FEMALE-HEADED FARM HOUSEHOLDS IN TWO CONTRASTING REGIONS IN ETHIOPIA: ACCESS TO AND MANAGEMENT OF RESOURCES

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ABSTRACT: This paper looks into the differences between female-headed and male-headed households in accessing productive resources. It is based on a comparison of the conditions existing in two woredas in central Ethiopia which exhibit differences in ecology and farming system and farm technology. In the interest of getting in-depth information case studies-supplemented a standard survey data. The findings suggest that except in rare cases female-headed households have less access to resources and have lower incomes than male-headed households.

INTRODUCTION

Women become household-heads when they are either widowed, or divorced, or when abandoned by their husbands. In this paper a female farmer is defined as a woman who is the sole or main operator of a farm. A woman is categorized as a household head when registered with a peasant association (PA) as a member.

Female farmers, a special group of rural women, have remained almost invisible to policy makers, rural development practitioners and researchers. Female household heads are farmers in their own right. They exhibit distinct characteristics as compared to women in conjugally-based households on whom the literature has focused. In Ethiopia, women play limited roles in agricultural production as compared to their counterparts in many countries in Sub-Saharan Africa countries (Dejene 1992). Even in the rest of Sub-Saharan Africa, the role of women in agricultural production is stereotyped and overstated as reviewed by Whitehead (1990).

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The general purpose of this study is to make female farmers more visible to policy makers and rural development practitioners by characterizing them by their access to and management of productive resources. The specific objectives of the study are to investigate whether female-headed households have equal access to productive resources as male-headed households and whether female farmers are equally productive as male farmers in the production of major field crops. An attempt is also made to identify coping mechanisms employed by female headed households to improve their economic status.

Access to traditional resources is measured in terms of ownership of the four major inputs for crop production in peasant agriculture: land, labour, draft oxen, and other animals which affect production through the provision of manure, cash income, etc. Access to modern technology is also considered. Changes in agricultural technology are captured by comparing the status and role of women in a resource-poor and low productivity agro-ecological region (North Shoa) with a technologically advanced and relatively prosperous region (the Adaa *Woreda* and Wonji areas of East Shoa). More than 90 percent of farm households in the latter region use chemical fertilizers as compared to less than 10 percent in the former. Also, productivity in the latter region is almost double than that of the former. The Adaa *woreda* attracts huge migrant labour from the poor areas particularly for harvesting of *teff*, The Wonji area is well-known for sugar cane production and is characterized by highly intensive, production. Productivity is measured in terms of yield or land productivity.

A total of eight PAs were considered from North Shoa and East Shoa. Three major approaches were employed in collecting the required data and information. First, documents of peasant associations were investigated to collect background information. Second, household surveys were used to collect data on patterns of access to resources. The survey covered a total of 1,415 households in both regions. Of the total, 313 (22%) were female-headed households and 1102 (78%) were male-headed ones. Third, a total of 74

women were interviewed and intensively studied using the life-history approach. This was used to cross-check the validity of the quantitative information, and also to provide additional information to draw insights into the lives of the "invisible peasants".

The quantitative information was analyzed by comparing the status and role of households headed by women to those households headed by men.

REVIEW OF THE LITERATURE

The literature suggests that female-headed households have limited access to productive resources compared to male-headed households. In one study it was found out that the average family size of female-headed households was 2.63 as compared to 4.82 for male-headed households (Aspen 1993). Regular access to necessary male labour could be attained if there is an adult member in the household (e.g. a husband, an adult son, a husband figure, or hired labour). According to Pankhurst (1992, p.121), "the single status, the absence of a man in the household, was not desired since it resulted in vulnerability and the likelihood of a greater burden associated with household maintenance and marginalized social status". Moreover, female-headed households often get less income from cash-for work programmes since payment is made according to household size, even if they are equally treated with others (Webb et al 1992, p.1190).

Village-level studies showed that only 4.5 percent of the sampled households owned land (Altaye 1993) and that female-headed households accounted for 50 percent of the landless population (Aspen 1993). Limitation in the size of holding can partly be explained by the limited size of female-headed households because peasant associations distribute land among members mainly according to household size.

Shortage of draft oxen is even more conspicuous than land shortages. In one study it was shown that 80 percent of female-headed households owned no draft oxen as against 43 percent for male-headed households (Save the Children 1993). Similar patterns are observed with respect to the ownership of other animals.

The literature suggests similar proposition with respect to modern technologies and services. Female farmers often have limited access to new technologies. They are often marginalized in extension services and in the process of diffusion of new technologies. It has been observed that "most technologies developed for small-scale farmers are geared to men with no concern for their appropriateness for women, who possess different physiques and energy capabilities in comparison to men" (Kaul and Ali 1992, p.35).

As a result, the tasks that were traditionally done by women are passed on to the men, who with new equipment, find the task easy and attractive. This leaves more difficult tasks for women to perform. In addition, when developing "relevant" technologies there is a tendency to ignore the well-established gender based task division of small-scale farmers (Kaul and Ali 1992, pp. 37-38).

Female farmers, in general, appear to be less productive than male farmers. One study revealed that average productivity of low income households (of which female farmers are predominant) was a mere 243 kilograms of food grains per household as compared to 705 kilograms for high income households (Dejene 1993). Differential access to productive resources is one of the factors explaining inter-household variations in productivity.

Limited access to productive resources and lower productivity lead to low household income. A study undertaken in Western Shoa suggested that the maximum annual expenditure among male-headed households was Birr 10,200 as compared to only Birr 1,827 among female-headed households. Similarly,

the average family expenditure was Birr 819 for the former and Birr 617 for the latter respectively (Gebre Hiwot 1992). Studies undertaken in other countries confirm this point (for example, see Cornhiel 1988).

Female-headed households predominate in the ranks of households that are not members of PAs. In the village of Sarambana-Sholla-Meda there were 19 non-members, of which 18 were female-headed households. Similarly, in the village of Sina-Debre-Sina there were 7 non-members of which 6 were female-headed. In recent years, the unknown citizens have been increasing in number as former soldiers and the landless masses (the young, in particular) joined their ranks. A common feature of non-member households is that they are often very poor and marginalized. Most of them own little or no land at all. They rarely owned draft oxen. They are almost exempted from meeting civic duties. They pay no taxes. They are not required to make contributions. Little is known about their coping mechanisms despite their vulnerable positions in society.

Field surveys and micro-level intensive studies suggest that female household-heads employ different coping mechanisms to make ends meet. First, they tend to adopt farming strategies which are more sensitive to their unique socio-economic and demographic status. For example, they tend to pay more attention to kitchen (backyard) farms, where activities can be undertaken side by side with household chores than field crops. Female household heads have comparative advantages in backyard farms because: (1) travel time of fields is almost none, (2) labour required for guarding crops against wild animals is minimal, (3) the soil is well-enriched with manure and with household waste, and (4) the plough is little used, as a result of which women can undertake food production independently. A study revealed that low income households (of which female farmers dominated) produced 30 percent of their total food from backyard farms while the high-income groups produced 24 percent of the total (Dejene 1993). It was also found out that yields in backyard farms were double of those in fields.

Second, it is likely that female household heads tend to be more businessoriented than housewives. They are active in petty trade and the processing of food for sale. A survey of the Central Statistical Authority has shown that rural women have higher participation rates in petty trade and manufacturing than men (CSA 1985). In the province of Sidamo, for example, 24 percent of the economically active women participated in petty trade and manufacturing as compared to only 0.2 percent for men. And the national average was 2.7 percent for women and 0.1 percent for men (CSA 1985).

An on-going family budget study being undertaken by the author in a village in North Shoa indicates that female household heads are active in petty trade in grain and other items and food processing for sale. Women in the study area earned 21 percent of their annual cash income from trade in *araki* as compared to 3 percent for males. Female household heads appear to have greater propensity to generate gross cash income than housewives. Female household heads earned gross cash income amounting to an average of Birr 884 per year as compared to Birr 363 for housewives. However, it should be noted that the latter received more in-kind income than the former. That is, housewives have more capacity to produce their own food.

Third, women in general, and female households in particular, participate more actively in the traditional saving institution, the *iqqub*. One village-level study suggested that the participation rate was 70 percent for female-headed households and 48 percent for male-headed households (Dejene 1993, p. 43).

Finally, we note that female household heads tend to rely more on remittance from their children than others. Other coping mechanisms adopted by female household heads include land leasing practices, participation in food-for-work projects (where available), working as daily labourers in betteroff households, securing labour through the traditional institution of the extended family.

RESULTS OF THE STUDY

Empirical Analysis

Patterns of access to resources by female headed households and male-headed households in North Shoa and East Shoa are summarized in Table 1. Female farmers in both regions have limited access to productive resources as compared to male farmers. The average size of holding for female farmers as a percent of that for male farmers increased from 69 for North Shoa to 90 in East Shoa. The average number of draft oxen in female-headed households is less than half of that in male-headed households in North Shoa; and two-third in East Shoa. The relative positions of women was better in East Shoa than in North Shoa. This point can perhaps be explained in terms of higher technical progress and improved productivity achieved in East Shoa than North Shoa. Contrary to Boserup's (1970) assertions it is possible that technical progress contributes more to improvements in the economic positions of women.

The size of female-headed households is larger in North Shoa than in East Shoa. The ratio of female-headed households to male-headed households was 34 percent in the former as compared to 24 percent in the latter. Household heads are older in North Shoa (with an average age of 52 years for both sexes) than in East Shoa (with an average age of 45 for males and 49 for females). This is perhaps due to the possibility that males migrate from resource poor region looking for a better life elsewhere. On the other hand, the relatively prosperous areas of East Shoa attract migrant workers because of the high rate of returns to agricultural activities therein. This has been confirmed by case studies undertaken by the author using the life-history approach in both regions.

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Table 1. Access to Resources by Female-headed Households in North and East Shoa

Characteristics	North Shoa			East Shoa		
	Female	Male	Ratio	Female	Male	Ratio
PA membership rate	25.2	74.8	33.68.	19.20	80.8	23.76
Mean age of head	51.6	51.7	99.80	48.70	45.5	107.2
Mean household size	3.20	4.67	68.52	3.65	4.81	75.88
Mean size of holding-kert	2.75	4.00	68.75	1.56	1.73	90.17
Mean no. of draft oxen	0.69	1.39	49.64	1.23	1.83	67.21
Mean no. of other animals	1.34	3.29	41.88	1.17	2.35	49.79
Number of households	175	520	33.65	138	582	23.71

Kert is about one-fourth of a hectare.

Women's access to modern technology in the relatively advanced areas of Adaa woreda is, in general, relatively impressive (Table 2). The literacy rate stood at 45 percent. As much as 96 percent of the sample households used chemical fertilizers, and the huge level of fertilizer consumption was 94 kilograms per hectare. Extension service could reach 47 percent of the sample households. These figures compared favourably with that of male headed households. But variations between PAs were considerable. These findings throw doubt on conventional thought which asserts that women are denied access to modern technology.

Table 2. Access to Modern Technology by Female-headed Households in Adaa woreda

Household Characteristics	Oudie	Sirbana- Godeti	Kumbursa	All PAs
Rate of literacy	42	50	44	45
Fertilizer utilization (percent)	100	88	100	96
Fertilizer consumption (kg/ha.)	63	90	130	94
Rate receiving extension service	23	8	100	47
Sample size	26	24	28	78

Yield differentials between female farmers and male farmers are pronounced as can be seen from Table 3. Yields of all crops were estimated at 9 quintals per hectare for the former as compared to 11 quintals for the latter. That is, in general female farmers are 25 percent less productive than male farmers in the production of field crops in the study area. This could be explained in terms of limited access to complementary inputs by female farmers, limited farm managerial capacity, and, perhaps, land quality differentials between female and male farmers. Some female household heads complained that they were unfairly treated by the peasant leadership at times when land was redistributed. However, in some cases female household heads were found to be more productive than men as in the production of wheat and chickpeas in Kumbursa PA. They are also likely to be efficient in backyard farms, and, perhaps, in animal husbandry. Their farm managerial efficiency in field crop production is constrained by social and cultural factors, such as rigid sexual division of labour, and by economic factors.

Table 3. Productivity Differentials in Crop Production in Adaa Woreda (quintals per hectare)

PA	Teff		Wheat		Barley		Horse Beans	
	Male	Female	Male	Female	Male	Female	Male	Female
Kumbursa	11.15	7.63	3.90	6.60	n.a.	11.38	n.a.	12.32
Sirbana Godet	14.07	9.47	12.56	11.65	22.40	12.03	4.86	8.47
Oudie	11.37	10.01	12.57	8.90	17.30	14.27	9.90	6.67
Average	11.99	8.99	11.60	8.43	19.57	13.21	6.89	7.99

A SYNOPSIS OF CASE STUDIES FROM EAST SHEWA

An attempt was made to capture the details of the life history and conditions of women households through a series of interviews with 74 women in East Shewa. The following provides a brief summary of the main findings.

A female-headed household is formed as a result of the disintegration of the male-headed household. A household may disintegrate voluntarily or involuntarily. Couples may opt for divorce when one of them or both think that they could no more live together as husband and wife. A woman may demand divorce or be separated from husband on several grounds. A women may simply abandon a husband and undertake an independent life. However, this seems a rare case. In many cases a woman asks for a divorce when she finds a husband irresponsible, lazy or drunkard. In some cases she divorces when she discovers that her husband has an affair with another woman or when he enters into an illegal marriage. On the other hand, a husband may demand divorce or get separated, among other things, when a wife is inflicted with prolonged and incapacitating illness with little hope of recovery. A contributing factor to this undesirable and uncharacteristic practice is perhaps the need to maintain the economic survival of the household with the labour of a healthy spouse. There are also cases when couples are separated as poverty become unbearable. This is a serious development that should be reckoned with; absolute poverty may lead to the disintegration of the household and to subsequent social problems.

Children could be an asset or a liability to a female-headed household. Grown-up sons could provide the necessary labour for farm work. Child labour was so important that, in some cases, children discontinued schooling in order to help their mothers with farm work. Moreover, some female-headed households find it difficult to send their children to school because, *inter alia*, they could not afford to pay for stationery and books. This point suggests that female-headed households tend to invest relatively little in the education of their children. Sometimes the burden of raising children is shared by the extended family. When a woman wants to remarry or when she is unable to bring up her children, she may keep them with a relative.

Hired labour is extensively used by better off female household heads in the relatively high-yielding areas of Adaa woreda. As much as one-third of female-headed households in Oudie, Sirbana-Godeti and Kumbursa hired labour particularly for harvesting. This contrasts sharply with North Shoa where hired labour is hardly used by female household heads. Female household heads face especial problems in managing hired labour. Disobedience to women and theft are common among hired workers. That is probably one important reason why woman household heads entrust the task of farm management to a male relative.

Another source of labour for female household heads in the Adaa area is community labour (*debo*). Community labour, however, is not easily available for many, especially the more disadvantaged ones, such that they have to trade other productive resources for labour. Poorer households usually get adult male labour in exchange for land or draft power. The extended family network is also used frequently by poor women. Women cannot afford keeping land idle; it may be taken away from them by peasant associations.

Female-headed households get access to land in different ways, including inheritance, lease from individuals, shares obtained upon divorce, etc. In some cases PA leaders attempted to discourage the formation of female-headed households by denying women equal access to land during the time when land is redistributed. There is also a fear, among PA leaders, that once a woman is given land as a member of a PA she may remarry a man with land and unfairly possess more land than otherwise.

Shortages of draft oxen have been felt by many female household heads. The traditional arrangement of pairing off oxen among farmers has been widely practiced. But this arrangement may not allow farmers to operate their plots at the right time, and the subsequent delay in farm operation can cause a substantial decline in yields. Those households without oxen and labour practice share-cropping by leasing their land to those with excess productivity capacity.

Another complementary and essential input lacking in Adaa woreda at the time of the study was chemical fertilizer. A lot of female household heads were dissatisfied by the recent policy measure which required cash payments for fertilizers. Those households with little cash income, in particular, female-headed households, have been adversely affected by this policy measure. This has been found to be the most common problem of female household heads covered by this study. More than one-thirds of the interviewed female household heads stressed that production declined resulting from reduction in fertilizer consumption. In the absence of a viable institutional credit, some female household heads were forced to buy fertilizers and other chemicals with credit obtained from traditional money lenders.

From the above summary, we can conclude that the case studies undertaken in East Shewa have confirmed the findings of the surveys. Female-headed households have limited access to productive resources. They have also limited bargaining power in dealing with male dominated PAs. But women device different mechanisms in order to maintain their standards of living. Women have limited capacity to manage their farms. Moreover, the findings of this study are in broad agreement with the literature on female-headed households in rural Ethiopia.

CONCLUSION AND POLICY RECOMMENDATIONS

The following observations are to be restricted to the conditions of the case study areas. This study has thrown some light on the economic and demographic characteristics of female-headed households and on the dynamism of these characteristics in the context of technical progress in agricultural production. Economic and social factors are identified as the major factors causing woman headship. Marital disruption is found to be largely involuntary. Economic decline is likely to be associated with the feminization of poverty. As agricultural productivity stagnates or declines,

the feminization of poverty becomes perversive and widespread. Women household heads in general have less access to productive resources than men-headed households. However, contrary to what the literature suggests, the gap between the two types of households tends to narrow as technical advances are achieved in agricultural production. The lower level of productivity of women in field crop production is partly attributed to farm management problems arising from their relatively weak economic and social positions. However, women employ different strategies to improve their economic and social positions.

Based on the findings of the study the following policy recommendations are made.

- a. The relative position of female-headed households could improve with technical progress and economic development. For example, the disruption of the household due to male labour migration could be reduced as the rate of returns in agriculture increases relative to other sectors, or (and) as the quality of life in rural areas improves.
- b. In targeting rural women distinction should be made between those in resource poor, low productivity areas and those in technically advanced high productivity areas.
- The draft oxen-credit scheme should be expanded and extended particularly to female-headed households.
- d. The wisdom of demanding cash payment for chemical fertilizers should be reconsidered and credit should be available to the needy ones.
- Traditional institutions, such as share-cropping and oxen-pairing arrangements, should be encouraged and be supported.

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- f. Women in general are forced by adverse circumstances to undertake independent food production. And, a woman's capacity for food production in her own right is limited. Therefore, it is more desirable to enhance the productivity of women in conjugally-based households than increasing a woman's capacity for food production in her own right. However, appropriate programmes should be designed for those women engaged in independent food production as a result of the disintegration of the family.
- g. Finally, it should be underlined that, in designing programmes for women, policy makers and rural development practitioners should make a distinction between two categories of rural women: housewives and household heads. One of the major implications of this study is that different programmes should be designed for different categories of rural women.

Further research is required to more deeply investigate the following areas: (a) the relationship between technical progress and changes in the economic positions and role of women using econometrics methods; (b) the effects of recent policy reforms on female farmers; (c) property rights and rural women and (d) characterization and explanation of women entrepreneurs.

REFERENCES

Altaye Alaro (1993). Case Studies on Wolayita Women and Household Management in Southern Ethiopia. Addis Ababa, Institute for the Study of Ethiopian Nationalities, Unpublished.

Aspen, Harald (1993). Competition and Co-operation: North Ethiopian Peasant Households and their Resource Base. Trondheim University Centre for Environment and Development, Working Paper No. 7.

CSA (1985). Rural Labour Force Survey 1981-1992. Addis Ababa, Statistical Bulletin No. 51.

Dejene Aredo (1992). The Gender Division of Labour in Ethiopian Agriculture. A Study of Time Allocation in Private and Co-operative Farms in Two Villages. New York: The Project on African Agriculture, Social Science Research Council, Working Paper No. 90.

____(1993). An Anatomy of the Household Economy. The Case of A Village in North Shoa, Ethiopia. IDR, Addis Ababa University, Addis Ababa, Unpublished.

Gebre-Hiwot Ageba (1992). Rural Credit and Credit Markets in Ethiopia: A Case Study in Western Shoa. IDR, Addis Ababa University, Unpublished.

Kaul, R.N. and A. Ali (1992). "Gender Issues in Farming: A Case for Developing Farm Tools for Women." Journal of Farming Systems Research-Extension, Vol. 3, No. 1, pp. 35-46.

Lastarria, Cornhiel (1988). "Female Farmers and Agricultural Production in El Salvador." Development and Change. Vol. 9, No. 4, pp. 585-615.

Mafege, Archie (1991). African Households and Prospects for Agricultural Revival in Sub-Saharan Africa, Working paper 2/91 CODESRIA.

Maxwell, Simon & Derytkje Belshaw (1990). Food for Development: New Roles for Food Aid in Ethiopia Rome, World Food Programme, Unpublished.

Pankhurst, Alula (1992). "Constraints in Diffusion: The Case of Composting in Welayta," Stephen Sanford and Alexandra Reece, ed. *Proceedings of the Workshop on Farmers' Participation Research Held in Addis Ababa* from February 17-19th

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Save the Children (1993). Making Ends Meet. A Survey of the Food Economy of the Ethiopian North-East Highlands. London: Save the Children, UK.

Webb, Patrick, J.V. Braun & Y. Yohannes (1992). Female in Ethiopia Policy Implications of Coping Failure at National and Household Levels IFPRI, Research Report No. 92, Washington D.C..

Whitehead, Ann (1990). "Rural Women and Food Production in Sub-Saharan Africa." In Jean Dreze and Amartya Sen (ed.), *The Political Economy of Hunger* Vol. I pp. 425-473. Oxford: Clarendon Press.