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Women, Work, Food and Nutrition in Nyamwigura Village, Mara Region Tanzania

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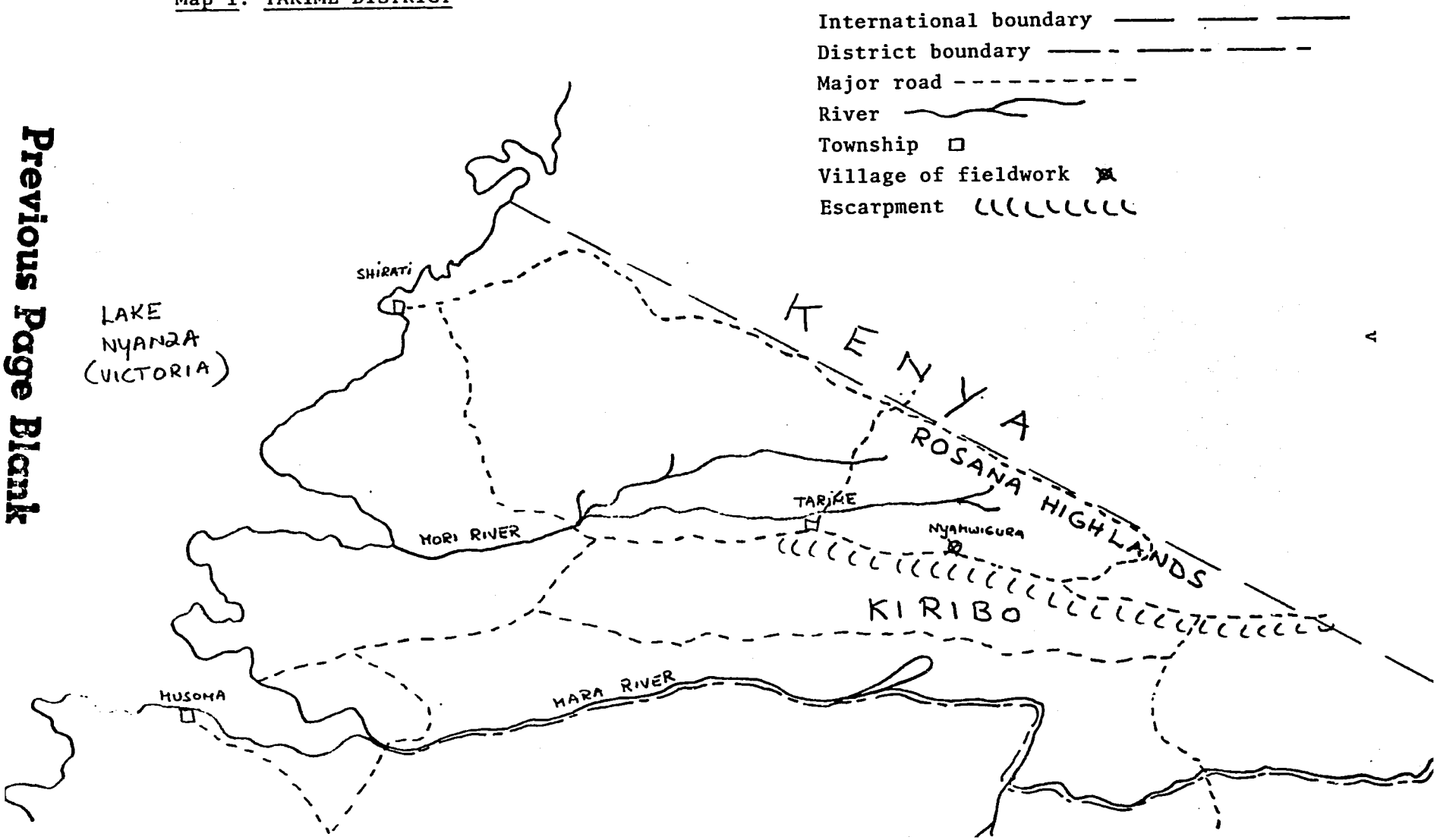

PREFACE

This report is based on fieldwork between February 1977 and July 1978 in Nyamwigura village, Tarime District, Mara Region, Tanzania. It forms part of a programme on food and nutrition in development planning, carried out by the Tanzania Food and Nutrition Centre (TFNC), and aims at analysing economic, political and ideological aspects of women's work, food and malnutrition in a rural village. It is my hope that the findings presented may contribute to an increased awareness of the importance of concrete village studies for an understanding of the social factors underlying food and nutrition problems in Tanzania.

My interest in the Kuria people and highlands originated from reading the writings of Dr. M.J. Ruel, Clare College, Cambridge, on the social organization of the Kuria. Recently I had the opportunity and pleasure to discuss my study with Dr. Ruel. Apparently, our deviating approaches as well as the difference in point of time for our fieldworks - Dr. Ruel's major work so far being carried out some twenty years ago - make our studies complementary.

I owe gratitude for encouragement and support to so many Tanzanians that giving proper thanks to them all seems impossible. A heartfelt debt is, of course, owed to all my friends in Nyamwigura village who were unfailing in their hospitality, patience and assistance. By treating me as an ordinary village woman I became introduced to the joys and hardships of rural life already from my first week among them.

This report is dedicated to three very special friends and relatives of mine in the village, viz. Mama Gati Sangaya, Mzee Jacobo Makoba and the late Mzee Chacha Keraryo.

I am very grateful also for the kind assistance provided by many politicians, planners and extension officers in the district and regional administrations during various stages of my fieldwork.

The Fathers at the Rosana Catholic Mission were kind enough to let me use a small room in their house as a study. Whenever participant observation became too intense this place of retreat was much welcomed and enabled me to sum up impressions in peace and quiet.

I am indepted to my co-worker from TFNC, Ms. Faith Kahurananga, who shared not only her observations but also the excitements of fieldwork with me.

The Managing Director of TFNC, Dr. T.N. Maletnlema, accepted me as an associate with the Centre for the period of fieldwork, for which many thanks.

The Swedish Council for Social Science Research provided the financial support that made my fieldwork in Tanzania possible.

Last but not least my thanks to Gerhard Hultcrantz, my comrade-in-arms, who like me takes a great interest in women - as well as in Tanzania. He has helped at every stage in the preparation of this report, including a painstaking reading with extensive comments on every chapter.

Stockholm, July 1980
E.T.

1 INTRODUCTION AND SUMMARY

1.1 Research Objectives

The relationship between increasing cash crop agriculture and aggravated nutritional vulnerability among children in peasant communities has been exposed and documented in recent years. However, the level of analysis has rarely proceeded beyond descriptive assessments of how much is produced and who is malnourished to what extent, into the underlying issues of forces and relations of production, the burden of work on women and men respectively, principles guiding the distribution of food during meals, and the like.

It is only recently that social scientists are beginning to seriously consider the decisive role of women peasants in agriculture and reproduction.[1] An investigation in 1974 by the Economic Commission for Africa shows that women account for 60-80% of the agricultural labour force in African countries.[2]

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1. It should be mentioned, however, that a number of studies carried out by female anthropologists, primarily in the 1940's and 1950's, have been of the utmost importance for our present knowledge of the social life of African women. Some of the more influential ones are:
A.I. Richards, Land, Labour and Diet in Northern Rhodesia, London: Oxford University Press, 1937.
P. Kaberry, Women of the Grassfields: A Study of the Economic Position of Women in Bamenda, British Cameroons, London: His Majesty's Stationary Office, 1952.
E. Colson, Marriage and the Family among the Plateau Tonga of Northern Rhodesia, Manchester: Manchester University Press, 1958.

2. UN Economic Commission for Africa, The Changing and Contemporary Role of Women in African Development, Addis Ababa, 1974.

Studies carried out in Tanzania show that the workload on rural women is excessive relative to that on men.[1]

Still, the growing awareness among quite a number of social scientists about the common situation of rural women and children is not reflected in practical rural development planning. And yet, many projects generate an increase in women's workload through a bias towards cash crops and orientation towards men. Such projects often presuppose that women readily take on the responsibility for new tasks or carry out their traditionally allotted ones even more carefully.

With all due deference to the problems involved in rural development planning and implementation of projects, the widespread ignorance among government officers about the conditions prevailing in rural communities nevertheless is remarkable. Too often "development" is envisaged to result under conditions where aggravated problems and displacement of vulnerable groups are the only logical outcome. If planners postulate that any rise in peasant's monetary income will be used so as to benefit all household members, they will certainly be at a loss to account for a subsequent rise in child malnutrition. When malnutrition is referred back to mother's "ignorance" or food taboos depriving children of vital nutrients, it is no wonder that their projects only rarely

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1. J. Rald & K. Rald, Rural Organization in Bukoba District, Uppsala: The Scandinavian Institute of African Studies, 1975.
L. Fortmann, Women and Tanzanian Agricultural Development, Economic Research Bureau: Paper 77.4, University of Dar es Salaam, 1978.
M. Mbilinyi, Women: Producers and Reproducers in Peasant Production, Economic Research Bureau: Occasional Paper 77.3, University of Dar es Salaam, 1977.
B. Storgaard, "Women in Ujamaa Villages", Rural Africana, No. 29, Winter 1975-76, pp. 135-155.

attack the fundamental problems. Experience has shown that projects aimed at educating rural women on the nutritional needs of infants will achieve little as long as women and children occupy marginal positions in the rural community.

The present study focuses on some implications of rural planning for peasant households in the Kuria highlands of Tarime District. Particular attention is paid to the situation of women and children under conditions where a diversified subsistence production gives way to a specialized one in order to accomodate for a growing share of cash crops. The accomplishment of an extensive fieldwork was deemed necessary for understanding the nature and operation of social factors underlying child malnutrition. The problem of, for instance, women's excessive workload and limited control over household resourses are not of a kind to be revealed through questionnaires and structured interviews with some few people who would be willing to pay attention to a researcher and assistants visiting the community for a short period only.

It is fairly obvious that a report of this kind cannot bring up all the important themes related to food and nutrition in peasant communities. However, by focusing on a few issues deemed to be fundamentally crucial and as yet insufficiently covered in the literature, our report may contribute to a greater awareness about the economic, political and ideological factors underlying food and nutrition problems. Another aim is to stress the importance of concrete village studies prior to designing projects to improve the food and nutritional situation.

1.2 Summary

The report begins with a general outline of the role and situation of peasant women and the lack of concern about them in social science research and development planning (Chapter 2). It is argued that whereas women play a decisive role in household agricultural production and reproduction, research and project planning tend to be biased towards cash crops and oriented towards men as the primus motor of development.

In Chapter 3 the traditional organization of the Kuria people is briefly outlined. Their household economy is based on a combination of agriculture and animal husbandry (agro-pastoralism), and the expansion of anyone sector is dependent on a surplus from the other. It is women who constitute the link between the two sectors, being married in exchange for cattle and performing most of the work in agriculture.

The major steps in the strategy to integrate the Kuria economy into the Tanzanian national economy are described in Chapter 4. At a superficial level the historical changes in Kuria agriculture may appear to have taken a turn for the better. For one thing, colonial rule in Kurialand was less harsh than in other parts of the country more suitable for white settlement and large-scale farming. Moreover, different from the growing of purely commercial crops in many other areas, the Kuria specialization in maize cultivation implies that their major crop has the double function of a subsistence food and a source of cash. The introduction of maize by the British administration was accompanied by demonstrations and extension services aimed at convincing the population of

the advantages of substituting a small iron plough for the traditional handle-hoe. Before long, ploughs were used in many households enabling them to put more land under cultivation. The Tarime highlands proved so suitable for maize cultivation as to be selected for incorporation into the National Maize Project in the mid-1970´s.

The ultimate effect of the colonial policies was to put an end to production as primarily a means of safeguarding subsistence and developing the household economy in line with traditional ideals. The district administration´s imposition of maize as a cash crop and the spread of the plough were meant to change Kuria agriculture so as to comply with the demands of the colonial economy. Even measures seemingly directed towards local needs were, in fact, applied with the overriding objective of preserving and furthering colonial interests. For instance, the setting up of mills in some highland villages during the late 1940´s, enabling the producers to consume part of their maize harvest, was necessitated by a situation where households experienced increasing problems of reproducing the labour force. In the long run such conditions would inevitably impair the colonial interests sinze maize cultivation would be curtailed in favour of the traditional staples, especially the labour-consuming finger millet. The colonial policy generated a clash between traditional ways of crop husbandry, applied primarily with respect to subsistence production, and new methods for the expansion of cash crops. Since men were the targets of agricultural extension, the traditional subordination of women relative to men was reinforced. The imposed changes in household agriculture involved much extra work, through the addition of new tasks or through the performance of existing ones with

greater care. The increase in the overall burden of work mainly fell on the women with the result that their coordination of productive and child-care responsibilities became increasingly a problem.

The Tanzanian policies for rural development after independence have differed from those of the past in certain important respects, but certainly not in all important respect. For instance, the rural population has been resettled into villages with the declared objective of facilitating the expansion of social services and changing the orientation of household agriculture to comply with the national goal of self-sufficiency in food by 1981. However, in order to acckomplish the rapid implementation of the villagization plan, resettlement was often enforced and thus the principles of voluntariness and participatory decision-making were renounced. In the Tarime highlands resettlement took place in the midst of intensive agricultural work. The women had to walk long distances to their old cultivation plots and could not put in the same amount of work as usual or prevent birds and wild animals from feeding on the crops, factors partly responsible for the dramatic drop in grain yields in 1974. In its turn, the women's preoccupation with household agriculture away from the village, rendered their participation in communal decision-making and work impossible.

In Chapter 5 the situation in Nyamwigura village is analysed in greater detail. The history of the village is sketched as are a few problems related to village leadership, communal work, planning and government extension.

The typical Kuria diet and their health status and facilities are subjects of Chapters 6 and 7. A general outline of the common household diet is given and supplemented with the particular prescriptions for pregnant or lactating women and for breast-feeding and weaning children. Most of the information presented is based on dietary surveys carried out in the village.

Chapter 8 is devoted to the women's overall role and situation in Nyamwigura village. The problem of their direct and indirect exclusion from political discussions decision-making and communal work is analysed. A combination of traditional forces - implicitly defining women as subordinate to men - and the organization of village life continues to keep women preoccupied with household work while men engage in prestigeous communal activities and discussions. This chapter also presents a household survey carried out in the village in order to find out more specifically about the relations of production between women and men. The survey gives further support to the overall findings of the study, i.e. that the workload on Kuria women by far exceeds that on men and that their access to the produce of household labour is unequal, an anomaly leading on to nutritional disorders of their children. The survey also shows that the average workday (excl. child-rearing and some other activities defined below) of village women amounted to at least eleven hours.

Finally, Chapter 9 emphasizes the importance of awareness and concern among politicians and planners about the relationship between men and women in peasant households. Quite contrary to the prevailing approach of treating rural households as homogeneous

units, attention should be paid to the fact that women usually perform most of the work with the least returns. It is necessary for planners at all levels to pay specific attention to the possible consequences of development projects on women and children. Furthermore, women should be looked upon as a decisive force in development work due to the wealth of knowledge and experience they possess from the various sectors of rural life. The chapter ventures a few recommendations in the areas of agriculture, nutrition and health specifically based on our work and findings from Nyamwigura village.

2 WOMEN AND DEVELOPMENT

2.1 The Role of Women in Production and Reproduction

The social structures typical of rural communities in post-colonial developing countries are the outcome of multiple processes of social change. On the one hand, there are specific social features of traditional origin, e.g. food habits and organization of work, which have proved viable in the course of generations and serve to distinguish a society from neighbouring ones. Such features are never static but are subject to continuous transformation in order to "comply" with the demands generated by new social situations and events. On the other hand, the rural communities become targets for externally induced processes of social change, e.g. the introduction of new crops and new technology, aiming at incorporating rural areas into national development efforts. Such externally induced processes of social change tend to dominate the indigenous structures. Thus, the introduction of new crops often necessitates a change in cropping pattern towards a reduction of traditional crop varieties. Furthermore, the adoption of new cultivation techniques may well render the traditional organization of work inappropriate and call for new forms. Also, the agricultural work-teams traditionally set up to handle specific tasks may be used in new situations.

Therefore, in order to <u>understand</u> the range of problems experienced by contemporary rural communities, these problems must be analysed in terms of the underlying processes that have served to generate and maintain them. Only through such an approach will there be a <u>real</u> possibility for considering effective measures to counteract and solve the problems. However, it is a fact beyond reasoning that many of the efforts targeted at rural communities lack this fundamental perspective.

It seems as if politicians, planners and extension staff operating in the field of rural development depart from a perception of rural communities as lacking all forms of indigenous economic planning, organization of work, technology,etc. Such a neglect of local conditions may not only imply that much of important potential for change in terms of knowledge, experience and physical resources is overlooked. In addition, experiences from many countries point in the direction that the arrogant manners of government staff in their interaction with the rural population serve to reduce the possibility of future development cooperation. A fundamental factor behind such a neglect probably is that national development strategies tend to be as firmly defined as to leave little scope for the consideration of specific local conditions, needs and priorities.

Partially due to the factors referred to above, a vast number of projects targeted at rural communities ultimately serve to impair the conditions of living of rural households. While many economists and development planners continue to emphasize a hypothetical relationship between an increase in peasant's cash income derived from sales of agricultural produce and improved conditions of living, the consequences in terms of aggravated nutritional vulnerability have been documented in recent years.[1]

In order to fully appraise the relationship between cash crop production and nutritional vulnerability, it is imperative to analyse the situation of women. On the African continent women compose between 60 - 80% of the agricultural labour force.[2] They are generally

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1. M.L. Swantz, U.S. Henricson, M. Zalla, Socio-Economic Causes of Malnutrition in Moshi District, BRALUP; Research Paper No. 38, University of Dar es Salaam, March 1975.
O. Jacobsen, Economic and Geographical Factors Influencing Child Malnutrition; A Study from the Southern Highlands, Tanzania, BRALUP: Research Paper No. 52, University of Dar es Salaam, 1978.
2. UN Economic Commission for Africa. The Changing and Contemporary Role of Women in African Development, Addis Ababa, 1974.

responsible for the performance of continuous tasks, e.g. planting, weeding and harvesting, while men primarily perform occasional tasks perceived of as physically demanding, e.g. cutting trees, uprooting bushes and ploughing. In addition to their work in agriculture, women are generally responsible for the handling of food produce, i.e. transportation, processing, preparation, storage, etc.

Besides their decisive productive functions, women play the central role in biological and social reproduction. Not only do they bear and give birth to children, but they continue to carry the major responsibility for them during childhood in terms of feeding, supervising their health status, etc. They care for sick and old members of the community and maintain the present and future labour force through performing the bulk of absolutely essential tasks such as fetching water, collecting firewood, threshing, cooking, cleaning, washing, etc.

In traditional African economy food crops cultivated on household land were of many different kinds. Thanks to diversified production, the negative effects of unforeseeable changes in the natural and social environment could be minimized. For instance, an attack by pests or vermin would rarely affect all crops cultivated by a single household and a loss of one specific crop could generally be compensated for by the harvest of another. The cultivation of a variety of food crops also facilitated the composition of nutritionally balanced meals throughout the agricultural year[1]. As long as agricultural production was aimed primarily to satisfy household consumption needs, women were acknowledged tc make crucial decisions with regard to the planning of agricultural production and the use of harvested produce. The were, for instance, generally

1. The consequences of cash crop orientation for peasant's subsistence production are analysed in;
K.E. Knutsson, "Malnutrition and the Community." In Nutrition, a Priority in African Development, ed. B.Vahlquist, Stockholm: Almqvist & Wiksell, 1972.

responsible for a continuous review of the adequacy of the area under cultivation and crop pattern, in relation to their perception of household subsistence needs.

Since land and labour amount to scarce resources in the vast majority of peasant households, the expansion of cash crop cultivation generally has to take place at the expense of cultivation for subsistence. The changes in food production to be observed all over Africa, from the cultivation of a large number of crops, e.g. finger millet, sorghum, pulses and vegetables, to a predominance of monocrop cultivation, should be viewed as a manifestation of the struggle to derive a subsistence from diminishing resources. Although, for instance, cassava has comparative advantages in being high-yielding, resistant to pests, relatively labour extensive and harvestable throughout the agricultural year, its nutritional quality is inferior in comparision with other staples.

In developing countries generally the population in rural areas are integrated into the capitalist mode of production through selling their labour power and/or their agricultural produce. The relationship between classes is one of exploitation and a major share of peasant's returns of labour is appropriated by a dominant class.

The exploitative relationship between classes is reflected in the relations of production at household level, i.e. between men and women. As long as production was aimed primarily to satisfy household subsistence needs, the produce of labour was consumed jointly by household members although women in most cases performed the bulk of labour. With the cultivation of cash crops, the inequality between men and women often is, in addition to differences in labour imput, a matter of unequal

appropriation of labour returns. As cash crop cultivation is expanded on peasant lands, there is a tendency for men to hand over to women the responsibility for their traditionally allotted tasks in relation to subsistence crops. In addition, women often end up being responsible for the similar routine tasks in relation to cash crops that are defined as "female" in traditional terms. Hence, the tendency is for men to assume responsibility for "male" tasks in the cash crop sector while women's workload is dramatically increased since they participate in both sectors of household agriculture.

In addition to the reduction of food crop varieties referred to above, the increase in women's workload may have negative consequences for food preparation and feeding practices. In the struggle to coordinate their productive and reproductive responsibilities, women are often forced to wean their infants at a much too early age, in order to be able to spend the necessary time in the fields. Therefore, the increase in child malnutrition to be observed in many, if not most, developing countries should be appraised in relation to women's deteriorating social situation, manifested in an increased workload and a diminishing control over the produce of labour.

2.2 The Neglect of Women in Research and Development Planning

The absolutely vital role that African women play in production and reproduction is generally overlooked in social science research and in the formulation of rural development strategies. Although the reasons behind this neglect are complex, two closely related factors can be singeled out as of fundamental importance, i.e. the focus on the cash crop sector of the peasant economy and the male bias in research and planning.

A commonly held perception among social scientists is that the relative social position of men and women is determined by biological factors.[1] A crucial point in such argumentation is that women give birth to and raise children, while men do not. The reproductive functions of women are held to determine their contribution to production in that they assume responsibility for the kind of routine and easily interruptible tasks that can be performed in combination with childcare. It is further maintained that women are psychologically better equipped to handle such tasks in comparision with men who are said to have the capacity for mobilizing sudden spurts of energy to be followed by resting and recovery of strength.

While the existence of a relationship between women's productive and reproductive functions should not be questioned, the reference to biological factors alone amounts to an inadequate explanation as to why "female" tasks are universally considered as relatively subordinate. In fact, biological factors seem to be of significance only to the extent that they are interpreted as significant in cultural terms. If this was not the case the division of labour between men and women should, in principle, be uniform in all societies. However, our knowledge of cultural variations show that "male" and "female" are dramatically different from one society to another. Whereas the women in some societies are held to be strong enough to handle the ox plough, this task may well be performed exclusively by men in yet others on the ground that women lack the necessary strength. In many societies, men and women cooperate in hoeing while elsewhere it is regarded an altogether female task.

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1. See, for instance:
J. Brown, A Note on the Division of Labour by Sex, American Anthropologist, 72, 1977, pp. 1074-1078.

L. Tiger/ R. Fox, The Imperial Animal. New York: Holt, Rinehart and Winston, Inc., 1971.

G.P. Murdock, Social Structure, New York: Macmillan, 1949, p.7.

The fact that men and women do not primarily assume responsibility for specific tasks due to biological criteria is evident also from situations where the division of labour is modified as part of an overall process of social change. For instance, the situation where men from rural areas seek seasonal employment in mines, industries, etc., often necessitates that women take over men's responsibilities in agriculture. In industrialized countries biological arguments are often put forward by employers as a justification for restricting the participation of women to jobs which are monotonous, underpaid and temporary. By reference to the fact that women menstruate, bear and rear children, they are expected to be off from work for more or less extensive periods. However, when the labour market is in particular need of additional female labour, the reproductive function of women readily become a matter of society's concern, resulting in for instance the setting up of nurseries.

Empirical evidence points in the direction that it is much more common for women to take over male tasks than the other way around. In the case where men carry out to any considerable extent tasks traditionally assigned to women, their undertakings are generally endowed with higher esteem than is the case when women perform the same tasks. Where men increasingly take part in food preparation, a haute cuisine develops, which in cultural terms is fundamentally different from the women's commonplace preparation of ordinary foodstuff.

The fact that biological arguments have been brought forward in explanation of women's social position has not exactly invited further analysis of women as social actors or of the relationship between men and women in society. Rather, from the numerous monographs dealing with the social life in e.g. rural Africa, one might get the impression that the societies described are composed of men alone. It is the activities, thoughts and aspirations

of men which are singled out as "problematic" enough to attract the researcher's interest. When the female part of the population is referred to, it is basically as objects in social arrangements, e.g. circumcision, marriage and family life, which are analysed from a male perspective. This bias is but a logical outcome of the situation where the number of men in the research community by far outranges that of women. In addition to this, the fieldwork experience gained by male and female researchers respectively, in terms of ability to communicate with the local population, is often quite different. While most female researchers feel that they have been quite successful in interacting freely with both men and women, their male colleagues have often experienced difficulties in communicating with rural women. Therefore, information on the life of women has usually been derived from secondary sources of information, such as interviews with the male members of the community who judge the situation of women on the basis of their relationship to them as husbands, brothers, fathers, fathers-in-law, etc.

The analytical distortion of social processes has, among other things, implied that many of the responsibilities commonly assumed by women are not perceived of as "work". This tendency is particularly evident with respect to reproductive tasks, e.g. fetching water, collecting firewood, preparing food, looking after children. A most flagrant example of this is provided in a report on village society and labour use prepared by the village studies programme at the University of Sussex for the International Labour Office (ILO).[1] In addition to the fact that women's contribution to agricultural work is highly underestimated, their reproductive responsibilities are neglected altogether. In the categorization of tasks performed within village households,the reproductive tasks

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1) B. Dasgupta. Village Society and Labour Use. Delhi: Oxford University Press. 1977.

commonly handled by women appear in a residual category on "non-work and leisure". In this category those tasks are accompanied by fairly diverse undertakings, e.g. attendance at religious and cultural festivals, resting and recreation.

However, more important than merely being difficult to assess, the neglect of women should be viewed as ultimately a matter of the underlying objectives guiding research and development planning. During the colonial period, social scientists were sent out to pave the way for a quick and effective penetration of traditional societies in order to turn them into resources benefiting the colonial economy. Many monographs written by anthropologists during this period focus on the indigenous political organization of "fierce people" and traditional forms of land rights and land utilization in areas of high agricultural potential which were regarded suitable for European settlement.

In recent years development efforts have largely been geared to the promotion of cash crop cultivation on peasant lands, in order to achieve the targets set by national and regional authorities. This emphasis on cash crop cultivation has largely been accompanied by a total neglect of the part of peasant's production which is aimed at household subsistence. Since women generally assume responsibility for work and decisions in relation to the subsistence needs, the bias in research and development planning towards cash crops is followed by a neglect of women. When projects dealing with cash crops are communicated to the local population, it is the male part of the population which is invited to village seminars on crops husbandry and which will receive information on subsidized implements, producer's prices, etc. If the perception of the local population of their problems and their opinion as to how problems could be

solved are sought for by government authorities, the men generally act on behalf of the entire community. It seems to be almost a universal phenomena that most of the tasks assigned to women in rural communities are expected to be carried out to satisfaction more or less as a matter of course. Such tasks therefore rarely appear on the list of development priorities whether formulated by government authorities or by male representatives of the rural community. Rather, agricultural implements made available in rural areas very often are of the kind to increase the workload on women. For instance, when ox ploughs or tractors are introduced as an alternative to hoeing by hand, larger tracts of land can be put under cultivation but it also implies more weeding on the part of women. Until agricultural implements are specifically directed towards attacking the major bottlenecks of labour, there will always be a probability that they serve to enhance the already problematic situation of women.

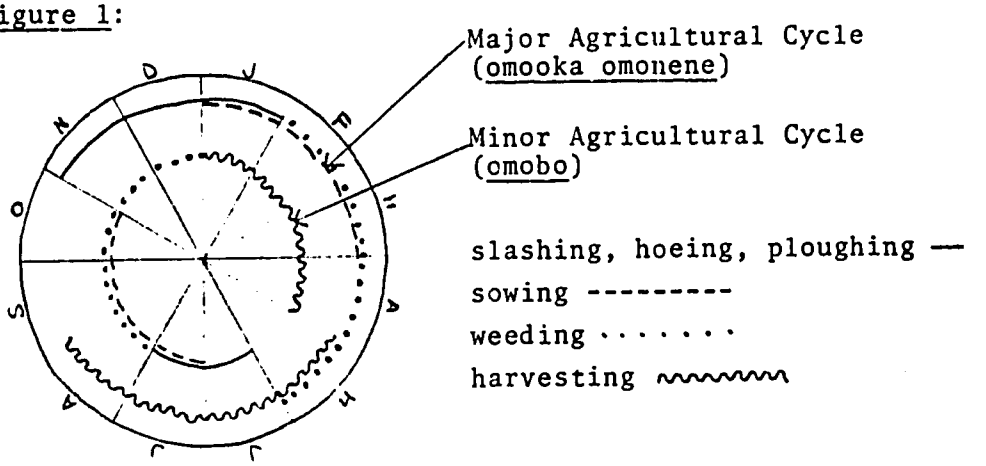
3 THE KURIA AND THEIR TERRITORY

3.1 Agro - Economic Zones

The Bantu-speaking Kuria people live east of Nyanza (Lake Victoria), in the upper part of Tarime district, Mara region, in Tanzania and along the southern boundary of South Nyanza district in Kenya. According to the 1967 Census the Kuria comprised 22% of the population in Mara region of 544,000 inhabitants.[1] Other ethnic groups of numerical significance in the region are the Luo (21%) and the Jita (21%).

Two of the major agro-economic zones in Tarime district are the highland Rosana and the Kiribo plain. The rolling hills of Rosana border on the Kisii highlands in Kenya at an altitude ranging between 1500 and 1700 meters. The soils are fertile, the temperature is favourable and the rainfall of 1250 to 1500 mm is fairly well distributed throughout the year. Mainly due to favourable environmental conditions, the highland population is able to realize two cultivation cycles per year - the major one stretching from November to September (omoka omonene) and the minor one from June to May (omobo).

Figure 1:



1. According to estimations made by the Ministry of Water Development, Energy and Minerals, the population in Tarime district amounted to 217.000 in 1977. Natural Resources, Population and Agriculture in Mara Region. Water Master Plan for the Mara, Mwanza and West Lake Regions. Vol. 9. United Republic of Tanzania. July 1978. p. 31.

The most important crop cultivated by the highland population is maize, which is grown for the twofold purpose of subsistence and cash income. Additional food crops of significance are finger millet, sorghum, bananas, cassava and sweet potatoes. The cultivation of coffee and bananas supplement the cash income derived from sales of maize.

The combination of a diversified cropping pattern and two overlapping cultivation cycles implies more or less continuous work in agriculture. The peak season, which is also the most vulnerable period from an agricultural subsistence point of view, coincides with the beginning of the long rains around March/April. The failure to complete the task of hoeing or weeding before the peak of the rainy season implies that the soil gets excessively damp and heavy to be turned properly. According to old people's saying, planting must be completed before the moon is full in late March or else the harvest will be negligible. It is also of the utmost importance that the first weeding is finished by the beginning of the rains in order to enable the crop to grow close to maturity before the rain terminates.

In the pre-colonial period when finger millet and sorghum were the only staples cultivated, the agricultural year comprised only one cultivation cycle. As showed in the calender below, the agricultural work started in November, when the soil was prepared for cultivation, and was ended with harvesting in August.

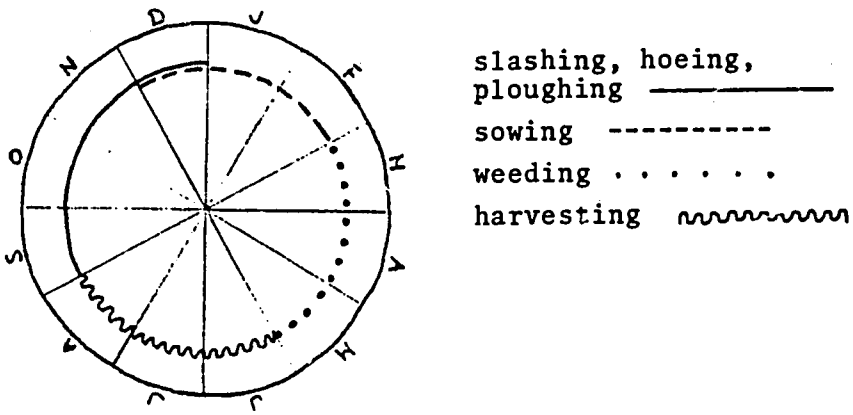
The highland Rosana is separated from Kiribo, some 700 to 900 meters below, by an escarpment stretching in the east - west direction. On the plain, the erratic rainfall varies between 750 to 900 mm per year. Different from the highlands, the environmental conditions prevailing in major parts of Kiribo provide

Table 1: THE TRADITIONAL AGRICULTURAL CALENDER

Month	Kuria Term	Agricultural work
November	Itiiria	Preparation of land for cultivation.
December	Itiiria	As above.
January	Kenyariiri	Preparation of land completed.
February	Itabaraari	The sun burns the weeds.
March	Getaturi	Sowing.
April	Kimwamu	Month of heavy rain. Weeding is initiated.
May	Kerabu	Weeding is completed.
June	Iheta	Birds and vermin kept at distance from the crop.
July	Mabeho	Month of cold weather. Resting.
August	Kegembe	The knives are sharpened for harvest. (knife = kegembe)
September	Nyansahi	The women visit relatives bringing flour as gifts. (flour container = nyaɔsahi)
October	Ikuuri	Month of hunger for households cultivating too little land. People will "cry" (kulia) for help.

options for merely one cultivation cycle per year.

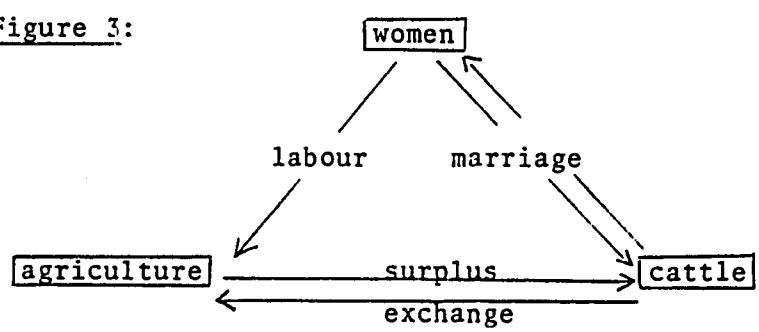
Figure 2:



The most important food crops cultivated on the plain are maize, cassava, finger millet and sweet potatoes. In addition to providing a subsistence, minor quantities of maize and cassava are sold off for cash, as are cotton and rice in some lowland areas.

In addition to agriculture the Kuria economy comprises animal husbandry. In fact, it is the combination of agriculture and animal husbandry at the level of the household which make up for a viable economic system. Just as well as the agricultural sector can not be accurately apprehended except in relation to animal husbandry, the attention paid to cattle is intimately tied to agricultural considerations. As showed in figure 3 below, it is women who constitute the fundamental linkage between the two sectors of economic life.

Figure 3:



Thus, women are married in exchange for cattle and a primary objective of marriage is the birth of children. A father marries off his daughter in exchange for cattle, which constitute the medium of exchange for a daughter-in-law, thereby ensuring the continuity of the patrilineage. In addition to her reproductive role, a Kuria woman plays a fundamental role in the expansion of the household herd through her work in agriculture. At the time of harvesting, whatever remains in the household granary is usually exchanged for cattle or smaller stock. In periods of food shortage the households experiencing acute problems are able to acquire grain in exchange for cattle, at a rate of three cows for the contents of an ordinary granary. Under normal conditions the same amount of grain is equivalent to one cow. In the past, it was common also to temporarily dispose of a cow in exchange for grain. Under such circumstances the household providing grain was entitled to retain a calf while eventually returning the cow to the ultimate owner.

Due to agro-economic variations the relative stress on agriculture and animal husbandry differs between Rosana and Kiribo. The highland population is densely settled and major parts of land are under continuous cultivation leaving little space for grazing. On the plain, however, agriculture is less intensive while pasture lands are abundant, rendering animal husbandry a prime economic activity. In spite of the differences in production potential the subsistence and reproduction of a Kuria household, whether located in the highlands or on the plain, depend on a combination of agriculture and animal husbandry. It is in this perspective that the continuous economic cooperation between households of the twin agro-economic zones is to be understood. The highland households retain the number of stock needed for ploughing, milking, etc., while the "surplus" herd

is temporarily distributed among cattle-associates in the lowlands, who are usually but not necessarily relatives and who care for the animals until they are reclaimed by the ultimate possessors. They are compensated in kind through a right to retain the milk of cows and to use oxen in agriculture and breeding. Should cows deliver during their period in Kiribo, the calves belong to the ultimate owner. In cases where cattle die from injury or disease the owner must be informed immediately and the meat will be brought to his homestead if the distance is not too great. In addition to pasture considerations, there are other reasons for dispersing highland cattle among relatives and friends in the lowlands, such as minimizing the effect of cattle-raids and disease. During periods of food shortage the Kuria living on the plain will, on the other hand, turn to relatives and friends in Rosana for assistance. Thus, in spite of agro-economic variations, Kuria households are able to support themselves from a combination of agriculture and animal husbandry due to an elaborated system of mutual assistance.

3.2 The Province[1]

The majority of highland Kuria population residing close to the escarpment and those living on the plain immediately below are members of the Timbaru clan.[2] The territorial dimension of a clan is the province (ikiaro) and the people of Timbaru (abaTimbaru) thus reside in the Timbaru province (buTimbaru). The patrilineal

1. It should be noted that the traditional Kuria province is not an administrative unit comparable to district, division, ward, etc.

2. A more detailed account of the social organization of the Kuria people is provided in;
M.J. Ruel, "Kuria Generation Classes", Africa, January 1962.
M.J. Ruel, "Religion and Society among the Kuria of East Africa", Africa, July 1965.
M.J. Ruel, The Social Organization of the Kuria, a field-report, unpublished, 1959.

kinship relations between households in the two agro-economic zones of buTimbaru are manifested and reinforced in various ways. For instance, marriage alliances are highly sought for since they will expand the possibilities of economic cooperation described above. A common procedure applied by large cattle owners in Rosana is to place one or several wives in households of relatives and friends in Kiribo, in order to be able to supervise and assist in the care of a dispersed herd. The relationship between households in Rosana and Kiribo is further reinforced through the joint performance of major ceremonies such as circumcision and ancestral rituals.

The Kuria people are internally organized into some fifteen provinces which, according to oral tradition, were founded by sons and grandsons of the father of all Kuria, i.e. Kuria Mugango. In the past, the most important practical function of a province was that of defence, which was organized by individuals recognized as war-leaders (abaceena). In the case of an attack, territorial sections of the warrior-youth (abamura), i.e. young men between the age of circumcision and marriage, were mobilized. In addition, the province constitutes the primary unit for social identification and the people living in buTimbaru refer to themselves as abaTimbaru rather than as wakuria, which merely designates a general cultural identity.

All the male members of a clan are entitled to attend the provincial assembly (omoŋgaini). The discussions taking place in such meetings are directed by a small number of individuals of exceptional esteem, whose words and advice are ponderous, i.e. the spokesmen (abagambi), the dream-prophets (abarooti)and the war-leaders (abaceena). The spokesmen are publicly recognized owing to their personal qualities in super-

vising and revising the state of agriculture in their provinces. Through continuous discussions with elders from various parts of the province, they are able to identify and visit households who apparently produce below their subsistence needs in order to advise them on appropriate changes in their production pattern. When a problem is perceived of as so severe as to affect badly the whole province, i.e. drought, pest, vermin, etc., the matter is thoroughly discussed and extensive actions might follow. The dream-prophet is believed to obtain knowledge about important events through dreams or visions. In the past, the war-leaders were particularly skilled in organizing defence and directing raids into other Kuria provinces and the Masai territory.

In addition to the provincial assembly, the traditional Kuria political organization comprises secret councils (inchaama), composed of elders from various parts of a province and a few young men in order to secure the continuity. The members are appointed primarily by virtue of their knowledge of supernatural processes and their ability to keep secrets. Different from a provincial assembly a secret council primarily deals with the ritual well-being of a province. The members of a council supervise individual behaviour and are authorized to impose supernatural sanctions on anyone who is held to endanger the well-being of the province.

Each clan inhabiting a province is subdivided into a number of descent sections (egesaku), within which people are vaguely recognizing particular kinship bonds. The descent section is further divided into clan segments (irigiha), within which people relate to each other more specifically through classificatory kinship. In traditional Kuria society, marriage was forbidden between members of such a clan segment. At the lowest level of descent a clan segment is divided into lineages(eka)

of various depth, the most shallow one being composed of a father and his sons.

3.3 The Household

Within each province the people traditionally lived in stone-walled villages (amagori) which were located at points of strategic importance. The villages differed greatly with respect to size, primarily due to the availability of cultivation lands in the nearby surroundings. In the Timbaru province the common village accomodated some sixty to eighty households. The vast majority of inhabitants in each village reckoned membership to a common clan segment. Since marriage was proscribed between such close kin, the continuous exchange of spouses between more or less distant villages served to reinforce the community spirit.

In the traditional village, households were allotted cultivation ground on the conditions of rights of usufruct which was ultimately based on acknowledged ties of patrilineal kinship to a common clan segment founder. The distribution of land was handled by a village council of elders, who also supervised the use of it. In cases where an areal allotted to a household was left to fallow for an unreasonable number of years, it was redistributed for more effective use. The cultivation ground allotted to a household was subsequently redistributed by the household head to wives and daughters-in-law. Each woman derived the subsistence produce needed by herself and her children from this plot and the harvest was preserved in her granary next to the house. In addition to the plots cultivated by women of the household, a certain plot was perceived of as ultimately belonging to the household head. All members shared the work on this plot and the harvested produce was put in

a special granary (emongo) as a reserve should unexpected problems arise. Smaller quantities were exchanged for tobacco, medicine, beer and services provided by traditional doctors, rain-makers, etc., during the year. When a new harvest was secured the remainder in the emongo was exchanged for cattle and smaller stock. Since the household herd is always the possession of the male household head, the surplus produce from agriculture serves to accumulate his wealth.

According to traditional principles a woman can never be recognized as head of a household. In the rare cases of divorce she returns to her parents and remains under her father's authority until, possibly, she enters another marriage. A widow usually remains with the children in the husband's homestead and the authority over household undertakings is transferred to the deceased husband's brother.

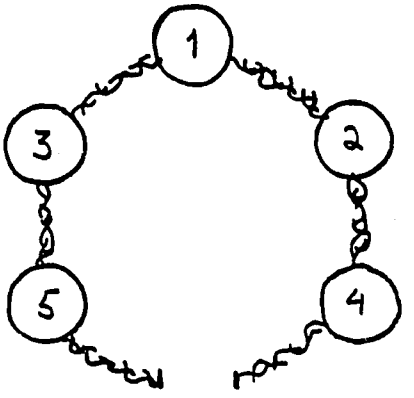
However, although lacking formal authority the Kuria women traditionally exercised considerable influence over the organization of agricultural production at household level. They were, for instance, able to enforce major changes in the cropping pattern from one cultivation cycle to another, primarily thanks to their being preoccupied with cultivation and agricultural considerations more or less continuously. Also, their recognized knowledge of natural processes and their ultimate responsibility for food handling and food preparation made for their influence.

A household composed of a man, his wife and children obviously is different from one where several brothers and their families reside together or where a man and his family live with the husband's old parents. However, variations in the social composition of households should be seen as representing progressive

steps in a household developmental cycle, characterized by growth and fission. Although a son may build his own homestead at marriage, at some distance from that of the parents, he will nevertheless remain under his father's authority. It is only when the father dies that the son eventually become recognized as head of his household. Among other things this implies that he will be able to start accumulating wealth (e.g. cattle), marry additional wives and represent his household in community discussions. According to Kuria norms not more than two adult generations should reside together in the same homestead. Therefore, when the oldest child of a son undergoes circumcision, marking the transition from childhood and adulthood, the son and his family will set up their own homestead at some distance, as an extension of the father's household.

From the perspective of women the variations in household composition accordingly imply differences in status and degree of autonomy. As long as the couple remains in the homestead of the husband's parents, the mother-in-law will assist in looking after her grandchildren. However, the relationship between adult women of adjacant generations is asymetrical and the young woman is obliged to show respect towards her mother-in-law in various ways. When a son and his wife set up their separate homestead, the young woman becomes more independent since she will no longer remain under continuous supervision of her mother-in-law. However, at the same time she is apt to receive less assistance in the care of children which may serve to increase her overall burden of work. The hierarchical relationship between female members of a household is reflected in the physical set-up of the homestead as illustrated in figure 4 below.

Figure 4:



1. Widowed mother of the household head
2. First wife of the household head
3. Second wife of the household head
4. Wife of an elder son
5. Wife of a younger son

Thus, the location opposite to the corral-gate is reserved for the most senior woman, while the rest of the women locate their houses according to seniority, starting from top-right towards bottom-left. Although co-wives assist each other in many ways, e.g. with child-care and in agricultural work, the relationship between them is hierarchical. Thus, when a man marries a second or a third wife, the more senior women will be in position to command obediance and assistance in various ways.

3.4 The Organization of Work

3.4.1 Men and Women

A fundamental principle guiding the division of work in a Kuria household is that of sex. As noted in the introductory chapter, the allocation of tasks to men and women respectively is not primarily a matter of which tasks men and women are actually able to perform but, rather, which tasks they are acknowledged to perform by the society. Due to the fact that a woman leaves her parental household at marriage to join that of her husband's father, the principles for socialization of children into their adult roles must be uniform. Thus, a daughter and a son's wife should be interchangeable in the performance of specific tasks in order for the household economy to operate effectively.

In the Kuria economy the women have always been chiefly responsible for the performance of agricultural tasks, while men have been preoccupied with animal husbandry. Prior to the termination of warfare between the Kuria and Masai and agaist more distant Kuria clans, herding was the responsibility of warrior-youth (abamura). When a section of such warriors from neighbouring households brought the cattle to more distant pastures on the Kiribo plain, they were usually accompanied by some young girls. In case of an attack the girls brought the cattle into safety while the warriors remained to fight. If a possibility arose to get hold of the enemies cattle during a fight, a few girls would try to reach beyond the enemy lines to seize the cattle. Although warrior-youth and girls thus pooled their efforts into herding as well as raiding and defence, the young men always assumed the ultimate responsibility for those tasks. Nowedays, girls no longer accompany herdsmen, as uncircumcised boys increasingly take over the responsibility for herding. With the exception of milking and cleaning the part of the hut where calves

and smaller stock are kept during the night, men are ultimately responsible for tasks related to animal husbandry, e.g. slaughtering, preparation of hides and building and maintenance of cattle-enclosures.

As to agricultural work, the traditional division of work between women and men was not very rigid. Therefore, although certain tasks were assigned to men and others to women, men could perform "female" tasks without losing prestige and women could do men's work. As a principle, however, men were responsible for the clearing of land before cultivation, including tasks such as cutting trees, up-rooting bushes and grass slashing. Men and women cooperated in cultivation, while women carried out planting, weeding and harvesting with only minor assistance from men.

The vast majority of reproductive tasks carried out within or in the vicinity of the homestead has always been handled by women, e.g. fetching water, collecting firewood, threshing and grinding, preparing food, cleaning the house, washing clothes, looking after children, caring for old and sick people, etc.

3.4.2 Age

The assignment of tasks to men and women respectively in Kuria households is crosscut by a division of work based on age. Thus, a number of "female" tasks are primarily carried out by older women while yet others are reserved for unmarried girls. A number of tasks presume knowledge and skills which are communicated to the individual at specific points in the life-cycle such as circumcision, marriage and elderhood.

The participation of children in various household undertakings is basically a matter of socialization into adult roles. Thus, when small children assist

older siblings or parents in collecting firewood, agricultural work or herding, they learn from imitating adult behaviour. From the point of view of household production and reproduction the most important contribution made by children is that of assisting in the care of younger siblings.

The first age-specific tasks in the course of a life-cycle are herding and defence. Having passed the circumcision ceremony, young men enter the warrior-section of their respective neighbourhoods as warrior-youth (abamura). They are chiefly responsible for herding the household cattle until they reach the age of marrying, when herding is handed over to youth recently circumcised. During the years of herding responsibilities, the young men only occasionally participate in agricultural work. When doing so, it is primarily as participants in one of the numerous work-teams. A marriage may therefore imply quite a dramatic shift in young men's work. towards agriculture and such cattle related activities that can be carried out in the vicinity of the homestead. Different from men the married women continue to perform tasks similar to those which they are accustomed to since childhood. They simply leave the parental household to join that of the husband. In the case of elders, they are socially acknowledged to withdraw from physically demanding activities as soon as a first grandchild has been circumcised. Senior members of a household remain on the homestead most of the day and see to specific tasks reserved for them. In the past, old men used to prepare the traditional garments from cow-hides. In accordance with their recognized seniority, they were also responsible for communicating with ancestors.

The senior women mainly assist in looking after small children remaining on the homestead while mothers are away. In addition, they make and repair various utensils for food handling and preparation.

3.4.3 Individual and Cooperative Work

In Kuria society work is either performed individually, by members of a single household, or in cooperative work-teams where the participants are recruited from a number of households according to specific criteria, e.g. sex, age, kinship and friendship. Although work-teams can be gathered to perform almost any task, they are particularly important for labour intensive tasks in agriculture such as weeding and harvesting. While many work-teams have their permanent members who circulate among participatory households, others are called for specific day-to-day needs. The wide prevalence of work-teams implies that most adults are members of one or several permanent teams while joining yet others occasionally. Since participating in work-teams has a strong notion of reciprocity, the institution is of fundamental importance in safeguarding household needs.

The commonest work-team of a permanent nature is the *iriika* , which is organized on the basis of sex and age. For instance, young girls from some five to ten neighbouring households may collaborate in the collection of firewood. Each day, they supply the household of one of the participants enough firewood for a week. Another *iriika* may be composed of young men who continuously cooperate in herding. The *isiri* work-team is composed of around twenty to thirty unmarried young people of both sexes who share an agricultural task, housebuilding, etc. Such a team can be called at any occasion by one of the participating households. The members of an *isiri* are permanently recruited

among kinsmen and households in the neighbourhood. After completion of work, food is served and traditional dancing is arranged. An ikomiti numbers ten to fifteen men and women of different age who join for agricultural work, housebuilding,etc. The actual members of such a team are close kin and, depending on the nature of the task, they call additional participants among friends and neighbours.

In addition to permanent work-teams, ad hoc teams can be called by anyone in need of assistance. If someone wants to gather such a team, the general procedure is to turn to an esteemed member of the community and ask him/her to invite participants. The composition and size of the resultant team is thus largely a matter of the consulted person's success in gathering a sufficient number of able-bodied persons. Such a team is rewarded exceptional food and ample beer. The ikiginga is gathered in the described manner and is composed of a large number of men and women belonging to the age-class of the person asked to call the team. The tasks performed by an ikiginga are those particularly labour intensive such as weeding and harvesting, and the food served upon completion of the work has to be out of the ordinary. The ekebotoro team is made up of as many as fourty people of both sexes. The team is subdivided into age- and sex specific subsections which work separarely, sometimes performing different tasks. The irisaga is composed of a small number of senior men who assist each other in agricultural work, maintenance of cattle-enclosures, construction of granaries, etc. They are provided with food and beer in the household attended during the day. A household in desperate need of assistance due to, for instance, illness or the death of a family member during a peak season of work, can ask a friend to call an igituria team, which is the Kuria word for "help" or "love".

3.4.4 Specialists

Members of a household generally possess jointly enough knowledge and skill to handle the range of necessary tasks in agriculture, animal husbandry and maintenance of the homestead and its people. However, the Kuria society encompasses a number of specialists who are acknowledged supereminent abilities to handle certain tasks. In some cases such skills can be acquired by anybody, but generally they are transmitted from parent to child. As concerns agriculture, the smiths (abaturi) constitute an important category of specialists. This was particularly so in the past, when all implements had to be made locally. From the pieces of iron brough along by customers, they manufactured all spear-heads, knives and hoe-blades needed by the households in their provinces. The iron was initially acquired through barter with the Masai or more distant tribes. In exchange for their services the smiths were given grain and stock according to recognized rates of payment.

A female category of specialists are the potters, who make cooking- and food preservation utensils from clay brought by the customers. The clay is taken from a certain area in Kiribo. Before money was used as a media of exchange, the potters were compensated by the amount of finger millet or sorghum that would go into the ready-made pot. Another female specialist of the utmost importance for the community is the village midwife (omoiburia ya abakari). Although rarely asking for compensation, they are provided ample gifts in the form of grain, goats or chickens.

In areas where production is sensitive to changes in weather, the rain-maker (omogembe wa imbura) is usually a most important and esteemed person. In the Kuria territory problems are envisaged both with respect to too

much and too little rain. The rainmaker is provided with gifts of grain or cattle and may well accumulate considerable wealth. In fact, the most famous rain-maker in buTimbaru on several occasions managed to assist young men from poor households with cattle needed for their marriages. Since he did this on the condition that the married couples joined his household as full members, the operation ultimately served to expand his lineage.

The traditional doctors (abarerī) are men and women trusted by the community to possess exceptional knowledge and skill in the area of medicine. Their undertakings involve curing as well as cursing and preventing evil spirits from harming the community.

3.4.5 Appropriation of Labour Returns

Prior to the expansion of cash crop cultivation, the bulk of harvested produce from household agriculture was consumed as food. The relatively excessive workload on women at their allotted cultivation grounds thus was not to any considerable extent accompanied by inequality in the appropriation of labour returns. However, the produce derived from the cultivation ground which belonged to the household head and preserved in the household granary (emongo) was endowed with a potential exchange value in that the remainder at the time of a new harvest was invested into cattle and smaller stock. Since cattle are the possession of household heads, part of the returns of female labour was therefore appropriated by men.

The fundamental principle guiding cooperative work is reciprocity. Although many work-teams operate on a rotational basis, with the implication of a more or less immediate reciprocity, yet others are gathered by single households for assistance on a day-to-day

basis. It is only through participating in such co-operative work that households will be able to count upon assistance from the community in times of need. As referred to above the success in actually attracting the participant's interest ultimately depends on the social standing of the person asked to invite people plus the ability to provide ample food and drinks. Since labour is in particularly short supply during peak agricultural seasons, it is fairly evident that some households will end up in a more favourable position than others. From a household perspective the appropriation of returns from cooperative work may well be unequal since a wife can be commanded by her husband to invite female friends for the performance of tasks which will ultimately serve to accumulate the wealth of the husband.

4 TRANSFORMATION OF KURIA AGRICULTURE*

4.1 The Colonial Period

German troups followed by administrators arrived in the Kuria territory from Mwanza in the 1890's. The intrusion was met by great confusion and in desperate efforts to withstand the superior arms of the Germans, the Kuria warriors soaked their shields with water so as to become immune against the bullets. According to Kuria ideology the water from rivers and ponds is blessed by supernatural beings who are held to reside in such places.[1] The warriors were defeated after a short period of resistance and elder representatives were forced to engage in "peace-agreements", which in practice served to provide the government with unlimited powers to exploit the local resources.

In order to realize government policies representatives of the local population, who were hoped to be particularly loyal to the government, were appointed as chiefs and headmen. One of their primary undertakings was to command local labour to the construction of the Shirati port and roads to areas with high agricultural potential. Local labour was also the major resource applied in the building of government headquarters. Although the policy of forced labour primarily affected the male part of the local population, the women in fact made considerable contributions whenever

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* General note: Staements and figures in this chapter for which no reference is given, were obtained by the author in personal interviews with Nyamwigura villagers or through district books.

1. A detailed account of Kuria religion is presented in: M.J. Ruel, "Religion and Society among the Kuria of East Africa", op.cit., pp. 295-306.

work was carried out close to the settlements.

The government schemes soon proved to be very expensive and necessitated the imposition of taxes. The latter were initially paid in hides and ghee, which for many years constituted the major export items from the area. When demands for these products eventually declined, efforts were made to change local production towards the cultivation of cotton and groundnuts. As a primary step in this direction the tax in kind was substituted for a money tax. Since cash could only be obtained through the selling of cotton and groundnuts, the peasants were forced to grow these crops.[1]

The cultivation of groundnuts was accompanied by the use of forced labour in transporting the crop from the highlands to the Shirati port. The hardships were tremendous and many porters died before reaching the final destination some sixty kilometers away. However, instead of directing the opposition towards the colonial administration, the elders decided to curse the cultivation of groundnuts in the conviction that the crop itself was harmful. The effect of the curse was an almost complete termination of groundnut production in the area.

The war 1914-1918 meant further changes in household production since German soldiers had to subsist on produce derived from local agriculture. Each household was obliged to contribute at least one tin[2] of flour weekly and a large number of cattle were confiscated.

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1. R.R. Matango, Peasants and Socialism in Tarime District, University of Dar es Salaam, (unpublished Master's Thesis), 1976, p. 28.

2. One tin of finger millet is roughly 17 kgs.

Subsequently, a primary undertaking by the British administration in Tarime was to appoint new chiefs and headmen. The German policy of using local labour in government schemes was further elaborated and the mines, started up in the lowlands before the war, were turned into even more profitable enterprises. Other schemes demanding local labour were, for instance, suger plantations in Kiricho and Kisii and the building of a railway between Mombasa and Kisumu.

The growth of labour centres in the Tarime area was accompanied by problems of reproducing the labour force. The food produce needed to feed workers had previously been acquired from white settlers in Kenya at high cost. The supply was unreliable mainly due to harsh weather conditions and bad roads. In order to secure a regular supply of food at lower cost, the colonial administration endeavoured to turn the Kuria highlands into an area of intensive food production. Since they regarded the traditional staples cultivated by the Kuria as inferior food, measures were taken to introduce maize into the local cropping pattern. The efforts were initiated already in 1927 when a demonstration plot was set up in the highland village of Mogabiri, ten kilometers from Tarime town. Employing Kenyan extension staff and local headmen, the male part of the population was forced to attend the demonstrations. However, the approach proved ineffective so that a law was passed obliging every household to cultivate a minimum of 1/2 acre of maize.

In spite of the legislations the desired change in peasant production was realized utterly slowly and it was not until the iron plough was introduced in the early 1940's that peasants found

maize cultivation worthwhile. Within a decade roughly 20% of the households in Tarime district possessed a plough.[1]

A factor of decisive importance for the increased acceptance of maize was the setting-up of small kerosine-operated mills in a few highland villages. Prior to the introduction of mills, the Kuria in Tarime district possessed neither knowledge nor technical facilities to utilize their maize as food since the traditional techniques applied in grinding finger millet and sorghum were not applicable to the new crop. It should be pointed out that the mills were not set up without careful considerations by the district administration since they might well have the effect of counteracting colonial interests. If the local population looked upon maize as a potential food resource, they might retain large quantities which had previously been marketed at government buying posts. However, the introduction of maize was an inevitable undertaking since the market orientation of peasant production was accompanied by aggravated subsistence vulnerability particularly in situations of unforeseeable environmental change, e.g. drought, excessive rainfall and pests. A further deterioration of household subsistence would inevitably endanger future productivity

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1. The population in Tarime district was estimated to 113,200 in 1948 (according to the District Records of 1949). In 1959 the average size of a Kuria homestead in the Ingwe chiefdom was 6.8. (M.J. Ruel, The Social Organization of the Kuria, a Field-Work Report, op.cit., p.70. The information presented by Gesase (E.S. Gesase, Agricultural Change in Eastern Tarime District during Colonial Rule 1900-1961, University of Dar es Salaam, unpublished Master's Thesis, 1976, p.iv) of 3,500 ploughs used in Tarime District by 1947 thus points in the direction that roughly 20% of the households possessed a plough.

with the implication of an impaired colonial economy. The setting-up of mills was to be followed by forced cultivation of cassava as relief food to be used in periods of food shortage.

Up to the mid-1950's maize was the only cash crop cultivated extensively in the Kuria highlands. In 1954, the Catholic mission initiated experimental cultivation of coffee and the results were promising. The government strategy, however, to involve the local population in the production of this commodity remained selective and a permission to grow coffee had to be obtained from the agricultural office in Tarime. In principle, only households which were considered progressive in their maize cultivation were permitted to engage in coffee. This, no doubt, contributed to an increased economic stratification among households in the highland area.

The British administration considered cattle a main hindrance to the successful implementation of their colonialist policy. Not only were peasants held to possess to many heads of cattle but they also devoted extensive time and efforts to cattle oriented activities. The problem of soil erosion was referred back to over-stocking, although rather it primarily resulted from the cutting down of trees and bushes without environmental considerations and from using ploughs in ways so as to add to the damages caused by heavy rains. Nevertheless, in the 1950's the Tarime administration imposed measures aimed at drastically decreasing the size of household herds. In addition to forced sales a large number of cattle were killed by poison which was injected on the pretext of vaccinating against rinderpest.

4.2 After Independence

The rural development policy launched prior to the Arusha Declaration in 1967 was, in principle, a continuation of the colonial policies of the 1950's. Thus, attention was paid to improving the conditions of "progressive" peasants in the hope that they would act as innovators in their respective neighbourhoods. The approach brought forward in the First Five-Year Plan was that of transforming peasant agriculture through settlement schemes in areas of high productivity. The strategy was ultimately formulated by a World Bank mission visiting Tanzania in 1961, and departed from the conviction that the market relations with industrialized countries had to be maintained. The underlying assumption was that peasants had to be firmly directed and supervised in adopting the ethics of so-called "modern" agriculture.

For a number of reasons Mara region was only peripherally affected by the transformation approach. Compared to other parts of the country, the cultivation of export crops was poorly developed. Moreover, the population of Mara region was never looked upon as "progressive" in the sense of willingly accepting government measures before their benefits had been clearly demonstrated. Yet, a settlement scheme aiming at improving the cultivation of cotton, groundnuts and maize was set up in the Rwamkoma area south-east of Musoma town. After a few seasons of operation the scheme was closed down primarily due to financial problems accompanying overcapitalization. A major shortcomming of the project was that the efforts were not directed towards solving the real bottlenecks of labour, i.e. weeding and harvesting. Quite on the contrary the use of tractors aggravated the already problematic situation

since larger areas could thereby be put under cultivation.[1]

In Tarime district a settlement scheme was planned for an area some seven kilometers east of Tarime town. A primary objective of the scheme was to consolidate the scattered holdings of households in the highland area. It was anticipated that the peasants would thereby be more prone to invest and pay attention to the cultivation of cash crops. However, the project did not proceed beyond the accomplishment of a preparatory study, aimed at identifying possible cultural features that might obstruct the desired course of change. In the report, the Kuria are referred to as "conservative" and "stubborn" in adhering to traditional ideas and practices rather than accepting new routes of "development", suggested by the district authorities.[2]

In the Arusha Declaration socialism and self-reliance was proclaimed as the state ideology. The President's document on Socialism and Rural Development emphasised the need to counteract elements of rural capitalism that had evolved from the previous focus on "progressive" peasants. The objective was to establish "economic and social communities where people live together and work together for the good of all, ...".[3] Initially, it

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1. For further information on the Rwamkoma scheme, see: M. Silberfein, "Agricultural Extension Policy and its Local Interpretation in Musoma District, Tanzania", Rural Africana, XIX, 1973, pp. 41-55.
J.R. Nellis, "Prelude to Arusha: A Study of Productivity Problems on a Rural Development Scheme in Tanzania", Journal of African Administration Overseas, XII (July 1972):31, pp. 169-181.

2. J.W. Hamilton, Problems of Agricultural and Social Development in the Kitembe Scheme, North Mara, Tanzania. U.S. Department of Agriculture in Cooperation with USAID, February 1969.

3. J.K. Nyerere, "Socialism and Rural Development", in Freedom and Socialism, a Selection from Writings and Speaches 1965-67, Dar es Salaam: Oxford University Press, 1968, p. 348.

was stressed that the decision to resettle into villages should be voluntary. Nevertheless, shortly after the declaration of the principles for villagization (Ujamaa Vijijini), the stress on voluntariness was officially abandoned in favour of a frontal approach by which all citizens must participate in the move towards socialism.

In the Presidential Circular Number 1 of 1969, all government institutions were urged to give preference in their allocation of funds to the establishment of large villages. A few years later the biennial conference of TANU approved a resolution stating that the entire rural population should reside in villages by the end of 1976. The policy was to be implemented at regional level and Mara was one of the first regions to start off.

The mode of procedure whereby the villagization campaign in Mara region was launched, indicates that the authorities were more concerned with a rapid implementation of the policy than the fostering of participatory decision-making and mutual understanding between the regional staff and the local population.[1] The optimistic attitude among government officials when initiating the campaign to some extent was based on experiences gained in the late 1960's, when some peasants had responded to the President's call for "ujamaa vijijini". However, the villages registered at that time were in fact old settlements that had evolved close to rural markets and missions, and nearby strategic cross-roads. Such registrations did not involve a change of settlement or the bringing together of households

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1. This is exemplified in:
R.R. Matango, "Operation Mara: The Paradox of Democracy", Maji Maji, 20 (1975) Dar es Salaam.

not previously acquainted with each other. Different from the few villages of the 1960's, many of the peasants resettled through the villagization campaign were convinced that village life would serve to accentuate a range of problems, which could be coped with more satisfactorily in dispersed settlements, e.g. diseases, witchcraft and adultery.

In some areas the peasants moved into properly demarcated villages where construction work was already initiated and supplementary food produce was available until agriculture became viable. In other areas yet, the conditions were chaotic, to say the least. For instance, the number of people arriving into some villages by far exceeded estimations, rendering the plans altogether inappropriate. A vast number of villages in the highlands were not properly demarcated and disputes arose concerning the best location of building sites, village centre, cultivation grounds, etc.

In the highland area resettlement took place in the midst of intensive agricultural work. Thus, the women had to walk long distances daily to the old cultivation grounds in order to care for the crop until harvest. This situation in combination with still other factors, described with regard to Nyamwigura village below, should be viewed as chiefly responsible for the dramatic drop in production output in 1974 as showed in table 2. Since the households retained for their own consumption needs whatever they were able to harvest, the sales to the National Milling Corporation (NMC) and through the Tarime market were negligible.

Table 2. PRODUCTION OUTPUT OF SOME MAJOR CROPS IN TARIME DISTRICT, 1972 - 1975 (000'tons)

Crop	1972	1973	1974	1975
Maize	12,640	47,800	7,000	10,700
Finger millet	39,320	27,000	267	2,375
Sorghum	4,900	4,440	5,600	4,000
Cassava	122,190	52,600	15,400	7,100
Sweet potatoes	95,620	75,100	2,545	68,900
Irish potatoes	510	1,400	620	580
Bananas	26,200	6,000	1,700	1,000
Coffee	...	930	885	650
Paddy	4,700	1,000	100	300

Source: District Agricultural Office, Tarime, Annual Reports 1972 - 1975

4.3 Consequenses of National Policies for Household Production and the Situation of Women

In the pre-colonial period the orientation of Kuria agriculture was based on community and household considerations made primarily with respect to subsistence needs. Under normal conditions the food situation was predictable due to the fact that the bulk of harvested produce was aimed for household consumption. The relations between households, manifested in cooperative work-teams, cattle alliances and the moral obligation to assist one's neighbours, relatives and friends in periods of food shortage, provided for food safety should unexpected problems arise.

The producer procurement price of maize remained more or less constant at T.Shs. 1/50 per tin[1] up to the mid-1950's, while the consumer price of industrial goods tripled[2]. Nevertheless, households devoting major attention to the cultivation of maize were sometimes able to derive quite substantial earnings. As against cash crop orientation in other parts of the country, i.e. towards industrial crops such as coffee, cotton and tobacco, the specialization in maize cultivation, at least in theory, implied that the harvest could either be marketed or it could be consumed in the production units. According to the elders, however, ample quantities of maize were sold off before subsistence needs had been secured. The traditional function of the household granary (emongo) was increasingly undermined in that the granary reserve was marketed before the quantity size of the subsequent harvest could be predicted.

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1. One tin of maize contains approximately 15 kgs.
2. R.R. Matango, Peasants and Socialism in Tarime District, op.cit., pp. 42-43.

In provincial meetings the elders expressed their apprehension concerning the effects of agricultural specialization. They were particularly worried about the way in which the monetary income was used by young men. For instance, whereas local beer and liquor had traditionally been a privilege to be enjoyed by elder men at special occasions it was now bought by anyone. Furthermore, a large proportion of the cash income was invested into cattle and smaller stock, which merely served to accumulate the wealth of household heads without caring for the possible needs of additional household members.

The exploitation of the peasantry as a class was accompanied by increased economic stratification between agro-economic zones as well as between households of each particular zone. For instance, the selective policy launched by the British administration in Tarime had the effect that only households which had proven "progressive" in maize cultivation were granted permission to grow coffee. The chiefs and headmen were also in a position to favour particular households of their choice through granting them additional land and reducing their taxes.

At the household level the exploitative relations between classes was reflected in the relationship between men and women. The fact that both agriculture and animal husbandry traditionally formed part of the household economic system implied that part of the returns of agricultural labour was invested into cattle. However, prior to the introduction of cash crops the bulk of harvested produce was consumed as food by the producers. Thus, although the workload on Kuria women has always exceeded that on men, the inequality between the

sexes in terms of appropriation of labour returns was not considerable as long as production was geared towards the fulfilment of household needs.

The government efforts to stimulate maize cultivation involved, among other things, demonstration plots, village seminars on appropriate crop husbandry and agricultural imputs at subsidized price. The male members only of the rural communities were approached with the implication that their knowledge of so called "modern" crop husbandry was looked upon as superior to women's traditionally acknowledged experience of subsistence cultivation. However, although men monopolized the knowledge applicable to cash crop cultivation, it was the women who eventually performed most of the work expended on the new crops. In addition to their traditional responsibilities in household agriculture, they increasingly handled "female" tasks in relation to cash crop cultivation. Since the men were preoccupied with administering the cultivation of cash crops, including such things as keeping pace with the flow of information on crop husbandry, technology, producer prices etc., they tended to withdraw from their traditionally allotted responsibilities in the subsistence sector. For instance, whereas the clearing of land was previously handled by men, the women increasingly took over this task. Furthermore, the women received less assistance from men in the performance of labour intensive tasks, such as weeding and harvesting.

Much advice on crop husbandry involved additional work, either through a more careful operation of existing tasks (e.g. weeding) or through the addition of completely new tasks (e.g. application of chemical fertilizers and insecticides). In either

case, the extra burden of work mainly fell on the lot of women.

Although the plough facilitated cultivation, it served to increase the burden of work at later stages of the agricultural cycle. By using the plough more land could be put under cultivation with the implication of additional land to weed and to harvest. At the time when the plough was introduced, it was handled by men exclusively. The fact that it involved a monetary investment, oxen and presupposed skill made it a prestigeous object. While the household head operated the plough, his wife walked in front of the oxen in order to direct their moves. Yet, within a decade the women were increasingly acknowledged to operate the plough without male assistance. This change in division of work was primarily necessitated by the fact that men were absent for more or less extensive periods in mines, road construction, etc.

When maize was cultivated for the twofold purpose of subsistence and cash, it was planted on the husband's plot as well as on plots allotted to wives. Although a husband would not dispose of his wives' finger millet or sorghum without their consent, he was able to do so with respect to maize. Since husbands were in command of the income derived from sales of agricultural produce, they were the ones to decide whether to retain the cash for their own needs or to distribute parts of it to the women.

The changes in household agriculture had inevitable consequences for the women's ability to coordinate productive and child-care responsibilities to satisfaction. Kuria women do not usually bring small children along to the cultivation plot. When they

do so, it is often looked upon as a manifestation of quarrels between the woman and her mother-in-law. However, the increase in women's agricultural workload rendered it absolutely essential to have someone remaining on the homestead during the day to care for small children. Since the heavy agricultural work also applied to older women, infants were increasingly left in the care of siblings which implied a deterioration in their dietary pattern. The presence of co-wives no doubt was of great assistance in temporary supervision of infants left behind on the homestead during the day.

The formulation and implementation of rural development policies rarely pay specific attention to the situation and priorities of women. Rather, experience point in the direction that the situation of women often deteriorates in the process commonly referred to as "development". Since achievements are primarily appraised on national and regional levels in quantitative terms, e.g. marketing statistics, the possible negative consequences for the local population are not easily accounted for.

In Tanzania official statements have been made on several occasions concerning the discrepancy between women's important role in production and reproduction on the one hand, and their subordinate position relative to men on the other. The Arusha Declaration declares that:" The truth is that in the villages the women work very hard. At times they work 12-14 hours a day... But the men who live in villages ... are on leave for half of their lives".[1] However, such clarity of vision is rarely reflected in the formulation of rural development strategies which continue to neglect women.

1. TANU: The Arusha Declaration, Dodoma 1967, p. 15.

5 NYAMWIGURA VILLAGE

5.1 Establishment

Nyamwigura village was established as a result of the villagization campaign launched in Mara region in 1974. The village is situated in Timbaru province, on the edge of Matere escarpment at eleven kilometers distance from Tarime. Prior to the villagization the area was dispersely inhabited by some thirty households who had been dwelling there for generations. They all belonged to the clan segment traditionally associated with the village territory.

As was generally the case with Tarime district, most of the households establishing Nyamwigura village were reluctant to abandon their old settlements. Partly due to the fact that merely negligible efforts had been made to inform the population about the objectives underlying the villagization policy, many people were convinced that village living would be inferior to life in dispersed settlements. Although the most senior settlers had experienced village life in the past, they expected the present situation to be different in fundamental respects. Whereas the old villages accomodated only households which, through their descendance from a common clan segment founder, were entitled to cultivate the village territory, many of the households resettled into Nyamwigura could not claim such traditional rights to the land. Although the government policy emphasized national unity as opposed to local traditional alliances, clan segment affiliations eventually proved to influence inter-household communications, election of village leaders, etc. Whereas life in the traditional villages implied social security,

cooperation in defence and provision of identity, many people feared that the new villages would increase their vulnerability. For instance, the inhabitants of Nyamwigura feared that concentrated settlements would invite disease and epidemics. The ad hoc composition of the village and the possibility for strangers to move in and out of the village without being noticed, were believed to facilitate the acts of evil spirits and witches. Old people also feared that village life would foster an increase in adultery and undermine the sexual morals of young people.

Another set of anticipated problems referred to cattle. In the dispersed settlements cattle could be grassed close to the homestead during the day if not brought down to Kiribo. In the villages the herd inevitably has to be grasses at some distance which involves a continuous risk of cows trespassing into plots under cultivation particularly when being brought in and out of the village on narrow paths. Furthermore, the villagers would not be able to change the site of cattle enclosures in the midst of the rainy season when the soil gets excessively wet.

Due to the tremendous haste by which the campaign was launched, most village sites were inadequately prepared for the mass arrival of people and stock. In Nyamwigura no comprehensive map existed which would have facilitated a rapid accomplishment of the plan. The households were registered on plots of land in order of their arrival. Since very few were able to complete the building of houses and cattle enclosures before abandoning their old settlements, most households had to dwell in temporary shelters until permanent houses had been built.

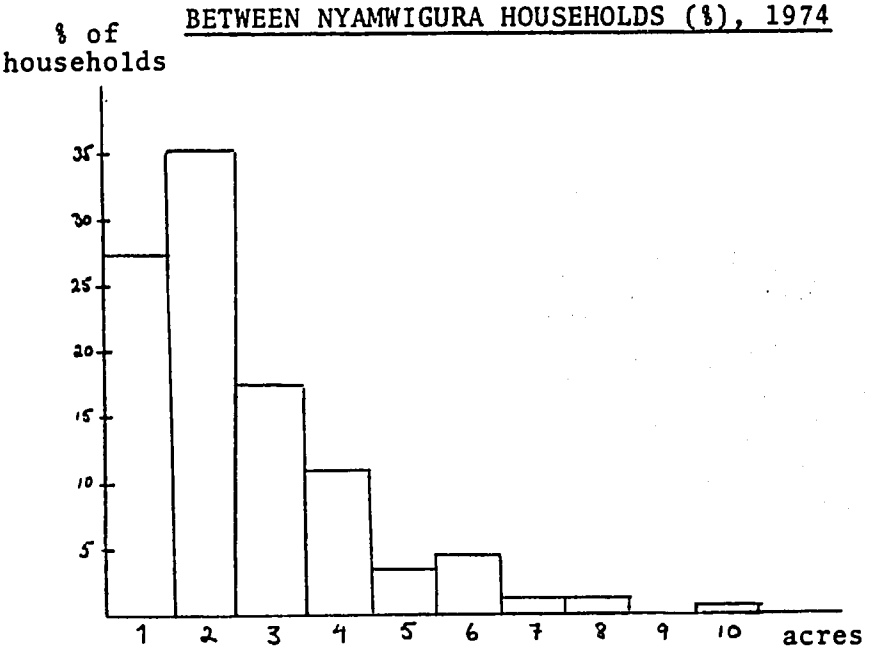
Those who moved in from the village surroundings could generally make use of their own building material, while others had to compete for scarce resources on the village territory. Since cow-dung is a necessary component in the paste applied to walls, most villagers had to transport this from their old cattle corrals.

In principle, each household was entitled to one acre of land in the centre of the village, to be used as building site, cattle corral and a small vegetable plot. The tendency was for young married men, who had previously been residing on their father's homesteads, to register themselves as heads of households in order to acquire building sites of their own. In practice, though, they remained under their father's authority. The proportion of monogamous marriages registered at the Divisional Secretary's office in 1974 was also exceptionally high (70%), compared to 1975 (35%) and 1976 (38%). This indicates that young men married in order to maximize their father's acquisitation of land, or their own in case they established separate households.

The cultivation grounds were located in the outskirt of the village territory. According to regulations worked out by district officials, each head of a household was to be allotted two acres per wife and daughter-in-law, one acre per old parent or relative residing on the homestead and one acre per son in marriageable age. Thus, a household head with two wives and a daughter-in-law was formally entitled to altogether six acres of land for cultivation.

According to the village records 532 acres of cultivation ground were initially distributed between 210 households. Thus, each household on average received 2.5 acres. As can be seen from diagram 1 below the vast majority of households (91%) were granted between one and four acres. Altogether 27% received merely one acre. Particularly when taking into consideration the Kuria ideal of polygamous marriages, the sizes of cultivation ground allotted to most households were clearly below their subsistence requirements. The households claiming that they had been cultivating extensively in their previous settlements were particularly dissatisfied with their allotments. And those who had been residing on the present Nyamwigura territory for generations complained that they had been deprived of fertile plots which had entered the pool for redistribution.

Diagram 1: DISTRIBUTION OF CULTIVATION GROUND BETWEEN NYAMWIGURA HOUSEHOLDS (%), 1974



Source: Village Office Records, Nyamwigura

Over the years 1972-75 the population of major parts of Tanzania experienced food problems to varying extents. A common explanation was lack of rain. While in Tarime district the population did experience a dramatic drop in production output in 1974, the amount of rainfall was in fact quite normal.[1] However, planting was delayed due to late start of the rainy season. The rainfall during March and April proved excessive and amounted to a total of 650 mm (Tarime township), nearly twice as much as the average for this period between 1969 and 1973. The rain suddenly came to a halt in the beginning of May, which was exceptionally early.

The irregular rainfall no doubt contributed to the dramatic drop in production. Nevertheless, there were other factors of even greater importance for the event of an agricultural crisis. The households in many highland villages had been resettled in the midst of intensive agricultural work. Therefore, the villagers had to put in every effort to secure a harvest from their old cultivation grounds before agriculture could be started up in the new settlements. For several months the women returned almost daily to complete the tasks of weeding, harvesting and transportation of the crop to Nyamwigura village. A particular problem applied to the handling of cassava and sweet potatoes which have a cultivation cycle extending over several years. Since most households were unable to continue agricultural activities in the old settlements basically due to the fact that the fields were redistributed to other households, the entire crop had to be uprooted irrespective

1. According to rainfall statistics from the hydrometeorological station in Tarime, the annual rainfall in the district usually varies between 1200 and 1400 mm. In 1974 the rainfall amounted to 1400 mm.

of its stage of maturity. Since the harvest of tubers had been substantial in 1972, as a relief measure to compensate for a shortage of grain, the tubers uprooted in 1974 were still in the initial stage of growth.

Although the women in Nyamwigura made tremendous efforts to maintain the crop on the old homesteads up to harvest, the output proved meagre, basically because weeding could not be completed satisfactorily. Due to the long distances the time spent on the fields was inevitably reduced. Besides, the women had to put considerable efforts into various tasks in the new settlements, such as housebuilding. Another problem was that the circumstances did not allow children to participate in agricultural work as usual. Their most important contribution is keeping birds, baboons, wild boar, etc., away from the crop.

The timing of villagization was such as to start cultivation in Nyamwigura village with the minor agricultural cycle in June. Since only limited areas had been under cultivation during preceding years most villagers had to devote much time to the clearing of land. Furthermore, due to the late arrival of the rains planting had to be postponed until the end of September. When eventually the rains started they lasted for a mere week and were followed by two months of dry weather. Thus, the output reaped from the short season was similarily meagre, altogether rendering 1974 a year of vulnerability.

5.2 Leadership

The Tanzanian policy for rural development does not express any verbal opposition between traditional social structures and "modernized" ones accompanying the village situation. Rather, it has been emphasized that many traditional values and practices must be acknowledged by politicians and planners if villagization is to be successfully implemented. Nevertheless, in Mara region the villagization policy was largely implemented without such considerations about particularities in the local social structure. For instance, the possibility to cooperate with Kuria elders was overlooked.

In the villages the internal affairs as well as external communications were to be handled by a council of elected village representatives. The composition of such councils and the mandate guiding their responsibilities differ in fundamental respects from that of their traditional counterparts. The fact that the villagization campaign was externally initiated and pushed through by use of external forces, led the villagers to elect representatives trusted to be particularly skilled in "speaking the language" of politicians and extension staff. From the villager's point of view such a leadership would minimize the "risk" of excessive government interference with household affairs. Hence, there was already from the start a gap between village leadership and common villagers, which, among other things, was manifested in poor participation of the latter in discussions and decision-making.

The typical member of the Nyamwigura village council is a young or middle-aged man who has been working outside the community, e.g. in the army

or police force, for an extended period of time. Out of a total of 25 members in 1978 a mere three were women. Due to lack of social seniority, few of these members, if any, would be able to qualify for a respected position in the traditional political framework.

5.3 Communal Work

Although resettlement had considerable social implications the orientation of household work has remained largely unchanged. The villagers thus continue to devote most of their time to household agriculture, animal husbandry and domestic work. However, a a fundamental objective of village life is that work must proceed beyond the scope of individual households and traditional alliances. Through communal undertakings primarily in agriculture, the villagers are expected to contribute to the construction of a school, shops, village office, teacher's house, etc. In Nyamwigura village communal work was launched in 1975 by the clearing of some twenty acres of land for village maize cultivation. Towards the end of the year two classrooms in the village school were ready for use and the building of a village office had been started. Nevertheless, although communal efforts were impressive from the start, they did in fact only involve households of ten-cell leaders and individuals who were specifically loyal to the policy of villagization. Before long the active participants expressed dissatisfaction with the overall meagre attendance in communal work, which implied that the efforts of a few benefited the entire village community. The village council therefore formulated principles according to which every villager above eighteen years was obliged to take part in communal work on a regular basis. Exempted from the call were villagers too old or to weak to engage in physically demanding work, sick people and women for a period of three months after

child birth. Since all villagers are mobilized for communal agricultural work at the same occasion, i.e. twice a week from early morning until noon, one adult per household is permitted to remain at home to look after children and cattle. The absentees who fail to provide an acceptable excuse pay a penalty of five to ten shilling to the village fund.

Different from communal agriculture the mobilization for additional village undertakings is made on the basis of ten-cell units. Each household is represented by one person and a ten-cell unit carries out a specific task for a week, when it is succeeded by another one according to a fixed scheme. Since Nyamwigura village comprises seventeen ten-cell units, each of those performs non-agricultural communal work for altogether three weeks in the course of a year.

A fundamental problem referring to village communal work is that of scale. When the majority of villagers turn up at the communal field, conditions often become chaotic. This is especially so when it comes to ploughing. It should be kept in mind, however, that the decision to concentrate communal agricultural work to one instance per week is a government one. Thus the village leadership should not be held wholly responsible for underutilizing the potential for communal mobilization. In a neighbouring village the problem of scale has been tackled through dividing the labour force into smaller units succeeding each other in the course of a day. The diversification of work is there facilitated by the fact that communal agriculture comprises several crops with slightly different cultivation cycles. Furthermore, additional communal work involve a wide range of activities rendering work less monotonous and villagers participate on a continuous basis.

From their traditional practices the Kuria are well acquainted with cooperative work. Nevertheless, those experiences are not fully applicable to the village situation. As referred to above the traditional work-teams are ultimately household oriented, meaning that they are formed and maintained with the objective to solve problems of labour shortage at household level. Furthermore, the participants are recruited from a fairly narrow range of friends, neighbours, relatives and peers. From the perspective of participants in village communal work, the results of labour may be less obvious. Thus, although they gain from the building of a school, shop, village office, etc., they may fail to identify a direct link between the efforts put in and the final result of their labour. In Nyamwigura village many people initially were convinced by promises forwarded by government staff and politicians about the provisions of free social services. Consequently, they sometimes were at a loss understanding that development was to be achieved primarily through their own efforts.

5.4 Planning

The annual development plan guiding the activities in each village is the outcome of combined village and district considerations. In October each year the village council is supposed to formulate a plan and forward it to the district authorities. The plan should comprise a number of projects which are to be implemented through the villagers' own efforts and funds, and in addition lists projects which presume government support in one way or another. Basically due to shortage of manpower the district authorities in Tarime only exceptionally interferes with the self-help projects. It is, however, clear from interviews that they would have liked to do so since they perceive of many such projects as unrealistic.

The problems of sound planning is particularly apparent in communal agriculture, where the targets set by village councils are rarely reached. A fundamental problem is that their plans are often based on misconceptions about the present area under cultivation. In most cases the villagers lack both the instruments and experience necessary for measuring their communal and household cultivation grounds. Many of the villagers still apply a traditional method for appraising the adequate area to be cultivated by their own households, i.e. by throwing the small hoe used in the cultivation of finger millet (ekebayi). The piece of land covered by such a throw is referred to as one ekerobo (three ibirobo amounting to one intui). The harvest from two ibirobo normally fills up an ordinary granary. It is also important to remember that the extensive plans for village communal agriculture constitute a means of attracting the attention of district authorities prior to their distributing the available funds, personnel and social services.

The projects which require government support are scrutinized by the district authorities which decide whether or not the projects are to be included in the district plans, which in turn is forwarded to the regional administrative and political bodies. Besides the availability of funds in general, a crucial factor for recommendation and final approval of a project is its conformity with current directives and intentions spelled out in national and regional guidelines for the drawing up of annual and five-year plans for social and economic development. Only a trifle few of the projects originally suggested by villages are approved for implementation and support in the end. In some areas of development efforts, such as health, the rate of extension is already set at the ministerial

level and village priorities will not go long to alter this.

Thus, the plan eventually returned to a village may be wholly different from the one ultimately formulated by the district council. Most of the projects suggested in village discussions in Nyamwigura, e.g. a dispensary, a tractor and coffee seedlings, have not been realized. On the other hand, the village has been granted government assistance for projects which were not suggested by the village council. For instance, a godown was set up in the village a few years ago in order to facilitate the purchase of maize and coffee by the National Milling Corporation (NMC). In 1977 Nyamwigura was also allotted a Village Manager whose primary task is to assist in the organizing of development efforts.

5.5 The National Maize Project (NMP)

Not a few villages in Tarime district are participating in nation-wide projects of various kinds. Since extensive areas are particularly suitable for maize cultivation the district has been incorporated into the National Maize Project which has been financed by the World Bank since 1974. The aim of the project is to encourage cultivation through subsidized distribution of hybrid seeds, chemical fertilizer and pesticids, and establish strategic grain reserves in some regional centres.

Nyamwigura is one of the 41 villages in the Tarime district which participate in the project. In 1975 extension staff informed male household representatives about proper maize husbandry in general and the advantages of using modern inputs in particular. They were advised to plant maize in pure stands, to use a string for straight planting and to weed the crop three or

four times. The recommendation of pure stands was contrary to the indigenous cropping pattern, where maize is preferably interplanted with either beans or cassava. It is fairly obvious that the extension staff never bothered to inform themselves about this, since otherwise they would not have put forward the recommendation indiscriminately. The unfortunate consequence has been that many households reduce the cultivation of beans to the extent that they suffer enhanced nutritional vulnerability.

As already mentioned the initial meetings were attended almost exclusively by male villagers who forwarded the information to the women, i.e. to the ones primarily preoccupied with food crop agriculture. Partially due to their obtaining information from secondary sources the women did not thoroughly understand or accept the arguments in favour of the recommended practices. The most immediate effect from their point of view was additional work. They failed to see how the anticipated rise in output and household income would serve their interest since their husbands to such a large extent controlled the cash income derived from increased sales.

A major criteria guiding the distribution of inputs to villages is the number of households inhabiting them. When the project started in Nyamwigura the supplies available through the NMC godown were enough to furnish each household with roughly 25 kg hybrid seeds, 83 kg fertilizer and 2 kg DDT. In the first period of the project each household therefore was expected to be able to cultivate between 1.5 and 2.5 acres of maize in accordance with recommended practices.[1]

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1. According to estimates made by the Ward Agricultural Officer.

In the annual reports issued by the District Agricultural Office in Tarime, the NMP has been described as a success. Nevertheless, statistics on the distribution of inputs to the villages and quantities remaining in store at the end of each cultivation cycle indicate that resources have been poorly utilized.

Table 3a: NMP INPUTS DISTRIBUTED IN TARIME DISTRICT (% OF TOTAL ALLOCATIONS AVAILABLE)

Period	Hybrid seeds	Fertilizer	DDT
1975/76	26	7	1
1976/77	29	21	21

Source: District Agricultural Office, Tarime

As showed in the table below the situation in Nyamwigura conforms well to the general picture for the district as a whole.

Although the reasons behind the poor utilization of inputs are complex a few factors can be singled out as fundamental ones. Although inputs were available at subsidized prices (50% off for the first period of operation), the villagers nevertheless considered the expenditures as heavy. It should be kept in mind that peasants in the area were not accustomed to spend money on similar inputs prior to the start of a cultivation cycle. Since the use of seeds from the previous harvest give diminishing returns there is also a problem of recurrent expenditure for those who go for purchased seeds. Many villagers express their apprahension with the possible problem of unregular supply of seeds. The procedure of buing new seeds each cultivation cycle also contradicts the perception of life itself, and more specifically the reproduction of life. According to an old village woman: "What's the use of giving birth to a daughter who is unable to bear children herself. You haven't

Table 3b: AVAILABILITY AND USE OF NMC INPUTS IN NYAMWIGURA VILLAGE, 1975/76-1976/77

Period	Available supplies (kg)			Distributed supplies (kg)					
	S	F	DDT	S	%	F	%	DDT	%
1975/76	6424	21600	500	1375	21	3000	14	0	0
1976/77	5049	18600	1125	2749	55	750	4	465	41

S = Seeds, F = Fertilizer

Source: National Milling Corporation, Tarime

achieved anything really! This is how we feel about using the new maize".

Above all, the villagers' reluctance to accept hybrid maize is due to the fact that they regard their commonly used varieties to be relatively superior quality. In areas where the population rely on single staplefoods for their consumption, they tend to be very particular about its quality and to notice the slightest variation. Hence, just as well as the inhabitants of Asian rice growing regions have an extensive vocabulary for various kinds of rice and uses of rice, the Kuria differentiate between maize grown in various parts of their territory according to the uses to which it it preferably put. Thus, in addition to preserving the best seeds for planting they exchange seeds with friends and relatives living in other areas in order to secure a diversified produce. While most varieties are regarded as suitable for the preparation of porridge and gruel, the villagers are more particular about the maize they eat fresh from the cob, use for beer-brewing and for making ubusara. No matter how much extension staff speak in favour of the anticipated rise in maize output resulting from the use of hybrid seeds, the villagers will continue to appreciate the varied produce derived from using the common varieties. It is important to keep in mind that the notion of "quality" has a strong cultural connotation. When the Nyamwigura villagers refer to qualitative differences between seeds, their discrimination may well differ fundamentally from that advocated by the agricultural extension staff.

5.6 The Malaria Control Project

As noted above Nyamwigura village has been involved in more extensive projects aimed at improving the conditions of living generally in rural areas. When such a project is started representatives from the district

authorities usually visit each village in order to inform about the background and objectives of the scheme and about the ways and means whereby the improvements are to be achieved.

In 1977 the village was visited by the District Health Officer and personnel from the Malaria Control Project, which operates from Shirati hospital on a WHO grant. The ten-cell leaders were briefed about environmental hygiene and more specifically about the project. Through the information derived from the ten-cell leaders, the sex and age of children below the age of eleven were recorded. Each ten-cell leader was to be supplied with malaria pills on a continuous basis for distribution among the children of his households. The village was to be visited regularly by a mobile team in charge of urine and blood samples.

The villagers experience malaria as one of their major health problems. Since there is always someone within a narrow range of neighbours, friends or kin who suffers from malaria it is a continuous topic for discussion. Although pills are available from the village shops only a very few villagers, however, buy them regularly for prevention, the main reason being the high cost. In a household of two adults and four children, the cost of malaria pills amount to at least three shillings per week (1977). Not until someone is seriously ill are pills bought from a shop. In addition to the problem of cost, the villagers are not accustomed to use malaria pills for preventive purposes. When they visit dispensaries or the government hospital in Tarime pills are never received for prevention but only for curing.

When pills were to be distributed free of charge through the project, the villagers were enthusiastic. Two months after the introductory seminar, however, the pills had not yet been distributed to the ten-cell leaders. When eventually project staff returned it was only to inform villagers that the highland area was no longer to be included in the project. They were told that there was no malaria in the highlands. Clearly, such disregard of their problems only serves to foster a reluctant attitude towards all kinds of future development work which presupposes mobilization of the local population.

5.7 Extension Staff

Government extension staff operating in various fields of development work constitute an important link in the communication of national policies to the peasantry. Such staff are sometimes based in villages or else carry out their work within wider administrative boundaries, such as a district or a division.

In addition to its own staff Nyamwigura village is visited occasionally by district and ward agricultural staff. The ward officer is based in Nyarwana village in the lowlands some ten kilometers away. He attends five villages constituting Kibasuka ward, and visit Nyamwigura primarily when agricultural matters are to be specifically discussed in village meetings. The district agricultural officer in charge of the highland area pays frequent visits to Nyamwigura as the office of the Division Secretary (Inchage Division) is located here, containing the agricultural statistics necessary for the compilation of annual district reports.

Neither the ward nor the district agricultural officer communicate to any noticable extent directly with individual villagers or households. To compensate for time restrictions on their part, it is assumed that the members of the village council act as intermediaries in the communication between extension staff and village households. Therefore, the outcome of the staff's efforts to a large extent depends on the ability of village representatives to identify and formulate a wide range of problems experienced by the households and to apprais the feasibility of measures suggested by the extension officers.

Since 1977 a female agricultural officer has been based at Nyamwigura. Almost immediately, however, she got involved in a project run by the Tanzania Coffee Board and has spent most of her time supervising an experimental plot beyond the village area. Several villagers have expressed disapproval in village meetings since they had expected her to advise them on household agriculture. They are particularly annoyed by the fact that she takes no part in village communal agricultural work.

Nyamwigura village has also been provided with an attendant to supervise the cattle-dip located on the outskirts of the village. Since the highland population herd their cattle in the lowlands, the problems of tick-borne diseases equal those of other parts of the country. Many villagers, however, are not convinced by the arguments generally put forward in favour of dipping. The majority of the large cattle owners are elderly men who still remember the government de-stocking campaigns of the colonial period. Then, at times, large numbers of cattle

were killed off on the pretext of vaccination, and this experience still breeds suspicion and reluctance against using the dip. There is also the persistent problem of irregular supply of required chemicals. During 1977, for example, the dip was closed for seven months altogether. Finally, the villagers are dissatisfied with the working hours of the attendant. While he insisted on working morning hours only, the villagers prefer to come in the evening after grazing is over. Unfortunately, this dispute on several occasions has resulted in cattle having been brought to the dip when the latter was unattended, thus causing contamination of the chemicals as the cattle were not washed prior to dipping.

6 FOOD CONSUMPTION

6.1 The Kuria Diet

The staple crops traditionally cultivated by the Kuria are finger millet (uburi) and sorghum (amahemba). According to oral tradition the common ancestor of the Kuria tribe brough with him finger millet on his arrival to the present Kuria territory. The cultivation of sorghum was probably initiated through contacts with neighbouring northern tribes. Both finger millet and sorghum are ground into flour and used in the preparation of porridge (bukima), gruel (kirunguri), beer (ruseke) and a slightly fermented gruel containing germinated seeds from finger millet (ubusara). Mixed with sesam, finger millet may be brought along by herdsmen during the day in order to provide energy and by people in general who make long journeys on foot.

In the past porridge was commonly eaten together with a boiled vegetarian mix prepared from wild spinach-type of plants such as ndelema, chinsaga and mlenda which the women gathered from homestead surroundings. A few of the plants were eventually incorporated into the household cropping pattern.

Since the Kuria have always been reluctant to slaughter stock for mere consumption needs, and since wild game only occasionally came close to the settlements, meat rarely occured in the traditional diet. Whenever cattle were slaughtered the meat had to be shared among a wide range of relatives according to recognized principles of seniority. In fact, the obligation to distribute meat sometimes forced people to secretly suffocate an animal inside their hut in order to be able to retain the meat for themselves. Such conduct, however, was always regarded as utterly

immoral. In situations when substantial quantities of meat were available, it was dried over the fire for two days and preserved in a container with flour (irikindi).

If meat was rarely consumed, blood and milk appeared the more often in the common household diet. Blood was extracted from live animals and mixed with fresh milk. Some of the milk was preserved in calabashes together with pieces of charcoal (e.g. umurama) until it curdled. Milk was relatively abundant and most people consumed it daily in one form or another. Fresh milk was also sprinkled on the ground as part of rituals held in order to please the ancestors.

The salt traditionally used (ebara) was extracted from soil or grass brought from the lowlands. The soil or burnt grass was put in a perforated calabash on a bed of gravel, and drained with water. The saltish water thus produced was used in small quantities for the daily preparation of food. Even nowadays the Kuria regard such water to be an indispensable source of health and strenght.

Both bananas (ibikone) and cassava (amaleboa) were familiar to the Kuria prior to the arrival of the Germans, although rated as inferior compared to the common staples. Bananas were primarily cultivated by households which had established marriage alliances with more distant tribes to whom bananas were an important staple. Cassava and sweet potatoes (emengo) had been introduced by northern neighbours who had settled in the Kuria territory in periods of famine in their home areas. Since few Kuria knew how to prepare the cassava tubers into an edible dish, they quite correctly regarded the crop as poisoneous.

Sweet potatoes, on the other hand, were readily incorporated into the Kuria cropping pattern, primarily as a supplementary staple during periods of food shortage.

The agricultural policy of the German colonial government had negligible impact on the Kuria diet. They introduced cabbage, limes, oranges and Irish potatoes which were cultivated in small quantities by highland households and primarily for sale. As long as land was abundant the enforced cultivation of cotton and groundnuts did not generate substantial changes in in the household cropping system.

The agricultural policies imposed by the British government during the 1940's had a far greater impact on the local diet. Since both land and labour were now in short supply the extensive cultivation of maize as a cash crop was accompanied by problems of maintaining a viable production for subsistence. When the district administration realized that an expansion of maize cultivation would endanger a safe level of subsistence, they took measures to enable the local population to use part of their harvested maize as food. Thus, kerosene operated mills were set up in a few highland villages. The peasants soon found maize flour excellent for the preparation of porridge, gruel, beer and ubusara made to traditional recipes.

When maize was pushed as a cash crop the cultivation of cassava was enforced as a famine relief food in the highland area. However, the majority of peasants were already reluctant to cultivate cassava since they did not regard it as food proper. The population in lowland Kiribo, on the other hand, accepted cassava without government coercive measures, as a

supplement to their common staples during periods of food shortage.

The present Kuria diet in some respects differ from that of the past. While the consumption of meat remains low, the availability of milk in the highlands has declined dramatically primarily due the common use of the ox-plough which renders female stock comparatively useless from an agricultural point of view. When the highland households distribute their cattle among relatives and friends in the lowlands they, therefore, strive to dispose of cows in order to be able to retain oxen and heifers to pull the plough. When bridewealth is handed over from a highland household to one in Kiribo it usually comprises a large majority of female stock. The preference for male animals in the highlands corresponds to a desire for cows in the lowlands. In addition to the fact that ploughs here are rare, the Kiribo population are able to sell their milk to the Mara Milk Cooperative. Milk thus constitutes an important source of a cash income.

The traditional practice of extracting blood from live animals has vanished. The Kuria nowadays fear that extracting blood reduce the strenght and thus the animal´s ability to pull the plough. When slaughtered their blood is reserved for elderly men.

The protein-rich vegetables make up no large proportion of the present-day diet. The cultivation of beans is of fairly recent origin and not very widespread. In fact the Kuria classify beans neither as a staple nor as a supplementary food and thus have problems in putting them to proper use. The low popularity is due also to their preparation demanding much firewood. Furthermore, the advice

by extension staff of the National Maize Project to plant maize in pure stands only, implies a decrease in beans cultivation wherever the latter used to be interplanted with maize.

Although the Kuria observe a number of food prescriptions and food restrictions their dietary impact must be exaggerated. When restrictions pertain to specific physiological conditions the food items involved can mostly be replaced by others of similar nutritional quality. The observance of food restrictions generally serve as a manifestation of asymetrical social relationships. Thus, a daughter-in-law is not permitted to eat chicken in the house of her mother-in-law. If she does her conduct is expected to cause misfortune to the entire household. The Kuria women are prohibited to eat wild game, e.g. antilope, wild boar and buffalo, as it is believed to make them as obstinate as those animals. In addition, food restrictions may serve as manifestations of a common cultural identity. For instance, the members of the Timbaru clan observe the totem of the zebra (inchage), i.e. they are strictly forbidden to consume zebra meat.

In order to find out more about the Kuria diet, a survey was carried out in Nyamwigura village in August 1977. The food items consumed by 16 households were recorded over a period of 15 days.[1] The records were kept by one member of each household and all households were visited repeatedly during the survey period.

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1. A "food diary" prepared by the Bureau of Statistics was used. The diary was initially applied in a nation-wide survey carried out in 1976-77, on food consumption and household cash expenditure. It should be noted that the method of data collection involve a problem of reliability since people may be tempted to report food items of high nutritional quality although rarely eaten.

Table 4: THE RELATIVE PROPORTION OF FOOD ITEMS IN THE DIET OF 16 NYAMWIGURA HOUSEHOLDS, AUGUST 1977

Food item	% of total food items* (1444)
Porridge	27.3
Gruel	16.8
Ubusara	3.4
Roasted maize	0.7
Rice	0.3
Bread	0.1
TOTAL CEREALS	48.6
Sweet potatoes	7.1
Cooking bananas	2.5
Cassava	0.5
TOTAL TUBERS	10.1
TOTAL STAPLES	58.7
Beans	2.3
Peas	1.0
TOTAL VEGETABLE PROTEIN	3.3
Fish	6.9
Meat	5.7
Milk	2.5
Egg	0.5
TOTAL ANIMAL PROTEIN	15.6
TOTAL PROTEIN RICH FOODS	18.9
Green vegetables	12.0
Fruits	4.2
Pumpkins	1.2
Onions/tomatoes	0.9
TOTAL VEGETABLES AND FRUITS	18.3
Tea	3.7
Cooking oil	0.6
GRAND TOTAL:	100.0

* Local beer and liquor are not accounted for in the survey.

As showed in table 4, porridge accounted for 27% of the total number of food items recorded (1444). It was served as a staple dish in 83% of the afternoon and evening meals and was prepared from maize in 78% of those cases. Gruel was served in altogether 98% of the morning meals. In the majority of afternoon and evening meals, a boild mix of green vegetables was served together with the staple. The items particularly rich in protein amounted to 19% of the total number reported. The fact that fish (usually the small sun-dried dagaa) is reported more frequently than meat is partly explained by the availability of dry fish from the Tarime market at relatively favourable price. The most striking information in the survey is the rare use of cooking-oil in food preparation.

6.2 The Diet of Pregnant and Lactating Women

During pregnancy and lactation women are in need of extra nutrients to compensate for the growth of the child and the production of breastmilk. This physiological vulnerability may be further aggravated by the fact that women tend to be vulnerable also from a social point of view. Thus, in a Kuria household the men are served first, and particularly delicious pieces (usually protein-rich) of food are reserved for them.

A pregnant or lactating Kuria woman usually pays heed to the dietary advice given by local midwives. Such advice primarily relates to the stimulation of breastmilk and a pregnant woman is urged to eat food which physically resembles human milk, e.g. gruel, cow's milk and ubusara. In the past a woman who had just given birth was advised to consume the stomach content from slaughtered cattle (kichuri).

This is held to be exceptionally nutritious and "strong", hygienically "packed" and containing medical herbs which the cattle are believed to select carefully among the varieties of grass and bushes on the pastures. The practice of reserving kichuri for lactating women is less common nowadays. Instead, it is enjoyed as a delicacy by elderly men.

In addition to food prescriptions pregnant and lactating women are advised to restrict their consumption of a range of food produce which are believed to harm the foetus and the newborn child. An excessive intake of bananas, pumpkins and cream, for instance, is held to foster the development of boils. The use of industrially processed salt accordingly is restricted in favour of saltish water prepared by traditional methods. Such saltish water is believed to prevent the development of eczema. At the time when maize was increasingly accepted as a staple, pregnant women were strongly advised not to eat it since the consequences for the foetus and the suckling child were unpredictable. It is interesting to note that the dietary regulations applying to pregnant and lactating women are explicitly directed to the needs of the child, and not to those of the woman herself.

In order to estimate the energy intake of women in Nyamwigura village a survey was carried out in June 1978. The procedure for data collection was worked out by the Tanzania Food and Nutrition Centre (TFNC) and the recording of the womens food intake was done by a young female Nyamwigura villager. The survey comprised altogether 27 women aged between 17 and 50 years. The energy intake was calculated by weighting the food items before cooking, then the total weight of the prepared food, and finally the

quantities actually consumed.[1]

Although the primary aim of the survey was to estimate the women's energy intake, the recording of food items made possible a comparision of the diet of pregnant and lactating women, on the one hand, and non-pregnant/non-lactating women on the other. The distribution of the surveyed women over various sub-groups was as follows:

Table 5: DISTRIBUTION OF WOMEN PARTICIPATING IN THE NYAMWIGURA DIETARY SURVEY, JUNE 1978

Age (years)	Pregnant women	Lactating women	Non-pregnant non-lactating women	Total
17-27	2	4	2	8
28-38	2	8	1	11
39-50	1	1	6	8
Total:	5	13	9	27

A comparision with the above-mentioned household survey of August 1977 shows some notable differences. As shown in table 6 below, a relatively large proportion of the food items reported in the women's dietary survey were staples (67% as against 59% in the household survey), while the proportion of foods particularly rich in protein was strikingly low (7% as against 19%). We may therefore conclude that although protein-rich foods appear in the household diet, the women eat less of such foods than do other members of the household. It should

1. Further information on the methodology and survey findings are available in:
R.Muniko, B.Ljungqvist, F.Kahurananga, E.Tobisson, Dietary Evaluation of the Energy-Intake of Women and Children in Nyamwigura Village, Mara Region, TFNC Report No. 265, Dar es Salaam, September 1978.

Table 6: RELATIVE PROPORTIONS AND FREQUENCE OF FOOD ITEMS IN THE DIET OF NYAMWIGURA WOMEN, JUNE 1978

Food item	Pregnant women		Lactating women		Non-pregnant, non-lactating women	
	% of total food items	aver. no. of food items per head/day	% of total food items	aver. no. of food items per head/day	% of total food items	aver. no. of food items per head/day
Porridge	30	1.4	34	1.6	31	1.6
Gruel	13	0.6	14	0.7	16	0.8
TOTAL CEREALS	43		48		47	
Sweet potatoes	26	1.2	15	0.7	16	0.8
Cooking bananas	0	0	0	0	4	0.2
TOTAL TUBERS	26		15		20	
TOTAL STAPLES	69		63		67	
Beans	0	0	5	0.2	2	0.1
Meat	4	0.2	5	0.2	4	0.2
Fish	0	0	3	0.2	0	0
Milk	0	0	0	0	2	0.1
TOTAL PROTEIN RICH FOODS	4		13		9	
Green vegetables	22	1.0	14	0.7	13	0.7
Pumpkins	0	0	5	0.2	2	0.1
Onions	0	0	2	0.1	0	0
Sweet bananas	4	0.2	3	0.2	4	0.2
Other fruits	0	0	0	0	4	0.2
TOTAL VEGETABLES/FRUITS	26		24		24	
Cooking oil	0		0		0	
GRANT TOTAL:	100		100		100	

be noted that none of the women ate foods prepared with cooking-oil. The fact that the women ate sweet potatoes and cooking bananas to such a large extent points in the direction that they depend heavily on left-overs from previous meals and eat on irregular hours.

The survey did not reveal any considerable differences between women belonging to various physiological sub-groups. However, the lactating women were found to eat slightly more food items rich in protein and their staples contained comparatively more porridge and less tubers.[1]

6.3 Breastfeeding and Weaning Foods

The Kuria regard brestmilk as indispensible for the health and development of the small child. The introduction of weaning foods to infants below the age of four to six months is commonly viewed as a manifestation of severe problems in the household, e.g. mother's illness, the child's refusal to accept mother's milk due to acts of witches or evil spirits, mother's excessive workload or quarrel between the mother and her mother-in-law.

Immediately upon delivery the baby is fed with some gruel and lime juice in order to stimulate the desire for breastmilk which is held to have a similar taste and texture. The child is fed irregularly during the day and each time for a short while only. At night, it is breastfed when crying or showing other signs of discomfort.

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1. As noted in the TFNC report the method applied in evaluating the energy intake (i.e. weighing foods and portions) has disadvantages since it affects the daily routines of the subjects, usually resulting in a lower than normal intake.

Normally, a child is fed exclusively from the breast up to six months when adult foods are added. This means that a mother has to carry her infant along while performing her daily tasks or return to the homestead several times to feed it. Although a small child may well be comforted by suckling the breast of an older woman who remains on the homestead it must under no circumstances take breastmilk from another woman, since such milk is believed to harm the child through being the produce of "another person's blood".

Gruel is the first weaning food introduced prepared from maize or finger millet. Around the age of eight months the child is accustomed to porridge and green vegetables in small quantities. When weaning is carried out properly the child will be fully accustomed to a wide range of adult foods before it reaches fifteen months. Throughout weaning the child's diet is monitored by the mother, another woman in the household or older siblings. It is not until after the weaning period that the child has to compete for food with older children, having to share a meal from a common bowl.

Although Kuria women seem to have a firm perception of how infant feeding should ideally be carried out, circumstances do not always permit adherance to sound practices. A major reason causing too early and abrupt a weaning is the mother's getting pregnant anew. According to Kuria beliefs breastfeeding must be immediately terminated when the mother notices that she is pregnant. Otherwise the foetus will be deprived of its vitality and the suckling will catch stomach problems due to the mother's milk "turning white". In order to prevent a new pregnancy while the newly-born child still depends on breastmilk, husband and wife are strongly advised to refrain from sexual

intercourse for six months after childbirth. The husband is acknowledged to have sex with his other wife/wives, but under no circumstances with other women. In case of external sexual contacts during this period his semen is believed to be affected so as to cause a reduction of his wives future breastmilk production. Although this ought not to be a problem in a polygamous marriage, the rich opportunities to make acquaintances in the village and the extension of prostitution to rural towns, force many a women to sleap with their husbands although still breastfeeding , risking rather a new pregnancy than adultery on the part of husbands.

Another cause contributing to an early introduction of weaning foods is the increased agricultural workload on women. In Tanzanian villages the cultivation grounds are usually located at some distance from the homestead and lactating women commonly find it problematic to return home several times a day to breastfeed. Under such conditions a child may be breastfed in the morning and evening but have to rely on additional foods, e.g. gruel, sweet potatoes and left-overs during the day.

If breastfeeding is ended due to a new pregnancy while the baby is not yet fully accustomed to an adult diet, various problems may occur. The use of commercial baby foods in some Nyamwigura households originated from such situations. In cases where weaning has just started it is common practice to leave the infant for some time in the care of its paternal or maternal grandmother. The old woman will comfort the child and ensure that it gets used to an adult diet. In case the small child has to accompany its mother, the latter will smear a bitter juice from the gitaka plant on her nipples to make suckling unpleasant. If the child is very young the gums are rubbed with a hard object to stimulate the

development of teeth which will facilitate the intake of solid foods.

In order to investigate the diet and nutritional status of infants in the age of breastfeeding and weaning, two surveys were carried out in Nyamwigura village using different methods. The first survey was conducted in October 1977 by TFNC personnel and a medical assistant from the government hospital in Tarime. The survey comprised 320 children below the age of six. A wide range of information was collected about weight, height, arm circumference, health status and food items consumed by the child during the day preceding the survey. The anthropometrical findings show that growth retardation is most significant for the age group of one and a half to two years. The children above this age are slowly catching up and height is back to standard at the age of five. The children with an arm circumference below 13.5 centimeters and those with height and weight below 80% of the standard were almost identical. A follow-up investigation showed that almost all of the children reported to be deficient in weight had been weaned at an earlier age than is common in the village.[1]

The dietary part of the survey represented in table 7 below showed that merely one out of the total of 36 children below the age of one, did not receive breastmilk. Furthermore, only two children from among 200 aged two or more were still breastfed. Thus, the survey show that the children are fully weaned between one and two years. At the age of five months breastmilk is commonly supplemented with gruel, while additional foods are introduced somewhat later. The average number of meals per day were found to be more than

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1. Further details on methodology, standards and findings are available in:
B.Ljungqvist, F.Kahurananga, E.Tobisson, Village Nutrition Survey in Nyamwigura, Tarime District, TFNC Report No. 212, Dar es Salaam, October 1977.

Table 7: THE FREQUENCY OF FOOD ITEMS IN THE DIET OF NYAMWIGURA CHILDREN*, OCTOBER 1977

Age (months)	0-5	6-8	9-11	12-17	18-23	24-29	30-36	37-48	49-76
No. of child.	6	13	17	30	32	24	44	51	81
Breastfed (%)	100	100	94	70	41	4	2	0	0
Food item									
Gruel	.5	.8	1.25	1.0	.8	.8	.8	.8	.85
Porridge	.2	.7	1.25	1.4	1.6	2.0	1.9	1.8	1.8
Rice									.01
Ubusara		.2	.1	.2	.1	.2	.3	.3	.2
Total cereals	.8	1.6	2.4	2.6	2.5	2.9	3.1	2.9	2.9
Sw.potatoes		.1		.1	.2	.1	.2	.2	.1
Ir.potatoes			.2		.05	.1		.05	.04
Cooking bananas		.2	.2	.3	.3	.2	.1	.3	.2
Total tubers	-	.2	.4	.4	.5	.4	.3	.5	.4
TOTAL STAPLES	.8	1.8	2.8	3.0	3.0	3.3	3.4	3.4	3.3
Meat		.1	.2	.2	.4	.1	.4	.5	.3
Fish			.1	.2	.1	.5	.4	.3	.2
Milk		.2	.2	.1	.05	.05	.2	.1	.1
Total anim.food	-	.3	.5	.5	.6	.6	.9	.9	.6
Beans	.2	.1	.2	.1	.1	.1	.1	.3	.25
Cowpeas		.1		.05				.05	.02
Prot. rich veg.	.2	.2	.2	.2	.1	.1	.1	.4	.3
TOTAL PROT.RICH	.2	.4	.7	.7	.7	.8	1.0	1.3	.9
Spinach		.3	.2	.4	.5	.8	.6	.4	.5
Mlenda		.1	.2	.3	.2	.2	.1	.2	.2
Mgagani			.1	.05	.2		.1		.1
Chinsaga				.05					
Ndelema					.05		.03		
Kisamvu				.05			.05		.01
Cabbage		.1		.1		.1		.1	.1
Onions		.3	.2	.3	.2	.4	.2	.4	.3
Tomatoes		.2		.05				.02	.06
Sugar cane						.05		.02	
Ripe bananas		.1	.1	.1	.05	.1	.03	.2	.07
TOTAL VEG+FRUITS	-	1.2	1.2	1.4	1.3	1.8	1.3	1.7	1.7
Cooking oil		.9	.7	.7	1.1	1.3	1.2	1.3	1.3

Source: B. Ljungqvist, F. Kahurananga, E. Tobisson, Village Nutrition Survey in Nyamwigura, Tarime District, op.cit., table II, p. 7.

* Although the survey comprised 320 children the table is based on findings from a mere 298. No reason is given in the TFNC report for omitting the remaining 31 children. It should be noted, however, that the statements in this report referring to the survey are based on the total number of children participating.

three and one of those contained food items particularly rich in protein. A vegetable stew was served at least once per day and cooking-oil was reported to be frequently used in food preparation.

The medical part of the survey revealed that 47% of the children aged between three months and one year, i.e. when adult foods are introduced in the child's diet, had diarrhoea. The prevalence of diarrhoea is steadily decreasing among children above one year and amounts to a mere 6% of children aged three to five years.

The second survey, carried out in the village in May 1978, was specifically directed towards an evaluation of the infant's energy intake. It comprised 25 children between six months and two years. The procedure of data collection was similar to that applied in the women's dietary survey. Twelve of the surveyed children received breastmilk (table 8) and the dietary intake was therefore calculated for the remaining thirteen children who were fully weaned.

Table 8: DISTRIBUTION OF CHILDREN PARTICIPATING IN THE NYAMWIGURA DIETARY SURVEY, MAY 1978

Age (months)	Partly breastfed children	Fully weaned children	Total
7-12	4	1	5
13-18	7	7	14
19-24	1	5	6

1. Further details are available in:
R. Muniko, B. Ljungqvist, F. Kahurananga, E. Tobisson, Dietary Evaluation of the Energy-Intake of Women and Children in Nyamwigura Village, Mara Region, op.cit.

Altogether 80% of the children between seven months and one year were found to be breastfed. The corresponding figures for children aged fifteen to eighteen months and nineteen to twenty-four months respectively were 50% and 17%.

Out of the total number of food items reported, gruel, porridge and sweet potatoes amounted to 72%. The porridge was commonly eaten in combination with a boiled vegetarian mix. Merely 2% of the reported food items were particularly rich in protein and none of the children received protein rich foods of animal origin. As indicated by the table below, the children's diet is strikingly monotonous.

Table 9: THE RELATIVE PROPORTION OF FOOD ITEMS IN THE DIET OF 25 CHILDREN IN NYAMWIGURA VILLAGE, MAY 1978

Food item	% of total food items
Gruel	39
Porridge	18
Sweet potatoes	15
Green vegetables	13
Sweet bananas	9
Cooking bananas	3
Beans	2
Tea	1
GRANT TOTAL:	100%

A comparision between the age-groups of thirteen to eighteen months and nineteen to twenty-four months (table 10) shows that while both eat a lot of cereals, the latter group also eats a lot of tubers. Taking into consideration the observed pattern of infant feeding in the village, the variations may be due to the fact that younger children remain close to the

Table 10: THE RELATIVE PROPORTION OF FOOD ITEMS IN THE DIET OF BREASTFED AND WEANED NYAMWIGURA CHILDREN, MAY 1978

Food item	Partly breastfed children			Fully weaned children		
	7 - 12 months	13 - 18 months	19 - 24 months	7 - 12 months	13 - 18 months	19 - 24 months
Gruel	40	32	0	40	44	40
Porridge	20	18	0	20	22	10
TOTAL CEREALS	60	50	0	60	66	50
Sweet potatoes	10	18	100	0	9	20
Cooking bananas	0	9	0	0	0	5
TOTAL TUBERS	10	27	100	0	9	25
TOTAL STAPLES	70	77	100	60	75	75
Beans	0	0	0	0	6	0
TOTAL PROTEIN RICH FOODS	0	0	0	0	6	0
Green vegetables	20	18	0	20	9	10
Sweet bananas	10	5	0	0	9	15
TOTAL VEGETABLES/FRUITS	30	23	0	20	18	25
Tea	0	0	0	20	0	0
Cooking oil	0	0	0	0	0	0
GRANT TOTAL:	100%	100%	100%	100%	100%	100%

mother during mealtime and share the foods served to adults. On the other hand, children in the age around two years usually eat in the company of older siblings and often at irregular hours. Thus, porridge may be eaten once a day when the entire family is gathered whereas additional meals comprise left-overs of the kind to be eaten cold and brought along while playing or assisting in household chores.

A comparison of the two infant oriented surveys suggests a few differences, not all of which are, however, accounted for by representativeness and scope but rather by methodological differences. In the first survey the person accompanying each child to the examination was asked to recall the child's diet during the previous day. Due to the limited time that could be spent on interviewing each person, answers were sometimes evoked through posing leading questions such as "did you use cooking-oil?" or "is your child still breastfed?", There is a tendency for such questions to be answered affirmatively.

It should be kept in mind that women in this area are informed about the importance of a balanced diet and a prolonged breastfeeding through MCH-clinics, etc. The distance to travel is long, however, until such insight can be implemented in the prevailing village situation. Under conditions where cattle are rarely slaughtered, where eggs are increasingly sold off for cash, milk production is low, etc., and where women lack the financial means to buy relatively expensive foodstuffs from rural markets and shops, the nutritional knowledge women possess will have little impact on the household diet.

It appears that the women experienced the interview situation as similar to those in the clinic, the class-room, etc., implying that they felt induced to forward a somewhat idealized picture of the children's diet. Such conduct is certainly not outstanding about the women of Nyamwigura, or Tanzania for that matter. Nevertheless, it is important that the frequent references to protein rich foods and use of cooking-oil are appraised in this light.

In contrast to the first survey the second one did not require respondents to interrupt their daily tasks in order to able to sit for an interview. Instead, the field-assistant could devote a whole day to each household, and the daily routines could therefore be carried on as usual.[1] The households were not informed beforehand which day they were to be visited, why the possibility to serve anything not forming part of the children's common diet was much limited. Whereas the first survey noted the variation in food items, the households participating in the second one were informed that the aim was to find out how much the children consumed of their usual diet. Thus, the importance of the qualitative aspect of food intake was played down.

The most conspicuous difference in findings applies to the proportion of protein-rich foods in the diet. In the second survey only two out of the total 91 food items were particularly rich in protein and none was of animal origin. No use whatsoever of cooking-oil was recorded. In the first survey the children were reported to eat meat and fish at least twice a week and have one meal per day prepared with cooking-oil.

1. This is different from the women oriented dietary survey which was carried out by use of the same methodology. Whereas the daily routines of the women were interrupted, the children remained on the homestead even if mothers were away during the day.

7 HEALTH SITUATION

7.1 Traditional Medicine

The disease pattern characteristic of the Kuria highlands can partly be explained by reference to environmental conditions, such as ample rainfall and a broad temperature interval between day and night. However, the widespread occurance of diarrhoea, colds, malaria, intestine worms and parasites should ultimately be viewed as manifestations of poor economic conditions. When people are inadequately dressed, sanitary facilities are lacking, mosquito-nets rarely found, drinking-water contaminated, etc., the effect of harsh environmental conditions on the population's health is bound to be considerable. When adults suffer from a combination of socio-economic and environmental problems, the situation of children is very often disastrous, since the latter experience accumulated effect of such problems. For instance, lack of material resources or food in the household usually has a multiple effect on children, since they are the first to suffer from an unequal distribution of resources. Such problems are aggravated by the fact that children constitute the most vulnerable section of a population from the point of view of health and nutrition, due to their particular requirements and susceptability to disease.

Although modern health facilities are available in the highland area, traditional medicine continues to play an important role. As already noted a Kuria community comprises one or several traditional medical practitioners recognized for their ability to identify and neutralize the causes of health problems affecting individuals or households. Since many such problems are believed to originate from the acts of evil spirits who operate through individuals in the

community, the curing procedure involves a combination of magic and medical treatment. Although the traditional medical practitioners only exceptionally are able to identify the person who plagued the victim, he/she will usually succeed to find the magical object used and neutralize this through counter-magic. If this is achieved the patient can be expected to recover.

There are, of course, medical problems which traditional practitioners can not cope with satisfactorily, e.g. epidemics and many of the internal diseases. In the past people who were victims of what was regarded as epidemical disease used to be moved from the homestead to a temporary shelter at some distance. Several times a day they were provided with food which was left nearby their shelter for them to collect. When someone died, for instance, from leprosy, the body was discarded far away in the bush in order for it not to cause harm to the entire patrilineage.

In Nyamwigura village the traditional medical practitioners are primarily preoccupied with the treatment of common medical problems such as wounds, cuts, broken limbs, eczema, boils and headache. The standard treatment is to smear the affected part of the body with a paste prepared from soaked and pounded herbs, roots and bark which have been mixed together with finger-millet porridge. When pain cannot be attributed to visible injuries the disease will be "extracted" from the body by means of various practices. For example, a common treatment of headache involves cutting a small scratch in the patient's neck and extracting the blood through covering the scratch with a cow-horn for about ten minutes.

The villagers readily testify that the local treatment of common medical problems is often successful. There are cases where the patient has visited dispensaries and hospitals repeatedly without recovering. When finally they turned to the traditional practitioner they were cured before long. We personally witnessed the treatment of tropical wounds by use of a whitish flour derived from the pounded seeds of a local plant. The flour was powdered on to the wound once a day for a week until it had dried completely. Several patients had previously applied an ointment from a nearby dispensary or the government hospital, without any improvement.

The local midwife is a specialist within the category of traditional medical practitioners. Her sphere of activities preceed far beyond assisting during childbirths. Among other things, she advices women on measures to increase their fertility as well as to prevent too frequent pregnancies. A woman desiring to get pregnant is adviced to eat a small quantity of soot scrapped from the ceiling above the hearth. She may also be told to visit the sacred grove in the Timbaru province, i.e. the home of the clan spirits, in order to bring home a branch from a ritually important tree to hide under her bed. A common practice to prevent a new pregnancy before the last-born child has been fully weaned is to tie a rope with seven knots knots around the waist. The rope is removed when the woman wants to get pregnant anew. The local midwife also advises on the appropriate diet for pregnant and lactating women, as well as for children during the period of weaning. When supervising childbirths she is assisted by married women from the homestead of the woman giving birth. Since the Kuria practice female circumcision the delivery of a child very often

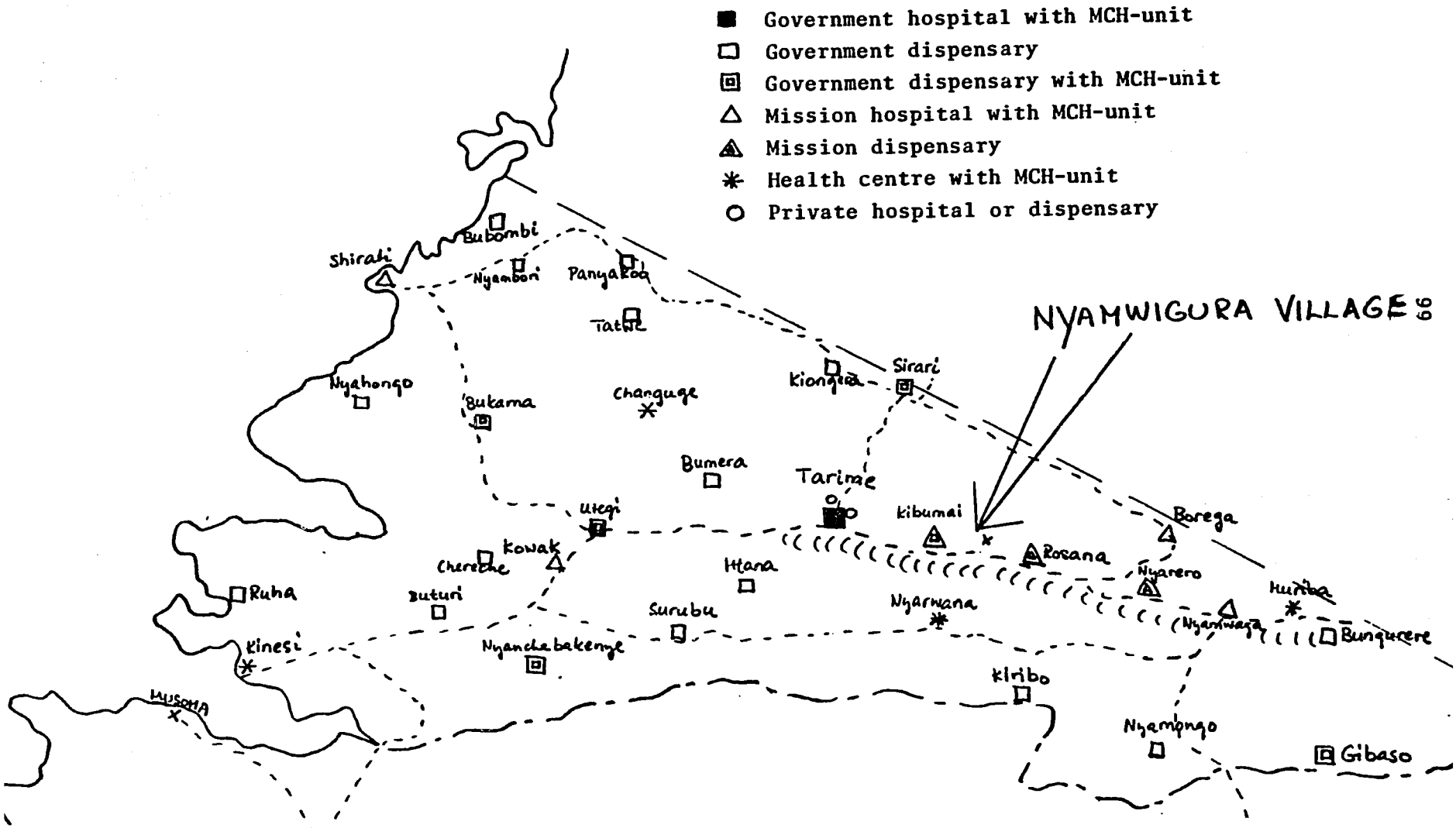
necessitates cutting open the scars to facilitate passage. The midwife of Nyamwigura village knew of many cases where children had died since the women gave birth at home without her assistance.

A local midwife does not demand payment for her services although she is usually provided with gifts such as a goat, chickens, grain, etc. Contrarywise, the consultation of a local medical practitioner about other problems generally involves ample expenditures, particularly so in comparision with dispensary and hospital fees. The medical practitioners operating in Nyamwigura village are paid between Shs. 100-300 for treating a patient. It should be noted, however, that such an expenditure covers several visits, as well as medicines. In some cases the payment is not made until after the patient has recovered completely.

7.2 Modern Health Services

In addition to traditional medical care the population in the Kuria highlands have the option to visit dispensaries and hospitals which are run by the government, missions or private persons. By Tanzanian standards the health infrastructure in this area is fairly good. As can be seen from the map below, the villagers of Nyamwigura are within walking distance from two mission dispensaries (Rosana-3kms, Kibumayi-5kms), one government dispensary (Nyarwana-10kms), one government hospital (Tarime-12kms) and two private dispensaries (Tarime-11kms). However, a review of the health infrastructure does not in itself reveal anything about the quality of medical care, about the villager's attitude to modern health facilities or about the factors preventing them from using available facilities in the desired way.

Map 2: MODERN HEALTH FACILITIES IN TARIME DISTRICT



It is, for instance, quite evident that the dispensaries of the area have to operate with unqualified staff and with a continuous shortage of medicines and dressing material. The conditions prevailing at the Rosana Catholic dispensary are probably fairly representative of the situation generally in the area. Since the dispensary was set up in 1957 no improvements have been made of the premises (one room about 20 sq.m), in spite of the fact that the number of attendancies has increased tremendously. Presently, the dispensary serves an area counting approximately 9000 inhabitants. Visitors from more distant villages have to spend several hours walking, often with a sick child on the back, and more hours waiting outside the dispensary. The permanent staff amounts to a medical assistant, a nurse assistant and a laboratory assistant. In addition, a trained nurse from a mission hospital at Kowak (40 kms away) attends to patients at Rosana every fortnight. The supply of medicines from chemists' and agents in Mwanza and Tanga is unreliable and far below the requirements, not so much due to lack of means of payment but rather to a combination of poor transport facilities, impassible roads during the rainy season and an overall competition for medical commodities in which the more distant health institutions suffer the most. Thus, the government hospital in Tarime experiences the same problems as do the mission dispensaries in the highlands.

Although patients pay for treatment and medicines at Rosana, the fees must be said to be moderate. For instance, a patient treated for malaria pays Shs.15 which then includes physical examination, laboratory test of blood-samples, chloroquinine injections, pills and check-ups until recovery. The villagers nevertheless perceive of the fees as heavy and are willing to spend their money only when a household member is seriously ill. This is not to say that they prefer the government

hospital where treatment and medicines are to be available gratis. Not only is the distance and waiting hours longer but the standard medicines are often out of stock. The villagers also claim that not seldom have they to pay for medicines at the government hospital if they are to receive any at all.

The Rosana dispensary has special hours reserved for MCH services. However, few women make use of the opportunity to have regular health controls for themselves and their children. This particularly applies to pregnant women who are being urged to visit the dispensary regularly. Many husbands, however, are reluctant to grant money to such controls since they regard them as not necessary. According to their view, pregnant women are not sick and need not visit a dispensary where sick people are treated. The pregnant women who manage to attend regular controls are advised to deliver at the government hospital in Tarime. But in Nyamwigura village many women are reluctant to listen to this advice due to previous experience. Those who decide to deliver in the government hospital usually have to walk the 12 kilometers to get there. Since they are accepted at the maternity ward only when labour pains have started, they leave Nyamwigura when the latter are heavy in order not to risk being sent home again. There are several cases where women failed to reach the hospital in time and had to deliver by the side of the road, assisted by other women who happened to notice their situation. Others who reached the hospital in time , for unknown reasons were left unattended for hours and eventually gave birth without any assistance from the hospital personnel. In yet other cases the midwives were not aware of the possible complications causable by circumcision scars, which led to unnecessary pains

and worries. Although the situations referred to above are exceptional rumours diffuse rapidly and make for a widespread suspicion against hospital delivery.

The traditional midwife in Nyamwigura is well aware of the fact that delivery in a hospital has comparative advantages. She specifically referes to the superior hygienic standard and the possibility to "cut open the stomach" if need be. However, she realizes the problem of having to depend on medical facilities at such a large distance from the village, particularly since the women are not accustomed to carefully noticing their physiological state, an absolute precondition since they have to walk to the hospital. The midwife feels she has a lot to learn from modern maternity care and would have tried to obtain such knowledge had she been younger (now being in her 70's). At the same time, she stresses that the personnel in hospitals and dispensaries have a lot to learn from traditional medical practices.

Even if contraceptives are available gratis from some of the health institutions, a mere few of the village women make use of them. In societies where children are seen more as an economic asset than as passive consumers, and where the rate of infant mortality is high, the demands for contraceptives will remain low. Furthermore, although women might prefer to use contraceptives after several child-births their husbands would not allow them since fewer children run contrary to their overriding objective of expanding the patrilineage.

7.3 Diseases in the Kuria Highlands

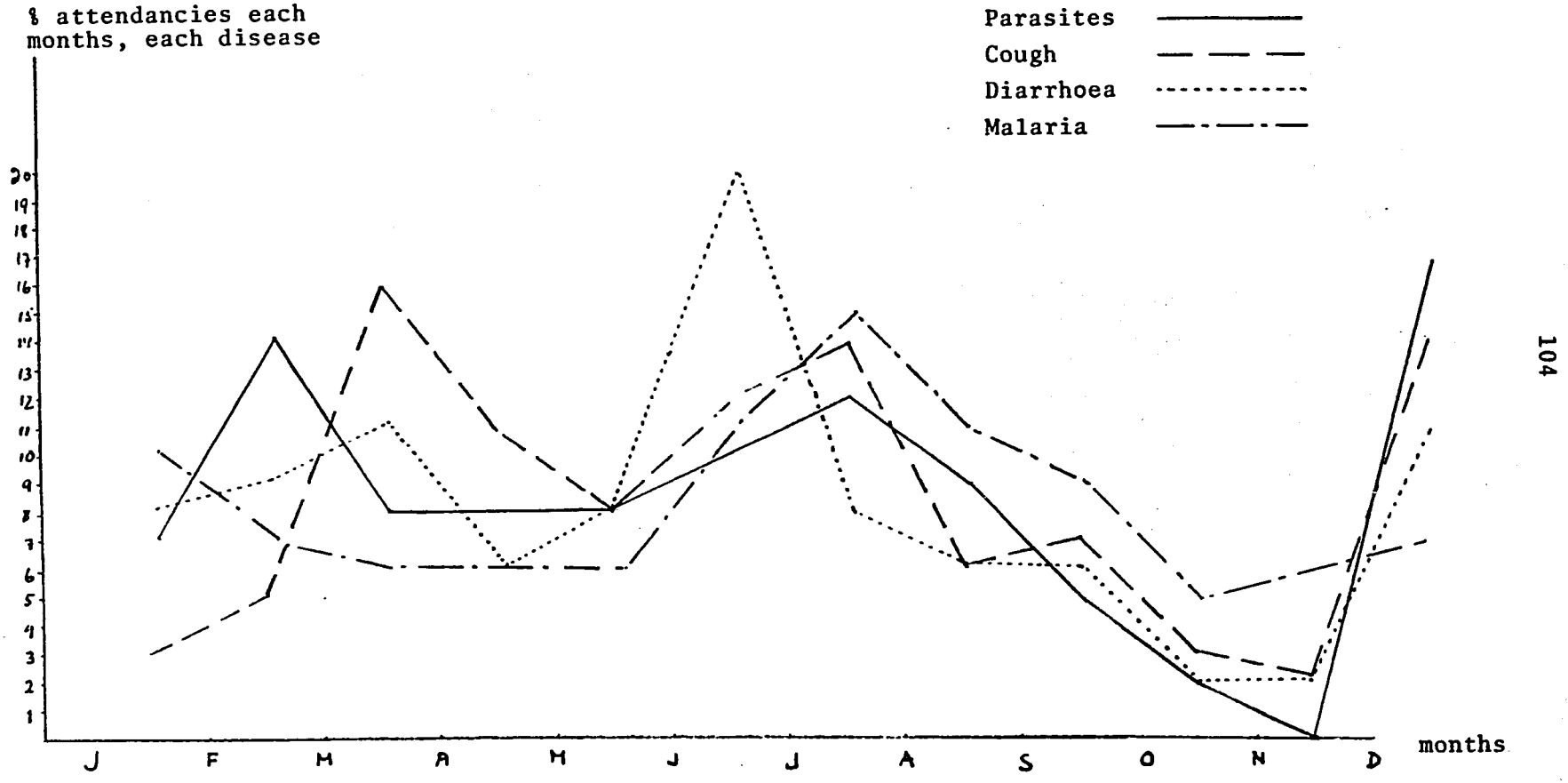
Records available at the Rosana dispensary for the year 1977 show that malaria, colds, parasites and diarrhoea are the most frequent diseases among

children below the age of six.[1] Altogether 3,970 cases related to these illnesses and this age-group, out of which malaria accounted for 78%, while cases of colds, intestine worms and diarrhoea amounted to respectively 10%, 7% and 5%. The seasonal distribution of attendancies for each of these major diseases is showed in diagram 2. February-March, June-July and November-December stand out as peak periods.

The disease pattern is partly to be explained by climatic conditions, e.g. colds are most frequently recorded during the months of heavy rain and low temperature. Then there is the fact that the agro-economic conditions vary from one season to another in terms of intensity of agricultural labour, access to food resources and to cash, etc. Since women are preoccupied with agricultural work more or less continously between February and May, their possibility to watch the health status of their children is much reduced. As already noted the workload on women may force them to introduce weaning foods at a too early a stage in order to be able to leave their children with someone remaining on the homestead during the day. Such a person is rarely able to take a sick child to the dispensary, while leaving the other children unattended. In addition, this peak agricultural period is one in which most households experience severe shortage of cash. This means that although health problems among small children may be most acute in this period of intensive agricultural work, usually they are unlikely to be brought to

1. Although the records listed an extensive number of diseases, nutritional disorder or kwashiorkor never appeared. Rather than indicating the non-existence of malnutrition in the area, its absence was explained by the dispensary staff as consequent on malnourished children being recorded by their foremost symptoms, e.g. diarrhoea or parasites.

Diagram 2: SEASONAL DISEASE PATTERNS AT THE ROSANA CATHOLIC MISSION DISPENSARY, 1977



the dispensary until the agricultural workload on women has diminished, i.e. in June and July. The two other peak periods at the dispensary coincide with a general shortage of food. When children receive no adequate diet their susceptability to disease is bound to increase. Many women in Nyamwigura village worry about a decline in their breastmilk production during these periods. Whether this is true or not, the fact that mothers substitute other foods for breastmilk, for fear of not feeding their children satisfactorily, is probably in itself enough to account for the increase in cases of diarrhoea and parasites in the dispensary records.

8 THE ROLE AND SITUATION OF WOMEN IN NYAMWIGURA VILLAGE

8.1 Women Participation in Village Affairs

The way the villagization campaign was launched and directed in Mara Region suggests that government officers presume that community affairs and agricultural work are exclusively handled by men. Although the official policy stated that men and women alike were to take part in decision-making and communal work[1], only men were encouraged to do so in Nyamwigura. The women continued to be preoccupied with their traditionally allotted responsibilities. Since villagization took place in the midst of the major agricultural cycle, the women had to walk almost daily to their distant cultivation plots to maintain the crops until harvest. This situation rendered their participation in village communal affairs impossible.

During the first year of settlement in Nyamwigura the women accounted for roughly 80% of the penalties meted out to the village fund for negligence to fulfil their communal obligations.[2] The women's poor participation in this respect is commonly sanctioned by their husbands who do not like wives, daughters and daughters-in-law to interact freely with men beyond a narrow range of kin and neighbours. The person acknowledged to remain on the homestead to look after children and stock, while others take part in communal work, is with few exceptions a woman. Those women who do participate, on the other hand, often have reason to complain that their contribution is recognized as of minor importance compared to that of men. For instance.

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1. J.K. Nyerere, "Socialism and Rural Development", in Freedom and Socialism: A Selection of Writings and Speaches 1965-1967, Dar es Salaam: Oxford University Press, 1968, p.359.

2. Information from the Nyamwigura village office.

although co-wives may handle a plough in communal agriculture while their husband remains at home, their participation nevertheless is registered in the name of their husband as he is the owner of the plough and oxen.

The exclusion of women from village affairs is manifested also in political discussions and decision-making. While few villagers as a whole attend village meetings the participation therin of women is negligible. Only three out of the total 25 members of the village council are women. Differing in important respects from ordinary village women, two of them are widows who maintain themselves and their children without support from their deceased husband's kin. Hence, they are not subject to male dominance in the usual way. The third woman elected to the village council recently returned from Dar es Salaam where she lived for many years while her husband served in the army. One of the widows is appointed by virtue of her position as the village UWT secretary. Few women in Nyamwigura, however, are members of the UWT. Particularly when the husband is a Party member, neither he nor his wives regard it as important for the household to further engage in political activities. Besides, most women are unable to raise money for the UWT registration fee (T.Shs. 40/- in 1978).

Neither the female members of the village council nor the very few additional women who attend village meetings take active part in the discussions. This is basically due to the acknowledged perception of authority. While women are recognized to be potentially powerful they do not hold authority which is a characteristic of leadership. This implies that women are not supposed to speak up in front of an assembly of men, and women who attend village meetings easily end

up with a bad reputation of taking every possible chance to show off and throw their eyes on men. It is interesting to note that such prejudice is found among men as well as women.

The men in Nyamwigura commonly state that the low participation of women in village affairs is due to their lack of interest and concern. To a certain extent the women are prepared to confirm this view. Basically, however, they explain their poor participation as a matter of lacking experience. Although many women apparently have an interest in village matters, the fact that they rarely participate eventually serves to reduce their interest to a minimum. It should also be noted that the heavy workload on women on the homestead severely restricts their ability to devote themselves to village affairs.

The poor participation of women in village undertakings should be seen as a major factor contributing to the relative lack of government concern about the women's situation as revealed by development priorities and plans. Rather, most of the projects suggested by regional or district authorities and village councils rest on the notion that women readily accept and are capable of putting in an extra workload. It is a commonly prevailing phenomena that women's work remains "invisible" as long as it is carried out satisfactorily and without complaints. Furthermore, it is evident that the existence of a UWT branch in the village contributes to the lack of concern about problems experienced by women and development priorities identified by them. When "female" topics are raised in the village council or general village meetings they are usually delegated to the UWT assembly. In this way such topics are ranked as secondary to those discussed in assemblies with predominantly male participation.

A specific problem applies to the extent to which extension officers are able to appraise the situation and needs of village women. As mentioned above, such staff mainly communicate with households through the village council with generally scant female participation. The agricultural officer based in Nyamwigura has not yet been able to devote herself to household agriculture. It therefore remains to be seen whether or not she will be particularly concerned with problems experienced by women. If so, she may nevertheless find it problematic to receive enough support for her views in the village council and to encourage women to devote themselves to village affairs. Since her work is evaluated by the district authorities primarily by her achievements in implementing the district agricultural policies, she will certainly not be credited for efforts at reducing the workload on women, since the work of the latter constitutes the cornerstone of most projects.

Development work specifically targeted at women in Nyamwigura village so far has been negligible and of a kind not to counteract more fundamental problems. During three weeks of 1978 the village accomodated two female students from the home economics training centre at Buhare south of Musoma town, who had to carry out a village socio-economic survey as part of their training. Experiencing much difficulty in their work, primarily due to lack of interest on the part of the village leadership, the students after a week of more or less futile efforts managed to convince the UWT secretary to call a women's meeting. A mere six women attended the meeting, however, the major reason being that the UWT secretary had forwarded the invitation to the (all male) ten-cell leaders for further communication to the women. Apparently, the latter never received the message.

At an early stage of our work in the village we invited the women to a demonstration of appropriate weaning foods. The idea was to try out new recipes using local food produce. Only some ten women turned up. Several months later, when we were more familiar with the villagers, the reason for our failure to attract more interest became clear. The men had prevented their wives to attend due to a previous incident when the sisters of the nearby Catholic mission had invited Nyamwigura women to attend a cooking demonstration. At that time the women had prepared food and consumed it jointly before returning home. Their husbands, however, were convinced that the food had been given to lovers which Kuria men always suspect their women to entertain. Apparently the meagre response to our invitation was a matter of the husband's concern not to let the same thing happen again.

Probably the most successful effort to involve Nyamwigura women in development work was made by a young man from SIDO (Small-Scale Industries Development Organization) in Musoma. He had learned that many women in the Kuria highlands were skilled in basketry, and through contacts with the Catholic mission he managed to trace a number of them. An arrangement was made whereby the women could sell baskets to the mission for money. The baskets were to be forwarded to Dar es Salaam for resale. Although the project was important in terms of providing women with some cash income, the women were unable to devote much time to basketry. Besides, they had to give priority to the making of baskets and other utensils needed in their own kitchens or to be given away as wedding gifts.

8.2 Women in the Household Economy

In previous chapters the historical and structural factors responsible for the women's heavy workload and limited control over household resources have been outlined. In order to find out more about the operation of the household economy, and specifically about the situation of women, a comprehensive survey was carried out in Nyamwigura village during two successive agricultural cycles in 1977/78. The survey comprised several interrelated parts, e.g. size of land holdings, cropping patterns, labour allocation, grain outputs, income from marketed produce and cash expenditures.[1] Eleven marital units of husband and wife, and four single women, participated in the survey.[2] The reason for including single women was to find out to what extent their situation was different in these respects. Two of the single women were widows who did not receive the usual assistance from their deceased husband's kin. The two other had been left but not divorced by their husbands years ago and now subsisted as fairly independent sub-units of their father's-in-law households.

The survey was initiated in March 1977 when the participants were informed about the procedures of data collection. The cultivation plots belonging to each unit were carefully measured and the crops cultivated on each plot were recorded.[3] In the subsequent minor agricultural cycle the changes in land use were recorded. The information on cropping patterns were important for our appraising of the accuracy of reports

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1. The findings on incomes and household expenditures will be presented in a forthcomming report.

2. While the nature of our fieldwork and the surveyed phenomenona did not allow us to draw a random sample of households, it should be noted that the husband/wife units were carefully selected to reflect major variations with respect to e.g. age, number of children and wealth.

3. It should be noted that the vegetable garden generally located on the homestead was omitted altogether from the survey.

on time spent on various activities. The tasks accounted for were confined to the preparation of land prior to cultivation (i.e. slashing of grass and up-rooting of bushes), hoeing/ploughing, weeding and harvesting. Since planting and application of fertilizers usually take place in combination with ploughing or hoeing, these tasks were not specifically accounted for in the survey. Furthermore, the transportation of harvested produce was omitted since it does not add significantly to the time spent walking between plots and homesteads.

The time spent on agricultural work by husband and wife respectively and by single women was estimated through informal daily interviews. The calculation of time departed from the local perception of sequences through which the day passes from morning until night. Thus, from the information that someone arrived on the field when the midday rain started and returned home when the sun passed beyond the Binagi hill, a fairly accurate estimate in hours spent in agriculture could be made. As often as circumstances permitted we participated in various kinds of agricultural work together with the households of our sample. This provided possibilities for discussing problems which were not spontaneously brought up on the homestead when husband and wife were together. Thanks to their familiarity with the survey and improved routines the agricultural time-scedule of the minor cycle had to be recalled only twice a week.

The grain harvest was calculated in terms of bags and contents of granaries, then translated into kilos.[1]

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1. The weight of bags containing various crops are: Maize - 90kg, finger millet - 100kg, sorghum - 100 kg.

The grain is commonly preserved in granaries on the cob/head. The small and large granaries used in Nyamwigura village were estimated to hold:

Maize:	Small granary,	10	bags on cob	=	5 bags off cob
	Large .. ,	20	.. . ..	=	10-12 bags off cob
F.mill.:	Small .. ,	12	.. . head	=	4 bags off head
	Large .. ,	25	.. . ..	=	8-10 bags off head
Sorghum:	Small .. ,	10	.. . head	=	4 bags off head
	Large .. ,	20	.. . ..	=	8 bags off head

The accuracy of this information was judged in relation to acreage cultivated, time spent on performing various tasks and the extent to which agricultural inputs were used.

The non-agricultural tasks accounted for by means of informal interviews, participant observation and measurement related to animal husbandry, house-building and household chores. Impossible as it is to account for the total range of tasks performed within a household, a specific problem derives from the fact that a number of tasks, e.g. child-rearing and political discussions, are commonly coordinated with yet others. Therefore, such activities had to be omitted from the survey and observations were thus confined to those tasks performed daily or several times a week and which were clear-cut enough to be measureable.

The land holding part of the survey shows that husband/wife and single women on an average had 2.5 and 3.3 acres respectively for cultivation. In addition to having at their disposal more land for cultivation the single women were found to actually cultivating larger acreages.

Table 11: SIZE OF LAND HOLDING AND ACREAGE CULTIVATED BY HUSBAND/WIFE AND SINGLE WOMEN (acres)

Unit	Land holding	Acreage cultivated	
		Major cycle	Minor cycle
Husband/wife	2.5	2.2	1.8
Single women	3.3	2.5	2.0

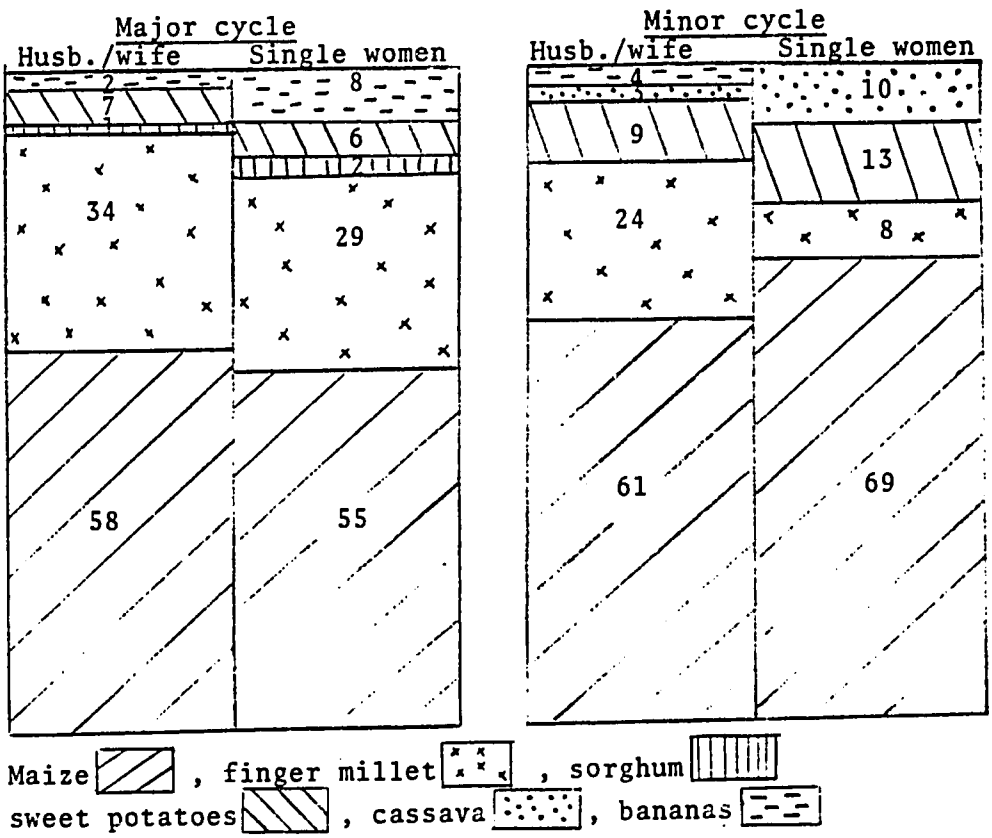
As showed in table 12 below maize dominated the cropping pattern in both agricultural cycles, while finger millet was cultivated primarily in the major cycle and tubers in the minor one.

Table 12: CROPPING PATTERN (% of total acreage cultivated)

Agr. cycle	Maize	Finger millet	Sorghum	Sweet pot.	Cassava	Bananas	Total:
Major	57	32	1	6	..	4	100%
Minor	63	19	..	10	5	3	100%

A comparision between husband/wife units and single women shows that the latter cultivated a larger acreage of tubers and a smaller one of finger millet. This tendency was particularly apparent with regard to the minor cycle.

Diagram 3: CROPPING PATTERN FOR HUSBAND/WIFE UNITS AND SINGLE WOMEN (% of total acreage)



A possible factor responsible for the difference in cropping patterns is that the marital unit of husband and wife presumes a labour contribution from both of them. The single women, on the other hand, have to rely primarily on their own labour and therefore cultivate larger acreages of less labour demanding crops, e.g. maize and tubers.

In the major agricultural cycle no more than five units purchased hybrid seeds while two applied chemical fertilizer to the maize crop. In the subsequent cycle only two made use of hybrid seeds while two other units applied fertilizer. It is noticable that none of the single women made use of modern agricultural inputs.

The harvest from the major cycle averaged six bags per acre of maize and seven bags per acre of finger millet. In the minor cycle maize decreased to 4.8 bags while finger millet increased to 7.5 bags per acre.

Table 13: HARVESTED MAIZE AND FINGER MILLET (bags/acre)

Unit	Major cycle		Minor cycle	
	Maize	F.millet	Maize	F.millet
Husb./wife	6.3	6.5	3.8	7.2
Single women	4.6	8.3	7.4	9.3

Differences in agricultural yield between husband/wife units and single women (table 13) should be appraised with regard to acreages cultivated. Thus, the single women's relatively high yield of finger millet (a crop where proper weeding is of decisive importance) is partly to be explained by the fact that they devoted a mere 8% of their acreages to this crop in the minor agricultural cycle (as against 24% for the husband/wife units) and consequently could find the time to weed properly.

This also implied that more attention could be paid to the cultivation of maize. In fact the single women's yield of maize per acre was almost double that derived by the husband/wife units.

The time-budget part of the survey gave further support to the overall findings that the workload on women by far exceeds that on men. In the course of the two agricultural cycles the monogamously married women and men observed spent an average of 786 hours and 136 hours respectively in agriculture, i.e. the women put in nearly six times as many hours in agriculture than the men. The relative allocation of time to various tasks by wife and husband was as follows:

Table 14: TIME SPENT IN AGRICULTURE BY WIFE AND HUSBAND DURING THE MAJOR AND MINOR CYCLES

Activity	Wife		Husband	
	Hours	% of total	Hours	% of total
Slashing grass	107	14	28	21
Ploughing/hoeing	88	11	49	36
Weeding	381	48	39	28
Harvesting	210	27	20	15
Total:	786	100%	136	100%

The women thus devoted half of their time in agriculture to weeding and one-fourth to harvesting. The men were primarily preoccupied with ploughing.

Observing each activity per se showed that husband and wife cooperated primarily in ploughing and hoeing, while men's contribution to the most labour intensive activities, i.e. weeding and harvesting was negligible.

Table 15: RELATIVE ALLOCATION OF TIME TO SEPARATE AGRICULTURAL ACTIVITIES

Activity	Wife		Husband		Total	
	Hours	%	Hours	%	Hours	%
Slashing grass	107	79	28	21	135	100
Ploughing/hoeing	88	64	49	36	137	100
Weeding	381	91	39	9	420	100
Harvesting	210	91	20	9	230	100
Total:	786		136		922	

As regards single women, the latter devoted 969 hours to agriculture, that is 183 hours more than the married women. The hours spent on the various agricultural tasks by married and single women respectively was as follows:

Table 16: ALLOCATION OF TIME TO AGRICULTURAL ACTIVITIES BY MARRIED AND SINGLE WOMEN

Activity	Married women		Single women	
	Hours	% of total	Hours	% of total
Slashing grass	107	14	111	12
Ploughing/hoeing	88	11	90	9
Weeding	381	48	553	57
Harvesting	210	27	215	22
Total:	786	100%	969	100%

Considering that the villagers usually rest from agricultural work during one day per week, the average agricultural workday for married and single women amounted to 2.5 and 3.1 hours respectively.[1] These figures point in the direction that the lack of a male companion does not add significantly to a woman's agricultural workload.

1. It must, however, be pointed out that the seasonal variations in the intensity of agricultural work are large so that when weeding is at its peak the women often devote six hours or more per day to agriculture alone.

Our observation of non-agricultural tasks (excepting child-rearing, etc. - cf.p.114) showed that women alone were responsible for collecting firewood, fetching water, preparing food, cleaning cooking utensils, milling/grinding, cleaning the house and milking. The allocation of time to tasks which all the women carried out on a regular basis is shown below:

Table 17: WOMEN'S ALLOCATION OF TIME TO NON-AGRICULTURAL TASKS

Activity	Hours/year	% of total
Food preparation	1074	34
Water	528	16
Shopping and collecting vegetables	362	11
Firewood	361	11
Cleaning utensils	317	10
Grinding/milling	246	8
Cleaning house	176	6
Washing clothes	118	4
Total:	3182	100%

The men's contribution to the activities listed above was confined to washing clothes (their own) on an average 55 hours/year and shopping 114 hours/year.

A total of three women and six men undertook work in the area of house-building and maintenance of houses, granaries and cattle-enclosures during the year. The women spent an average 79 hours and the men 54 hours doing such work. Five of the women assisted in herding the household cattle and devoted an average 780 hours during the year to this task. The corresponding figure for two men was 1456 hours. Six of the women milked cattle for 303 hours on average.

Excluding the non-agricultural tasks which only a few women engaged in, the women devoted 79% of their total time in production oriented work to the tasks listed in table 17 above. This indicates that the women spent 8.7 hours/day to non-agricultural tasks and 2.3 hours/day to agriculture. Thus, their workday amounted to a total of eleven hours (excluding child-rearing, etc.).

9 CONCLUDING REMARKS AND RECOMMENDATIONS

While tradition serves to ensure that Kuria women in a situation of social change continue to perform their acknowledged duties as wives, mothers, daughters-in-law, etc., the bias in rural development planning towards cash crops and the emphasis on men as the sole agents of change tend to reinforce the women's subordinate position. In structural terms the relationship between men and women has remained stable while government policies have changed the meaning and function of this relationship. The low prestige attached to "female" tasks in contemporary Kuria households is the outcome of a combination of traditional ideas about the relative subordination of women and of government efforts to promote cash crop cultivation through demonstrating agricultural inputs and crop husbandry to men only.

According to Tanzania's Third Five-Year Plan for Economic and Social Development (July 1976 - June 1981), rural development is to be achieved mainly through an increased input of work in agriculture.[1] It is astonishing to note that the plan does not reveal any awareness whatsoever about the difference in present work inputs by men and women in rural households. In fact, when village leaders are urged to encourage people to work harder the relationship between men and women being what it is today, it is only to expect that the men will command their women to put in even greater efforts rather than responding positively themselves. Our survey indicated that the workday of women amounted to at least eleven hours. Time-studies carried out in other parts of Tanzania give further support to the argument that

1. English edition: First Volume: General Perspectives & Regional Perspectives, Dar es Salaam, 1979, p.iii.

the workload on rual women is excessive.[1] The vast majority of women in rural Tanzania simply have no sparetime why additional work on their part is apt to limit their possibility to satisfactorily attend to other responsibilities, e.g. child-care.

It is imperative for Tanzanian politicians and planners to begin appreciating the possibly negative consequences for women and children of rural development policies. A rural household is not composed of individuals who share the burden of work and returns of labour on an equal basis, nor according to abilities, not to speak of needs. As long as government policies continue to be biased towards cash crops and oriented towards men, thus neglecting the fact that women carry out most of the work with the least returns, the latter will inevitably suffer as will the children they care for.

Greater concern abour women and children in development planning ought not to be reflected primarily in projects specifically targeted at them. The complexity of factors responsible for their situation would render such an approach rather ineffective. Experience from Nyamwigura village shows, for instance, that a focus on women and children through UWT or through nutrition education achieves little since women lack the authority to influence decision-making and allocation of resources.

Therefore, rather than treating women and children separately, rural development administrators at all levels should pay specific attention to negative consequences of projects for these groups in order to be able to take quick compensatory actions.

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1. A survey among households in Bukoba District showed, for instance, that the minimum work-day of Haya women amounted to nine to ten hours. See:
J.Rald & K.Rald, Rural Organization in Bukoba District, Tanzania, op.cit., p.71.

Moreover, the knowledge and experience that rural women possess in agriculture, food handling, medicine, etc., should be looked upon as a decisive force in development efforts.

The selection of measures and projects which might improve the lot of women and children in Nyamwigura village must pay due attention to feasibility considerations. Thus, one can think of many projects which no doubt would prove beneficial, e.g. the supply of clean water close to homesteads, or better access to non-expensive dispensary services. Such projects, however, are rarely targeted at single villages but form part of more extensive regional or district plans. It would therefore by quite meaningless to suggest projects of this kind in relation to Nyamwigura village alone. No less substantial results are more likely achievable through modifications in externally induced projects currently affecting the village, as well as in the organization of village communal work, or in the use of village funds.

To exemplify, a fundamental problem already mentioned is the women's poor participation in village discussions and communal work. While traditions contribute to this effect, the women's continued detachment from village affairs serves to reinforce their subordinate position relative to men. It is evident that a more active involvement of women would necessitate stronger regulations. Since the women refer to lack of experience as a major factor responsible for their poor interest in village meetings, each husband and wife should be requested to attend together. A monetary fine similar to that meted out in case of non-participation in communal agriculture might be imposed. The sexual division of labour renders it unlikely that men would volunteer as caretakers of their children while their

wives take part in communal agriculture. Therefore, village leaders in charge of registering participants should enforce the sharing between husband and wife of this responsibility.

There is much to be achieved through technological improvements applied to tasks commonly handled by women. From time immemorial the women have carried the harvested crops on their heads to their homesteads. The resettlement into villages has made this transportation even more burdensome since the cultivation plots are now located at greater distance. The lack of appropriate transport facilities makes for harvesting to proceed over an extended period of time. In case of rain the crops may be damaged if not brought to the homestead quick enough. The women are also chiefly responsible for carrying agricultural produce to the Tarime market place, which means a full day's excursion each time. The use of ox carts would shorten the period between harvesting and storage and thus make it less risky from a subsistence point of view, besides reducing the workload on women. With the exception of wheels, which may have to be manufactured elsewhere, the villagers should be able to make their own carts under the guidance of the village management technician.

Communal agriculture in Nyamwigura would benefit from a change towards a more diversified production. The dispersed cultivation cycles of various crops would render work less monotonous and the labour force might be divided into smaller teams. Furthermore, the communal cultivation field could be used for demonstrating proper husbandry of crops of high nutritional value but which as yet are no commonly cultivated, e.g. beans, peas and groundnuts.

In order to reduce post-harvest losses, in terms of quantity as well as quality, efforts should be made to improve the traditional storage structures. Since the women are chiefly responsible for food handling, they should become the primary target group for such efforts. However, the men should be involved as well, since they perform tasks towards the construction of granaries allotted to them by tradition. It is important to note that while the UWT branch may be used as an intermediary agent in the mobilization of village women for demonstrations, seminars, etc., the communication between government staff and the villagers must reach beyond the few members of the UWT in order to be effective.

Nutrition education in Tanzania is narrowly targeted at women through MCH-clinics, UWT-seminars and adult education classes. Although a father may bring his malnourished child to the clinic, the mother is usually sent for to be taught rehabilitation measures. The approach is based on the correct analysis that mothers are the primary caretakers of children. Since children, however, often return to clinics with similar symptoms of nutritional disorder, the prevailing approach must be deemed as inappropriate. Contrary to the perspective commonly held by health planners and extension staff, interviews with Kuria women show that they are usually well aware of the nutritional needs of infants. Besides receiving such advice at MCH-clinics, etc., it should be remembered that traditional Kuria ideas and practicies related to infant care emphasize prolonged breastfeeding, stimulation of breastmilk production, measures to prevent a new pregnancy until the last-born child has been fully weaned, etc. However, our observation of household life in Nyamwigura village showed that women very often lack the means to practice the advice given by medical workers. With limited

access to cash and rarely taking part in decisions about the use of household resources, the women are rarely able to buy the nutritious foods suggested or to convince their husbands about the importance of retaining eggs, milk and beans for household use. Thus, not only should agricultural extension services pay more attention to the role of women in peasant agriculture, but nutrition education should involve men as a decisive target group in order to contribute to the improvement of maternal and child nutrition, community health, and so forth. Such an approach would necessitate that nutrition education be extended to village seminars with compulsory attendance.

Our findings from Nyamwigura further point in the direction that the training of traditional medical practitioners, e.g. midwives, would contribute to the improvement of village health and nutrition. This recommendation should be viewed in light of the fact that such specialists will carry out their work regardless of the development and extension of modern health facilities. Discussions with the most renowned midwife in Nyamwigura made it clear that she would welcome such training. The worries she expressed about her old age were primarily a matter of reluctance to attend courses at a far-away hospital. For the training of traditional medical practitioners to be successful, it should be located within the neighbourhood of a few villages so that the participants may return home in the evenings. Moreover, the local language should be used since most elderly people would otherwise be excluded from participation.

Related to this a few words should be said about the on-going training of young villagers as medical auxiliaries to be in charge of village first-aid kits.

In 1978 a mere three out of total twenty-four trainees attending a course at the district hospital in Tarime were women. Yet, it should be obvious to anyone that no village woman would ask the assistance of young men in cases such as childbirth, problems due to circumcision, etc. It is imperative, therefore, to secure increased female participation in such training.