

**EFFECTS OF LABOR REQUIREMENTS ON WIDOWS' PARTICIPATION IN SMALL SCALE
FARMING, NYARIBARI MASABA SUB COUNTY, KISII COUNTY - KENYA**

^{1*} **Lydia Nyamoita Mangoa**
mangoa10@gmail.com

^{2**} **Josephine Obonyo**
wandagojosephine@gmail.com

^{3***} **Doris Nyokangi**
dnyokangi@gmail.com

^{1, 2, 3} *Institute of Women, Gender and Development Studies, Egerton University. P.O. BOX 536-20115, Egerton, Kenya*

Abstract: *Agriculture sector supports livelihoods of close to 1.5 billion people worldwide and is critical in eradication of hunger and extreme poverty. Despite its vital importance, the sector is highly susceptible and sensitive to climate change and variability where small scale farmers are disproportionately affected, as a result of high dependency on natural resources, poverty, and inadequate capability to adopt new livelihood strategies. The aim of the study effects of labor requirements on widows' participation in small scale farming in Nyaribari Masaba sub county, Kisii County. The study used structural functionalism theory. It used descriptive survey research design. Sample size of 144 respondents was obtained using proportionate sampling procedure. Questionnaires and interview schedules were used to collect data. The data was analyzed qualitatively and quantitatively. Findings of the study were presented using pie-charts, bar graphs and frequency tables. The finding indicated that majority of respondents didn't hire laborers because of their financial instability. The study recommended that the government need to come up with customized free, accessible and flexible loans for small scale farmers who are widows.*

Keywords: *Effects; Labor; Widows; Participation; Small Scale Farming*

Background Information

Agriculture sector is vital in eradication of extreme poverty and hunger and supports livelihoods of close to 1.5 billion people worldwide living in smallholder households in rural areas (World Bank, 2008). Despite its vital importance, the sector is highly sensitive and susceptible to climate change and variability (Van de Steeg, Herrero, Kinyangi & Thornton, 2009; Schlenker & Lobell, 2010). Small scale farmers are disproportionately affected, as a result of poverty, high dependency on natural resources and inadequate capability to adopt new livelihood strategies (Osbaahr & Viner, 2006).

The agricultural sector supports local livelihoods and contributes enormously to national Gross Domestic Product (GDP) in most countries in Africa (Mendelsohn, Dinar & Dalfelt, 2000). The contribution of agriculture to GDP varies in different countries but studies indicate an average contribution of 21% in the region (Mendelsohn, Dinar & Dalfelt, 2000). In Kenya, agriculture contributes above 24% of GDP and supports livelihoods for approximately 82% of the small scale farmers in the rural areas (IFPRI, 2004). Notwithstanding the crucial role Agriculture plays in Africa, the sector suffers from inadequate adoption of high yielding technologies, climate largely dominated with droughts, floods and effects of climate change, lack of proper mechanization among other issues (Mendelsohn, Dinar & Dalfelt, 2000).

Globally, there is a growing recognition of the importance of gender equality on issues of access to productive resources and the role of both men and women in agricultural development (Jayne, Mather & Mghenyi 2010). Generally, agricultural sector has been considered by most people as a masculine dominated world. According to Ololade and Olagunju (2013) in most communities in Sub-Sahara Africa women are forbidden to inherit resource such as Land. In addition, research has shown that women and men's differential access to credit, access and control labor and ability to enhance agricultural productivity more so in Sub-Sahara Africa resulted from socially emanated gender-specific constraints that are built into the socioeconomic, local institutions and socio-cultural norms and practices in their domains (Ololade and Olagunju, 2013).

Labor can be looked at in terms of hours or number of laborers needed to get the farm work carried out. How many laborers that are available is very important in determining the types of activities possible and how intensively the land owned by widows can be worked (i.e., the more intensive, the more labor is needed (Drimie, 2012). For example, some crops are more labor-intensive than others (e.g. horticultural crops as compared to cereal crops). The number of laborers available can affect whether peak activities can be done, and on time. For example, late preparation, sowing, weeding or harvesting can have an adverse effect on yield (Amaducci, 2015). The management of labor, the farm equipment available, as well as the use of draught animals and mechanization, greatly affects farm activities and the quality and quantity of production. (Matson, Parton, Power & Swift, 1997).

In small-scale farms, it is often seen as an advantage to have family members working on the farm because they do not need so much supervision, and are prepared to work long hours in a way that hired hands are not (Matson et al, 1997). However, whether family members can work on the farm depends on how productive it is, as well as whether (better) opportunities for off-farm employment exist. In sum, widows face a high set of restrictions, high set of responsibilities, and limited endowment (Amaducci, 2015). This, in turn, constrains a widow's capability to live a healthy and fulfilling life, particularly during the early stage of widowhood. Evidence from this study, supported by other research, indicates that widows suffer from high levels of material deprivation, limited job opportunities, social isolation, social exclusion, limited social mobility and poor physical health (Matson et al., 1997).

Literature Review

Labor is one of the most important components out of four factors of agriculture production. Even though India has the second largest man power in the world, all sectors of the economy have been affected by the scarcity of labor and the impact being felt more in the agricultural sector. Laborers constitute a vital input in agricultural production, but they are migrating to different parts of the country for earning a better livelihood, adding to the existing imbalance between labor demand and supply of laborers (Deshingkar, 2013).

Production in the agricultural sector requires both labor input and technological development. Also an aging this production needs technology to make up for physical deficiency (Drucker, 2017). But on the other hand, the opportunity cost of agricultural labor input can be large if there are non-farm payrolls. This will therefore make them to invest in using machinery instead of labor input. The accumulated knowledge and skills help farmers maximize the efficient use of agricultural input, such as pesticides and fertilizers, as well as labor input (Altieri, 2002).

According to the Ministry of Special programs (2012) access to non-farm employment is also mediated by social rules and regulations which often have a strong gender bias. In southern Tanzania, female headed households and widows living alone are generally excluded from the patronage system. They cannot control

access to rural non-farm employment and are forced into marginal activities such as harvesting of natural resources or even prostitution (Seppala, 2016).

Typically, women especially the widows have been absent from the labor market for years and are at a severe disadvantage with respect to occupational and educational demands of current employment. In addition, they are often confronted with pervasive and subtle discrimination by employers who do not want to hire older women. Particularly older ones, are unable to support themselves, many are partly or wholly dependent on the assistance of relatives and public funds and still many widows live in economic circumstances that are far from satisfactory. Widows who have obtained employment are heavily concentrated in the low paying jobs. Less than one-tenth of all widows are employed in technical or professional occupations (Goffee & Scase, 2015).

Structural Functionalism Theory

Structural Functionalism is a sociological theory that endeavors to explain why society functions the way it does by concentrating on the relationships between the different social institutions that exist in society such as religion, law, government, education etc. It was developed by Emile Durkheim, Radcliffe Brown, Bronislaw Malinowski and Herbert Spencer (Jones, (2007).

Structural Functionalism is an understanding of society that disposes that social systems are collective channels to satisfy social needs. Therefore, for social life to continue existing and develop in society several activities need to be carried out to ensure that certain needs are satisfied. In this model, individuals produce the required goods and services in the different institutions and roles that correlate with the norms of the society (Allaire & Firsirotu, 1984). According to Structural Functionalist thought, maintaining the status quo of women being subordinate to men allows the hierarchies of the society to function smoothly since everyone in the society knows their respective positions in the hierarchy. As a result of this, society functions well the gender stratification that exists and such a stratification is acceptable and most don't put effort to change it. This example illustrates that Structural Functionalism is generally seen as being supportive of the status quo (Friedkin, 2004).

Structural Functionalism also views society as constantly trying to be at a state of equilibrium, this suggests that there is a persistent need within human societies to stay together (Perrin, 2003). Social equilibrium is achieved in society when there is absence of conflict and social inequality. But society consists of hierarchies of structures that are very distinct from one another and conflict is naturally prevalent within such social structures. This then leads to social inequalities especially gender inequality where men tend to be in places of power and enjoy better access to resources than women (Sjoberg, 2013).

Women will therefore seek to compete for the resources enjoyed by their male counterparts and this leads to a rise in conflict. Widows on the other hand will want to be like the widowers. They will want to enjoy the same benefits as widowers especially on land, credit and labor access. This causes them to form their own sub-system for their own survival. This leads to groups such as the widow associations and widow self- help groups. This sub- system therefore grows to become a structure/function in society. Such sub systems can either be formal (supported by the legal systems) or informal (people take matters into their own hands and decide their own future). The new sub- system is then likely to depend on the existing systems for support such as religious and administrative systems.

A structural-functional approach on food production especially among widows can focus on the role of the agricultural industry to the nation’s overall economy and how this has changed over time from manual labor farming methods to modern mechanized farming method of production. Widowed persons fall within a specific social group and their response to events in life is definitely shaped by the meanings they construe, not just from their status as widows/widowers, but also from the association they create from people’s comments and actions towards them

Methodology

It used descriptive survey research design. Sample size of 144 respondents was obtained using proportionate sampling procedure. Questionnaires and interview schedules were used to collect data. The instruments were pilot tested in Nyaribari- Chache sub-county to determine reliability which was found to be 0.783 which is above the threshold of 0.7 this is an indication that the instruments were reliable. The data was analyzed qualitatively and quantitatively. Findings of the study were presented using bar graphs and frequency tables.

Results and discussion

Socio-Demographic characteristics of the Respondents

Distribution of Respondents by Age

Table 1: Distribution of Respondents by Age

| Years | Frequency | Percentage |
|----------------|------------|------------|
| 18-30 years | 6 | 4.28 |
| 31-40 years | 18 | 12.86 |
| 41-50 years | 60 | 42.86 |
| Above 50 years | 56 | 40 |
| Total | 140 | 100 |

This shows that majority of the participants were above the age of 40 years. this study re-affirms a study according to Heltberg and Tarp, (2012) that found out that the agricultural sector is made up of almost entirely small-scale and subsistence farmers, and majority of the land owners in rural areas are between the age of 40 and above. Generally, this study shows an aging trend in the labor force. This is consistent with a study by Lin and Deng, (2012) who found out there is a worrying trend of an aging labor force which this may affect the output of the agricultural practices if the aging producers will continue to engage in agricultural production.

Distribution of the Respondents by Education Background

Table 2: Education background

| Education Level | Frequency | Percentage |
|---------------------|------------|------------|
| No formal schooling | 35 | 25 |
| Primary school | 65 | 46.43 |
| Secondary school | 25 | 17.86 |
| Tertiary colleges | 9 | 6.42 |
| University | 6 | 4.29 |
| Total | 140 | 100 |

This showed that most of the participants in the study area had only attained at least primary school education or no formal schooling. This means that they do not have sufficient capacity to understand and apply farming principles.

Labor Access

This sought to establish the effects of labor availability to the widows and how it affects their participation in small scale farming, Nyaribari Masaba.

Labor Availability

15.7% strongly disagreed and 21.4% disagreed while 39.3% agreed and 23.6% strongly agreed that labor is available once it’s required. This therefore means that a slightly higher number of participants 62.9% agree that labor provision is readily available once it’s required.

Table 3: Labor Availability

| | Frequency | Percentage |
|-------------------|------------|------------|
| Strongly Disagree | 22 | 15.7 |
| Disagree | 30 | 21.4 |
| Agree | 55 | 39.3 |
| Strongly Agree | 33 | 23.6 |
| Total | 140 | 100 |

The lack of access to labor services can be attributed to the financial instability of the widows. This means that they may lack the money to pay those that provide the labor services. But whenever they are able to afford the labor services, they can easily access them as they are laborers that are easily available. The participants paid laborers according to the number of hours worked per day as agreed between them and this made the labor services considerably cheap.

Household Labor Provision

The study found out that 75% of the participants disagreed that labor is not mainly provided by the household members, 25% of the participants agreed to labor being mainly provided by the household members. Labor is provided by casual laborers mostly and are paid their wages daily or as they may agree with the widows.

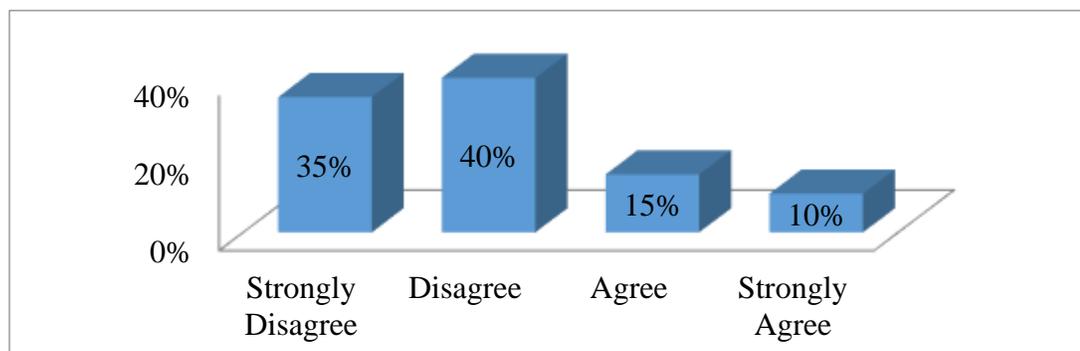


Figure 1: Labor is mainly provided by household members

A by-product of agricultural labor trends has been that widow-run farms have increasingly absorbed the kind of labor they might formerly have employed a laborer to do. This has reflected difficulties securing reliable labor (particularly when farms are all vying for labor at busy times), and financial pressures to maximize profits in a context where returns have become increasingly insecure. The interviewees also mentioned concerns over health and safety liability as a deterrent to employing permanent staff and a motivation to rely upon family labor. This kind of arrangement, however, could be problematic when farms had simultaneously increased

their stock sizes, increasing the potential workload, and as farming families got older and their health became more vulnerable. It also increased the pressure upon farmers to retain mastery of a variety of farming skills, some of which they may dislike.

The problem of access to farm labor poses a serious challenge to farmers, especially in the study area where farming is largely un-mechanized. However, this situation varies with gender due to gender-differential access to production resources. Since men and women access farm labor in different ways, they are likely to be affected differently by labor costs and constraints. There are various ways through which widows can access farm labor. The type of labor available to a farmer can determine the type of crops grown, the size of land cultivated and, by extension, the farmer’s productivity.

Cheap Labor

The participants responded to if they feel that labor access is cheap and adequate in the area. 5.7% strong disagreed and 6.4% disagreed while 55.7 % agreed and 32.2% strongly agreed.

This therefore can be deducted that the labor being provided was cheap and easily available thus enabling farming for the widows to be easier.

Table 4: Cheap Labor

| | Frequency | Percentage |
|-------------------|------------|------------|
| Strongly Disagree | 8 | 5.7 |
| Disagree | 9 | 6.4 |
| Agree | 78 | 55.7 |
| Strongly Agree | 45 | 32.2 |
| Total | 140 | 100 |

This is contributed to by the availability of labor services from family and other cheap forms of labor from friends and the family.

“Chamas” and Labor

The participants responded to whether their “chamas” help acquire cheap and affordable labor. 39.2% strongly disagreed, 30.7% disagreed that “chamas” help acquire cheap and affordable labor since labor acquisition is not done by “chamas”, 8.6% were not sure, 12.9% agreed and 8.6% strongly agreed that widows’ “chamas” help in acquiring cheap and affordable labor. This therefore means that a higher number of the participants 78.4% said that widows’ “chamas” do not help in acquiring cheap and affordable labor.

Table 5: Widows' “chamas” help acquire cheap and affordable labor

| | Frequency | Percentage |
|-------------------|------------|------------|
| Strongly Disagree | 55 | 39.2 |
| Disagree | 43 | 30.7 |
| Not Sure | 12 | 8.6 |
| Agree | 18 | 12.9 |
| Strongly Agree | 12 | 8.6 |
| Total | 140 | 100 |

Farm labor encompass what is sometimes distinguished as traditional labor, management, and other overhead time, and also includes labor acquired through farm labor contractors and all semiskilled services used in farming practices which include bookkeepers, building repair and mechanics for machinery. Even when a farmer makes a contract for a month (or year) with a group of workers for a certain number of hours of labor, there is generally considerable flexibility on what and when work is to be done. (Bishop and Cain, 2013). Thus, labor that might sometimes seem to be provided by women in the “chamas” is of great value to the widows since it is done in a round robin fashion. The widows move from one “shamba” to the next.

Contentment with Labor Services

53.6% of the participants were content with labor services they receive from those they hire to provide it, while 21.4% agreed and 25.0% strongly agreed that they are content with the labor services from those they hire. This therefore means the widows split on their experiences as to whether they were contented with the labor services they were receiving.

Table 6: I am contented with labor services I receive from those I hire

| | Frequency | Percentage |
|-------------------|------------|------------|
| Strongly Disagree | 29 | 20.7 |
| Disagree | 46 | 32.9 |
| Agree | 30 | 21.4 |
| Strongly Agree | 35 | 25.0 |
| Total | 140 | 100 |

The reasons for this are complex, reflecting not only growing mechanization, work intensification, and farmers and younger people leaving the industry, but a diminished labor force as former laborers have looked elsewhere to achieve maximum return for their labor, (Dimova 2012). In Nyaribari Masaba contract labor was particularly difficult to acquire, widows and particularly farmers’ sons often combined working on their own farm with seasonal contract work. Another strategy was to operate more informal systems of labor exchange with neighboring farms; amongst the farms case studied, this was a more common practice in Nyaribari Masaba.

Discussion

Effects of Labor Requirements on Widows’ Participation in Small Scale Farming

The study found out that 75% of the participants disagreed that labor is not mainly provided by the household members, 25% of the participants agreed to labor being mainly provided by the household members. Labor is provided by casual laborers mostly and are paid their wages daily or as they may agree with the widows.

Majority (53.6%) of the participants were content with labor services they receive from those they hire to provide it, while 21.4% agreed and 25.0% strongly agreed that they are content with the labor services from those they hire. This therefore means the widows split on their experiences as to whether they were contented with the labor services they were receiving.

From the study, it can be deducted that the labor being provided was cheap and easily available thus enabling farming of the widows to be easier. But despite the labor being significantly cheap, the widows have to source for it by themselves since they lack help from other such as the “chamas”. Also the study results show that that there is a higher number of participants (55.6%) agree that labor provision is readily available once it’s required.

According to the study results, the relatives and family members provide the best alternative to provide labor in the farm since mostly it is unpaid and thus very popular in Nyaribari Masaba. Most of the unpaid help for the widows comes from close family members such as their own children and a few of the in-laws.

Conclusion

It can be concluded that majority of the widows don't hire laborers. According to the majority of widows they are not financially capable to hire laborers in their farms since they consider them expensive. However some of widows who are financially stable hire laborers to increase their production. Labor is one of the factors of production which involves family and non- Family. Labor includes those that are rated on daily or hourly basis. Labor input is usually measured in man- days or sometimes man-hours, which represent the input of work of an average man in a working day or hour.

References

- Allaire, Y., & Firsirotu, M. E. (1984). *Theories of organizational culture*. *Organization studies*, 5(3), 193-226.
- Altieri, M. A. (2002). *Agro ecology: the science of natural resource management for poor farmers in marginal environments*. *Agriculture, ecosystems & environment*, 93(1-3), 1-24.
- Amaducci, S., Scordia, D., Liu, F. H., Zhang, Q., Guo, H., Testa, G., & Cosentino, S. L. (2015). *Key cultivation techniques for hemp in Europe and China*. *Industrial Crops and Products*, 68, 2-16.
- Bishop, S. L., & Cain, A. C. (2013). *Widowed young parents: Changing perspectives on remarriage and cohabitation rates and their determinants*. *OMEGA--Journal of Death & Dying*, 47, 299-312. Retrieved from <http://dx.doi.org/10.2190/N50W>
- Deshingkar, T. (2013). *Labor Scarcity – Its Immensity and Impact on Agriculture*. *Agricultural Economics Research Review Vol. 24 (Conference Number) 2011 pp 373-380*.
- Dimova, R., (2012). *Off-farm Labor Supply and Correlated Shocks: New Theoretical Insights and Evidence from Malawi*. *University of Manchester and IZA, Bonn*.
- Drimie, S. (2003). 'HIV/Aids and Land: Case Studies from Kenya, Lesotho and South Africa'. *Development Southern Africa*, 20 (5), 647-658. Available at: <http://www.informaworld.com/smpp/content/content=a713618534~db=all>.
- Drucker, P. (2017). *The age of discontinuity: Guidelines to our changing society*. *Routledge*.
- Friedkin, Noah E. 2004. *Social Cohesion*. *Annual Review of Sociology*. 30:409-25.
- Goffee, R., & Scase, R. (2015). *Corporate Realities (Routledge Revivals): The Dynamics of Large and Small Organisations*. *Routledge*.
- Heltberg, R., & Tarp F. (2012). "Agricultural supply response and poverty in Mozambique." *Food Policy* 27, no. 2(2012): 103-123.
- IFPRI. (2004). *Ending Hunger in Africa: Prospects for the Small Scale Farmer*. *International Food Policy Research Institute, Washington DC*.
- Jayne, T. S., Mather, D., & Mghenyi, E. (2010). *Principal challenges confronting smallholder agriculture in sub-Saharan Africa*. *World development*, 38(10), 1384-1398.

- Jones, S. S. (2007). *Functionalism of mind and functionalism of society: The concept of conscience and Durkheim's division of social labor. Durkheimian Studies, 13(1), 85-104.*
- Kingiri, A., & Nderitu, S. (2014). *Assessment of extension and advisory methods and approaches to reach rural women—examples from kenya—. MEAS Evaluation Series.*
- Matson, P. A., Parton, W. J., Power, A. G., & Swift, M. J. (1997). *Agricultural intensification and ecosystem properties. Science, 277(5325), 504-509.*
- Mendelsohn, R., A. Dinar, & A. Dalfelt (2000b). *Climate Change Impacts on African Agriculture. Preliminary Analysis prepared for the World Bank. Washington, District of Columbia.*
- Ministry of Special programmes (2012). *The National Employment Guarantee Act (NREGA) Operational Guidelines. Third Edition. Government of Tanzania. Government printer*
- Ololade, R. A., & Olagunju, F. I. (2013). *Determinants of access to credit among rural farmers in Oyo State, Nigeria. Global Journal of Science Frontier Research Agriculture and Veterinary Sciences, 13(2), 16-22.*
- Osbahr, H., & Viner, D. (2006). *Linking Climate Change Adaptation and Disaster Risk Management for Sustainable Poverty Reduction. Kenya Country Study. A study carried out for the Vulnerability and Adaptation Resource Group (VARG) with support from the European Commission.*
- Perrin, Robert G. (2003). *The Functionalist Theory of Change Revisited. The Pacific Sociologist Review 16, 1.*
- Schlenker, W., & Lobell, D. (2010). *Robust Negative Impacts of Climate Change on African Agriculture. Environmental Research Letters, 5(1), 1-8.*
- Seppala, P. (2016). *The politics of economic diversification: re-conceptualizing the rural informal sector in southeast Tanzania. Development and Change 27, 557-78*
- Sjoberg, G. (2013). *Contradictory Functional Requirements and Social Systems. Sage Publications, Inc.*
- Van de Steeg, J., Herrero, M., Kinyangi, J., & Thornton, P. (2009). *The Influence of Climate Variability and Climate Change on the Agricultural Sector in East and Central Africa—Sensitizing. The ASARECA Strategic Plan To Climate Change.Report 22.ASARECA (Association for Strengthening Agricultural Research in Eastern and Central Africa), Entebbe, Uganda, and ILRI (International Livestock Research Institute), Nairobi, Kenya.*
- World Bank. (2008). *World Development Report 2008: Agriculture for Development. Washington, DC: The World Bank.*