

**RESETTLEMENT: A WAY TO ACHIEVE FOOD SECURITY? A CASE STUDY OF CHEWAKA
RESETTLEMENT SCHEME, OROMIA NATIONAL REGIONAL STATE, ETHIOPIA**

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ABSTRACT

This study utilized a case study approach to assess the performance of Chewaka resettlement scheme in attaining food security. Primary data were collected using pre-tested questionnaires, focus group discussions, key informant interviews and personal observations while secondary data were mainly from reports from various government departments and organizations involved in resettlement. Study results showed that beneficiaries of Chewaka resettlement scheme had relatively larger and productive landholdings than in their areas of origin. While access to food generally improved, some households still faced food shortages and suffered from food shortage related illnesses. Major challenges that they faced included lack of access to technology such as improved farm implements, improved seed varieties, use of fertilizers, provision of extension services and irrigation facilities. The study concluded by noting that the resettlement program had the potential to improve the food security situation of resettlers if only it were fully supported by all stakeholders.

Key words: Resettlement, food security, food utilization, coping strategies, Ethiopia.

INTRODUCTION

In Ethiopia, like most Sub-Saharan African countries, agriculture is the backbone of the economy. However, over the past half century, the sector has been affected by persistent droughts, increased population pressure and widespread land degradation, among other factors, often leading to food insecurity. To address the food security situation, the country initiated resettlement programs which saw people being moved from marginal areas to more suitable ones (Dejene, 1990; Dessalegn, 1997; Gebre, 2001; 2004).

According to World Food Program (2005), the concept of food security relates to three dimensions: physical availability; economic and physical access; and utilization. Food availability is the amount of food that is physically present in a locality through domestic production, commercial imports and food aid. The aspect of food access involves household's ability to acquire adequate amounts of food through home production, purchase, barter, gift or borrowing. As for food utilization, it has two components - households' use of food to which they have access; and individuals' ability to absorb nutrients. It is the stability of these dimensions that attains sustainable food security (Maliwichi et al., 2012). The issue here is: to what extent have these dimensions been addressed especially in the current resettlement operations?

As background information, in Ethiopia, government initiated resettlement programs can be traced back to the Imperial Regime in the 1950's. The aim was to improve the livelihood of households from overcrowded, environmentally degraded, and drought prone areas that as a result experienced food insecurity. The early programs were not successful as they were ill-planned, lacked stakeholders' participation and poorly funded (Dessalegn, 2005; Gebre, 2005).

Subsequently, during the *Derg* (military) regime in the mid-1970s, the programs were carried out on massive scales but evaluative studies criticized them for causing human suffering rather than improving their livelihoods (Mengistu, 1992; Kassahun, 2000).

The current government, aware of the pitfalls of its predecessors on the implementation of the resettlement program, adopted a highbred version whose major objective was to ensure food security at household level (Federal Democratic Republic of Ethiopia [FDRE] (2002). The program saw the resettling of 440,000 households during the period 2003 and 2005. This resettlement program is the focus of this evaluative study. Despite having a number of studies done on the impact of the program on food security, the results seem inconclusive (Plan for Accelerated and Sustainable Development to End Poverty [PASDEP], 2006). This study complements these and other studies by shedding more light on the performance of the program in attaining food security.

Some of the enquiries of interest in this work are: What is the nature of the current resettlement program and to what extent has it addressed the food insecurity situation of the resettlers? What challenges are encountered in the implementation of the program and the coping strategies designed to mitigate these? To answer these and other questions, this study utilizes a case study approach to assess whether resettlement is a panacea to food security in Chewaka resettlement area. Chewaka was selected for study mainly because it is the largest resettlement scheme in the Regional State of Oromia and reflects most of the key elements entailed in the current resettlement program.

The study's specific objectives are to:

- describe the nature of the food security situation in Chewake Resettlement Scheme
- identify challenges facing the resettlers and their coping mechanisms
- suggest alternative/additional measures that can be instituted to improve the resettlers' food security situation.

This study adopts the conceptual framework designed by Hoddinot (1999) which focuses primarily on household and individual level food security. The framework considers household food security situation as defined by three interrelated components: availability, access, and utilization. Each component has its own sub-component that can either directly or indirectly affect one of the three dimensions.

The framework further highlights seven interdependent determinants of food security: *environment*, that is, the physical, social and policy environment; *resource endowments* such as labor, capital and other assets that can produce food income to the household; *food production* for own consumption, cash crop production, other income generating activities; *prices* that determine what level of consumption can be supported by a level of income; *consumption* relating to those goods that affect household and individual food security and all other goods; *goods that affect food security* such as those directly related to health care (e.g., medicines), and those that affect the public health environment; and, *feedback effects* from Non Governmental Organizations (NGOs) and Private Voluntary Groups (PVGs) likely to be involved in community participation and hence can be effective in finding sustainable solutions as well as in mobilizing community resources to address food insecurity aspects (ibid). The stability of the three dimensions, their interrelationships and interdependences, provide a framework used in this study.

THE STUDY AREA

Chewaka *wereda* (district) is one of the 258 *weredas* in the Oromia National Regional State, Ethiopia, and is located 600 kilometers west of Addis Ababa (Figure 1). It has 26 administrative *kebeles* (villages). The total land area of the *wereda* is about 52,227 hectares, and the population is estimated to be 78,783 (Oromia Food Security Bureau [OFSB], 2005).

Chewaka lies in the moist “*Weynadega*” agro-climatic zone and experiences both high temperatures and rainfall. The average temperature is 24⁰C. The rainfall of the *wereda* is between 1,200-1500 mm per annum and has an altitude ranging from 1,600-2,000 above sea levels. Red brown soils and such trees as *Acacia*, *Cordia* and *Ficus* tend to characterize the zone. It has two crop production seasons - *Meher* (main) and *Belg* (*short rain*) (Oromia Disaster Prevention and Preparedness Bureau (ODPPB), 2003).

The *Meher* season is that of the long rainy season, which occurs from June to September. Generally this rainy period provides ideal growing conditions for the longer maturing crops which can be harvested during September to February. On the other hand, the *Belg* season refers to small but timely rainy season, which normally occurs from February to May. Short maturing crops are grown during this period for harvest during June or July (ODPPB, 2003; Central Statistical Agency [CSA], 2009).

Beneficiaries of Chewaka resettlement scheme were drawn from east and west Hararghe of Oromia Region. These were selected from highly degraded areas where agricultural production was poor and hence experienced chronic food insecurity. Most of them relied heavily on food aid for most of the year (PASDEP, 2006).

RESEARCH METHODOLOGY

The study employed both purposive and stratified random sampling techniques. With regard to purposive sampling method, two out of a total of 7 resettlement sites were selected for study. Four *kebeles* (villages) – two successful and the other two problematic – as per the assessment by the resettlement’s finance and economic bureau - were considered for selection. Hence, Chokorsa (successful) and Tokuma Harar (problematic) were selected in resettlement site one (1) while resettlement site two (2) had Dameksa (successful), and Missoma Gudina (problematic). About 14% of the resettlers from each of the selected *kebeles* were selected for study using stratified random sampling. In all, a total of 1070 households: Chikorsa – 321; Tokua Harar – 250; Dameksa – 285; and Missoma Gudina – 214 were selected. The unit of analysis was household head.

Both primary and secondary data sources were used. Primary data were collected using household survey questionnaire, focus group discussions (FGDs), key informant interviews and personal observations. The questionnaire solicited information on food security situation, household assets, aspects of food access, availability and utilization, and coping strategies and was completed by heads of households or their spouses.

Two FGDs, one for females and the other for males were formed in each study *kebele*. Checklists which solicited information on food production, means of production, opportunities, challenges and coping strategies employed at both household and community levels were prepared.

Regarding key informants, these were mainly officers from Chewaka resettlement scheme, Oromia Regional State and Ethiopian Disaster Prevention and Preparedness. Check lists were also prepared and these solicited information on criteria for selecting food insecure households, reallocation of people, planning, executing, monitoring and administering the resettlement, provision of basic social services, construction of basic infrastructure, organizational structure of the resettlement site, and problems faced and coping mechanisms by responsible bodies.

For this study, the researchers also used direct observation. Direct observation is an important indicator or mechanism to crosscheck data gathered through other methods and supports the whole information through eyewitness, hence an important tool for triangulation.

Secondary data were based on statistics from Ethiopian Disaster Prevention and Preparedness Agency (DPPA), Ministry of Finance and Economic Development (MoFED) and local authority records

Quantitative data were analyzed using descriptive statistics with the help of Statistical Package for Social Science (SPSS) Version 15. As for qualitative data, open-ended questions were summarized from tape records and diary and analyzed thematically.

RESULTS AND DISCUSSIONS

Food Security Situation

Government's resettlement program aimed at improving agricultural productivity through moving people on a voluntary basis from land deficient and highly degraded areas to areas with relatively ample fertile land. The strategy aimed at reducing food insecurity through improved access to land (PASDEP, 2006). The beneficiaries of Chewaka Resettlement Scheme, which are the focus of this study, came from east and west Hararghe, Oromia Region. According to focus discussions, the area was overcrowded and some areas were severely degraded with the majority of new household formations rendered landless or shared small family lands to eke a living.

Agricultural production

In this study, holding refers to all the land and livestock kept which is used wholly or partly for agricultural production and is operated as one technical unit by one person alone or with others, without regard to title, legal form, size or location (CSA, 2009). Survey respondents were asked for their opinion on the new landholdings in Chewaka Resettlement Scheme. The results show that the majority expressed satisfaction and were pleased that they had access to land and some were in possession of certificates of ownership from the government, which guaranteed them security of tenure. The magnitude of those with land ownership certificates tended to vary from *kebele* to *kebele*: Chokorsa 248 (77.2%), Tokuma Harar 200 (80%), Demeksa 185 (65%), and Missoma Gudina 150 (70%). Certificates for other respondents were still being processed.

The survey results further show that the land holding sizes range from 1 to 3 hectares with a mean holding size of 2 hectares per household. The average land holding is more than that of their area of origin and the national average of 1 hectare and 0.75 hectare, respectively (ODPPB, 2003; CSA, 2009). However, FGDs raised concerns that their land holdings were still small and do not satisfy their needs. The plot sizes do not take into consideration the size of the households as spelt out in the program implementation manual (PASDEP, 2006). As a result, some beneficiaries with larger families rented land to supplement theirs.

Survey respondents revealed that the new land holdings were less degraded than the previous ones with 44% of the respondents in Chikorsa rating degradation low to very low, 51% in Tokuma Harar, 70% in Demeksa and 73% in Missoma Gudina. While most survey respondents acknowledged that they were allocated virgin land where they had to clear the forests

first, their concern was that their new land holdings are not suitable for traditional staple crops they used to grow in their area of origin.

Focus group discussions revealed that in their previous small holdings, they used to grow a wide variety of crops - *teff*, wheat, maize, *khat*, coffee, and different types of vegetables and fruits. However, in the new holdings, because of agro-ecological limitations, crops were limited mainly to sorghum, maize, soya beans, sesame and coffee. Sorghum is the major staple crop in all areas.

Irrigation facilities are minimal in the new areas: 93%, 50%, 80%, and 90% of survey respondents from Chokorsa, Tokuma Harar, Demeksa and Missoma Gudina respectively reported the absence of irrigable water as the major factor for not using irrigation. Other factors cited for not using irrigation include lack of irrigable land, financial constraints and lack of knowledge on the activity.

Crop production in the resettlement scheme, though high compared to the areas of origin, still continued to be impacted by low levels of use of modern technology. Survey results indicated the dominance of human labor and *dongora* (form of a folk with iron tombs and a long wooden handle, used for digging land). Only respondents from Chokorsa and Tokuma Harar (44% and 40% respectively), where there is a relatively low prevalence of *trypanomiasis*, reported using oxen for ploughing.

Focus group discussions revealed that the prevalence of *trypanomiasis* and other animal diseases, coupled with lack of veterinary services in the area had rooted out most of the animals. To overcome drought power problems, some households often exchange their labor for draft power from other households through a traditional arrangement known as *ye-finchit*. This is an ox-labor exchange arrangement whereby an ox-owner's land will be ploughed for three days and then that of the laborer is ploughed for one day. While this sounds a good arrangement, it reduces the number of days a farmer works on his holding hence affecting production. None of the respondents reported using improved technology such as tractors or other mechanized implements for tillage.

FGDs further revealed that few resettlers apply fertilizers to their crops because of price inhibitions. They attributed the high costs of the input to the poor road network: there are no all-weather roads and the dry-weather roads are few and poorly maintained. The resettlement scheme is also devoid of development agents to offer advice on improved land management practices and new technologies. On the other hand, it was also revealed that some resettlers resist using new technologies such as improved seed varieties and fertilizers because they fear that they are not suitable for their soils.

On marketing of the produce, survey results showed that the majority of the respondents - 178 (55.45%) in Chokorsa, 164 (65.6%) in Tokuma Harar, 178 (62.45%) in Demeksa, and 101 (47.1%) - sale their products in Missoma Gudina. Sorghum is the major crop that is marketed. Reasons given for selling the crops varied and included satisfying basic needs, medication, education, pay loans (often borrowed from relatives or neighbors), and purchase of agricultural inputs and tools among others. The majority of those who reported not selling indicated that they had not produced enough.

One key informant highlighted that low access to markets affect resettlers' bargaining power relating to pricing of their commodities in the absence of farmers' union and cooperative associations. In the absence of suitable storage facilities that can handle their commodities during bargaining periods, resettlers cannot keep their produce for long as they deteriorate and hence lose value. It was suggested that the remedy for this problem was expanding and encouraging efficient food marketing and trade. Government should promote intra- and inter-regional trade and facilitate opportunities for traders to maximize their returns from their efforts by improving roads and marketing infrastructure.

Another key informant revealed that in the previous area of living, off-farm employment opportunities played a significant role in complementing household food requirements. It was highlighted that except for a few crafting activities, there are limited off-farm employment generating activities in Chewaka. It was suggested that well-designed and appropriate off-farm employment programs for small and medium trade activities should be introduced. Such an approach would further enhance the livelihoods of the resettlers.

Food access, acquisition and utilization

Food access refers to the household's ability to regularly acquire adequate amounts of food through a combination of their own stock and home production, purchase from market, transfer food in the form of loans, gifts or borrowing and 'other' channels like food - for - work and daily labor.

Survey results indicate that the major source of food acquisition is home production. Respondents grow staple crops such as sorghum, *teff*, wheat, to name some, most of which are consumed in the home with the excess sold on the market. However as noted earlier, some households do not grow enough to see them to the next harvesting season and hence they have to acquire their staple food from other sources.

The second major source of food acquisition is purchasing from market. All respondents indicated that they frequently purchase wheat and *teff* - their major staple crops in their previous areas – from the market as they do not grow these in the resettled areas due to agro-ecological reasons and type of soil. Other frequently purchased staple food items especially in Damaqsa and Missoma Gudina include sorghum and maize either weekly or monthly, Basics such as salt, sugar and edible oils are also frequently purchased in all *kebeles*.

Respondents reported that since 2006, they had not received any direct food aid from the government or any other body even though some households may experience food deficiency. Most of the food deficient households rely mostly on loans from relatives and/or neighbors. This is particularly true in Damaqsa and Missoma Gudina where 129 (45%) and 100 (46.67%) respectively reported receiving staple food loans of sorghum and *teff* from relatives and/or neighbors. Food-for-work and daily labor were regarded as other channels of food acquisition in Damaqsa and Missoma Gudina.

Survey results further show that the majority of resettlers use money budgeted for other purposes such as loan repayment, agricultural inputs and school expenses for children to purchase food. In the absence of such sources, they often end up mortgaging their assets starting from the less preferred assets such as radios and other electronic goods to fixed assets such as

land. Such desperation is echoed by Abdulaziz Terefe, a 45 years old male resettler in Missoma Gudina, who highlighted some of the fall-back strategies they resort to during pre-harvest season food shortage.

"...in some circumstances, I am ashamed of selling my clothes, particularly those of my children so as to get money to buy them some food. As for me I will spend the day praying and addressing *Saa'lat* (Muslim Prayer), but for my children the only option is to mortgage clothes as I do not have any other alternative source of money to feed them.."

Access to food tends to vary by season. In this study, efforts were made to correlate food availability with seasons. Table 1 below shows that during the period January - April most resettlers reported their food situation as either food normal or in excess. Chokorsa and Tohuma Harar reported no occurrence of food shortage in these four consecutive months.

Table 1: Seasonality of food availability

Chekorsa Kebele: %age of survey households reporting.												
Food Seasonality	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb
Food Shortage	0%	0%	22.22%	89.98%	84.44%	95.50%	88.89%	91.11%	86.67%	28.89%	0%	0%
Food Normal	68.89%	75.56%	71.11%	11.11%	15.56%	4.44%	11.11%	8.89%	13.33%	60%	60%	66.67%
Food Excess	31.11%	24.44%	6.67%	0%	0%	0%	0%	0%	0%	0%	40%	33.33%
Tokuma Harar Kebele: %age of survey households reporting.												
Food Shortage	0%	0%	28.57%	77.14%	94.29%	97.14%	91.43%	97.14%	91.43%	48.57%	0%	0%
Food Normal	62.86%	74.29%	68.57%	22.86%	5.71%	2.86%	8.57%	2.86%	8.57%	37%	66%	48.57%
Food Excess	37.14%	25.71%	2.86%	0%	0%	0%	0%	0%	0%	14%	34%	51.43%
Demeksa Kebele: %age of survey households reporting.												
Food Shortage	5%	10%	40.00%	85.00%	95.00%	100.00%	100.00%	100.00%	95.00%	45.00%	8%	3%
Food Normal	70.00%	75.00%	60.00%	15.00%	5.00%	0.00%	0.00%	0.00%	5.00%	30%	63%	65.00%
Food Excess	25.00%	15.00%	0.00%	0%	0%	0%	0%	0%	0%	25%	30%	32.00%
Missoma Gudina Kebele: %age of survey households reporting.												
Food Shortage	7%	27%	43.33%	86.67%	96.67%	100.00%	100.00%	100.00%	96.67%	30.00%	47%	30%
Food Normal	86.67%	73.33%	56.67%	13.33%	3.33%	0.00%	0.00%	0.00%	3.33%	27%	33%	53.33%
Food Excess	6.67%	15.00%	0.00%	0%	0%	0%	0%	0%	0%	33%	20%	16.67%

However, from May – October, some households experience serious food shortages, though with some variations by area. The situation is worse in Demeksa and Missoma Gudina where during the months of August – October, all resettlers experience food shortage

Food intake utilization

According to Webb and von Braun (1994), enquiring about less preferred food intake shows households' food availability and acceptability. Another important aspect of food security is consuming enough amounts and types of food. If a household is food secured, it can take enough food both in terms of quantity and quality. Quantity and quality also relate to household's food intake in terms of amount, kind and frequency.

In this study, respondents were asked whether they were consuming the type of food they preferred. The majority of the survey respondents indicated that they did not consume the kinds of food they wanted while a few did, but not always. Focus group discussions revealed that in the area of origin, resettlers grew and consumed such staple crops as *teff* and wheat, which could not do well in Chewaka due to differences in agro-climatic conditions. Resettlers rely mostly on sorghum which is the major crop of the new area. The change in taste from their traditional food crops explains why most settlers do not like the new staple crop. Further probing during FGDs revealed that what resettlers consider as preferred food items are foods having better calorific value and good quality nutrients such as wheat.

Focus group discussions further revealed that food containing high nutrients like meat, eggs, milk and milk products, fish, vegetables and fruits are hardly consumed by resettlers with the exception of on holidays where few of them reported that they consume some meat.

Table 2: Number of meals per day, in Chewaka

Number of Meals per Day	Chokorsa		Tokuma Harar		Demeksa		Missoma Gudina	
	Count	%age	Count	%age	Count	%age	Count	%age
One	-	-	-	-	-	-	-	-
Two	41	12.7	43	17.2	86	30.1	78	36.4
Three	280	87.3	207	82.8	199	69.9	136	63.6
Total	321	100	250	100	285	100	214	100

Table 3: Number of meals per day, in area of origin (Hararghe)

Number of Meals per Day	Chokorsa		Tokuma Harar		Demeksa		Missoma Gudina	
	Count	%age	Count	%age	Count	%age	Count	%age
One	178	55.4	129	51.6	57	20	71	33.1
Two	107	33.4	86	34.4	86	30.1	93	43.4
Three	36	11.2	35	14	142	49.9	50	23.5
Total	321	100	250	100	285	100	214	100

Survey respondents were further asked the frequency of their meals per day in the resettlement scheme as compared to their area of origin. Tables 2 and 3 summarize the results. The Tables indicate that the number of meals per day improved in Chewaka where they reported having at least one meal a day. Variations were observed from *kebele* to *kebele*. However, FGDs highlighted that the staple food consumed in the resettlement scheme, sorghum, was less preferred to *teff* and wheat consumed in the area of origin. Satisfying daily meals in terms of shortages were met through food-for-work, borrowing from relatives, neighbors and local shops, an indication that reinforces the above finding that not all resettlers are food secure.

Health aspects

Food shortage may result in starvation and other food related health problems (Federal Democratic Republic of Ethiopia, 2004). Survey respondents were asked if household members had suffered from food shortage related illnesses in the last 12 months. The results indicate that the majority experienced food shortage health related problems and that the magnitude varied from *kebele* to *kebele*: Chokorsa 243 (75.7%), Tokuma Harar 200 (80%), Demeksa 235 (82.5%) and Missoma Gudina 207 (96.7%).

Most of the affected respondents: 178 (73.3%) of resettlers in Chokorsa 164 (65.7% in Tokuma Harar, 62.5% in Demeksa, and 63.33% in Missoma Gudina reported that their members visited health institutions for treatment. Lack of vitamins, malnutrition, and low food intake and food contamination were cited as some of the major health related problems. The few that did not visit health institutions for treatment cited the inaccessibility of such facilities and shortage of drugs as the major reasons for not doing so.

One of the few who identified himself as Tsebaye, a male resettler at Demeksa expressing improvement of livelihood since he came to Chewaka had this to say:

“In Chewaka, I have enough food for myself and family. I am helping some resettlers who are seriously malnourished...”

This is an indication that some resettlers are benefiting from the resettlement program, though few.

Resettlers' perception on their food security situation

Survey respondents were further asked about their perception of food security in the resettlement scheme. Figure 4 summarizes the responses.

Table 4: Resettlers' perception on their food security situation

Resettlers' Perception	Chokorsa		Tokuma Harar		Demeksa		Missoma Gudina	
	Count	%age	Count	%age	Count	%age	Count	%age
Better than before	78	24.3	64	25.6	50	17.5	43	20.1
No difference	100	31.2	79	31.6	93	32.6	50	23.3
Lower than before	143	44.5	107	42.8	142	49.9	121	56.6
Total	321	100	250	100	285	100	214	100

Survey results showed that the majority of the resettlers perceive their food security situation as being no different or even lower than what they had in their area of origin. Key informants revealed that reason for the low perception of the resettlement areas by some resettlers was that they were nostalgic about the availability of their traditional staple foods such as wheat and *teff* in their areas of origin which cannot be grown in the resettlement schemes because of agro-ecological reasons.

FGDs further revealed that even though they are nostalgic about their areas of origin, the majority of the resettlers have no intention of moving back. They expected the government to facilitate in solving most of the problems such as access to markets, provision of social services and other infrastructural facilities.

CONCLUSION

The resettlement program has the potential to improve the food security situation of resettlers if it is fully supported by government and other stakeholders. Beneficiaries of Chewaka resettlement scheme were afforded larger and relatively productive landholdings resulting in them being able to produce more than in their area of origin, hence improving the food security situation of the majority of the resettled households. However, the program did not go concomitantly with the access to the necessary technology for farm production such as improved farm implements, improved seed varieties, use of fertilizers, provision of extension services and the related infrastructure as should have been the case. These aspects made farmers not realize the full potential of the program. However, these are some of the challenges faced by any similar new programs (Mberengwa, 2010) and with time, and government taking the necessary corrective measures, the program will be a boon.

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