GENDER ROLES IN THE HOUSEHOLD AND FARMING SYSTEMS OF TCHENZEMA, MOROGORO - TANZANIA

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ABSTRACT

The purpose of the study was to determine gender roles in a matrilineal society in domestic and crop production activities. The role of gender in decision making was also investigated. The study was conducted in Tchenzema ward in the Western Uluguru mountain Morogoro, Tanzania.

A structured questionnaire was used to collect primary data while secondary data was obtained from the literature. The study findings show that females of all ages did all the domestic work except fuel wood collection which was done by males of all ages. There was no clear cut division of labour between gender in either cash or food crop production. Decision on production and resource allocation were done jointly between spouses while decision on hire of labour was mostly done by men.

Gender production relations in the society studied differs from those in patrilineal societies. It was recommended that the extension service and development projects should address both gender equally. Extension meetings should be organised at times and places that would enable women to attend.

1. INTRODUCTION

Agriculture is the backbone of most developing countries' economies and is mostly based on small holder production systems. In Tanzania about 72% of the population is involved in small holder agriculture employing traditional practices (Senkondo, 1992). Although there is an enormous potential for increasing agricultural production this potential is not being realised due to a number of factors including weather hazards, factors pertaining to the national extension systems such as; inefficient input and information delivery systems, lack of relevant extension packages and unattractive working conditions for extension officers. In addition gender issues like division of labour and decision making by gender are not considered (Gabriel, 1989 and Wambura, 1992).

The role of women in development has often been seen as invisible because some

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development planners only look at work in the modern cash sector of the economy ignoring the essential domestic work of women. Thus it is men who make up the statistics of agriculture labour (Karl, 1984).

In many societies farm tasks are often gender specific. For example while males plough the land, females may sow, or females may be responsible for water fetching, while males cater for firewood. In farm production the division of labour may be by crop, by field or by task. Within the domestic sphere, women work for the family not only to ensure its reproduction, but also its maintenance and survival (Mies, 1985). Lijongwa (1981) reported that women especially those of sub-Saharan Africa did all the housework as well as a big proportion of agricultural activities. Her findings are supported by those of Due & Mudenda (1982) who found out that in a study of 142 rural and urban families in Zambia females contributed 82 percent of domestic labour while males contributed only 18 percent.

It is evident that women spend a large proportion of their time in activities related to family welfare. Women perform practically all domestic work with assistance of children.

In certain areas in Tanzania men control cash crops while females control the production of food crops. For example in Bukoba, men control coffee and banana fields while women take care of beans, maize, bambara nuts, yams and potatoes (Swantz 1985). A similar trend is found in Kilimanjaro region where coffee is managed by men while banana and bean production is done by women.

In Egypt women play a significant role in agriculture, their main activities being planting, weeding, hand removal of pests, harvesting, processing and retail selling of fruits and vegetables. Men's role is mainly cultivation and assisting in harvesting. They also contribute a large share of marketing labour (Beshara, 1987). In Sierra Leone and Gambia, Longhurst (1985) concluded that both men and women play equal roles in agriculture. However, fruits and vegetables are collected from the wild by women and children in order to complement and diversify the diet.

It is concluded that there is division of labour in crop production, whose nature and extent varies from one society to another. This together with the fact that women do most of the domestic work and a significant proportion of agricultural activities is never taken note of by most development projects. Exclusion of these aspects in project planning may jeopardise project's success and its sustainability.

2. THE PROBLEM

There is a wealth of literature on gender production relations in patrilineal societies but there has not been much quantitative study on matrilineal societies. Much of the literature assumes that the household is a unit of statistical analysis which works together harmoniously (Feldstein & Poats, 1989). However in most cases this is not so because household members are likely to have conflicting preferences, incentives, responsibilities and objectives with regards to the intra household distribution of labour, resources and rewards (Jones, 1986). Project Intervention must be conscious of these facts and take them into consideration during planning and implementation to ensure success and sustainability of rural development projects.

3. THE STUDY AREA

The study was conducted in Tchenzema ward in Upper Mgeta on the Western slopes of the Uluguru mountains in Morogoro region. Upper Mgeta lies between the altitude of 1400 and 2000m above sea level and enjoys a temperate like climate with a bimodal rainfall pattern. October to December is the short rain season while March to May is the long rain season. Rainfall ranges from 1000 - 2000mm per annum depending on the altitude. The driest season is from July to August which is at the same time the coolest season. Although the study area is only 45 kms from Mogorogo town it takes about 2 hours by car and up to 4 hours by lorry because of the difficult terrain and bad road condition, which worsens during the rainy season.

The Western Uluguru Highlands is characterised by smallholdings due to the high population density of 250 inhabitants/km² (Paul 1988). Farming systems in the area include commercial crop production (vegetables, beans and temperate fruits); subsistence crop production (maize, beans, bananas and root crops). In livestock production systems, pigs, goats and chicken are common. Manure from the chickens is used to maintain soil fertility and is applied mostly to vegetables.

The ward is dominated by the Luguru, one of the few matrilineal societies in Tanzania.

4. STUDY OBJECTIVES

The overall objective of the study is to examine and document the gender roles in domestic and farming systems of Tchenzema ward in Morogoro region.

The specific objectives include:

- a) Description of the division of labour on the basis of gender and age in:
 - (i) domestic work
 - (ii) production of cash crops
 - (iii) production of food crops
- b) Determination of decision making in the following aspects:
 - (i) production processes
 - (ii) resource allocation

It was hypothesised that decision making is independent of gender. This hypothesis will be tested in the study.

5. METHODOLOGY OF THE STUDY

A cross sectional survey was conducted on a randomly selected sample of 200 farmers of both genders. A structured questionnaire was used to collect data, while secondary data was obtained from literature. Respondents were asked to state the proportion of the task done in domestic and agricultural production tasks (Whether ½; ½; ¾; or 1). These proportions were compiled, converted to percentage and compounded to one figure for each labour category. Five labour categories were set: adult male and female (couple); male and female children of the couple; and others which included extended family, hired labour and "ubava" the traditional labour exchange system. In decision making, the respondents were asked to state the person in the household with the final say in named aspects of the production process, resource allocation and income expenditure.

The data was compiled by using the D-Base programme and analysed using the Statistical Package for Social Sciences Programme.

6. RESULTS AND DISCUSSION

6.1 Division of labour in domestic work

Domestic tasks included food preparation and cooking, cleaning homestead, washing dishes, fetching water, securing firewood, washing clothes and shopping for domestic items like salt. The results of division of labour by gender are shown in Figure I.

All domestic tasks are mostly done by women with the exception of two; securing fuel wood which is mostly done by men, and shopping which is more or less shared equally between family members. Fuel wood is fetched from a

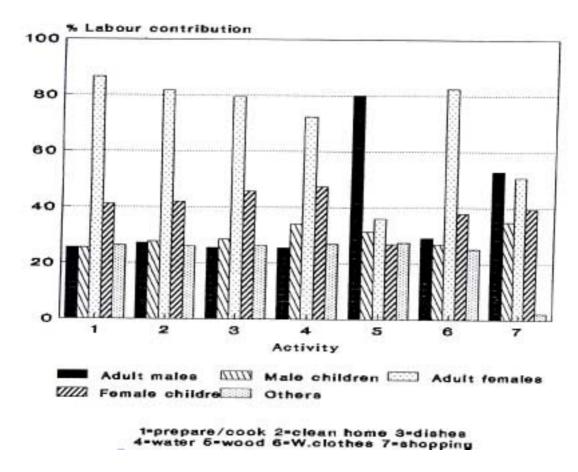


Figure 1: Division of labour by gender in domestic work

long distance due to the dwindling of natural forest reserves, a task which is laborious and time consuming. Kajembe (1988) also observed that the role of fuel wood collection is being taken over by men when distance to source increases. These findings partly contradict observations by other researchers (Lijongwa, 1981), Due & Mudenda, 1982 and Burfisher & Hornstein, 1985;. Bulow & Sorensen, 1988; Polomack, 1989 and Poley, 1991); that women do all domestic work including fuel wood securing. This is most probably due to the matrilineal lineage of the Luguru. It is not uncommon to see a man carrying a baby on his back and fuel wood on his head while the wife carries the hoe, returning back from fieldwork in the evenings.

In a farmer exchange programme held in 1994 in which farmers from Iringa Southern Tanzania visited farmers in Tchenzema, Iringa farmers (patriachal) were embarrassed to see their male counterparts of Tchenzema carrying babies on their backs and fire wood on their heads. In Iringa it is a taboo for a man to carry a baby on his back. This is a women job. It is also unheard of for men to collect fuel wood, let alone carry it on their heads. If men in patrilineal societies were to carry a heavy load the closest they'll do is to carry it on their shoulders not on their heads. In Tchenzema the majority of the potters are men frequently

carrying bags of vegetables and fruits on their heads to the market place about twice a week.

6.1 Division of labour in cash crop production

The dominant cash crops were legumes (beans and peas) and vegetables. Beans were grown by 58 percent of the respondents of whom 45.5 percent were men while 54.5 percent were women. Twenty three percent of the respondents grew peas of whom 43 percent were men and 57 percent were women. Vegetables (Cabbage, lettuce and leeks) were grown by 18 percent of the respondents of whom only 32 percent were women and 68 percent were men. More men grew vegetables than women. The most likely explanation is that the management of vegetables is more laborious and included fertiliser and pesticide applications which are considered quite technical and were mainly done by men.

The tasks involved in cash crop production included cultivation, sowing, weeding, fertiliser application, pesticide application (cash crops) harvesting, processing, storage and marketing. Males and females shared four tasks on more or less equal basis; these were cultivating, sowing, weeding and harvesting (Figure 2).

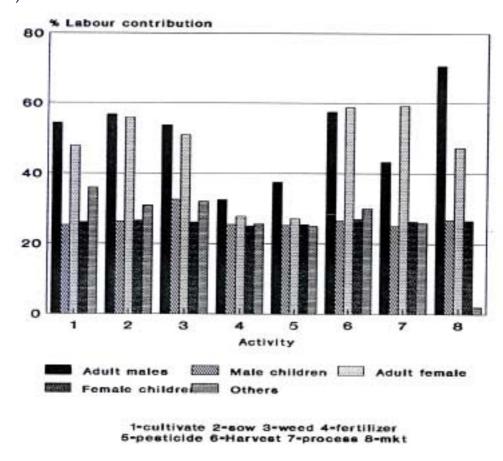


Figure 2: Division of labour by gender in cash crop production

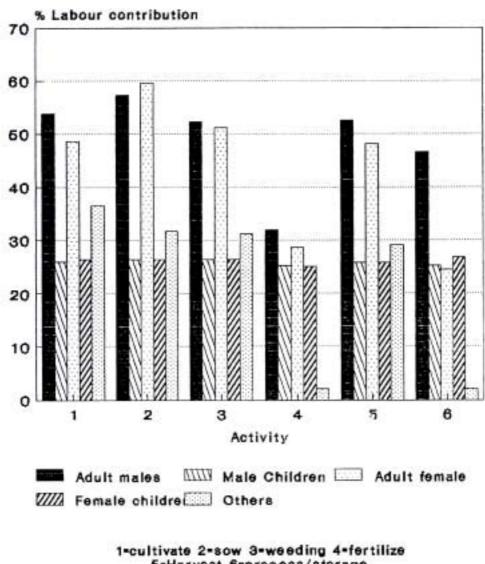
Male and female children contributed equally to these tasks. Fertiliser and pesticide application were unequally shared, with men contributing slightly more labour than women while male and female children's contributions were similar. Processing and storage were predominantly women's tasks (the main crop being beans), marketing was predominantly men's task. "Others" (hired labour and the traditional labour exchange known as "ubava" contributed considerably to all tasks except marketing where contribution was small.

6.2 Division of labour in food crop production

The main food crops grown in the area were maize, beans and root crops (yams, potatoes, and cassava). Maize was the most important food crop grown by 90% of the respondents and was equally distributed between men and women. Beans was found to be both a cash crop and a food crop. Intercropping is a common phenomenon in Tchenzema. In most cases cash crops are intercropped with food crops. Therefore labour contribution by gender and age categories to food crops would be expected to follow the same pattern as in cash crop production. Figure 3 confirms this expectation, that males and females shared the same tasks as in cash crop production on more or less equal basis; except processing and storage which were predominantly mens tasks. Male and female children contributed more or less equal labour to all tasks. "Other" (hired labour and "ubava") contributed considerable labour to all tasks except fertiliser application, processing, and storage. Men contributed more labour to processing and storage of food crops because of the nature of tasks. The main food crop maize, is stored on the house ceiling and the task of climbing up the ceiling is done by men; maize shelling is done at the time of processing into flour and thus falls under food preparation and cooking (domestic task).

In both food and cash crop production the source of labour was the family. Traditional labour exchange between friends and neighbours commonly called "ubava" was frequently practised. This was usually during peak labour periods such as during cultivation, sowing, weeding and harvesting. At such occasions local beer was used as a token payment. Such a phenomenon has also been documented by Feldestein & Poats (1989) that resource poor families engage in labour exchange programs to secure the needed extra labour for which payment in cash is lacking.

There is sharing of tasks between males and females. As such there is no task specificity by gender in crop production. Men and women of all ages shared all the agricultural tasks related to cash and food crop production. However there were differences in the proportion of labour contribution by gender in a few tasks. For example women contributed more labour than men to processing and



6-Harvest 6-process/storage.

Figure 3: Division of labour by gender in food crop production

storage of cash crops (59 percent compared to 43 percent, while men contributed more labour than women to storage of food crops (47 percent men versus 25 percent women) and marketing of cash crops (71 percent men versus 47 percent women). Male and female children contribution to crop production was more or less similar.

The above results are in agreement with Paul (1988) in his description of the farming system of the area and Lassalle & Marquett (1991) working in the same area. The results disagree with observations by Due & Anandajanyasekeram (1982) working in Kilosa district, Due & Mudenda (1982) working in Zambia, Burfisher & Horenstein (1985) working in Nigeria, Swantz (1985) in her study in Kilimanjaro and Bukoba, Beshara (1987) in Egypt and Polomack (1989) on her

study in Kilimanjaro. These studies noted a clear cut division of labour by gender, with women contributing more labour than men. The most probable explanation for this state of affairs in Tchenzema is the matrilineal heritage of this society which gives more power to women.

6.3 Decision-making in the production process

Respondents were asked to state the one with a final say in the home in the production process. Four options were given to choose from ("self"; "spouse"; "both" or "other"). The production process was broken into five components: choice of cash crops and food crops to be grown, time to perform a particular task (e.g. land preparation, sowing or weeding), decision to adopt an innovation and choice of processing and storage method. In order to test for significant dependent of decision making on gender, null hypothesis were formulated and tested by using Chi-square test for independency. The column on "others" was excluded from the Chi-square calculations. Responses are presented in Table 1.

Table 1: Production process decision (N = 200)

Decision on	Men	Women	Both	Others
Cash crop grown	47		139	0
Food crop grown	19	14	162	0
Time for a task	38	10	147	0
Adoption of innovation	84	8	100	3
Processing method	4	5	79	91

Null hypothesis: Production decisions were independent of gender Alternative hypothesis: Production decisions were dependent on gender The chi-square value was significant at 0.01 level of significance - (Appendix 1)

The table shows that most of the decisions were made by consensus between spouses except on the choice of processing and storage method in which case "others" took the lead. Others in this case referred to weather and tradition of the Luguru. This meant that the choice of method of processing and storage of crops (mainly maize and beans) was made by weather and tradition. If it was sunny, beans were sun dried, threshed and stored in big containers made of earth, (Mtungi). Otherwise they were stored together with maize on the ceiling.

Chi-square test for independency was used to test for a significant dependency of production process decision on gender.

Therefore the null hypothesis was rejected in favour of the alternative hypothesis. Thus, decision making on the production process is gender dependent. Women alone played very little role in all items, in comparison men alone played a bigger role in all the items with the exception of the choice of the processing and storage method which was determined by weather and tradition. However consensus between spouses, "both" took the lead in all the items except one.

6.4 Decision making on resource allocation and disposal of produce

The resources considered were land, labour and livestock. Respondents were asked to state the individual with the final say in the above items. The results are shown in Table 2.

Table 2: Resource allocation and disposal of farm produce (N = 200)

Item	Men	Women	Both	Others
Field selection for crop	53	7	125	8
Task allocation	39	8	147	0
Decision to hire labour	81	8	79	0
Field purchase	65	9	90	0
Sale of surplus food	9	6	40	1
Market choice	30	10	91	45
Livestock purchase	64	6	115	1

Chi-Square test for independency was used to test for a significant dependency of resource allocation decision on gender.

Null hypothesis: Resource allocation decisions were independent of gender.

Alternative hypothesis: Resource allocation decisions were gender dependent.

The chi-square value was significant at 0.01 level of significance (Appendix 2).

Most of the items were decided upon by consensus between spouses. Men alone ranked second in all the items except the hiring of labour where they took the lead. Women had a minor role in decision making in all items. "Others" made some decisions on market choice and field selection. Tchenzema had two markets to choose from, i.e. Msewe and Lolo. Market choice depended on the price and distance. On the field selection, this depended on the characteristics of the field like fertility, closeness to the house, water source and the road. Thus vegetables were grown on fertile fields near the house and water source and also close to the road for convenience of management and transport to the market.

Therefore, the null hypothesis was rejected in favour of the alternative one. Thus resource allocation decisions were gender dependent. Selection of field, task

allocation, purchase of extra field and livestock and market choice decisions were made by consensus between spouses in most cases and to a lesser extent by men. Women had very little say on these items. Decision to hire labour was made by men in most cases followed by consensus between spouses. Distance to the market and the current price determined market choice. Decisions on production processes and resource allocation were made by consensus between spouses in most cases, seconded by men alone and lastly women alone. Resource allocation decisions were made by consensus between spouses in all items but one; this was hiring of labour in which men alone made decisions.

The above results on decision making agree with Due & Anandayasekeram (1982), who observed that production decisions in Kilosa and Morogoro districts were made jointly between spouses and Due and Mudenda (1982) in Zambia that decisions on the sale of farm produce was made jointly. Ashby (1989) observed in Columbia that decisions on the management of the farm were made by consultation and negotiations among the household members.

7. CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

Females of all ages did all the domestic work except collecting fuel wood which was done by males of all ages.

There was no clear-cut division of labour between gender in either cash or food crop production tasks. Men and women shared in all field activities with the exception of processing and storage (cash crops) which were mainly done by females and fertiliser and pesticides application and marketing which were mainly done by males.

Decision-making was gender dependent. Decisions on production process and resource allocation were dominated by the consensus between spouse, followed by men alone and lastly by women alone. However decision on hire of labour was mostly done by men alone.

Gender production relations in the society studied differ from those in patrilineal societies. The results supports the notion that gender roles in the household activities are socially constructed and not sexually determined and thus they are responsive to changes like variations in the farming systems, economic pressure and culture. Tchenzema has made room for both genders by conserving some of her matrilineal tendencies.

7.2 Recommendations

Females carry a larger burden of domestic work. Gender sensitisation programmes are needed to encourage men and women to share in domestic tasks. This could take place in meetings as well as introducing gender issues in primary schools curriculum. Meetings organised by extension should take note of the heavy domestic workload so that such meetings are scheduled at appropriate times to enable women to attend.

Decisions on many aspects of agricultural production are made jointly. Development projects should therefore address both gender equally instead of approaching only the head of the household often assumed to be a man.

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APPENDIX 1

Chi-square test of relationship between production decisions and gender. Null hypothesis: Production decision are independent of gender. Alternative hypothesis: Production decisions are gender dependent

Decision on	Men	women	both	total
Cash crop grown	47	9	139	195
Food crop grown	19	14	162	195
Time for a task	38	10	147	195
Adopt innovation	84	8	100	192
Processing method	4	5	79	88
Total	192	46	627	865

$$X^2 = 86**$$
 df = 8

APPENDIX 2

Chi-square test for relationship between resource allocation and disposal of produce decisions and gender.

Null hypothesis: Resource allocation decisions are independent of gender Alternative hypothesis: Resource allocation decisions are gender dependent

Item	Men	Women	Both	Total
Field selection	53	7	125	185
Task allocation	39	8	147	194
Hire labour	81	7	79	167
Purchase field	65	9	90	164
Purchase livestock	64	6	115	185
Sale surplus food	9	6	40	55
Market choice	30	10	91	131
Total	341	53	687	1081

$$X^2 = 52^{**} df = 12$$