

CONTRIBUTION OF PEASANT MIGRATION TO HOUSEHOLD FOOD SECURITY: A CASE STUDY OF KIDEA VILLAGE OF KIGOMA RURAL DISTRICT, TANZANIA

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Abstract

There is limited information about the contribution of peasant migration to household food security in Tanzania because many studies conducted in the country have put less emphasis on this aspect. This study assessed the contribution of peasant migration to household food security using Kidea Village of Kigoma Rural District. Land ownership status; types of crops grown; food availability and access; post-harvest food management practices; the amount of food harvested and length of time it lasted were used as determinants of food security. Household questionnaire, focus group discussion, physical observation and key informant interviews were used in data collection. The findings show that all respondents had security of land tenure. This enabled more food production. Investment in multiple cropping helped to accommodate risks and uncertainties from unforeseen poor climatic conditions. The reported post-harvest food management practices including food donations and brewing did not contribute to food insecurity since their frequencies and amounts were occasional and small, respectively. A high proportion of respondents reporting adequate and affordable food in the village market imply that exchange between food-surplus and food-deficit households was made possible. In addition, majority of respondents reporting better production of crops at destination than in their places of origin and which lasted to the next harvest imply that households were food secure. However, it was noted that migration to Kidea is more of subsistence than long term investment in economic development.

Keywords: Food security, peasant migration, livelihood diversification

Introduction

There is limited information about the contribution of peasant migration to food security because many studies conducted have put less emphasis on this aspect. Most of the available literature indicates migration as a livelihood strategy by peasants in search for better conditions with little or no mention of its contribution to food security (Deshingkar and Grimm (2004); Green (1996) and IOM (2008). Studies conducted in India, Nepal, Vietnam, Western Kenya and Southern Tanzania indicate that migration involves individuals and households moving either permanently or splitting the location of families to more virgin areas. The current migration in Tanzania as reported by Mung'ong'o (1998); Mwamfupe and Mung'ong'o (2003); Mbonile (1996); and Madulu (1998) is sought for as a survival and income earning strategy following the breakdown of livelihood base in the areas of origin. Despite that fact, less is known about the extent to which such survival strategy ensures food security.

This study used Kidea village of Kigoma Rural District Tanzania as a case study to assess the extent to which such mobility behaviour contributes to food security. Since the late 1980s many areas in this district experienced migration of peasants driven by food shortage. To date no study has been conducted in the district to assess the contribution of this mobility

behaviour to food security. In the absence of specific study, it is impossible to give an assessment of how migration contributes to household food security. Specifically, the study aimed at: (i) assessing land ownership status in the study area; (ii) identifying the types of crops grown and their purposes; (iii) assessing the post-harvest food management practices in the study area; (iv) assessing amount of food produced and the length of time it lasted after harvest and (v) assessing food availability and access in the market.

Findings from this study are crucial for indicating village’s potential in supporting the migrants and an indication of the extent to which migration is a viable coping strategy to overcome food and income insecurities. Since these migration patterns target forest land and other resources including reserved land and water catchment areas, this study will shed light on the extent to which this mobility pattern is achieved at the expense of these resources. The study will therefore, serve as information source for decision- makers and actors involved in management of natural resources.

Main Text

Methodology

Study area

This study was conducted in Kidea village, located in Kandaga Ward in Kigoma Rural District (Figure 1). A village census carried out in 1992 indicated that Kidea had a total population of 1,125. After 10 years, the population grew by about 70% to 3,760 people. The 2010 village census indicated that the village had a population of 6,267. The majority of people in the village are smallholder farmers (2011 pers. Comm. with Village Chairman). The study area receives between 7– 8 months of rainfall and varies between 1000mm and 1,200mm per year. The average temperature ranges from 12⁰C to 20⁰C in June/July to as high as 32⁰C to 35⁰C in August/September (URT, 2008).

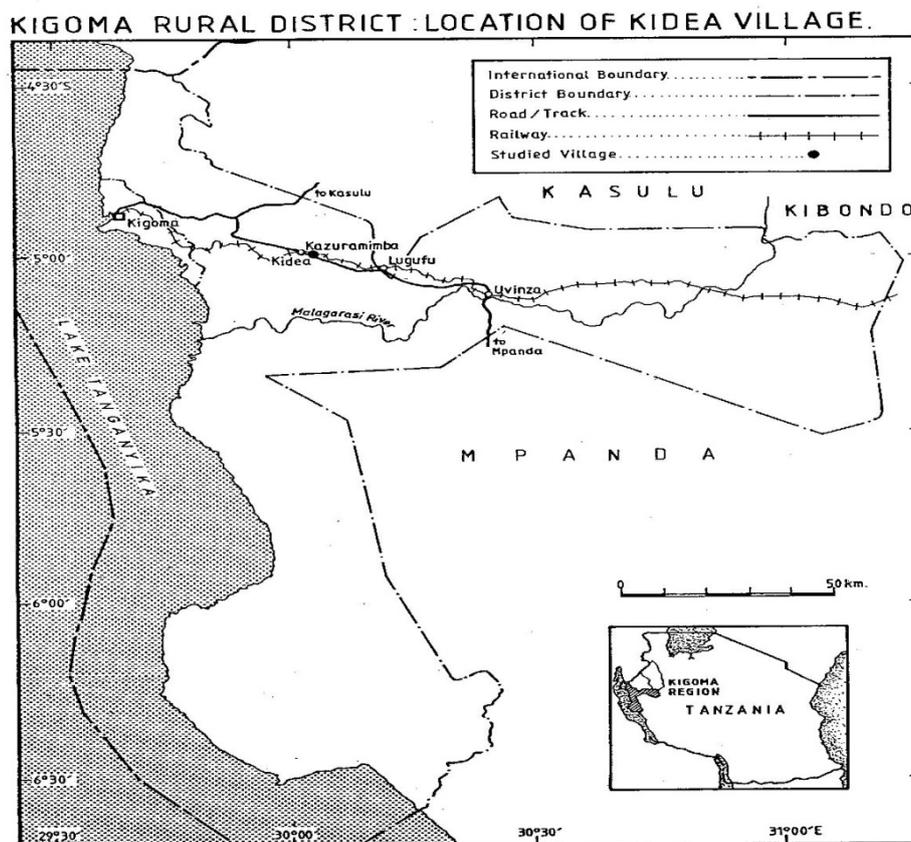


Figure 1: Location of Kidea village

Source: Geography Department, University of Dar es Salaam, 2011.

Data Collection

Secondary data collection was done mainly through literature review to establish what has been studied and what is still missing. Academic and research institutions, regional, district and village offices as well as the internet were used as sources of secondary data. Primary data collection involved the use of household questionnaire administered to heads of households, focus group discussion with 10 purposively selected people, and key informant interviews with the District Agricultural and Livestock Development Officer, a food trader, a farmer and a pastoralist. The methods enabled acquisition of information about knowledge, perspectives and attitudes of people about the impact of their migration decision to food security. The study village had a total of 885 households, unevenly distributed in 5 sub-villages. In each sub-village, a household formed a unit of study. A simple random sampling was used to pick households for study. Seventy five heads of households, equal to 8.5 % of the total migrant heads of households were considered representative for this study.

Results and Discussion

Food security at individual, household and national levels can be measured by many factors including food availability and access; food production; the duration harvested food lasts and the nutritional quality of food consumed (Maxwell & Smith, 1992). With regard to this study household food security was measured using five indicators that are discussed in the following sections.

Land ownership Status

Access to, size, and mode of land acquisition are some of the most important indicators of household food security. When land is available in good quantity and quality and if other production factors are available, households will naturally get the opportunity to produce more food for consumption and market (USAID, 2007). The study found that all respondents owned enough land with about 76% of the respondents owning between 0.5 and 19 acres, and 24% owning between 20 and 79 acres (Table 1). None of the respondents reported to have inadequate land. Land acquisition took several forms including land purchase (53.3%), government allocation (21.3%), acquiring unoccupied land (12.0%), inheritance (5.3%), renting (5.3%) and land sharecropping (2.7%). A small proportion of respondents who rented land were those who had newly migrated to the area and were financially unable to purchase land by that time.

Table 1: Respondents' land ownership status

Mode of Land Acquisition	Number of respondents (n = 75)	%
Purchase	40	53.3
Inheritance	4	5.3
Renting	4	5.3
Government allocation	16	21.3
Acquiring unoccupied land	9	12.0
Land sharecropping	2	2.7
Size of the Land Owned (in acres)	Number of respondents (n = 75)	%
0.5 – 9	34	45.3
10 - 19	23	30.7
20 - 29	9	12.0
30 - 39	3	4.0
40 - 49	2	2.7
50 - 59	2	2.7
60 - 69	1	1.3
70 - 79	1	1.3

Source: Field Survey, 2011

The implication of this finding is that migrants in the study area benefit from possessing secure land tenure. By having secure land tenure, and if other factors were kept constant, implies that majority of migrants had a greater likelihood of engaging in food production because they could maintain rights over the land for the whole duration of investment.

Farmers' perception of the probability that he or she could maintain rights over the land for the duration of the investment is an important variable in achieving food security. The higher the perception of tenure security, the higher would be the farmers expected returns to the investment (Maxwell and Wiebe, 1999). Whereas reduction or outright loss of access to land leads to a reduction in income and food, increased security of tenure in productive resources enables more efficient and productive agricultural production (ibid).

Types of crops grown and their purposes

This study established that all respondents grow a combination of crops at the same time. Maize, cassava, beans, groundnuts and potatoes are the commonly grown crops in the study area. Of the 75 respondents interviewed, 84.0% grew maize, 65.3% cassava and 66.7% grew beans for both food and cash purposes (Table 2). About 84% of the households reported to grow potatoes. On the other hand, sunflower and tobacco are grown by 8.0% and 2.7% of the respondents, respectively.

Table 2: Types and purposes of crops grown by respondents (%)

Proportion of Crops Grown in Percentage (N = 75 in each case)									
Purpose	Maize	Cassava	Beans	G/nuts	Potatoes	Banana	Peas	S/flower	Tobacco
Food	16.0	34.7	28.0	36.0	84.0	24.0	46.7	0.0	0.0
Cash	0.0	0.0	0.0	0.0	0.0	2.7	1.3	8.0	2.7
F & C	84.0	65.3	66.7	34.7	6.7	8.0	4.0	0.0	0.0
D/grow	0.0	0.0	5.3	29.3	9.3	65.3	48.0	92.0	97.3
Total	100	100	100	100	100	100	100	100	100

Key: F & C= Food & Cash; D/grow = don't grow; G/nuts = groundnuts; S/flower = sunflower

Source: Field Survey, 2011

The advantage of multiple cropping with regard to food security in the study area is twofold. First, it ensures the harvesting of other crops in the event that the main crops (maize and cassava) fail. In this case, investment in crop diversity is used as a coping strategy to accommodate risks and uncertainties from unanticipated unpleasant climatic conditions by spreading it across a variety of crops with different climatic capabilities. This contributes to creating vigorous food crop system that can withstand a wider range of environmental changes (Soul et al., 2009). Second, apart from being used for household food, a portion of certain food crops can be sold to cater for other household requirements as well as investing in farming to increase production.

Most of the crops grown in the area form a major portion of the staple food and have highest per capita consumption rate in the local diet in the study area in particular, and Tanzania, in general (URT, 2008). It was reported that when some or all of these crops fail due to whatever reasons, such as poor rains and pests, most of the households in this village complain that they do not have enough food. This is an indication that these crops are important in sustaining household food security.

Post-harvest Food management Practices

Post-harvest food management (PHFM) practices have great implication on the level of household food security. When food is harvested, it is normally put under different uses depending on the type of food grown, household food requirements and the culture of a place. PHFM practices including food donations and uncontrolled use of food in ceremonies can

reduce the amount of food meant for consumption, thus, endangering both availability and sustained access to adequate food by household members (Abebe and Hundie, 2006).

With regards to how food crops are used after harvest, this study found that household consumption was the main use of food crops while local brewing was the minor. Of the 75 respondents, 96% of them reported to use crops mainly for food while 4% reported to use crops for both household food and local brewing (Figure 2). Majority of respondents reported that local brewing is predominantly carried out using a certain variety of banana which is not suitable for food. In addition, almost all respondents reported occasional incidences of food donations to neighbours and relatives to cater for wedding, funeral and other ceremonies in and outside the village.

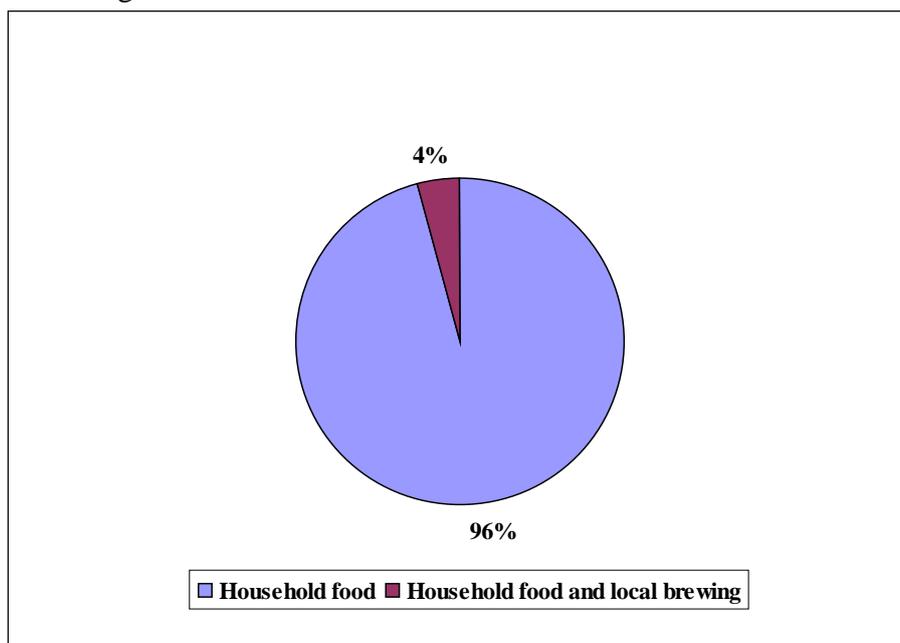
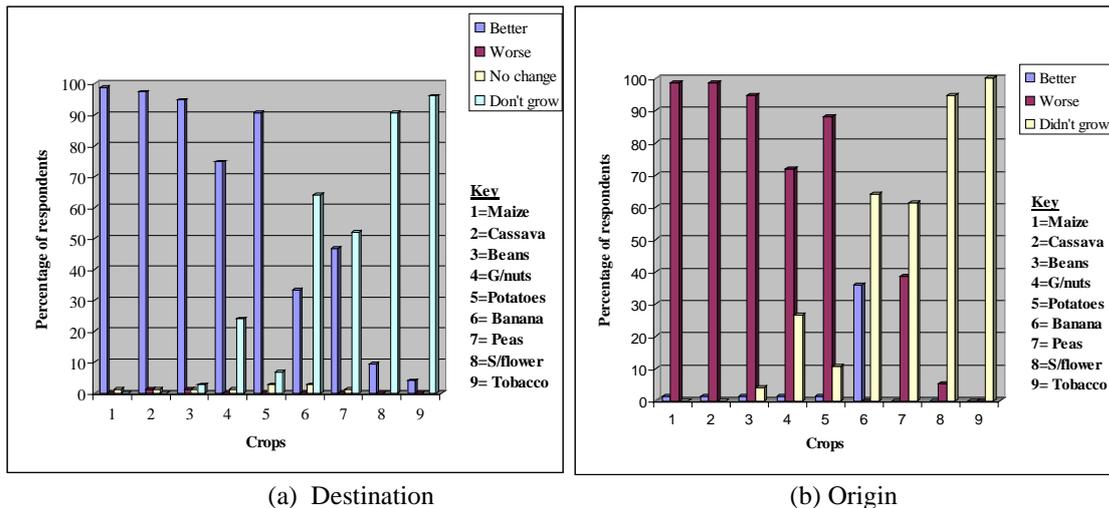


Figure 2: Different uses of harvested crops in Kidea (%)
Source: Field Survey, March 2011

The mere fact that local brewing is predominantly carried out using a certain variety of banana which is not suitable for food; implies that local brewing had no negative impact on food availability and access. In view of the fact that the amount of food donated was small and the incidences of food donations were occasional it can therefore, be argued that local brewing and food donations did not negatively affect household food security.

Amount of Food Crops Produced and Length of Time Food Lasts after Harvest

Almost all respondents were not able to report the amount of food produced per growing season, partly due to poor record keeping. However they were able to compare the amount of food production between their areas of origin and destination. The proportion of respondents reporting better production of maize, cassava, beans, groundnuts and potatoes at the place of destination ranged between 70% and 100%, with maize and cassava accounting for 98% each, beans 95%, groundnuts 71% and potatoes 88% of the total respondents (Figure 3a). On the other hand, more than 90% of the respondents reported worse situation of maize, cassava, beans, groundnuts and potatoes at their places of origin (Figure 3b). Production of banana, peas and sunflower, though reported by a few respondents was better at destination than at origin (Figure 3a).



(a) Destination (b) Origin
 Figure 3: Situation of crop production at destination and origin
 Source: Field Survey, March 2011

The length of time food lasts before the next harvest is a commonly used measure of food security. This study found that 49 respondents (64%) produced food that lasted to the next harvest contrary to 29 respondents (36%) who produced food that did not last to the next harvest. Of the latter case, 20% had food lasting for three quarter of a year, 12% for half a year and 4.0% for quarter of a year (Figure 4). It was also found that some of the respondents who reported to run short of food before the next harvest are those who sold part of it soon after harvest in order to get money for other household requirements including education and medication.

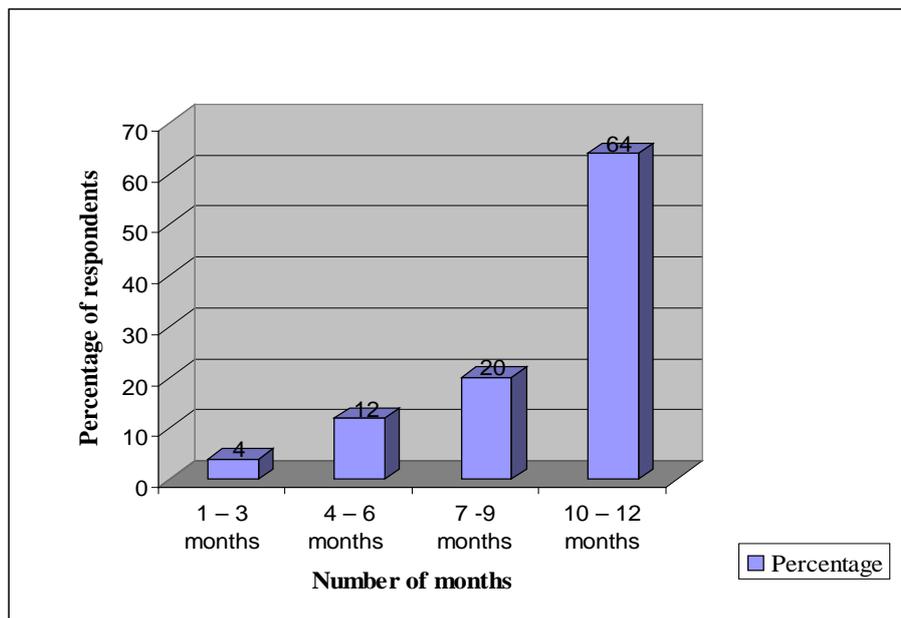


Figure 4: Length of time food lasts before next harvest
 Source: Field Survey, March 2011

The fact that two third of the households produced food that lasted to the next harvest while only one third produced food that did not last to the next harvest is an evidence that majority of households were food secure. Households which produced food that did not last to the next harvest employed a combination of coping strategies including casual labouring, borrowing from neighbours, collection of wild foods, engaging in petty business and

handicraft making to bridge food deficit gap. This implies that households can still maintain stable availability of and access to food in spite of low food production (Arun, 2006).

Food Availability and Access in the Local Market

Availability of the main staple and non-staple food in the market is one of the dimensions of food security. Accordingly, respondents were asked to state whether or not there were adequate staple food crops in the markets and whether the prices were affordable or not. About 98.7% of the respondents reported adequate food crops and affordable prices. A field visit to the village market revealed that the price for 1 Kg of un-milled maize ranged from Tanzanian Shillings (Tshs) 150/- to 200/- while the price for one bundle of dried cassava (equivalent to 5 Kgs when milled) was Tshs.1000/-. During harvest period this price could go as low as Tshs. 500/- per bundle. Prices for beans followed almost similar patterns. Other crops such as groundnuts were usually not sold on retail basis but kept in stores waiting for food traders who buy in bulk.

Depending on the purchasing power, availability of all required food crops in the market ensured households' access to food. When food is available in the markets at an affordable price, the exchange between food-surplus and food-deficit households is also made possible and allows households with different income levels within a livelihood to access adequate food (Braun, 2007).

Conclusion

Migrants' overall perception on the impact of migration on household food security involved comparison of the overall situation of food production, availability and access between the areas of origin and destination. Accordingly, a high proportion of respondents applauding improved access to more and productive farmland, better crop harvest and affordable food prices imply that migration to the study area had positive impact on household food security. Better performance of the commonly grown crops in the area of destination than at places of origin, as reported by majority of respondents, is yet another proof of the positive impact of migration on household food security. The observed multiple cropping system for either food, cash or both purposes helps in creating a strong food crop system that can endure a broader range of environmental vagaries thus, ensuring crop harvest. Coping strategies including casual labouring and borrowing from neighbours which are adopted by food-deficit households is also an assurance to food security as these practices help to bridge the food deficit gap before the next harvest.

Based on the above findings this study recommends that concerted efforts be taken by the regional or district government to curb the persistent food insecurity in the district. To achieve this purpose, migrants in their destinations as well as non- migrants in their places of origin should be assisted with farming inputs in order to maximize crop production per unit area and achieve both food security and environmental conservation. If unchecked prolonged cultivation on a limited area coupled with increasing population in the study village is likely to degrade the soil. Depletion of soil fertility is likely to induce movements to other places which are still virgin thus, achieving food security at the expense of the environment

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