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Making Rural Services Work for the Poor and Women in Ethiopia

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Over the last several years, the Ethiopian government has committed substantial resources for the expansion of public services and infrastructure in rural areas. To what extent do these investments and services reach different social and economic groups in rural areas? This paper applies a public expenditure benefit incidence analysis of different public services in rural Ethiopia across gender and wealth groups. Among the results are findings that the gender gap in our study areas is substantial and that public works transfers are more progressive than direct support transfers.

This research note provides a summary of IFPRI Discussion Paper 1057: The Wealth and Gender Distribution of Rural Services in Ethiopia. A Public Expenditure Benefit Incidence Analysis. The question of how the benefits from public services are distributed between women and men, or among different wealth groups, is important and provides information on the equity dimension of public resource allocation. To answer these equity questions the study undertakes a public expenditure benefit incidence analysis across gender and wealth groups of three public services/programs in rural Ethiopia: (1) agricultural extension services, (2) selected components of the Food Security Program (FSP), and (3) drinking water supply. We utilize individual, household, and *kebele* level surveys that were conducted in 2009 jointly by the Ethiopian Economic Policy Research Institute (EEPRI) and the International Food Policy Research Institute (IFPRI), and the Wereda/City Benchmarking Surveys, financed by the World Bank and implemented by Selam Consult.

Benefit incidence analysis describes how the benefits of public services are distributed among different groups in society—for example, groups categorized by income or wealth, gender, or gender of the head of household. Benefit incidence analysis is primarily concerned with the incidence of public services and infrastructure across different social or economic groups in society, and not with the impact that access to these services may have on other outcomes, such as household income or agricultural productivity. Benefit incidence analysis also does not account for the potentially differential valuations of the public service that individual users may make.

Results

Concerning agricultural extension services, a broad first look suggests that its provision is relatively progressive. A more detailed analysis of public spending shows that benefit incidence depicts regressive tendencies among just the poorest segment, and is also regressive among just the higher-wealth segment, while in the middle spectrum we find a progressive incidence trend. Women appear to receive extension services at about half the rate as men. This result is capturing both a gender dynamic and a head of household element, as women are less likely to be household heads than men. When looking only at household heads, female headed households receive about 35 percent less and male headed households receive 25 percent more of the benefits from public spending on extension than if public spending were proportional to the different population groups. At the individual level, men receive 31 percent more than if they had received benefits proportional to their numbers in the population. Women, in contrast, receive 27 percent less benefits then their proportional share (see Table 1).

Table 1. Benefit incidence of public spending on agricultural extension, by gender and headship status

	Benefit share (%)	Benefits to Population odds ratio
Gender		
Women	39.22	0.732
Men	60.78	1.309
Headship status		
Head is female	26.24	0.637
Head is male	73.76	1.255

Source: Authors' compilation based on the EEPRI/IFPRI survey.

Evaluating the benefit incidence for selected components of the FSP includes the public works program which provides food or cash for work and direct support in the form of free food and/or cash aid to households. The incidence of FSP is generally pro-poor: poor households receive proportionately the largest share of the public spending benefits (see Table 2). The incidence of participation is pronouncedly progressive for the public works aspect, whereas no clear progressivity is discerned for the direct support component. From a gender perspective, the public works component favors male headed households, with female headed households receiving about 35 percent less than their proportional share. In contrast, for the direct services component, female headed households are favored, receiving two and a half times their proportional share.

Regarding the benefit incidence of drinking water supply, water quality and quantity are analyzed through proxy measures. The results show that there do not seem to be any clear distinctions between lower- and higher-wealth households in terms of drinking water quantity. However, there is a clear incidence trend of drinking water quality favoring poorer households. This may appear counterintuitive, but there is some evidence from other countries of water service not being skewed against the poor. Interesting findings also emerge from the gender incidence analysis for drinking water supply. We find that female headed households travel longer distances to their main water source, but that they select safe water sources at a greater rate than do male headed households (see Table 3).

Table 2. Benefit incidence of public spending on the selected components of the Food Security Program, by gender and income quintiles based on household wealth (percentage)

		Q1 (poorest)	Q2	Q3	Q4	Q5
Selected components of FSP combined	All	41.46	26.62	26.21	5.08	0.63
	FHH	60.73	9.31	26.56	3.36	0.03
	MHH	35.56	31.90	25.66	5.95	0.93
Public works	All	49.46	37.56	10.71	2.06	0.21
	FHH	75.13	12.49	10.66	1.71	0.00
	MHH	44.22	42.79	10.52	2.19	0.29
Direct support	All	38.97	10.46	49.83	0.50	0.24
	FHH	46.35	3.60	49.51	0.48	0.06
	MHH	9.87	44.84	44.45	0.51	0.33

Source: Authors' compilation based on the EEPRI/IFPRI survey.
Note: FSP = Food Security Program; FHH = female-headed household; MHH = male-headed household.

Table 3. Gender incidence of water supply

		FHH	MHH	Head-gender
Physical access to drinking water (minutes)				
Primary source in dry season	One way	29.0	24.3	1.196
	Full trip	73.5	62.9	1.169
Primary source in wet season	One way	25.1	19.9	1.264
	Full trip	62.8	50.4	1.245
Use of safe drinking water (percentage)				
Primary source in:	Dry season	49.51	33.73	1.468
	Wet season	48.53	35.29	1.375
	Both	48.04	32.42	1.482
All sources used in:	Dry season	29.56	24.80	1.192
	Wet season	29.56	25.43	1.162
	Both	28.08	23.58	1.191

Source: Authors' compilation based on the EEPRI/IFPRI survey.
Note: FHH = female-headed household; MHH = male-headed household.

To buttress the benefit incidence findings this paper also presents regression analysis of demand- and supply-side factors of the services to indicate correlates with access to service. The agricultural extension analysis shows that once a range of factors are controlled for, there is no statistically significant positive or negative correlation of wealth with access. However, when location effects are not controlled for, the negative relationship observed in the benefit incidence analysis reemerges. Additionally, the regression analysis of the public works and direct support also offers support for the findings of the benefit incidence component, whereas the public works component appears to be more gender neutral. And with regard to access to improved drinking water, there is strong evidence that less wealthy households and female headed households are more likely to access improved water facilities.

Policy implications

Several policy issues arise from this study. First, it is important to take seriously the gender imbalance in extension services. The gender gap in our study areas in Ethiopia is substantial. It also shows a headship gap: development agents gear their contacts to household heads, and household heads are more often men than women. But this does not fully explain the gender gap, as even among household heads women are less likely to receive advice than men. While a gender inequity in agricultural extension delivery is not uncommon in many developing countries, it is no less troubling for it.

Second, our findings on the benefit incidence of the food security safety net program can and should be, to some extent, viewed in light of the features of their targeting. In addition to applying eligibility criteria, the public works component has a partial self-targeting aspect: only those with a low enough opportunity cost will be selected into the program to provide unskilled manual labor against a modest cash or in kind wage. In contrast, the direct support component lacks a self-targeting feature. This raises the question whether the incidence patterns observed in this study point to relatively strong self-targeting mechanisms and relatively weaker implementation of administrative targeting procedures. A closer look at the direct support component is warranted. While this study is not a direct analysis of the program's targeting effectiveness, the contrast in the wealth incidence of the components is striking, and at the very least suggests a closer examination for example of administrative data of the direct support beneficiaries and nonbeneficiaries and their wealth and welfare-proxying characteristics.

The final suggestion for policy makers and development partners has not to do with direct findings from this study, but relates to the absence of findings due to an absence of data. We were surprised to find that in our random sampling of FSP beneficiaries only a very small percentage of beneficiaries sampled actually received Other Food Security Program (OFSP) transfers. This hindered undertaking a benefit incidence analysis of the OFSP. It was impossible to cross-check the share of OFSP among all FSP participants in our survey against the nationwide share of OFSP from all FSP beneficiaries, due to an absence of any statistics on this in available donor project reports or government reports. With the recent initiation of the donor-funded Household Asset Building Program (HABP), this absence of information on the OFSP to date is a serious information gap which should be addressed.

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