

PSNP and Sustainable Land Management in Ethiopia

A formative qualitative investigation

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Overview and study objectives

The Productive Safety Net Program (PSNP) is Ethiopia's national safety net program, launched in 2005 and currently in its fifth phase. The objective of the PSNP is to protect households' food consumption and assets, reduce their vulnerability to shocks, and address underlying causes of extreme poverty (MoA FSCD 2020). Households who have an adult available to work are required to take part in public works that focus on building infrastructure and improving the natural resource base (MoA FSCD 2020). As such, these projects are partially designed to contribute to disaster risk reduction and climate change adaptation and mitigation. However, there is limited evidence about how sustainable land management (SLM) activities are conducted under the PSNP on both publicly and privately operated lands, and how the uptake of these activities and their benefits differ by gender.

The Strengthen PSNP5 Institutions and Resilience (SPIR II) Resilience Food Security Activity (RFSA) in Ethiopia is a five-year project (2021–2026) that supports implementation of the PSNP in the Amhara and Oromia regions and provides complementary livelihood, nutrition, gender, and climate-resilience activities. World Vision, with funding from USAID's Food for Peace Initiative and in close collaboration with the government of Ethiopia, leads implementation of the SPIR RFSA in partnership with the Organization for Rehabilitation and Development in Amhara and CARE, while IFPRI is leading the SPIR II learning agenda in close collaboration with the implementation partners.

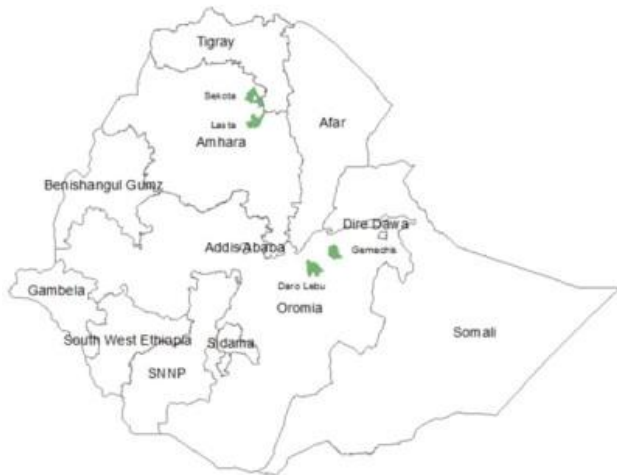
As part of this learning agenda, a series of formative studies were conducted in the first year of program implementation. In this qualitative investigation, we provide evidence on 1) the role of the PSNP in promoting SLM in public works, 2) private adoption of SLM technologies among PSNP households, and 3) gendered dimensions of engagement in SLM.

Sample and methods

This formative study consisted of qualitative data collection in conjunction with a desk review of previously published literature. Four semistructured questionnaires were administered in four focus groups: (1) a women’s group discussing barriers to participation in PSNP public works, (2) a women’s group discussing benefits of participating in PSNP public works, (3) a men’s group discussing benefits of participating in PSNP public works, and (4) a group of community watershed committee members. Ethical clearance for the study was provided by the Ethiopian Society of Sociologists, Social Workers and Anthropologists.

The data collection was conducted in December 2022 in four watersheds, two in the Oromia region and two in the Amhara region (Figure 1), and each in a separate *woreda* (district). The primary criteria for the selection of watersheds was their inclusion in the PSNP and local use of SLM practices.

Figure 1: Study woredas



Source: Authors

Primary findings

Public works and sustainable land management

According to the PSNP5 operational manual, individuals who are able to work are expected to engage in five days of public works per month, with a maximum of 15 person-days for each PSNP household (MoA 2021). According to study participants, the highest proportion of public works labor (51 percent) is devoted to SLM activities, with slightly higher rates observed in Amhara than in Oromia (Table 1). This activity category is followed by maintenance of public buildings and facilities such as farmers’ training centers, *kebele* (subdistrict) offices, and schools (22 percent), and by building access roads (19 percent).

Table 2: Proportion of public works time spent on different activities, by region

	Amhara	Oromia	Average	Rank
SLM activities	55%	46%	51%	1

Public buildings and facilities	15%	29%	22%	2
Access roads	19%	21%	20%	3
Housing for the elderly/disabled	11%	4%	7%	4

Source: Authors, based on data collected during focus group discussions

Note: SLM = sustainable land management.

The most common SLM activities conducted as part of public works are compost preparation, fruit tree and vegetable planting, and application of soil and water conservation technologies, such as terracing and construction of soil bunds and water retention trenches. In Amhara, constructing and cleaning irrigation canals is also a priority. In addition, public works programs establish area closures on many hillsides of public lands by closing them to livestock grazing and constructing soil conservation and water harvesting structures. Fodder trees and grasses are planted within the area closures, where the fodder can subsequently be used as feed to fatten animals. Participants reported that in addition to restored vegetation on hillsides, this strategy has improved the physical condition of livestock and reduced feed costs, and it often enables households to earn more income from sales of livestock and livestock products.

Community watershed committees govern SLM activities in each kebele. Through annual public works planning and review sessions, these committees contribute to watershed plans that are then integrated into kebele-level public works plans. In three of the four study woredas, the planning process is managed from the top down, and effective decision-making is concentrated at the woreda level (though the locations for SLM implementation are decided through community consultations). Study participants expressed dissatisfaction with this centralized decision-making and stated that their watershed was not adequately covered by public works SLM activities.

In the recent past, participating households negatively perceived SLM activities as labor-wasting tasks. More recently, educational outreach within the agricultural extension system has shifted these perceptions, and study participants reported that these activities are now often seen as a top priority due to their contribution to household livelihoods, as well as their environmental benefits.

“...we give more priority to SLM activities as they are fundamental to our agricultural livelihoods.”

–Female FGD participant, Amhara

Sustainable land management activities on private land

SLM practices are also implemented on privately operated land. The PSNP supports labor-poor households by providing public works labor to assist them with SLM tasks. The PSNP also considers some SLM practices implemented on private land to be part of a household’s labor contribution to public works. In Amhara, however, compost preparation is the only common SLM practice on private land that is counted as a labor contribution.

In focus group discussions (FGDs), men and women participants from both regions reported that they gained skills and knowledge around SLM through public works: as part of the PSNP's technical support, development agents and woreda experts provide organized trainings on specific SLM practices. Participating households are now applying these practices on their own land to enhance crop and livestock productivity. For example, men and women in Lasta woreda reported adopting terracing, compost preparation, fodder production, and planting of aloe vera for soil stabilization, while in Gemechis woreda, bench terraces and elephant grass production were commonly adopted.

"I planted elephant grass on terraced areas of my farm. I used most of the grass for my livestock. In addition to feeding them [the livestock], this year I have sold part of the fodder to another farmer for 7,000 ETB. There is a good market demand for fodder in our kebele."

–Male FGD participant, Oromia

In both regions, it is common to plant vegetables on terraced areas, a practice promoted by the PSNP, as terraces stabilize soil and hold more moisture. The construction and maintenance of irrigation canals by PSNP public works helps increase yields from households' vegetable production and lowers drought risk. Households located near area closures also engage as a group in beekeeping, buy grass from area closures, and are often allowed to harvest dried firewood under supervision.

Tree planting

The proportion of households practicing fruit tree planting varies, with the highest prevalence in Daro Labu woreda (85 percent), followed by Lasta and Gemechis (50 percent). Fruit trees are fairly uncommon in Sekota. In recent years, planting fruit trees has become more popular across the study area. In Daro Lebu, a woreda with a long-standing presence of fruit trees, households have planted two to five fruit trees on average; in other woredas, households generally reported fewer than two trees, planted only in the last two years. The most prevalent trees are mangoes and avocados. The economic and environmental benefits of growing trees for fruit and timber are well known, but participants also reported enjoying the aesthetic aspect. A small proportion of farmers who planted trees five to ten years ago are now earning significant cash income and using fruit for their own consumption. FGD participants in Sekota woreda reported a unique benefit: they are using fruit trees as collateral to access credit from a microfinance institution.

"I constructed terraces on my private land and planted trees, including some fruit trees such as guava, mango, and banana. Such activities have improved the fertility of the soil on my farmland. In the future, the fruits will be a good source of income."

–Male FGD participant, Oromia

Households access fruit tree seedlings from various sources, including from the government in recent years. In one woreda of Amhara, participants received seedlings that were produced using public works labor in kebele agricultural development centers, while in another woreda, they purchased them from a supplier located farther away. However, participants in Oromia reported a severe shortage of seedlings.

Compost

Due to the high cost and limited availability of chemical fertilizers in recent years, development agents have been strongly promoting the use of compost. Most households engage in compost preparation and application, but access to materials is a challenge (such as access to manure, for those who don't own cattle). In addition, households with female heads or elderly or disabled members lack labor to collect materials. Even when public works labor is used to prepare compost and transport it to farmlands, households are still responsible for collecting input materials.

In Amhara, it is common for compost preparation and application on private farmlands to be considered part of a household's contribution to public works labor. This is especially beneficial to female-headed households, and it has significantly improved crop yields and reduced the cost of applying fertilizer.

“The adoption of compost preparation has doubled my agricultural productivity: for instance, I harvested only three quintal last year without compost, but I have harvested six quintals from the same land today.”

–Female FGD participant, Amhara

Gender and public works

The proportion of women and men in public work groups is determined by several factors. For activities that involve heavy labor—such as digging, or carrying stones and heavy materials—the work groups are dominated by men. When major agricultural activities such as farmland preparation and crop harvesting coincide with public works, more women are engaged in public works. In households with female heads and older husbands, women are the predominant source of labor unless they have other adult male family members. Similarly, from the perspective of labor availability, women in polygamous marriages are essentially female-headed households and thus face greater labor constraints (Flintan et al. 2008).

The PSNP5 design document also mandates the establishment of childcare centers to reduce women's care responsibilities. However, no centers were available in study areas, and accordingly, mothers left their young children in the care of relatives and neighbors while they engaged in public works. In Oromia, women can receive exemptions if they cannot engage in public works for various reasons, including childcare, but in Amhara, few exceptions are granted. FGD participants reported that women are heavily burdened by their caregiving, income-earning, and community responsibilities.

“I should have to wake up early and go to sleep late to accomplish my domestic tasks, and then I should have to participate in public works. As I am the only breadwinner in the household, I should yet work on income generation activities after I get home from public works.”

–Female FGD participant, Amhara

While SLM practices on private land are predominantly implemented by men, women still engage in, and benefit from, some practices supported by the PSNP. Producing fodder and vegetables, planting fruit trees and coffee, and making compost are the most common activities adopted by women. Across

the study area, women have primary responsibility for fruit and vegetable marketing and the allocation of any income earned.

Some SLM activities are labor intensive, such as making compost, which involves collecting materials and mixing layers. Benefiting from these activities is more difficult for polygamous and female-headed households due to lack of labor and land. Despite the legal right of women to own land, in practice there is a significant gender imbalance in ownership rates: for example, FGD participants stated that widowed women are routinely denied the right to own land.

“Households in this kebele are applying different SLM practices on their own land, including planting fruit trees. Men are more often applying SLM practices than women. Women lack land and labor to apply what they have learned from PSNP.”

–Key informant, Amhara

While both men and women are supposed to be actively involved in the leadership of the watershed committees, our findings indicate that in practice, women’s representation is nominal, ranging from 1 to 6 women members out of the total 12 members in each committee. Top leadership positions, such as chairman or secretary, are held by men, while women are usually cashiers or loan officers.

Conclusion

SLM practices constitute a considerable portion of PSNP public works activities, and this qualitative investigation suggests that these practices are generating a range of benefits: households report benefiting from public works on communal lands, as well as learning about SLM practices and implementing them on their own land. The most frequently used practices include planting trees, making compost, constructing soil and water conservation structures, and growing fodder material.

Women’s involvement in SLM is much lower than men’s involvement, partly because women are less engaged in public works and partly because of gender-specific constraints. The latter is the most pertinent to households with female heads and polygamous marriages. According to participants, some of the most helpful strategies to enhance women’s engagement involve providing public works labor support to women, and reducing their public works labor contribution in exchange for SLM activities, such as making compost on private land.

This qualitative investigation also highlights specific constraints that limit adoption of otherwise promising technologies, such as the shortage of quality tree seedlings and labor intensiveness of compost preparation. To evaluate the impact of relaxing these constraints—and given the generally limited evidence on benefits of SLM practices to households and women—we launched a randomized controlled trial in rural Ethiopia (Gilligan et al. 2024). Preliminary results are expected to be available in late 2024.

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ACKNOWLEDGMENTS

This publication was produced by IFPRI in collaboration with World Vision under the SPIR II Program, Cooperative Agreement Number 720BHA21CA00036-IFPRI, funded by the United States Agency for International Development (USAID).

This study is made possible by the generous support of the American people through USAID. The contents are the responsibility of IFPRI and do not necessarily reflect the views of USAID or the United States Government.

This publication has been prepared as an output of SPIR II and has not been independently peer reviewed. Any opinions expressed here belong to the author(s) and are not necessarily representative of or endorsed by IFPRI.

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This research was funded through the CGIAR Research Program on Harnessing gender and social equality for resilience in agrifood systems (HER+). This publication has been prepared as an output of the SPIR II project and has not been independently peer reviewed. Any opinions expressed here belong to the author(s) and are not necessarily representative of or endorsed by IFPRI.

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