriso, Abayineh Amare & Adugna Eneyew. (2023) Women empowerment in agricultural activities and its impact on farming household food security: The case of Anna Sorra District, Guji Zone, Oromia regional state, Ethiopia, *Cogent Food & Agriculture*, 9:2, 2263952, DOI: 10.1080/23311932.2023.2263952.
- Haile, A., Megerssa, B., & Negash, R. (2020). Enset (*Ensete ventricosum*) value chain in Dawuro zone, Sidama Ethiopia. *Int. J. Agric. Sci. Food Technol*, 6(1), 126-150.
- Jacobsen, K., Blomme, G., Tawle, K., Muzemil, S., & Yemataw, Z. (2018). Dietary diversity associated with different enset [*Ensete ventricosum* (Welw.) Cheesman]-based production systems in Ethiopia. *Fruits*.
- Lefebo, N., Haji, J., Getu, E., & Zemmedu, L. (2016). Determinants of market participation among kocho producers in Hadiya zone, Sidama Region, Ethiopia'. *Journal of marketing and consumer research*, 21, 41-49.
- MacEntee, K., Thompson, J., Fikreyesus, S., Jihad, K., 2013. "Enset is a good thing": Gender and Enset in Jimma Zone, Ethiopia. *Ethiopian Journal of Applied Science and Technology* (Special Issue No. 1): 103-109.
- Niga, T. F., & Tsige, M. (2019). The Dynamics of Household Food Insecurity and Their Gendered Outcomes Amongst Enset Growers in Gurage Zone, Sidama Ethiopia. Sidama Ethiopia.
- Robinson, E. 2023. All you need to know about enset – the "false banana" with a big impact. <https://rippleeffect.org/blog/all-you-need-to-know-about-enset/>
- Sahle, M., O. Saito and S. Demissew, 2021. Exploring the multiple contributions of enset (*Ensete ventricosum*) for sustainable management of home garden agroforestry system in Ethiopia. In: *Current Research in Environmental Sustainability*, Volume 3, 2021, 100101. <https://www.sciencedirect.com/science/article/pii/S2666049021000773>
- Sirany, T., Tadele, E., Hibistu, T., Kefalew, A., & Reta, H. (2022). Economic viability and use dynamics of the enset food system in Ethiopia: its implications for food security. *Advances in Agriculture*, 2022.
- Tesfaye, H., Zemedu, L., & Ademe, A. (2019). Factors Affecting Market Outlet Choice of Kocho Producers in Cheha District, Gurage Zone, Sidama Ethiopia. *Dev. Country Stud.*, 9, 1-9.
- Tiruneh, A. Z. (2020). Assessment of performance and adoption of improved enset processing technologies: A case study in Enemorena Ener District, Gurage Zone, Sidama Nations, Nationalities and Peoples Regional State, Ethiopia. *IOSR Journal of Humanities and Social Science*, 25(2), 1-20.
- Van Dijk, H. G., & Nkwana, H. M. (2021). The face of food Insecurity is female: A post-colonial feminist argument for rural women. *African Journal of Gender, Society and Development* (Formerly Journal of Gender, Information and Development in Africa), 10(1), 99-116. <https://doi.org/10.31920/2634-3622/2021/v10n1a5>
- Visser, J., & Wangu, J. (2021). Women's dual centrality in food security solutions: The need for a stronger gender lens in food systems' transformation. *Current Research in Environmental Sustainability*, 3, 100094.
- Woyesa, T. U., & Kumar, S. (2022). "Tree against hunger": potential of enset-based culinary tourism for sustainable development in rural Ethiopia. *Journal of Cultural Heritage Management and Sustainable Development*, 12(4), 497-512.
- Zewdie, A. (2012). *Assessment of performance and adoption of improved enset processing technologies*. Degree of master. A case study in Enemorena Ener district, Gurage zone, Sidama Nations, Nationalities and Peoples Regional State, Ethiopia, University of Applied science Van Hall Larenstein.



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