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THE EFFECTIVENESS OF FOOD AID ON FOOD AVAILABILITY AND FOOD STABILITY AMONG SMALL SCALE PASTORALIST COMMUNITIES IN TANA RIVER COUNTY, KENYA.

By
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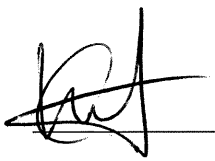

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AN ABSTRACT OF THE THESIS OF

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Food aid is one of the principal methods in which food is made available during the times of food insecurity. Food aid, both for short-term emergency relief and development-oriented programs is a major component of food security in developing nations. Sub-Sahara Africa receives a third of all food aid in the world. Food aid in Africa is massive and controversial and is associated with reducing long-term food availability and food stability, making households even more insecure. It is asserted that food aid has an extramarginal effect, causing households to displace their sources of food and income in anticipation of food aid; creating insufficient food availability and hence affecting overall food stability.

Long-term provision of aid to people in need of assistance is associated with the fear of creating a dependency syndrome. The primary concerns are that beneficiaries will lose the motivation to work to improve their livelihoods after receiving benefits, or that they will deliberately reduce their work efforts to qualify for the transfers. While there is effectively collective agreement as to the desirability of the goal of reducing acute and chronic food insecurity, there remains substantial dispute as to how effective food aid is in achieving the goal of reducing or eliminating long term food insecurity.

Furthermore, policymakers are pushing for better approaches that can be used to reduce dependency and tackle the adverse effects of food dependency. Donor agencies have expressed keen interest in shifting from food distributions to cash assistance or more sustainable methods. Specific alternatives are being put forward to food aid such as Cash-

Based Transfer (CBT) and Food for Work (FFW). Cash transfers are a social protection mechanism to reduce the most impoverished households' vulnerability to shocks and build human capital by smoothing consumption and sustaining expenditure on education and social welfare.

This thesis explores the dynamics surrounding food aid and its effectiveness on food security. Two dimensions of food security food availability and food stability are measured and studied to find out whether they are adversely affected by food aid. This research also sought to ascertain whether the dependency syndrome indeed exists among food aid beneficiaries. The Thesis considered the case of Tana River County, Kenya.

A total of 630 households were sampled in three villages of which one treatment village that does not receive food aid. Key interviews and focus groups were also conducted for triangulation of findings. Three scales are used in this research: food availability scale, Food Insecurity Experience Scale (FIES), and Coping Strategy Index (CSI). The food availability scale, which is comprised of three major drivers- household characteristics, off-farm income or livelihood sources of food and crop production - is used to measure food availability at a household level. The FIES and CSI are used to determine household food stability.

The results of this research show that food aid does not displace food sources or induce insufficient food availability among beneficiaries in the communities of Tana River, Kenya that were considered. The study also finds that food aid had no effect on food stability in the villages as food aid is often considered unreliable and insufficient. This finding contradicts numerous research studies and findings that indicate food aid

perpetuates dependency by creating short time or long-time inadequate food availability and food instability in the household level or both.

In conclusion, people in the community studied depend less on food aid than is often assumed by many in academia and relief work. According to this thesis, there is little evidence that food aid undermines initiative, or that even food aid delivery is efficient enough for people to depend on it. If indeed there is negative dependency due to food aid, better options as to what assistance should be delivered remain to be explored.

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LIST OF ABBREVIATIONS

CBT	Cash-Based Transfer
CERF	Central Emergency Response Fund
CHH	Child Headed Households
CSA	Climate-smart agriculture
CSI	Coping Strategy Index
DEC	Dietary Energy Consumption
DES	Dietary energy Consumption
DRR	Disaster risk reduction
FAO	Food and Agriculture Organization of the United Nations
FFW	Food for Work
FHH	Female Headed Households
FIES	Food Insecurity Experience Scale
FFW	Food for Work
HPG	Humanitarian Policy Group
IDP	Internally Displaced Person
IFAD	International Fund for Agricultural Development
IPC	Integrated Food Security Phase Classification
NDMA	National Drought Management Agency
SDGs	Sustainable Development Goals
UNHCR	United Nations High Commission of refugees

WFP- World Food Programme

WHO World Health Organization

CHAPTER

1: INTRODUCTION

Food security has been the centerpiece of food and agricultural policies since the beginning of human life. Food security was aggravated by the food crises of the 1970s and more recently in 2007 and has received prominence from all sectors. Food security is mostly an outcome of what Amartya Sen called entitlements, or the set of alternative commodity bundles that allow people to access food, enshrined in broader structures of political economy, citizenship, and social contract (Wenner, 2017). The four dimensions of food security are; food availability, food access, food stability and food utilization. This research will analyze how food aid affects food stability and food availability while answering the big question of whether food aid creates a system of dependency among the beneficiaries, popularly known as 'dependency syndrome.'

Food aid bolsters food availability in the short term but could have an adverse effect in the long run if it becomes a substitute for food production or trade. Food Stability, on the other hand, looks at the access to food periodically, nutritional status of the food utilized, weather conditions, political (in)stability, or economic factors (unemployment, rising food prices) may have an impact on food security (FAO,1996). There are two types of food insecurity; chronic food insecurity and transitory food insecurity. Food aid should address transitory food insecurity which is short term and temporary and occurs when there is a sudden drop in the ability to produce or access enough food to maintain a good nutritional

status (FAO 2008). Transitory food insecure is relatively unpredictable and can emerge suddenly. Hence food aid addresses these shortages.

Food aid, both for short-term emergency relief and programs are a major component of food security in developing nations. During the 1990s, Sub-Sahara received a third of all food aid delivered in the world (Broussard, Dercon, and Somanathan 2014). Long term provision of aid to people in need of assistance has been associated with the fear of creating a dependency syndrome. According to the HPG report, in many emergency contexts, aid agencies hesitate to provide food and other aid for an extended period of times because it may cause 'dependency' (Harvey and Lind, 2008). Dependency is more than semantic because it affects and influences decisions about the levels of assistance, and what type of aid is given to the people.

The primary concerns are that beneficiaries will lose the motivation to work to improve their own livelihoods after receiving benefits, or that they will deliberately reduce their work efforts to qualify for the transfers. While there is effectively collective agreement as to the desirability of the goal of reducing acute and chronic food insecurity, there remains substantial dispute as to how effective food aid is in achieving that goal (Barrett 2008). There is a growing concern that food aid undermines livelihood initiatives and perpetuates a cycle of dependence on aid among the beneficiaries. On the opposite side of the spectrum, there are sentiments that the whole debate on dependency is mere rhetoric that is not profoundly rooted on ethnographic research and stem from the preoccupation of disincentive of food aid while ignoring a whole myriad of positive aspects that food aid has (Barrett, 2008).

Furthermore, Non-Governmental Organizations are pushing for better approaches that can be used to reduce dependency and tackle the negative effects of food dependency (Margolies and Hoddinott 2012). Donor agencies have expressed strong interest in shifting from food to cash assistance. Certain alternatives are being put forward to food aid such as Cash-based Transfer (CBT) and Food for Work (FFW). Cash transfers are a social protection mechanism to reduce the poorest households' vulnerability to shocks and build human capital by smoothing consumption and sustaining expenditure on education and social welfare (Fisher et al. 2017). Cash-based Transfers represent a paradigm shift in poverty reduction. The CBT is usually long term or short term 'emergency safety net.' CBT is usually broadly based, covering a significant population that is living in poverty. Cash allows beneficiaries to choose to buy what they need most including schooling and health-related expenditures (Margolies & Hoddinott, 2012a). Cash gives beneficiary households the opportunity to make their own decisions about what they need and enables them to buy what is appropriate for them (Kebede 2006).

According to some circles, there is little evidence that relief undermines initiative, or that food aid delivery is efficient enough for people to depend on it. If indeed there is negative dependency due to food aid, better options as to what assistance should be explored.

This paper seeks to answer the question of whether food aid leads to dependency syndrome, creating a cycle of food insecurity as beneficiaries reduce their livelihood activities of food aid and what the best alternatives that could be adopted to curb food insecurity in the Tana River County in Kenya. The next chapter looks at the different views

on food aid dependency and theoretical frameworks that are paramount in analyzing these topics.

CHAPTER

2: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Food aid

Preserving food security at the household and national levels is the main priority for governments trying to avoid chronic food insecurity. To guarantee food security, governments have adopted numerous strategies including efforts to increase production (often with an explicit goal of food self-sufficiency), government intervention in markets, public distribution of food and maintenance of national food security stocks. Food aid, both for short-term emergency relief and food aid programs that help address medium-term food ‘‘deficits’’, is often a major component of food security strategies (del Ninno, Dorosh, & Subbarao, 2007).

Food aid has many definitions across the spectrum of policy makers, academics and humanitarian organizations. Food aid can defined as ‘international sourcing of concessional resources in the form of, or for the provision of food (Burchi & Turtechi, 2010, 32). This means that food aid can be a commodity aid granted as cash flow or exchanged for food. Its basic tenets are that it is provided by a foreign government or entity on a concessional basis. There is a difference between food aid and food assistance, where food assistance describes any intervention intended to address hunger in response to enduring food problems or short-term crises. Food assistance is different from food aid because it can be financed either at the international and/or national levels and does not

necessarily require that the donor purchases food commodities for the affected (Burchi & Turtechi, 2010). Food aid was first introduced as a cooperation tool in 1954 by the USA, with a goal of easing food insecurity in the world. For many years it was the only method of addressing food insecurity (Tabor, 2002). However, it is considered now as one of the many tools for addressing food insecurity. This is because the discourse of food security has evolved.

Following a shift in the food security discourse, the role of food aid has also changed. Supporters of food aid view it as an indispensable tool in meeting the needs of hungry people. There are three types; First, relief food which is delivered in times of crises to the people. Secondly, project food aid is targeted to specific groups as part of a longer-term development project and lastly Programme food aid is food provided directly by the government to the population (Ballard, T.J., Kepple, A.W., Cafiero, 2013)**.**

2.2 Relief dependency

Broadly speaking, dependency is identified in four terms; First, relief risks creating a dependency mentality and syndrome, in which people continually expect assistance. This undermines initiative at the community and individual levels. Secondly, relief threatens local economies, creating a continued need for relief assistance and trapping people in ongoing, chronic dependency on outside assistance. Thirdly, dependence on external assistance is one of the core features of extreme poverty, associated with a sense of shame or defeat. Lastly, dependency of governments at local or national levels, warring parties or aid agencies on relief resources (Harvey and Lind, 2008).

Crises represent extreme levels of vulnerability and risk; in a sense, therefore, dependency is a defining feature of humanitarian action. When shocks undermine a household's ability to meet their subsistence need, some form of transfer is required. The question is whether the aid will be positive or negative, or whether the consequences of the transfer will be positive or negative (Harvey and Lind, 2008).

Views of dependency are often linked to a belief system among aid workers that recipients are not only lazy or uncooperative but are also trying to cheat the system, translating as too much aid being given.

In some situations, dependency on external assistance is enforced by state laws. This is the case where refugees are denied employment or even freedom of movement. The extent of dependency on external aid among refugees or (Internally Displaced Persons) IDPs is pegged mainly on the policies of host governments. Political will is, therefore, mainly a considerable factor that needs to be addressed for refugees to be self-reliant. The contrast associated with the stigmatization of food aid as compared to other forms of relief is astonishing. It is generally accepted to be dependable on health care or education either in relief or as a development project, whereas it is not acceptable in the case of essential welfare provision to alleviate (Harvey and Lind, 2008).

2.2.1 Food aid and dependency arguments

Dependency syndrome or negative dependency is a general term that is not clearly defined (Harvey and Lind, 2008). One of the most popular ways of interpreting it is based on who is dependent on aid (Aschale, Hilhorst, & Uffelen, 2012). In this regard, analysis of dependency syndrome is classified and defined in two broad categories. The first is

'beneficiary dependency,' which refers to the dependency of local people who receive food aid for survival (Aschale et al., 2012). The second refers to the dependency on the entire aid apparatus, which includes the government, NGOs, as well as donor agencies, as being dependent on relief assistance for their existence (Lind & Jalleta, 2005). This paper deals with the first type of dependency syndrome. Dependency syndrome or negative dependency is therefore, used to describe a condition of intent to receive aid and lack of initiative in pursuing other livelihood options, such as small-scale agriculture or wage labor (Harvey and Lind, 2008). Dependency can be defined as when an individual, household or community cannot meets its immediate basic needs without external assistance (Barrett, 2008).

Dependency syndrome has some basic assumptions that underpin its usage. These include dependency is largely accentuated as negative and should be avoided; it is regarded as undermining livelihoods of the beneficiaries; it lacks a development approach; encourages poverty trap and is done over an extended period (Harvey and Lind, 2008). Persons are aid-dependent "when they cannot meet their immediate basic needs in the absence of relief assistance'' (Aschale et al., 2012, pp9).

This paper adopts the following definition of dependency syndrome as "a condition where households modify their social and economic behavior in anticipation of food aid." It assumes that beneficiary households depend on external assistance to the extent that they reduce engagement in other livelihood activities that could enable them to become food self-sufficient (Little, 2008).

Food aid, both for short-term emergency and relief, is a major component of food security in developing nations (del Ninno, Dorosh, and Subbarao 2007). However, there

has been a heated discussion on whether food aid has a positive or negative effect on the beneficiaries. Different schools of thought have emerged over food aid and dependency. The various schools of thoughts are discussed below.

2.2.2 Negative dependency or 'Dependency syndrome'

Certain assumptions and meanings underpin the common usage of negative dependency within the discourse of humanitarian aid. Firstly, it is perceived as something negative and to be avoided. Secondly, it is associated with relief and not development approaches. Thirdly, it is seen as undermining people's initiative. Fourth, it's contrasted with a variety of favorable terms such as independence, self-reliance, and sustainability. Lastly, it becomes a problem when relief is provided over a long period of time (Harvey and Lind, 2008).

Classical Marxist theory on dependency argues that aid is the genesis of negative dependency that is imposed on the poor masses by the elites. Marxists idea of dependency is very straightforward; emerging countries export primary commodities to the rich countries who then manufacture products out of those commodities and sell them back to the poorer countries at a higher price or as relief as consolation (Ferraro, 2008). The food aid is used as an incentive by the developed nations over the developing countries.

Dependency syndrome is further enhanced by elitism and western nations' neo-colonial tactics in developing nations. Neo- Marxists argue that if industrial nations want to help the Africans and developing nations, they should finally terminate food aid (Shikwati, 2006). Shikwati is critical of food aid and foreign aid because of its distortion of the

market. He argues that food aid ends up in the black market where it is dumped at extremely low prices. Local farmers lose their livelihood as they can compete in the market; no one can compete with the UN's World Food Programme (WFP) creating a cycle of dependency. He does not agree with the idea that emergency food aid in the short term is critical in curbing food security. He argues that developing nations can feed their population through trade with neighbors and proper sound frameworks that support farmers (Shikwati, 2019).

This argument is further expounded and supported by Kabonga (2007). He argues that donor food aid is a quintessence of dependency theory, and it does more good to the donor country than the recipient and thus rejects any notion that donor aid can have a positive dependency (Kabongo 2007). He argues that donor aid serves to create dependency and hence a system of neo-capitalism and neo-colonialism. He also claims that donor aid is used as a modern paraphernalia to ensure that Africans serve the needs of wealthy nations. He points to Britain withdrawing food aid from Zimbabwe after reclamation of land from white settlers to indigenous black people.

Food aid and donor aid create negative dependency that has stifled growth and livelihoods as witnessed in Africa (Moyo, 2009). Food aid has slightly increased poverty and long-term food insecurity due to increasing dependence on food imports and discouraging local production of local farmers (Gilligan & Hoddinott, 2007). However, Gilligan and Hoddinott admit and caution that their results are speculative and require more research. ‘Moral hazard’ is the most significant negative dependency syndrome, where the possibility that insured farmers or pastoralists will neglect their fields or animals, in the expectation that they will receive compensation for their losses through food aid

(Devereux, 2016). The apparent disinterest to continue pursuing livelihood projects to qualify for food aid is a moral hazard of food aid.

Some authors reject food aid programs while supporting short term food emergency relief. Food aid programs, in the long run, will not be sustainable if coupled with corruption and poor structural reforms will make the beneficiaries dependent. Food aid donations to Africa arrive typically as in-kind aid; cereals, largely wheat, which is distributed to the needy people affected by periodic droughts and famine in different localities. Undoubtedly, such in-kind aid has saved millions of lives over the years, but it has become increasingly questionable whether it is the best way to deliver emergency relief or long-term assistance (Gelan, 2006). Food aid only helps the households with no immediate poverty reduction of the same households or the extended community.

Food aid has a disincentive effect on the beneficiaries, a term known as disincentive argument. Disincentive argument contends that the increase in food supplies provided by food aid depresses prices received by farmers and causes or supports inadequate agricultural policies by recipients, which together lead to decreases in food production (Press 2018). The long-run answer to food shortages in the poor countries must be sought in expanded production in the poor countries themselves, and in employment and income distribution policies which provide sufficient incomes for the poor to be able to buy enough food (Isenman & Singer, 2018). There is enough concern about the possible harmful effects of food aid on domestic food production that many economists recommend less or no food aid even in cases where nutritional and other human needs are strongest.

2.2.3 Relative perspective on food aid

Some scholars have argued that food aid can result in both positive and negative dependency depending on the approach or the modality employed. Positive dependency supports households and persons to meet their basic needs for survival and that external provision of food aid acts only to cushion them from a natural disaster and their recovery is expected soon afterward (E. Lentz, Barrett, & Hoddinott, 2008). Negative dependency can only kick in if the food aid reduces the recipients' capacity to meet their own basic needs in the future without external assistance (Barrett, 2008). Negative dependency can be arrived through analyzing of two distinctions, "insurance" and "transfer-effects". Insurance effects are witnessed before the distribution of food. An expectation of food aid modifies the recipient's behavior. It can be both positive or negative. If it weakens the existing insurance mechanism, it is viewed as negative dependency such mechanism can be actions that reduce livelihood. Positive Mechanism will be activities that will improve food security through the diversion of resources to support livelihood activities (E. C. Lentz, Barrett, Gómez, & Maxwell, 2013). Positive and negative dependency can/are induced by beneficiary behavior (Wenner, 2017). Wenner (2017) argues that food aid can create negative dependency through disincentives for local production, displace commercial purchase and decrease initiative to build self-sufficient livelihoods. Wenner (2017), however, cautions that individual behavior is relative in different persons such as traders, poor farmers, wealthy farmers and landless. Wenner (2017) supports positive dependency in the form of short-term emergency that saves life such as in Ethiopia in 1974 (Wenner, 2017). Wenner observes, however, that she did not encounter any negative dependency in

her fieldwork in Nepal. She argues that food aid is highly inaccessible, as it is unreliable and its distribution not transparent.

Food aid can lead to both positive and negative dependency depending on whether it is given on ethical or self-interest (political & Economic) grounds. The economic motive includes disposing of surplus production, reducing storage costs, opening access to new overseas markets for donor goods and generating employment for donor citizen. The political ideology interest refers to food aid was an excellent way to fight communism, compensation for past injustices and frustration for fundamentalists and terrorists. The ethical reason applies to the moral and social obligation to help the poor but not for the interest of the donor countries (Zeweld, 2013). On negative dependency, Zeweld (2013) notes that Food for Work (FFW) is harmful to local livelihoods as it diverts workforce and resources and relocates it from production. He disagrees with others who view FFW as a positive dependency (Rahman & Chowdhury, 2019).

Positive or negative dependency is built on even the ratios received and satisfaction of the food aid received (Violette et al., 2013). Food aid assistance programs have both positive and negative effects. Zant (2012) notes that Cash transfers, FFW and Cash for Work programs (CFW) are particularly popular for their alleged effectiveness in targeting the poor, although this issue is heavily debated. Food aid assistance in form of Cash-based Transfers (CBT) allows households to decide freely on their expenditures and make economically efficient decisions on their budget, which is an attractive feature for households that are food insecure (Zant, 2012). M-Pesa, a mobile money transfer platform can be a specific option for Cash Based Transfer (CBT) in Kenya. M-Pesa transfer does not require banks or any form of paper trail that poor households do not have.

Effectiveness of public food aid assistance programs depends on how well they identify vulnerable households. This notion is especially true in poor, rural economies that are subject to periodic agricultural crises and low domestic food availability. Aid forms a critical source of food supply at these times, and its effective distribution can avert large-scale starvation (Broussard, Dercon, & Somanathan, 2014). The level of negative and positive dependency may as well arise due to power parity in community and beneficiary levels. Households with local influence are more likely to receive aid and receive more copious amounts of aid than warranted by objective measures of need. Households headed by the elderly, child/children and disable are prone to be more dependent. However, their dependency while long-lasting can be viewed as positive dependency as it prevents them from critical food insecurity. In the same settings, a powerful household that receives food aid has negative dependence due to insurance effect and moral hazard. Food aid limits the expansion of their livelihood base in anticipation of food aid (Broussard et al., 2014).

Negative and positive dependency food aid depend on the relative size of food transfer. Margolies and Hoddinott (2012a) coin two words *inframarginal* and *extramarginal.* They argue that inframarginal occurs when the food transfer is less than what the household would have consumed had the food aid not happened. In this case, the inframarginal food aid has a positive effect on the household as it will save on the income. Extramarginal food aid transfer refers to food aid transfer that is greater than what the household would have consumed absent the transfer. Extramarginal food aid has a substitute effect. Recipients substitute income and livelihood activities leading to negative dependency (Margolies & Hoddinott, 2012a). Margolies and Hoddinott (2012a), however, seem to argue that food aid does not lead to dependency. Food aid is not meant to

discourage recipients from participating in the labor market or substitute local production, but rather to provide a complimentary transfer to alleviate household level pressures (Margolies & Hoddinott, 2012a).

Emergency food aid has often been effective in addressing short term-relief and that it provides critical food security for the beneficiaries (Del Ninno et al., 2007). Del Ninno et al. (2007), however, take a more cautious perspective if emergency food aid becomes a long-term food security strategy in that it leads to dependency. The most critical consequence for long-term food security, however, is the possibility that food aid may cause disincentives for domestic production through reductions in local prices and lead to reduced public and private investment in food production. The belief that food aid, in the final analysis, will make households dependent because the food aid is too unpredictable (Del Ninno et al., 2007). Food aid may increase food security sufficiently to alter the market orientation of the farmers (Beuzuneh, Deaton, & Norton, 1988). Short-term emergency food aid has a positive dependency in that it meets the critical need for food for those in need of food. Dependency kicks in when food aid becomes a norm rather than an emergency. Better approaches as FFW programs that encourage alternative livelihoods than dependency. Research conducted in Baringo Kenya, Beuzuneh et al. (1998) concluded that long-term dependency on food aid could be averted through FFW. FFW in the study area (Baringo) increased agricultural production, income, capital investment, employment (including hired labor), and marketable surplus. It caused a production shift from the more nutritious maize to higher-priced millet (Beuzuneh et al., 1988).

2.2.4 Food aid and positive dependency

Most of the alleged negative effects of food aid or negative dependency triggers (e.g., Lappe and Collins 1977; Jean-Baptiste 1979; Jackson and Eade 1982) are supported only by unverified anecdotes rather than by detailed ethnographic or econometric research. These reports of food aid causing negative dependency are based on aid and negative dependency's simultaneous existence rather than on a demonstrable causality. This distinction between causality and correlation is critical (Barrett, 2008). Barrett (2008) does not entirely reject the negative dependency theory; he takes a more cautious appeal. He nonetheless supports that positive dependency and negative dependency are intended or unintended causes of food aid.

The concept of dependency syndrome has been challenged by some ethnographers as myth and stereotype rather than a reality. For example, some argue that refugees use all the available means at their disposal to cope with crisis and improve their situation (Kibreab, 1993). Empirical evidence shows that the refugee populations in the camps were not only willing to work; they worked, often for infinitesimal returns, whenever opportunities existed. Kibreab (1993) notes that even though many of the refugees were partially or wholly dependent on outside assistance for their survival for a decade or more, there was no evidence which showed that they developed dependency measured by the excessive preference for living on hand-outs when a choice to work for self-sufficiency existed. Among the Sudanese refugees living in Western Ethiopia, they did everything to survive and did not rely on food aid. Most of them worked manual jobs outside the camps to supplement food aid. They viewed food aid as unreliable (Uffelen, 2007).

Food aid also plays a critical role in coping and recovery strategies and very few are excessively dependent on it over a long time (Little, 2008). Little (2008) argues that the arrival of food aid often is highly irregular and untimely; hence cannot lead to dependency. Food aid does keep people alive and provides an important resource for the poor, but the uncertainties surrounding its timing and amounts have taught local farmers and herders not to depend too much on it (Little, 2008). In his research findings in South Wollo in Ethiopia, he observed that the dependency syndrome does not exist. He concluded that contrary to what might be expected, food aid recipients are just as inclined, or even more so than other households to pursue multiple livelihood options (Little, 2008). Smets et al. agree that food aid has only positive dependency effects especially in conflict and post-conflict situations (Smets, Tusiime, & Renard, 2013). They note that food aid to conflict-affected-populations played an important role in reducing household food expenditure, thus insuring households against the extended commitment of domestic assets to secure food and divert the resources to other livelihood strategies.

2.2.5 Food aid and humanitarian approach

The liberal humanitarian view argues that food aid should be given regardless of the outcome. Proponents of this view note that limited empirical evidence exists to refute or confirm the pervasive belief that food aid has significant disincentive effects on recipient food production (Abdulai, Barrett, & Hoddinott, 2005). Using advanced econometrics methods, their findings in Ethiopia showed that that food aid does not appear to have created disincentives to local agricultural production, labor supply, investment, or mutual support. They, therefore, reject the notion of negative dependency.

Food aid is necessary and has a more significant role even in ending conflict (Margolies & Hoddinott, 2012b). Margolies and Hoddinott (2012b) note that conflict is spurred by political, economic and cultural causes. Factors such as grievance, greed, and scarcity are usually at the heart of the conflict. In principle, the provision of food aid should reduce conflict. If grievance, in the form of disputes over the equitable share of resources, is the driver, disbursements of food aid to regions or communities that perceive that they have been deprived are one mechanism (Margolies & Hoddinott, 2012a) through which inequalities can be lessened (Collier, 2002). Food aid may reduce incentives for conflict in times of resource scarcity and environmental shocks as it represents an influx of new resources. This causes positive dependency.

Some scholars observe that most research supporting dependency syndrome is not based on ethnocentric research. They note that purported disincentive effects assume that receipt of food aid and other household characteristics are uncorrelated (Braun, Hazell, Hoddinott, & Babu, 2003). If food aid goes to poorer villages or villages receiving shocks that reduce the returns to labor, then the claimed disincentive effect is merely capturing the impact of these other characteristics (Barrett & Barrett, 2001). Similarly, claims of dependency seem to have the direction of causality wrong (E. C. Lentz et al., 2013). Shocks cause behavioral change that may necessitate various types of safety nets, including food aid. But food aid volumes transferred, in almost all cases, are too modest to make people dependent upon them, although they can help keep them alive and they can surely change the incentives that affect the behavioral choices they make.

In a study commissioned by Oxfam, it is argued that food aid should be analyzed in the context of emergency without debates on its positive or negative dependency. It is

noted that food aid is best used for refugees and in emergencies when food itself is short while indicating that most large scale programs that use project food aid for development have proved ineffective either because they simply do not work or because more locally suitable and often cheaper methods exist (Jackson & Eade, 1983). Oxfam's findings are that food aid tackles food insecurity among the vulnerable population, but the methods applied are poor (Jackson & Eada, 1980). Likewise, the Brandt Commission report fully endorses the idea of food aid for development: food aid should be increased and linked to employment promotion and agricultural programs and projects without weakening incentives to food production (ODI, 1980).

The liberal humanitarian view does not reject the notion that food aid in certain aspects is flawed. Supporters of this view point out that such are logistic and administrative failures and have nothing to do with the recipient's behavior. Oxfam notes that food aid purposes have served almost as a talisman against public criticism. Of course, it is admitted, food aid has had its problems — some of it inevitably goes astray; it requires a considerable degree of logistic support and administrative control; and it is not easy to ensure that it arrives on time and in the right quantities. But such problems are usually dismissed as incidental to the food itself, administrative difficulties that will disappear once the project is appropriately under-way (Jackson & Eade 1983).

As seen some authors drawing from Marxism and Hobbesian contend that food aid dependency always mean domination over subjects who therefore, must try to avoid it by striving for independence and liberty through other livelihood approaches. Others, especially liberal thinkers and humanitarian workers, challenge such thinking by arguing that vulnerability is an essential condition of human life: it is universal (all humans are

vulnerable) and particular some are more vulnerable than others (Wenner, 2017). Some authors have a middle ground approach in which they view negative dependency or positive dependency as a result of many factors especially coming from the beneficiaries (Maxwell, Young, Jaspars, Frize, & Burns, 2011).

With so much debate surrounding food aid and its impacts and negative effects; common solutions or alternatives have been sought. These alternatives should be efficient and provide humanitarian assistance to beneficiaries while ensuring that dependency is not created.

2.3 Food availability

Food insecurity duration can generally be divided into two parts: chronic food insecurity and transitory food insecurity and sometimes seasonal food insecurity, which is part of transitory food insecurity. Table 1 describes both types of food insecurity.

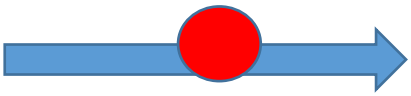
	CHRONIC FOOD INSECURITY	TRANSITORY FOOD INSECURITY
		
Is…	Long term and persistent	Short-term and persistent
Occurs when….	People are unable to meet their minimum food requirements over a sustained period	Short- term and temporary
Results from…	extended periods of poverty, lack of assets, and inadequate access to productive or financial resources.	Short term shocks and fluctuations in food availability and food access, including year-to-year variations in domestic food production, food prices and household incomes.
Can be overcome with...	typical long-term development measures also used to address poverty, such as education or access to productive resources, such as credit. They may also need more direct access to food to enable them to raise their productive capacity.	Transitory food insecurity is relatively unpredictable and can emerge suddenly. This makes planning and programming more difficult and requires different capacities and types of intervention, including early warning capacity and safety net programmes

Table 1 types of food insecurity

(FAO, 1996)

Seasonal food security falls between transitory food insecurity and chronic food insecurity. It is similar to chronic food insecurity as it is usually predictable and follows a sequence of known events. However, as seasonal food insecurity is of limited duration it can also be recurrent, transitory food insecurity. It occurs when there is a cyclical pattern of inadequate availability and access to food. This is associated with seasonal fluctuations in the climate, cropping patterns, work opportunities (labor demand) and disease (FAO, 1996).

2.3.1. Food Availability and Food Aid

Food availability to feed a country comes from one of these four sources: domestic production, domestic inventories, commercial imports from abroad, or food aid inflows from abroad. The first three are known as nonconcessional food availability (Wenner, 2017).

Per capita food production in Africa has been declining since the 1970s before increasing in the 1990s. However, despite the increase, the food levels have decreased by 20% below the levels observed 30 years ago (Abdulai et al., 2005). As food per capita decreased, food aid increased nearly fivefold. Food aid then becomes extraordinarily and affects food production.

This juxtapositioning of rising food aid and falling food production has an impact on food availability and food stability and therefore, raising significant concerns among governments, NGOs and the international community. Some analysts suggest that this is the main reason why African agriculture is failing (Abdulai et al., 2005). The logic behind

this assumption is that food aid increase supplies faster than they stimulate the production of food among the dependencies and other producers. The producers and farmers cannot compete with cheap products that come from donors and other food aid agencies. This creates a short time and at times long term food unavailability (Abdulai et al., 2005). At a household level, receipts of food aid cause households to reduce their labor supply and alternative livelihoods to supplement their food security. Food aid receipt has been associated with household decreasing their investments in agriculture and other forms of food insecurity. The result of this according to analysts has been reduced food availability and food stability. This argument is supported by Margolies et al. (2012b), as point out the concept of *ceteris paribus*. The idea is that food aid brings a shift in the supply curve for food rightwards, causing the prices to fall. Lower prices discourage domestic production. This concept does not affect food availability. Food aid does not create dependency though it does have some negative effects. This is not to say that food aid never has adverse impacts on food markets (Margolies & Hoddinott, 2012a). Negative effects occur primarily because of programmatic failures rather than from the provision of food (E. Lentz et al., 2008).

The unintended consequences of food aid are a staple of economics (Barrett, 2008). The basic concepts of the staple of economics in food aid are that there is induced behavioral response form dependencies.

Aggregate food availability is insufficient to ensure that either access or proper utilization of nutrients achieve food security (Sen, 2013), total food availability is nonetheless a necessary condition for food security. Food insecurity is unavoidable in an economy that is lacking enough food to feed its population even with equitable food

distribution and without wastages. Food availability in this sense will depend on several factors such as the elasticity of supply, timing of aid delivery, coping strategies, the amount of aid delivery, expectations regarding the duration of food transfers, openness of food markets. Additionally, the delivery mechanisms, by which food aid is brought to the beneficiary has a differential impact.

Social theorists view dependency as a vulnerability that is both enabling and disabling, however, in development practice dependency is seen as something negative that has to be avoided (Wenner, 2017). At a local level, this particular concern is called dependency syndrome. However, many developmental theorists and practitioners have opposed the notion of dependency syndrome. Harvey and Lind define persons as aid-dependent "when they cannot meet their immediate basic needs in the absence of relief assistance" (Harvey, 2007)**.** Lentz et al., conducting a study for the World Food Programme (WFP), concluded that dependency could be both negative and positive. Positive dependency, in this case, cares for households and persons to meet their primary needs for survival; outside provision of relief can, for example, enable victims of human-induced disasters and natural disasters to maintain their basic assets instead of selling them in times of crisis and hence support their recovery. In contrast, negative dependency arises when meeting current needs is achieved at the cost of reducing recipients' capacity to meet their own basic needs in the future without external assistance (Wenner, 2017).

2.3.2 National Level

Food availability is defined as the availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports (including food aid)

(FAO, 2013). The food available to feed a country's residents comes from one of four sources: domestic production, domestic inventories, commercial imports from abroad, or food aid inflows from abroad (Barrett & Barrett, 2001)**.** Domestic food production is notoriously volatile, especially in low-income countries that depend on rain-fed agriculture such as Kenya.

Collective food availability is insufficient to ensure either access to or proper utilization of nutrients to achieve food security; however, aggregate food distribution is necessary to achieve food security. Guaranteeing adequate aggregate food availability has been, and remains today, a serious task and challenge in much of the low-income world. From 1961 to 1995, average per capita daily energy and protein availability was reported at 2,244 kilocalories and 54.9 grams, respectively, which was below international recommended nutrient intake levels. Even today, a majority of the low-income countries have per capita daily energy availability of fewer than 2,500 kilocalories, signaling that availability remains an issue in advancing universal access to sufficient and appropriate food (Barrett & Barrett, 2001). However, aggregate food availability in Sub- Sahara Africa in 2014-2016 was 110% of the Dietary Energy Consumption (FAO, 2016).

The underlying logic for food aid in food security is therefore, very straightforward. Food aid seeks to address food availability shortfalls that may cause chronic hunger, malnutrition and in some cases death. However, the definition of food availability shortfalls emerges. Two reasonable alternatives have been put forward; First, a gap in cross-section reflects scarcity relative to others. Secondly, a shortfall in time series reflects lack relative to trend availability.

Food aid for security should always flow disproportionately to countries that exhibit low per capita nonconcessional food availability (Barrett & Barrett, 2001). However, food aid has not been able to preserve food availability since recipient countries' nonconcessional food availability remains the same. While commercial cereals trade is crucial in stabilizing food availability in low- and middle-income countries, binding foreign exchange constraints nonetheless commonly limit the capacity of poorer countries to dampen food supply volatility through commercial markets, in these situations ship aid shipments help in stabilizing availability.

2.3.3 Household level

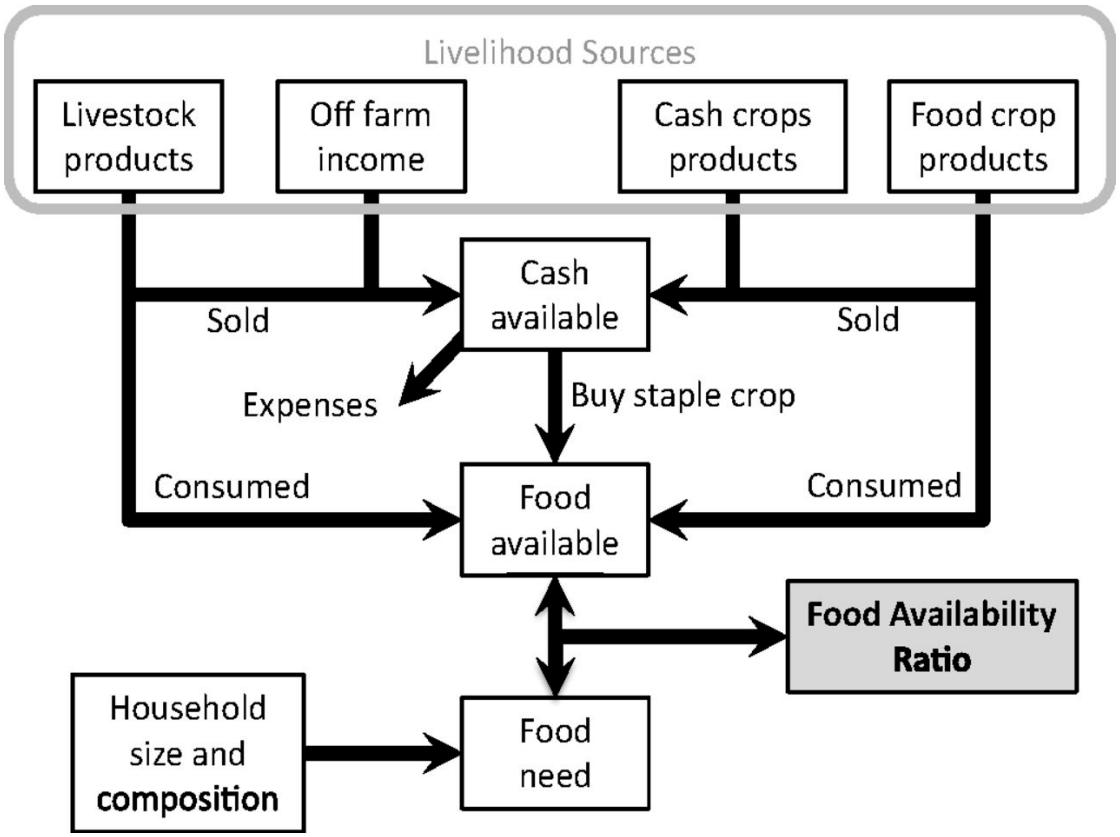


Figure 1 household food availability

(Frelat, Lopez-ridaura, Giller, Herrero, & Douxchamps, 2016)

Food production is the biggest driver or indicator of food availability at the household level, contributing to 60% of household source food (Frelat, Lopez-Ridaura, et al., 2016). The off-farm income has a substantial contribution to household food availability and is placed at 12% by FAO. Three major variables for analyzing household food availability are livelihoods (off-farm income), household characteristics and food production (farm activities) (Frelat, Lopez-ridaura, et al., 2016). If the household's food availability is insufficient, then food aid becomes inframarginal, as it fills in the gap left.

Food aid has different effects on different types of households. Food aid has a disincentive effect on the availability of food for poor households. This means that most Households that anticipate food aid withdrew their labor supply into livelihood activities affecting the availability of food for a brief period (Dayton-johnson & Hoddinott, 2004).

Evidence of households decreasing their investments in agriculture such as buying fertilizers and pesticides is witnessed before and after food aid in many households. Depending on the gender of the households, the saved cash can be used to generate more wealth or wasted. Food aid has the potential to influence the incentives of recipients such that short-term benefits erode longer-term strategies for sustainable food security (FAO, 2006).

2.4 Food aid and food stability

Food stability occurs after food aid distribution or lack of food aid thereafter. Food stability is reflected by the adjustments made by the households and communities after food aid or in anticipation of long-term food aid distribution. Experience from food aid may

have a positive or a negative consequence on a household which may adopt strategies to become more food secure or food dependent, after initial distribution. Some other effects include; effects on livelihood such as farmers and agriculture producers or remittances and food stability due to livelihood or coping mechanisms.

2.5 Insurance and transfer effects of food aid on food availability and food stability

Claims of dependency syndrome have rocked the food aid industry. To better analyze the intended and unintended consequences (dependency syndrome) of food aid. Lentz et al recommend a difference of so-called insurance and transfer-effects based on an economic model of the normal actor answering to a stimulus. Insurance-effects appear preceding to the distribution of aid (E. Lentz et al., 2008). Expectations of food aid might weaken existing insurance mechanisms such as social networks, and lead to increased risk-taking (which can be evaluated as positive or negative). While insurance-effects appear before the actual distribution of aid and are directly related to consistency and transparency of external transfers, transfer-effects happen after the food aid distribution (Wenner, 2017). While the actual transfer of food aid (in kind or cash) can help households to preserve their assets (seeds, livestock, land, money), some warning from its altering effects on markets (Wenner, 2017). Food aid in kind might cause downward pressure on food prices, displace commercial purchases and create disincentives for local food production. It might change food consumption habits and decrease initiatives to build self-enough livelihood incomes (E. C. Lentz et al., 2013). However, this is yet to be noticed. The actual effects of food aid on individual behaviors can appear to simultaneously differ for different persons with professions such as herders, farmers, the landless, etc. Insurance-effects appear preceding

to the distribution of aid (E. Lentz et al., 2008). Expectations of food aid might weaken existing insurance mechanisms such as social networks, and lead to increased risk-taking (which can be evaluated as positive or negative).

Partially indifferent to opinions about the liberal subject, the dependency model hails the life-saving function of short-term dependency in circumstances of distress, thereby justifying humanitarian interventions. Simultaneously, however, this dependency model cautions against the long-term detrimental effects of food aid that risk undermining the self-initiative and autonomy of recipients. Underlying this fear is the normative assumption of an ideal recipient who should only rely on aid in times of extreme crises (which are defined and labeled by governments and agencies) and otherwise be striving for self-reliance and autonomy (Wenner, 2017). Thereby, and in contrast to above-described vulnerability approaches, the economistic model based on incentives and disincentives tends to obscure the importance of structural conditions that enable or hinder persons from living a self-determined and independent life. Allegations of creating dependency have served agencies to pull out from their vital engagement in some situations (E. C. Lentz et al., 2013). This underscores the power of dependency misconception in development practice and an excuse for specific aid to be withdrawn (Wenner, 2017). Drawing on Dean, they explicitly acknowledge inter-dependency of humans: here, all members of a community are part of complex webs of relationships and dependencies, a point in the case study of Tana River (Harvey, 2007). Looking at differences between positive and negative dependency and the concept of insurance and transfer effects I will examine whether relief interventions aimed at lessening the vulnerability of recipients have the reverse effect by creating negative dependency among the pastoralist's community in Tana River.

Source of food scale was developed by (E. Lentz et al., 2008), to measure food security. It is part of the insurance effect. Lentz et al (2008), noted that households react differently in anticipation of food aid. Insurance effects include crowding out – that is, displacing – or filling in – adding to – existing safety nets and moral hazard effects associated with induced changes in risk-taking behaviors. Sources of food are affected by household's anticipation of food aid. Households can either reduce their sources of food in anticipation of food and this creates temporarily food unavailability situations which are covered by food aid; or continue with the same source of food in anticipation of food aid. This can be caused by several factors such as a lack of confidence in food aid distribution, low quantity of food aid, delays and inconsistency in food aid. Many studies have shown that Food aid hurts on food sources as household adjust their expectations or sources of income in anticipation of food aid (Scoones, 2009).

2.6 The alternatives: food aid or something else?

Opinions have been ranging to what the alternatives of food aid could be. Cash-based Transfers (CBT) have become very popular (Das, Do, & Özler, 2005). While donor agencies have expressed keen interest in shifting from food to cash assistance beneficiaries often indicate a preference for food over cash, (Margolies & Hoddinott, 2012a). Cash transfers provide recipients with freedom of choice and give them a higher level of satisfaction at any given level of income than is the case with food or another type of in-kind transfer (Margolies & Hoddinott, 2012b). They note that cash distribution can also stimulate agricultural production and non-agricultural activities as it shifts the demand

curve for food rightwards. Further, distributing cash is likely to be cheaper than distributing food or other commodities (Margolies & Hoddinott, 2012a).

From an economic efficiency perspective, cash transfers are generally deemed to be superior to in-kind transfers because they do not directly influence market prices (Tabor, 2002). This is because food aid has sometimes led to flooding of cheap food in the market affecting the markets and livelihoods. Cash subsidies provide recipients with greater freedom of choice and give recipients a higher level of satisfaction at any given level of income than is the case with in-kind transfers (Schwab, Margolies, & Hoddinott, 2013). With an in-kind transfer program, beneficiaries consume more of the subsidized target good than they would in the absence of the program (Tabor, 2002). Tabor notes cash transfer assistance is one of the few options for those who cannot be expected to work or to gain an adequate income from employment such as the disabled, socially excluded children, the homeless, substance abusers, widows, and widowers.

Assistance to people in emergencies can sometimes be appropriately provided in the form of cash, enabling people to decide for themselves what they most need and to buy it in local markets (Harvey, 2007). Harvey supports cash-based to food aid transfers. He notes that most arguments sometimes put forward for food aid is that it is likely to have a greater nutritional impact, so is more appropriate if a project has explicitly nutritional objectives. This might be possible, for instance, if food aid is fortified to address particular vitamin or mineral deficiencies. But there is also evidence that cash can be as effective as food aid in supporting nutrition (Harvey, 2007). He notes that cash is more cost-effective than food aid in many emergencies cases because it gives margin for the beneficiaries to purchase what is more pressing to them.

In a study commissioned by WFP it is noted that interest in cash transfers as a food security instrument has grown remarkably. WFP argues the debate is not which is approach is “better but rather Unresolved questions remain as to whether cash and food transfers are alternative or complementary options, whether they are different in qualitative terms and under which conditions the alternatives work best” (Gentilini, 2007, pp.65). It is noted that none of the alternatives is better than the other and that appropriateness cannot be predetermined. Rather, program objectives, economic analysis, market assessments, capacity requirements, and beneficiary preferences play important roles in the cash/food selection equation.

Cash aid has larger positive effects on household welfare, with multiplier effects on households other than direct recipients, and that food aid provides a disincentive to local food production (Gelan, 2006). Cash relief is then justified on the grounds of efficiency gains and hence welfare improvements for recipient households, which would be able to purchase greater quantities of food from domestic markets for the same amount of money initially pledged by donor countries. Free distribution (FD) of food aid as an approach is what causes negative dependency. Quisumbing (2003) notes that FFW approach can have a positive impact on the households and the community through the creation of livelihoods. FFW seems well targeted to asset-poor households (Quisumbing, 2003). Quisumbing (2003), however, notes that FD a has a positive impact on the nutrition of the girls while FFW has a positive impact on the nutrition of boys. FD follows a matrix which is gender sensitive and takes into consideration the number of household physiognomies and this favors girls; FFW in most cases will favor boys as most households are patriarchal in nature

and will let the boys work in such projects while the girls remain home, the distribution of FFW is therefore in most cases gender insensitive.

Over the last few years, there has been increasing recognition that Ethiopia is trapped in a cycle of annual appeals for emergency food aid. In response, and to address regular and predictable food insecurity more effectively, significant reformulation of food-insecurity alleviation policies (Kebede, 2006). Kebede (2006) notes that CBT is increasingly becoming a heated issue in both developmental and emergencies settings. He favors CBT because, from implementing and funding agencies, cash program involves low implementation costs compared with those of importing (or purchasing locally) and distributing food. He notes that for beneficiaries, the advantages of cash transfers include the added flexibility offered by cash, the greater convenience, and less time-consuming collection procedures and the lower level of risk. As Quisumbing he notes that CBT has also been found to result in a more diverse dietary intake, improvements in child-caring practices and increased uptake of social services.

CBT as a better approach to helping vulnerable people than food aid. CBT livelihood has impacts within household economies and social networks, paying attention to gender issues. A small but predictable flow of cash improves strategic livelihood choices and stimulates productive investments, including through positive effects on beneficiary entry into risk-sharing arrangements and networks for economic collaboration. Levels of household vulnerability and labor constraint nevertheless significantly mediate the ability of CTs to consolidate livelihood outcomes (Fisher et al., 2017). They, however, advocate for a bottom-up approach that incorporates beneficiary perspectives and brings to the fore the multidimensionality of CBT effects on experiences of poverty and deprivation,

including gender dynamics and intangibles such as dignity and respect; they add powerful realism to the influence of the CT on both immediate survival in food insecure households and livelihood choices (Fisher et al., 2017).

CBT's positive effect can be shown vis a vis that of non-recipient. Cash transfers to eligible households indirectly increase the consumption of ineligible households living in the same villages. This effect operates through insurance and credit markets: ineligible households benefit from the transfers by receiving more gifts and loans and by reducing their savings (Angelucci & Giorgi, 2006). Angelucci and Giorgi (2006) argue that CBT is much better than direct food aid transfer because it has a positive income shock in the local economy and secondly because most beneficiaries find this approach to be popular and offers more flexibility to invest in other livelihood projects.

2.7 Conclusion: Rethinking dependency

The notion of interdependency is helpful in reframing the debate around dependency on emergency relief. Rather than seeing dependency on relief as necessarily negative, the role of aid should be seen as a complex web of interdependencies that comprises a community's social relations and people's livelihood and may have both positive and negative aspects (Harvey and Lind, 2008). Poor people may be trapped into exploitative economic relations, such as crippling debts, sharecropping arrangements or bonded labor (Harvey and Lind, 2008). In this case positive external aid from relatives' friends and aid agencies may go long in helping address issues of dependency especially if existing social, political and economic frameworks are made.

Most of the debate around food aid dependency is unfounded. Many concerns about dependency seem to stem from a preoccupation from the disincentive effects of food aid. Discourses around dependency often blame the symptom, rather than the causes. The focus should not be on avoiding dependency, but on providing sufficiently reliable and transparent assistance so that those who most need it understand what they are entitled to and can rely on it as part of their efforts to survive and recover from a crisis (Paul and Lind, 2008).

The next chapter delves into the methodology the researcher used to collect data from Tana River county. The data and findings offer insight to further the debate on whether food aid causes dependency among the beneficiaries.

CHAPTER

3: RESEARCH DESIGN AND METHODOLOGY

Research methodology is the focus of this chapter. The chapter starts with a description of the research objectives and then proceeds to a discussion of the two main research methods: qualitative and quantitative research.

The primary research objective was to evaluate the effectiveness of food aid on food availability and food stability in Tana River County, Kenya. The specific objectives were:

1) Critically analyze the food aid dependency that has been linked to food aid among the small-scale Pastoralists community in Tana River County, Kenya.

2) Examine the Tana River food aid program and how it affects food availability and food stability.

3) Investigate possible alternatives to food aid that can make Tana River more food stable.

3.1 Sampling

The targeted sample was food aid beneficiaries from the two villages Damaka B and Morokani. Initially, the Researcher targeted 100 people from each village. However, this posed a research problem since the sample size was small and would generate errors during

the analysis as the population of both villages was more than 1500 people. The researcher, therefore, sampled 521 respondents from the two villagers.

The sampling was made possible by the fact that food distribution was taking place and as such the researcher used this time to reach to as many beneficiaries as possible. The sampling was done through completely random stratification method. However, no member of the same household was interviewed. This was made sure by announcements to members of the public before the questionnaires were administered. Secondly, the researcher used the existing pre-filled form from the NGO to ensure that no members of the same household were surveyed.

The researcher made modifications to pre-filled forms from the NGO that had beneficiaries' names and other details. A pre-filled form is a form which contains names of all beneficiaries, household heads, their ages, size of the household and any form of disabilities among any member in the household. The pre-filled form had data and information that the researcher will analyze among different demographics within the community such as female-headed households, elderly-headed households, person with disabilities households and households which do not fall in any categories. These demographics offer power relations and different dimensions and perspectives in food aid at a community level. Their results are analyzed in this research.

In the third village, Village 5, which does not receive food aid, the researcher targeted a sample of 100 people. However, the researcher sampled 109 people. Stratification data collection method was used, where members of Village 5 were divided into homogeneous subsets before the sampling was done. The subgroups were the same as the ones in Damaka B and Morokani.

The following research methods were used in Tana River, and an explanation for each is given below.

3.2 Study area

The evaluation was done in Tana River County, which is a county named after Kenya's longest river. Tana River County is found in the coastal region of Kenya. Agriculture and livestock are the primary sources of livelihood in the county, where they contribute 82% of household incomes and 80% of employment (KAPPA & World Bank, 2018). Agriculture takes place along the banks of the river while livestock keeping takes place in the hinterlands. According to the Government of Kenya, 67% of the residents are food insecure and depend on food aid every year (NDMA, 2017), which was approximately 45,900 households in the last year. This is due to the lack of exploitation of the agricultural land in the county (KAPPA & World Bank, 2018). Additionally, climate variability and change are taking its toll on agriculture. For these reasons, Tana River was chosen for analysis.

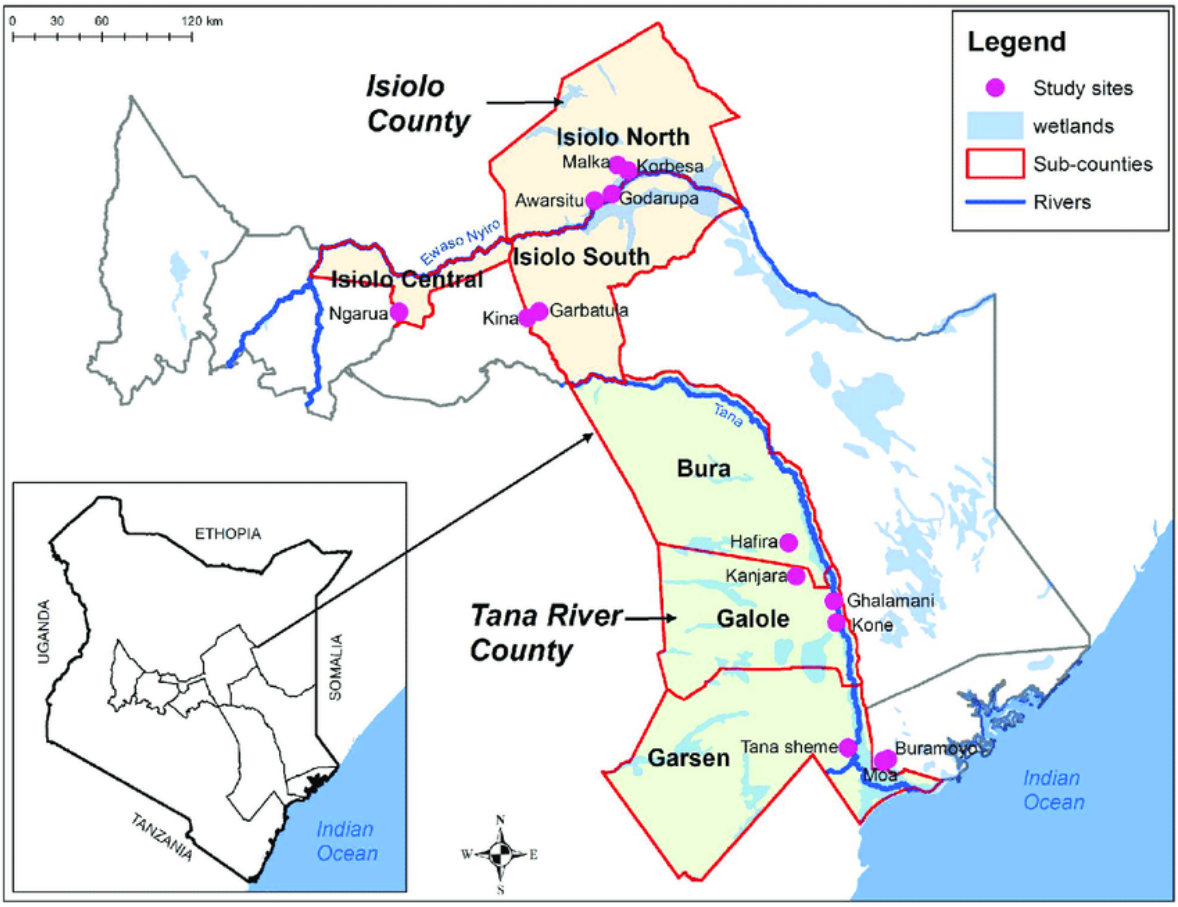


Figure 2 Map of Kenya and Tana River

The study covers three villages – Morokani, Damaka B, and Village 5 – with a combined population of approximately 8,000 people (Government of Kenya, 2018). According to the County government, Tana River County had a total population of 262,684 in 2012 (Government of Kenya, 2018). The Damaka B and Mitobini are on one bank of the river while Village 5 is on the other side of the Tana River. The three villages are highly traditional with cultural norms upheld high.

Damaka B and Mitobini receive food aid, while Village 5 is not a recipient of food aid. They also hardly receive any visitors and as such the researcher's presence was noted. The researcher was introduced to the villagers by the Chief and the village head. The community leaders and the Community Health Volunteers (CHV) were very helpful to the researcher.

3.3 Secondary Research

Secondary research was done to understand the nature of food aid and its effectiveness in Tana River. As pointed early in the introduction, Tana River is highly food insecure. Secondary data on the county is very scarce and rare and comes from reports from NGOs and Governmental institutions operating in the region, such as the National Drought Management Authority. The County government reports barely mentions food aid and food insecurity in the region. The county governmental sustainable blueprint omits food security, yet 67% of the entire population is said to be food insecure (Government of Kenya, 2018).

The researcher's secondary data on Tana River was mainly from the National Drought Management Authority (NDMA), which is an agency of the Government of Kenya mandated to establish mechanisms which ensure that drought and famines do not result into emergencies and that the impacts of climate change are sufficiently mitigated (NDMA, 2017).

3.4 Primary Research

Primary research was collected using three methods for this research; household survey, Focus group interviews and key informants. Questionnaires were prepared for each of the group, that is household surveys, personal interviews, and focus groups.

3.4.1 Household Surveys

The household survey was developed to gather information on the following areas: sources of food, coping strategies, effectiveness of food aid, alternatives to food aid, and overall food stability and food availability of the household. The survey was developed in English, and later translated into Swahili. The questionnaire was approved by the Institutional Review Board (IRB) of the American University of Beirut to ensure adherence with research and ethical standards, and that the questions did not infringe on personal rights. The questionnaire was pre-tested in Morokani and Village 5. Adjustments were made to questions, wordings, and range of certain categories to reflect the reality on the ground. The researcher administered all the questionnaires. The answers to the questionnaires were then transferred to the pre-filled list described above every evening.

Household surveys were carried out during the food aid distribution period (January 3-11, 2019), because it was easier to access many community members at once in villages receiving food aid. A total of 630 Households across the three villages took part in the survey. The questionnaires were administered during the distribution period in Damaka B and Morokani. Village 5 which was an independent value of the research is not a food aid recipient. Data collection in Village 5 was much harder due to a lack of distribution and given its physical location on the other side of the Tana River and hence lower number of

surveys taken. While the selection of the villages was well mapped and not random, selection of the households was randomly stratified to eliminate any error such as sampling of one group. Please see (Appendix) for the Household questionnaires.

Randomly stratified technique ensured there was no biased through omission of certain groups within the community. However, the researcher occasionally took phone numbers of some respondents for follow up questions. In Morokani, 256 households were administered the questionnaire, in Damaka B 265 households took part in the survey while 109 in Village 5- Village 5 was the control village in the experiment. The table below breaks down the household surveys as administered. The principal researcher administered all survey questionnaires.

This research uses the FAO Food Availability Scale to measure food availability at the household level. This scale has undergone linguistic adaptation so that it can reflect the cultural and the locality where the data collection and research was done. It was carried out in line with FAO recommendation for FIES approaches to diverse settings (Ballard, T.J., Kepple, A.W., Cafiero, 2013). Households are graded against sources of food scale which rank from 1-4 on their ability to insure households from food unavailability.

Table 3 Household Data Collection

Site	Data Collection Date	Categories	No. of HHs that filled the questionnaire
Morokani	3rd January 2019	Female-headed, other HHs	83

Morokani	4th January 2019	PWD, Other HHS	89
Morokani	5th January 2019	Elderly, Other HHS	67
Damaka B	7th January 2019	Female-headed, other HHs	87
Damaka B	8th January 2019	PWD, Other HHS	89
Damaka B	9th January 2019	Elderly, Other HHS	86
Village 5	11th January 2019	Female-headed, other HHs	109

Table 2 Household Data collection

Households were given one questionnaire, which they answered. Their responses were then transferred to the prefilled forms in the excel sheets. Coding of the answers took place in the evening of each day. The Household survey sought information on the following areas; sources of food, coping strategies, the effectiveness of food aid, alternatives to food aid and overall food stability and food availability of Households.

3.4.2 Procedure in Survey Questionnaire

The general procedure in conducting this survey in the three villages included the following: First, a questionnaire was formulated in English by the researcher. The questionnaire was then approved by the Institutional Review Board (IRB) to ensure the questions did not infringe on personal rights. Next, the questionnaire was pre-tested using

10 households in total from all the three villages and updated accordingly to reflect the reality on the ground. The survey was then conducted for two weeks. Afterwards, the answers were transferred to the Excel spreadsheet using numerical values that each represented answer. The collected data was checked by the researcher before analysis. Finally, data analysis was done and discussed in the later chapter of this research.

3.4.3 Survey tools

The questionnaire had three sub- sections which measured the following tools. The results from the questionnaire were then coded and entered in an spreadsheet. Numerical values were used to represent categorical or non-numeric answers, according to the coding established within the questionnaire

A) Food availability Scale, which has the following variables
    1) Household characteristics
    2) Livelihood incomes (Off-farm income), e.g. size of the herd
    3) Source of food and crop production
B) Food Insecurity Experience Scale (FIES), which has the following variables to measure food stability;
        1) Enough food all year without food aid
        2) Dependency
C) CSI, which measures the severity of food insecurity in the households

3.5 Statistical Analysis

Data was collected from the four sub-sections of the questionnaire, coded and entered on a spread sheet. The sheet had pre-filled data, which had been collected by the NGO doing the food aid distribution. The pre-filled data such as age, gender, head of household is useful in when food agencies are determining most vulnerable households. This data is also useful in the analysis of dependency when compared to household characteristics.

The statistical analysis was conducted for each scale and various statistical tools used for each scale. However, a deeper analysis of correlation and regression analysis from the various scale required the use of Stata/SE 12.0. and IBM SPSS Statistics.

3.6 Focus group discussions

The researcher used the focus group to gain information about their views and experiences in the subject of research (Gibbs, 1997). Focus group is particularly suited to obtaining several perspectives about the same topic that the researcher is interested in. The benefits of focus group research included gaining insights into people's shared understandings of food aid and its effectiveness. In addition, during this research, focus groups discussions were steered in line with Gibbs (1997:3), who points out that these conversations draw upon respondents' attitudes, feelings, beliefs, experiences and reactions in a way that would not be feasible using other methods such as observation, one-to-one interviewing or questionnaire surveys. Gibbs notes that a focus group enables the researcher to gain a large amount of information in a short period of time, and this was indeed the case during this research, as the research was time constraint. In all three focus

group discussions, different opinions on ways in which people perceive food aid, food availability and food stability were analyzed (Gibbs, 1997). These focus group discussions went very well, contradicting Gibbs's (1997:3) opinion that they can be difficult to assemble. Gibbs maintains that clearly identifying an individual message from the group may be complicated; moreover, focus groups may discourage certain people from participating, for example, those who are not articulate or confident or in extreme patriarchal societies where females are shunned from public participation. He adds that focus group discussions may lack confidentiality and discourage participants from entrusting sensitive or personal information to others (Gibbs, 1997). The negative aspects of focus groups were considered when the group discussions were designed and conducted

Focus group interviews took place in form of in-depth group discussions among members of the community. Three groups took part in the focus group discussions each of the three villages. In Damaka B and Morokani, focus group meetings was easier to organize as it was done during the distribution days. In Village 5, conducting the focus group was more difficult as the researcher had to find a suitable time that was conducive for all participants. Triangulation method- using qualitative data from focus group discussion and key informant interview- was used for the three villages so that issues could be determined objectively. In the three villages, judgment sampling was used to select focus group members. Judgment sampling, as explained by McDaniel and Gates is also known as quota sampling: The demographic or classification factors of interest in a quota sample are selected here on the basis of the researcher's judgment (McDaniels & Roessler, 1998). In this case, the researcher used village elders, small scale farmers, and pastoralists in the village 5.

Each of the focus group discussions comprised 7 members, as recommended by Ailawadi (Ailawadi, 2006) This recommendation is supported by Gibbs, who points out that the recommended number of people per group is usually six to ten, although some researchers have used up to 15 people (Gibbs, 1997). The researcher made care to have a well-balanced gender representation in the focus group.

A questionnaire with 14 questions divided into four sections was developed. The questions addressed the primary and secondary objectives of this research (Refer to appendix 7.1.3 for the questionnaire). The researcher conducted all the discussions for the focus group.

After all the focus groups discussions had been conducted, the written records from all the groups were analyzed according to a matrix that allowed the researcher to compare the information. The information obtained from the group discussions was also used for triangulation with the information collected during the household survey.

For focus group composition, please refer to the appendix 7.1.3.

3.7 Personal Interviews

According to Rowley (2015), if interviews have been appropriately designed and the interviewees appropriately selected, they have potential to generate a range of insights and understandings that might be useful and cannot be obtained from the general public (Rowley, 2015). In other circumstances where it is possible to identify some people who are in key positions to understand a situation, such as, say, food aid workers and NGOs perspective on food aid, interviews preferable because they provide more details and

insights, but also because the key informants are unlikely to take time to fill in questionnaires (Rowley, 2015).

Focus group interviews took place in form of in-depth group discussions among members of the community. Three groups took part in the focus group discussions each of the three villages. During this research, personal interview targeted three key informants. The first informant was a government official who works within the Department of Refugees affairs, Office of Presidency, Refugee Affairs Secretariat (RAS). The informant has had more than 28 years' experience working in this capacity. This informant was based in Nairobi.

The second informant was a local worker with an International Non-Governmental organization that works in the Tana River county and is based in Hola, which is the Capital County of Tana River County.

The third informant was an International expatriate who works as a food aid worker and is a food security manager for the region and is based in Hola. The Informant has worked in the region for more than 2 years with experience of more than 15 years in food aid relief programs.

3.7.1 Sampling procedures for key personnel interviews

Personal interviews were carried out using judgement sampling technique. This process was performed based on whether the researcher judged that their positions were directly or indirectly connected with issues of food aid. The researcher went ahead made appointments with the individuals and obtained permission for them to be interviewed at

appropriate times. All the interview apart from one was done in the offices of the interviewee.

3.7.2 Procedure for personal interviews

A simple questionnaire with guiding questions was designed and used during the interviews. The interviews took approximately 20 minutes each. The questionnaire is in the Appendix.

3.8 Limitations to and scope of study

While the evaluation is on the effectiveness of food aid on food availability and food stability, the study has not examined the other two dimensions under food security, namely; food access and food utilization, which are equally very important. The study is limited in scope to the two dimensions. The study does not also study weather patterns and ecological issues which are important topics related to food security but were outside the scope of the study.

The study analyzes the research question from a household level but does not examine or study the effects of food aid at the community level or the county level. It does not explore how different professions such as small farmers or small-scale pastoralists are affected by food aid. Accordingly, there is a need to study these patterns of food aid further and how they affect other levels in the community and different segments within the same community and vulnerable population such as women, the elders and Persons with Disabilities (PWD).

CHAPTER

4: EMPIRICAL FINDINGS AND DISCUSSION

This chapter presents the results and discusses the main findings. The findings were derived from household surveys, focus group discussions and personal interviews. The effectiveness of food aid on food availability and food stability among small scale pastoralist households in Tana River Kenya is manifested by many factors that shall be analyzed here. The total number of households surveyed were 630.

The analysis aims at conclusively answering the research question, "The effectiveness of food aid on food availability and food stability among the small-scale pastoralists in the Tana River County, Kenya.

The findings try to answer the research questions of this thesis. The research objectives were;

- Does food aid impact food availability in Tana River County?
- Does food aid to the population in Tana River County create dependency on externally provided food aid?
- Alternatives to food aid that can make Tana River more food secure

To answer the above questions several factors were considered such as: household characteristics which determine food availability, sources of food, livelihoods, alternatives

to food aid, enough food and dependency on food aid for the past one year. The findings of these factors are shown and discussed below.

Focus group findings and Key informant interview results are not displaced in tables but rather are used to triangulate the data in the findings and discussions.

The data collection was supported by an NGO (Name Withheld) operating in the area. The NGO provided the researcher with a pre-filled form and the ODK Kit that had information of all beneficiaries. Local volunteers such as community health volunteers (CHV) and local elders made it possible for the researcher to collect the data. They were able to convince the beneficiaries to take part in the surveys and focus group discussions.

4.1 Household Characteristics: Personal Information (Household head and size)

Table 3 contains personal information of the 630 households that participated in the surveys. The information gives a general view of the social settings of the three villages.

Table 3: Household head and size cross-tabulation of the households surveyed

	1-2 members	3-4 members	5-7 members	8+ members	Total
Male (MHHs, monogamous)	3	48	109	42	202
Female (FHHs Polygamous +Single Mothers)	26	100	151	63	340
Person with Disability (PWD)	2	9	7	0	18
Relatives (Grandparents etc.)	8	13	3	46	70
Child (CHH)	0	0	0	0	0

Table 3 household composition

Table 4 Household head and size cross-tabulation (share of total)

	Household Size					
Household Head	1-2 members	3-4 members	5-7 members	8 + members	Total	
Male (MHHs, monogamous)	0.6%	4.4%	17%	6.1%	28.1%	
Female (FHHs Polygamous and single Mothers)	2.1%	16.9%	24.4%	12.1%	55.5%	
Person with Disability (PWD)	0.4%	1.7%	1.3%	0%	3.4%	
Relatives (Grandparents, etc.)	1.5%	2.5%	0.6%	8.3%	13%	
Child (CHH)	0%	0%	0%	0%	0%	
Total	4.61%	25.53%	43.38%	26.49%	100%	

Table 4 household composition in %

Female-headed households (FHH) are the majority (55%) in all the three villages that were surveyed. CHH was not surveyed. It is critical to note that due to the AUB research policy, the researcher was not permitted to conduct household surveys on Child Headed Families (CHF). Compliance with this policy is reflected in Table 3 and 4, accordingly.

Households with 5-7 members are the majority. Persons with Disability (PWD) are the minority. Household with more family member especially children below 5 are considered more vulnerable.

Table 5 Gender of household heads by village

Gender	Morokani	Damaka B	Village 5	Totals
Male	129	73	88	290

	(50.4%)	(27%)	(81%)	
Female	127 (49.6%)	192 (73%)	21 (19%)	340

Table 5 gender of household heads

There is relative gender balance in Morokani, while in Damaka B female headed households were the majority. In the Village 5, the male headed households are the majority.

Table 6 Number of cattle per household by village

Site	Number of Heads of Cattle		
	<30	>=30	
Morokani	87	169	Food-aid recipient
Damaka B	74	191	Food-aid recipient
Village 5	97	12	Nonfood-aid recipient
TOTAL	258	372	

Table 6 number of cattle

The number of head of cattle at 30 is used as a cut-off level by the county government as an indication of poverty prevalence in the households (Government of Kenya, 2018). Using this logic, poverty prevalence in the two sampled food aid villages is 161 of 521 households. Interestingly, Village 5 which is not a food aid recipient has a smaller number

of cattle compared to two villages that receive food aid, meaning that using the cutoff point they are poorer than the two villages receiving food aid.

4.2 Food availability scale

The three drivers of household food availability as described earlier are: households characteristics, crop-production and livelihoods (Frelat, Lopez-Ridaura, et al., 2016). Crop-production should account for 60% of food availability for the households to be considered as sufficiently food available according to the guidelines established done by Frelat et al (2016) through a research commissioned by FAO.

Table 7: Sources of food for all the three villages by households

SITE	Sources of food (# households)					
	Grow food (crop & Animal production)	Buy food	Grow& buy food	Given by relatives	Food aid	Grow, buy, given and food aid
Morokani	143	13	57	5	27	11
Damaka B	167	9	47	19	13	13
Village 5	69	6	33	1	0	0

Table 7 Sources of food for the households

Crop production is the biggest source of food in all the 3 villagers. Damaka B has the highest number of households that engage in crop-production compared to Morokani. Food aid has a relatively small number of households that depend on it. Mixture of growing crops and buying ranks second.

Table 8: Percentage of sources of food for food-aid receiving villages

SITE	**Sources of food In Percentages (%)**					
	Grow food	**Buy food**	**Grow& buy food**	**Given by relatives**	**Food aid**	**Grow, buy, given and food aid**
Food aid villages	59.5%	4.2%	20%	4.6%	7.7%	4.2%
Nonfood aid village	63.3%	5.5%	30.2%	0.9%	0%	0%

Table 8 Sources of food in percentage

The above table shows that most households grow food as a source of food, at 59.5%. Households that entirely depend on food aid as food source is relatively small at 7.7%. Village 5, the nonfood aid village, is engaged in crop-production than the food aid receiving villages.

Their sources of food were a mixture of practicing subsistence farming, buying, donations from relatives and to some households' food aid.

4.3 **Dependency**

Enough food all year (without food aid assistance) is used as an indicator of food stability and also indicates whether households depend on food aid entirely (FAO, 2018).

Figure 4: Household response to whether they had enough food for the past year

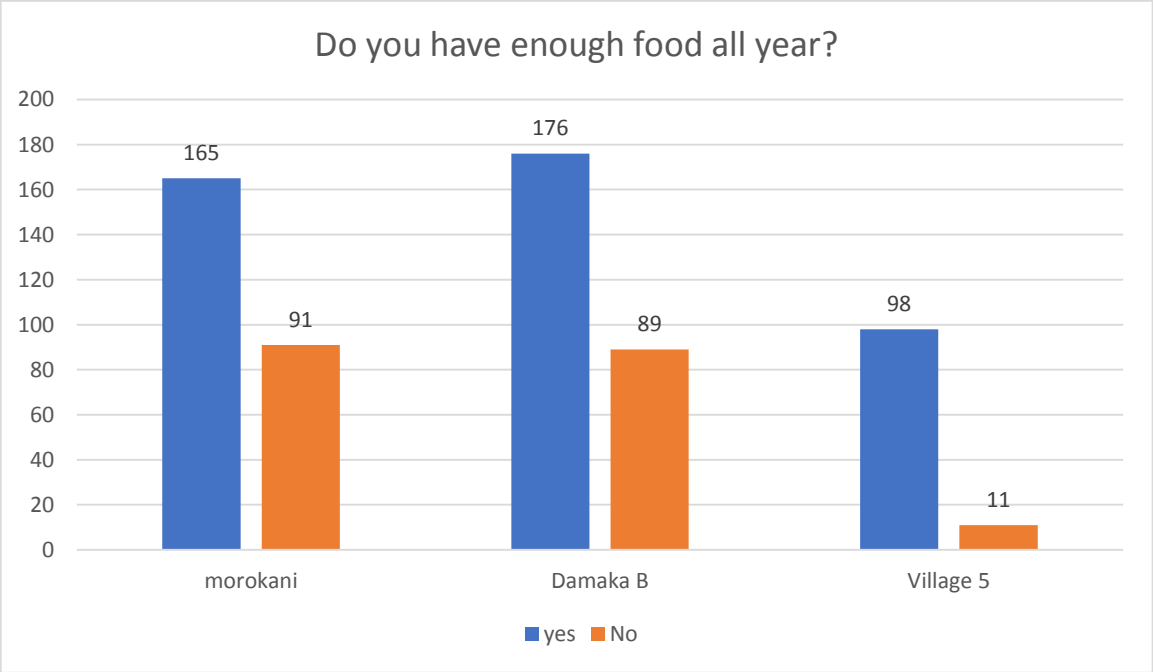


Figure 3 enough food for the past 1 year

Most households surveyed responded that they had enough food all year. In Damaka B, 87 more indicate they have enough food all year without food aid. In Morokani, 74 more households have enough food all year without food aid. In Village 5, 87 more households have enough food all year without food aid. In terms of percentage, households in Village 5 were most likely to report that they had enough food.

Next, total dependency which means solely relying on food aid as a source of food. on food all year (manage without assistance) is used to calculate whether households had relied on food aid even though they had not enough food for the previous one year (FAO, 2018).

Figure 5: Dependency on food aid for the last 1 year

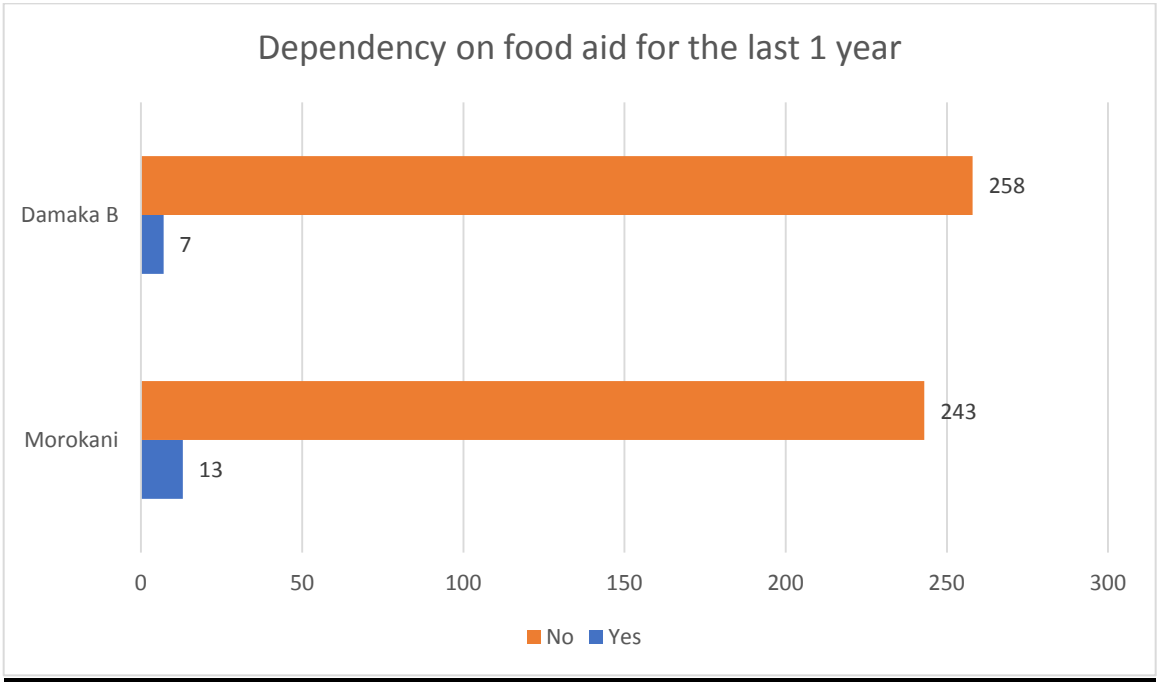


Figure 4 Dependency on food aid for last 1 year

Most of the households surveyed indicated that they were not food dependent for the last one year. 501 households indicated that they did not depend on food aid for the last one year, though they received it. 20 households indicated they depended on food aid for the last one year.

However, total dependency on food aid depends on several factors such as household characteristics and source of food.

4.4 Coping Strategy Index (CSI)

Coping strategies adopted by households are important indicators of food stability for the last one year (Dan Maxwell, Watkins, Wheeler, & Collins, 2003). Severe coping strategies such as begging food on the street, skipping meals or selling of household assets are an indication of acute food instability hence food insecurity.

Figure 6: coping strategies of households in the three villages

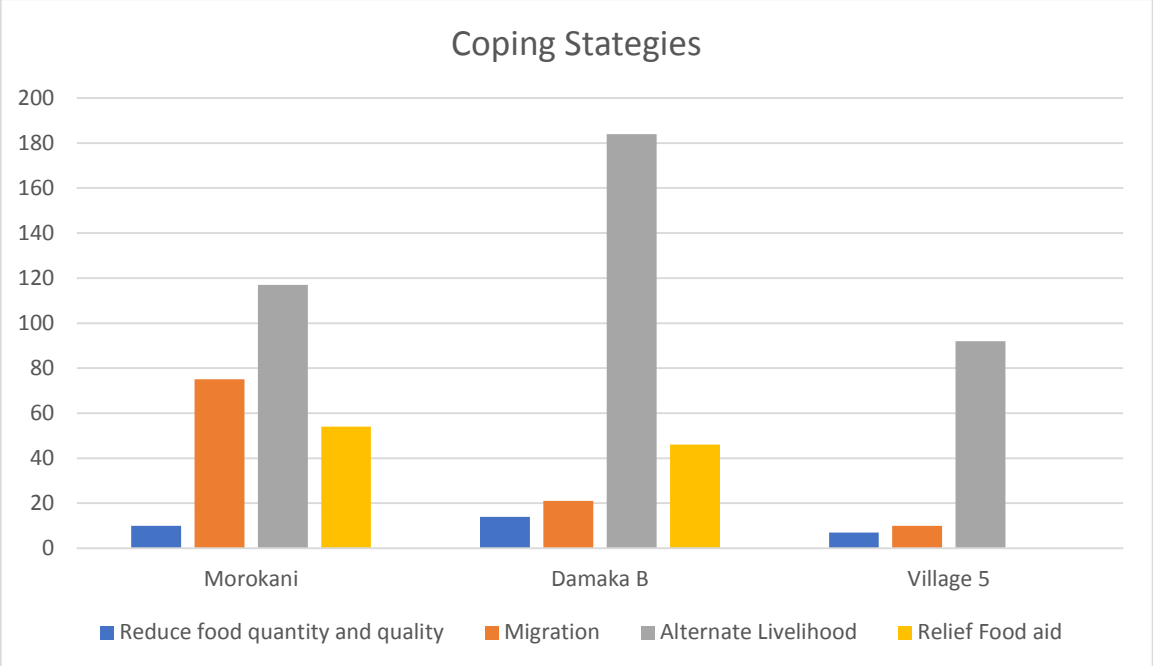


Figure 5 Coping Strategies

Changing livelihoods from pure pastoralism to both herding and small-scale farming or to any other casual labor for wages such as security guards is the most common form of coping strategies. Less than 20 households in Morokani and Damaka B receive food aid . Migration to other cities and towns is also popular among households, however not the whole household migrates only the head of the households.

4.5 Alternatives to food aid

Figure 7: Alternatives to in-kind food aid

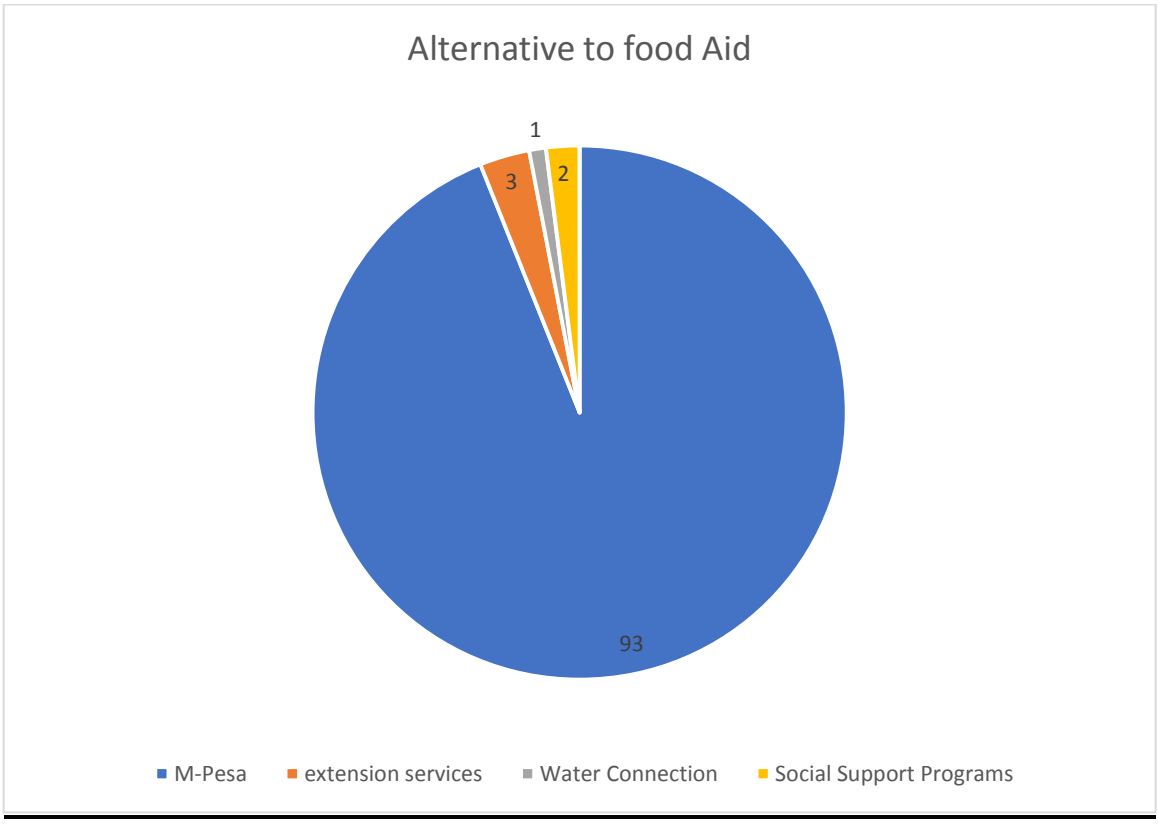


Figure 6 Alternatives to food aid

Approximately 93% of all households (484 HHs) would prefer M-Pesa as an alternative form to in-kind transfer of food aid. 16 HHs or 3% prefer extension services such as agricultural and veterinary services. 10 HHs (2%) prefer social support programs such as support of livelihoods. 1% which is 5 HHs indicated that they would prefer water from River from the River to be connected to their farms and homesteads.

4.6 Discussion: critical analysis of findings

In this sub-section, we discuss the findings in comparison to the literature review, theoretical frameworks, and other research done in the field of food aid. We consider the research questions and critically discuss the findings of the research. The overarching research question is to evaluate the effectiveness of food aid on food availability and food stability in Tana River County, Kenya. As sub-questions three issues have been addressed :

- Does food aid impact food availability in Tana River County?
- Does food aid to the population in Tana River County create dependency on externally provided food aid?
- What alternatives to food aid can make Tana River County more food secure?

The answers are then analyzed using the concepts presented in the literature review while comparing the outcomes with similar research.

4.6.1 Effects of food aid on food availability (sources of food)

In anticipation of food aid, households reduce their commitments to other sources of food and result to waiting, which causes on and off dependency on food aid and affect food availability in the long-term (Margolies & Hoddinott, 2012a). However, this thesis research conducted in Tana River County has shown that the beneficiaries in the study area do not neglect their other sources of food in anticipation of food aid. Therefore, food aid does not affect food availability from other sources in the two villages sampled.

Food aid accounted for 7.2% of the sources of food aid. Most households indicated that food aid supplemented their sources of food but was the least desirable as a single source of food. Triangulation of this result with focus group suggests that most households do not change their sources of food even during the food distribution period itself.

Food aid is seen as unreliable in terms of timing and quantity, and it is a tedious process from registration of recipients, verification of beneficiaries, pre-distribution meetings, long distribution days that take beneficiaries efforts off from essential activities and post-distribution meetings. Besides, the quantity of the food basket would not be enough to last several months for the households.

Due to its unreliability, it is tough for households to build a secure food source from and around food aid. This finding is in contrast with NGO workers drawn from the region who indicate that households shift their sources of food in anticipation of food aid to qualify as beneficiaries.

This research identified that far from being a monolithic institution that is trusted and relied upon by refugees as argued in many studies; food aid is unreliable among the beneficiaries in Tana River Kenya. The distrust of food aid is because of a myriad of issues

such as; - poor timing, the politics involved in the distribution and lack of interest in food aid.

This does not mean food aid is not effective in relieving short-term hunger among some households. This research establishes that most households do not rely on food aid as a method to achieve food security even in times of crises, and that is why they will still practice crop-production or continue with their livelihoods even in anticipation of food aid.

Focus group discussions indicated that most households sell items from the food aid basket for money. With the winds of devolution taking roots, development is taking roots enabling households to have easy access to the markets to sell food items from food aid. The items usually end up in local kiosks and roadside hotels to feed casual laborers operating in the region. Better methods to identify beneficiaries is needed so that deserving families get food aid when in critical condition.

This research contrasts numerous studies that indicates food aid negatively affects long-term food availability by inciting households to reduce their food sources to qualify for food aid (Frelat, Lopez-ridaura, et al., 2016). In a study in South Wollo, Ethiopia, It was noted of the 300 households sampled, food aid displaced other sources of food as well causing insufficient food availability (del Ninno et al., 2007). A similar study in the Oromia region found out that households slowed down on crop-production in anticipation of food aid reducing food availability at the disposal of households (Hoddinott, 2014).

4.6.2 Effects of food aid on food availability (livelihoods)

In the three sites in Tana River County where the study is done, livelihoods have taken the form of migration to towns for labor, commercial activities such as the opening of

shops and operation of M-Pesa (Mobile money banking) outlets. All these are considered stable forms of livelihoods which have a positive impact on sources of food, as households have the income to supplement food from crop-production. A stable source of food and livelihood indicate not only adequate food availability but also food stability.

Many researchers have found that in anticipation of food aid, beneficiaries lose interest in the daily livelihood effects. A word for it has been coined called “Moral Hazard.” The apparent disinterest to continue pursuing livelihood projects to qualify for food aid is a moral hazard of food aid (Devereux, 2016). However, given the nonfood aid sources existing in the two villages, it becomes apparent that moral hazard does not exist in the sampled communities of Tana River. Food aid does not hurt food availability by drawing away human and labor skills from the existing livelihood projects.

Non-farm activities such as small businesses and other livelihoods contribute 27% of the households, according to a research conducted in 17 countries, with over 13,000 households sampled (Frelat, Lopez-Ridaura, et al., 2016). In this thesis research, non-farm livelihoods accounted for 16.5% of food availability.

The existence of numerous M-Pesa shops even in the remote parts of the villages and small business indicates the presence of stable livelihoods and money flow, as M-Pesa shops typically exist where there is the flow of money and business transactions. M-Pesa transactions offer an easy way to conduct business and does not require a physical banking system. Some households indicated saving their money on M-Shwari, which is a mobile banking system for M-Pesa. During focus group discussions, indications that most livelihoods are conducted using M-Pesa and M-Shwari emerged. Households will sell their crops or services and get paid using M-Pesa. Households that migrate to towns send money

to their family members cushioning them from food insecurity and cash-shortage crisis. This revolutionary M-Pesa based economy reflects that the Kenyan economy has ensured that households do not depend on food aid and neither is their food availability affected by food security crises that would make them depend on food aid.

This result contrasts with one international NGO key informant interview based in Nairobi, who thought that M-Pesa could not be used to sustain livelihoods in such remote villages, and therefore the justification of giving food aid. The NGO worker further asserts that reports from the ground indicate that households are changing their livelihoods such as closing shops temporarily during beneficiary identification to qualify for food aid.

The desire for local development and to shrug off aid and dependency in the Tana River County has been the biggest motivation for households. The negative perception of food aid and assistance has seen many households strive to undertake stable livelihood incomes. In one of the distributions, one old man said they did not require food aid but require hoes, fertilizers and extension services. He said that they were tired of food aid. His comments were received with celebration and ululation by the rest of the villagers. This is just one of the cases that point out moral hazard does not exist in the sampled community of Tana River County and that food aid is not affecting food availability by drawing human labor from livelihoods in anticipation of food aid.

4.6.3 Effects of food aid on food stability (enough food without food aid)

As noted above, food aid agencies and many literary works assume that beneficiary households depend on food aid to the extent that they reduce engagement in other livelihood activities that could enable them to become food self-sufficient causing food

instability and food insecurity at the household level (Little, 2008). However, the sampled villages showed that they are food stable, without food aid. This finding debunks the myth of dependency on food aid or food aid inciting long term food instability.

This success is a result of the changing culture and women's empowerment. Most households are FHH and as such women are on the front line to provide for their families. With the promulgation of the new constitution in Kenya in 2010, females are greatly empowered with the local leaders mandated with ensuring that females are no longer passive or pariah because of the culture. Women are given the same access to resources as male, and women allowed to inherit lands. Adult education programs and classes opened throughout the country, and Tana River had some of the highest enrollment, with women being the majority, with women as old as 79 enrolling to elementary schools (Government of Kenya, 2018).

A culmination of all these policies and the community's acceptance for such progressive ideals has had a significant positive effect in Kenya and Tana River County. Traditional political roles are now opened to women, such as chiefs who are involved at a community level. In fact, the three villages sampled are headed by women, an achievement that was impossible before 2010. Empowered women have been able to become more active and this has trickled down to the households. Households have reported being more food secure. From the findings above, women are involved more in crop-production while males are involved in other livelihood activities. Ignoring changing political policies and women empowerment could be the main reason as to why many NGOs still identify Tana River as food insecure, while it has made huge strides towards food security.

A second finding is that the degree of dependency on food aid differs between the villagers. The more difficult the access to other sources of food the more significant the dependence on food aid becomes. Incentives and disincentives are ultimately determined by food aid's unreliability. Food aid, thus, is not a fixed, monolithic structure; it rather takes the character of a dynamic institution that villagers anticipate full of hope and expectation. The villagers' decision whether and how much to rely on food aid is thus framed by the ever-lasting tension between anticipation and the transparency of food aid deliveries and policies. Far from being passive and dependent recipients of food aid, as informant interviews indicated, recipients navigate not only the vagaries of the weather, market and exchange relation but also the vagaries of food aid with the aim of survival. It is in this navigation that they maintain their autonomy as subjects. The desire for autonomy is reflected by the fact that 93% of households sampled do not rely on food aid and have enough food without food aid.

Consequently, the households in Tana River, despite perennial food aid in the region, are not dependent on it. This is a contrast to the government report that indicated 69% of all households are food dependent yearly (Government of Kenya, 2018). Tana River County places those dependent on food aid at 75% yearly (NDMA, 2017). Research by the World Bank put the population at 23% (KAPPA & World Bank, 2018); it sampled 128 households. This research found out that only 7% of all households wholly depend on food aid for the last one year.

It was observed that food aid is associated with a sense of stigma, shame, and defeat. Focus group discussions indicate households that depend on food aid are often stigmatized as lazy and looked down upon.

Interviews with NGO workers paint a different picture with claims that households are entirely dependent on food aid. Since households turn up 100% on food distribution days, of households fighting to be in the beneficiaries list, unregistered households turning up on food distribution days and reports from the National government County government that puts Tana River as a severe food insecure county.

4.6.4 Food aid and dependency

There is a growing concern among food aid agencies and academic researchers that food aid perpetuates a cycle of dependence on aid among the beneficiaries. Extensive research has been done to support dependency syndrome among beneficiaries. In this thesis research, it was found out 93% of households sampled in the two villages indicated that they were not food dependent, had other nonfood aid sources and were food secure; only 7% indicated that they depended on food aid. These findings, therefore, contradict the notion of dependency theory among the beneficiaries.

The findings of this research are that food aid dependency is associated with a sense of stigma, shame, and defeat among sampled households of Tana River. In focus group discussions, some members thought that they were deliberately being given food aid and not other forms of assistance that could improve their food security and livelihoods. Some pointed out that they had persistently voiced their concerns for extension services to improve themselves. They argued that food aid was being imposed on them. In a way, this

is an agreement with the Marxist theory that food aid is an imposition on lower classes to ensured continued dependency.

The lack of dependency among the sampled beneficiaries stems from a myriad of issues. As earlier pointed out, women empowerment was very significant in addressing food stability and dependencies. Women access to land, and other services has greatly changed the household's food aid dependencies. Focus group discussion indicated that adapting technology and education of woman and girls were also boosting food security and reducing dependency.

M-Kilimo is a mobile agricultural platform which revolutionized agriculture in Kenya. The platform connects buyers to farmers, indicates which crops are in demand and offers agricultural advice. Most households pay less than 1$ a month to be able to use M-Kilimo services and benefit. Women indicated that they used the services to scout for crops that they didn't grow or find buyers. M-Kilimo gives options to sift and choose a geographical location where one resides to ease the business transaction. With a mobile phone then, households can buy and sell products and consult agricultural extension officers. This penetration of technology which reflects Kenya's growing technological advancement has made it very hard for families to depend on food aid. Focus group discussion indicated that food aid increases their sources of food, that otherwise would have been used to buy the food. Food aid, in this case, helped the households save incomes or invest income towards other livelihoods.

Another primary reason as to why dependency is not common among the households was the Kenyan Government's big four agenda. Since 2013, the Government of Kenya adopted a strategic plan that was to be rolled out to all parts of the country. The Plan

was called “The Big Four’ namely: attainment of national food security, affordable health care for all, affordable housing, and manufacturing. The government followed this with the opening of irrigation schemes of which two are Tana River, promoting local farmers and creation of free extension services. The sampled population took advantage of these developments, to get off from food aid. The community leader indicated that monthly, agricultural officers visited all villages to educate the community on crop-production, farming, and animal rearing. With such opportunities at their disposal, it is not hard to see why 93% of the sampled two villages receiving food aid indicated they were not dependent on it.

4.6.5 Alternatives to food aid

Cash is preferable to in-kind transfers because it is economically more efficient, provided that the markets from which recipients will buy food are available. Cash transfers provide recipients with freedom of choice and give them a higher level of satisfaction at any given level of income than is the case with food or another type of in-kind transfer (Margolies & Hoddinott, 2012a). NGOs have not been able to use M-Pesa due to the existence of Child Headed Families (CHH) which lack ID for M-Pesa registration and remoteness of some villagers.

In this study conducted in Tana River, M-Pesa (a mobile money transfer) was the most popular with 93% of all households surveyed. M-Pesa works using a simple mobile network in which a sender will send or receive money to a limit of Ksh 140000 or USD1430 per transaction. Households prefer M-Pesa since they did not need to go to the distribution center. Verification of households is straightforward and can be done through

mobile companies since registration requires a national Identity Card (ID). The M-Pesa transfer is then used to purchase food, pay medical bills through M-Afya, consult agricultural services through M-Kilimo and pay school fees (Horr, 2012). Interviews with NGO workers supported these claims as it lessens their workloads from beneficiary identification, verification, distribution, and post-distribution analysis. However, some households indicated that factors such as a child-headed family that lack ID cards, lack of mobile phones and long distances from local trade centers, where there is an M-Pesa agent might affect M-Pesa as a viable alternative.

M-Pesa offers the beneficiaries freedom to engage in positive choices that could benefit the households. Focus group discussion indicated that M-Pesa has helped them make savings where the physical bank is hard to find. They send the money to M-Shwari which is a mobile bank owned by Commercial Bank of Africa (CBA). Households have been able even to get loans from the bank without a tedious process. M-Shwari loan is simple as one gets a loan after saving or using M-Pesa for a minimum of six months. Some households have used M-Shwari loan to buy food in times of food insecurity cushioning them from dependency. This alternative reflects Kenya's shift towards mobile banking and application of technology to tackle myriad of perennial issues such as food insecurity. The ability of such remote villages to apply technological solutions to curb food insecurity indicates that food aid will shortly be rendered useless in the two villages.

However, even with such positive contributions of M-Pesa, CHH families do not benefit from this revolutionary solution, as they lack national identification to register for M-Pesa. The research has no data from CHH due to university policy and what alternative they think is better for them. Food distribution in this situation would still help CHH.

This research mirrors studies done in Indonesia and Ethiopia. In a research conducted in Indonesia, 100% of all households surveyed in a food insecure region indicated they preferred cash to any in-kind transfer, if they had access to markets and food is available. Households indicated that cash provided them with more freedom that in-kind transfers lacked (E. Lentz et al., 2008). In a research conducted in South Wollo, Ethiopia, of the 300 households surveyed, 92.8% of all households preferred cash to any other alternatives to food aid. Cash offers the households with the freedom to be able to buy food of their choice, invest in other areas such as buying goats or ox (Gelan, 2006).

CHAPTER

5 CONCLUSION AND RECOMMENDATION

The research indicates that food aid does not affect food stability and food availability for most of the households that are beneficiaries of food aid in Tana River, despite reports indicating that the region is food aid dependent. Further analysis is required to support the most vulnerable groups in Tana River while empowering households to be food secure.

The importance of food aid was less its amount but rather how it related to and complemented other available food sources. For instance, food aid had effects on the already existing interdependencies. Most visible, it partly dissolved existing dependency relationships by decreasing the need for employment in exploitative relationships such as logging of trees.

In summary, far from being an alien challenge to existing forms of livelihoods, strategies, and social networks, food aid becomes incorporated in already existing systems of dependencies. It becomes an additional entitlement that expanded and complemented these networks and helped recipients to rely on it during a crisis. It would be wrong to claim that food aid causes food availability in the long-term and causes dependency syndrome among the most vulnerable households that need food aid to overcome a temporary shock during the emergency.

Numerous researches have shown that many beneficiaries are dependent on food aid and this has caused many NGOs to cut vitally needed assistance to households and

beneficiaries that needed such aid. This research has shown that the notion of dependency is not that much pronounced among the recipients in the target community of Tana River County. Embracing technology, women empowerment, and robust government policies to improve food security – namely, the Big Four - has ensured that households are not dependent on food aid despite receiving food aid. This research makes a significant contribution then to the current research by debunking the myth of dependency on food aid. However, as noted the three key issues may have been the difference between this research and other researchers conducted worldwide. This thesis makes the following contributions and recommendations to the existing research and policies;

5.1 Recommendations

5.1.1 Literature

Further research needs to be carried out to analyze the role of mobile money transfer and banking on food security in Sub-Sahara Africa. As seen, M-Pesa technology has been crucial in reducing food insecurity among the households in the sampled communities. More thematic and systematic research on how non-internet-based technology platforms such as M-Kilimo and M-Afya affect household food security is missing and will need to be researched further.

This research recommends research to clarify shadowing factors influencing degree dependence on food aid such as production system, livelihood diversification, socio cultural factors.

5.2.2 Policy-based recommendations

The importance of household activities (livelihoods) changes households from insufficient food availability to ample food availability. Effective livelihood strategies and coping mechanisms are vital to food stability as witnessed. Households should be encouraged to not only produce crops for household consumption but embrace mixed cash crop farming as such households are more food secure and have more disposal income due to the availability of land and the new government policies to support food security. The mixture of crop production and cash crop not only ensure base supply of food for the households but an extra income that creates wealth if saved or invested for the households. Also, better beneficiary identification and mapping of sites and regions that need food aid needs to be carried out This is because the beneficiary identification is often the same among the NGOs as it was carried out by the same people. Some sufficiently wealthy households and food secure with diverse livelihoods have been receiving food aid, which then they divert to the market in the nearby markets and kibandas - informal eating places located by the roadside that sell staple foods, especially Ugali, rice, beans, and vegetables. This has left some of the most vulnerable households in acute danger of food insecurity. This is manifested during the chaos that is always witnessed in food distribution days, where allegations of corruption, nepotism, and prejudice are witnessed. Verification of households using mobile phone verification can solve some of these issues. Alternatively, the NGOs should start a fresh verification process by asking the community to identify the most vulnerable households without depending on the elders and beneficiary committees, while strictly adhering to the best practice standards of humanitarian aid.

CHAPTER

6 BIBLIOGRAPHY

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CHAPTER

7 APPENDIXES

7.1 Data collection tools

7.1.1 Household surveys questionnaire

The household interviews will be done in privacy once the participants have been selected. The participants will be invited to a conference room, in a nearby hotel facility to fill in the forms. However, given that many are pastoralists the questionnaires can be answered in a vehicle that is owned by the researcher. No two people will be allowed together in the interview car. In the conference room only participants will be there, non-participants will not be allowed.

section 1 – personal information

1.1 Who is the head of the household?

a) Father

b) Mother

c) Child

d) Grandparent

e) Relative

f) Other _____

1.2 How big is your household?

a) 1 - 2 members

b) 3 - 4 members

c) 5 – 6 members

d) 6 – 7 members

e) 8 and more

Section 2 - Source of Food

2.1 What are your sources of food?

a) We grow our own food

b) We buy our food

c) We grow and buy our food

d) We are given by relatives and friends

e) We receive all as aid from the Government and NGOs

f) We grow, buy and receive food aid

g) Other Specify_____

2.2 Do you own a piece of agricultural land?

Yes, No N/a

2.3 If yes to question 2 above, what is the size of your field?

a) 0 – 0.5 hectors

b) 0.6 – 1 hector

c) 2 – 5 hectors

d) 6 – 10 hectors

e) More than 11 hectors

2.4 If yes to question 2 above, how much food do you normally harvest?

a) Enough for the whole year round

b) Enough for half of the year

c) Enough for a quarter of a year

d) Not enough for a month

2.5 How many meals do you have per day?

2.6 How much do you make per month?

a) Less than Ksh 10 000

b) Ksh 10 000 – Ksh 15 000

c) Ksh 16 000 – Ksh 20 000

d) Ksh 21 000 – Ksh 30 000

e) More than Ksh. 30,000

Section 3 – Food Aid

3.1 Are you receiving food aid from agencies?

Yes No

3.2 If yes in question (4.1) above, how many times you have received food aid in the last six months?

a) Once

b) Twice

c) Three times

d) More than three times

3.3 What type of food do you receive from the agencies as food aid?

a) Maize or maize flour

b) Beans

c) Sorghum

d) Cooking oil

e) Sugar and salt

3.4 Some say here people don't want to grow their own food; they just want to receive free food, is it true or not?

Yes, it's true No it's not true

3.5 If yes to question above, why?

a) People receive enough food at the right time

b) They like the kind of food we receive

c) They have enough money and we can easily find food in the market

d) No need to go back to the field because of drought

e) Other Specify_____

3.6 If no to question above, why?

a) Food aid is not enough

b) Food aid is not always available

c) Food distributed is not always to people's liking

d) It's good to always have your own food

e) Other Specify_____

g) What are your coping strategies

1- sell livestock

2-migration

3-alternate livelihood

4- wait for food aid

Section 5– Food Security

5.1 Would you prefer to buy or produce your own food?

a) Buy

b) Grow own food

c) Not Applicable

5.2 If the answer is a) in the question (5.1) above, why you would prefer buying to growing own food?

a) It's easy to find food

b) It's easy to find a variety of food in the market

c) It's cheaper to buy than to grow

d) The drought makes it impossible to produce even if we wanted to

e) Other Specify _____

5.3 If the answer is b) in question above (5.1), why would you prefer growing own food to buying?

a) It's difficult to find food

b) It's difficult to find a variety of food in the market

c) It's cheaper to grow than to buy food

d) It feels good to produce your own food

e) Other Specify _____

5.4 If you grow own food how do you produce your own food considering the constant drought and flooding in the area?

a) The rains are enough

b) We use irrigation

c) We grow drought-resistant crops

d) We have a field in the wetland area

e) Other Specify _____

5.5 The current food distribution might not continue forever, what do you intend to do when the agencies stop distributing food?

a) I don't know

b) We will be able to produce our own

c) We will sell our belongs

d) We will starve

e) Other Specify_____

7.1.3 Focus group discussions

This questionnaire is designed to seek information regarding food security among small-scale pastoralists communities in Tana River county, Kenya. The interviewees are at liberty to refuse to partake in the questionnaires. They can skip question that they are uncomfortable to answer. The questionnaires will be private, and the responses will not be shared to organizations that offer food aid. Names of participants and villages will not be included or recorded. Participants can ask for more questions, clarity, and confidentiality regarding this questionnaire. Participants will be told why the research is being conducted.

As indicated in the consent forms that participants have signed, the members will be selected based on their knowledge of the subject matter being researched by the researcher. Members will be drawn from Community Health Volunteers (CHV), beneficiaries' identification members, and assistant chiefs and chiefs who are local leaders.

The meeting will be set in a private place where only selected members will be invited. No person will be allowed without prior approval by the focus group members. The meeting will be conducted in a conference hall paid for by the researcher in the village; if such a venue lacks the researcher will reserve a hall from the local government prior to the discussions. Even then only focus group members will be allowed.

Section 1: Sources of Food in the Area

1. What is the staple food in this area?

2. What are the main ways people get food in this area?

Section 2: Food Aid Distribution in the Area

3. In your opinion, do you think food aid is necessary for this area? Why?

4. What are the institutions that distribute food aid in this area?

5. Is the food distributed enough to meet the population's needs?

Section 3: Food availability in the Area

6. Do you think people have enough food in this area?

7. If food distribution was to stop, what do you think would happen?

8. What do you think are the causes of food insecurity in the area?

9. Do you think the Government is doing enough to alleviate the problem of food in this area?

10. What else do you think the Government needs to do?

11. What other ways would people do to improve food security in the area?

Section 4: The effectiveness of Food Aid on Food availability

12. What do you think is the attitude of people towards food aid?

13. Would you encourage food distribution? Why?

14. What would you say is the impact of food aid on food availability, accessibility, and utilization in the area?

7.1.4 Personal interviews

Personal Interview Paper with local NGOs workers and Local Government officials.

As indicated in the consent form signed by the participants, personal interviews participants were picked since they work with local NGOs involved in food aid and come from the community and the villages under research.

The personal interviews will be done in total privacy in a meeting room in a nearby facility ran by a hotel. The names will not be disclosed, and the NGOs will not be disclosed also.

Section 1: Sources of Food in the Area

1. What are the main ways people get food in this area?

2. Do you think people have enough food in this area?

3. What do you think are the causes of food shortages, if any, in this area?

Section 2: Food Aid Distribution in the Area

4. Does the Government distribute food in this area?

5. How much and where does the food come from?

6. How is food distribution going?

7. Is the food distributed in this area enough?

8. What do you think is the attitude of people towards food aid?

9. Would you encourage food aid distribution?

10. In your opinion, do you think food aid is necessary for this area?

Section 3: Food Availability in the Area

11. In your opinion do you think there is food insecurity in this area?

12. What do you think are the causes of food insecurity in the area?

13. If food distribution was to stop, what do you think would happen?

14. Do you think the Government and NGOs are doing enough to alleviate the problem of food shortages in this area?

15. What else do you think the Government and NGOs need to do?

Section 4: The effectiveness of Food Aid on Food Availability

16. What do you think is the attitude of people towards food aid?

17. Would you encourage food distribution? Why?

18. In your opinion, what is the impact of food aid in this area? Insecurity, radicalizations

7.2 Tables of data

Summary of the age of the beneficiaries

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. summarize age
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Variable	Obs	Mean	Std. Dev.	Min	Max
age	616	39.98701	15.17282	18	89

Table 9 Summary of age

Households Heads and number of cattle

Household Head	number of cattle			
	0-10	10-20	20-30	>30
FHHs (polygamous)	0	37	65	196
PWDs	0	2	3	30
Relative HHs	0	5	11	57
MHHs	0	4	34	77

Table 10 Households Heads and number of Cattle

Food sources for the Households

Nonfood aid Sources	Food aid sources
Growing food	Relief food
Buying food	Project food
Growing and buying	
Given by relatives	
Nature harvesting	
Chama	

Table 11 Sources of food

Programme food aid not surveyed

source of food ranking

The Numerical value of the source of food	Source of food
1	Grow food
2	Buy food
3	Grow& Buy
4	Given by Relatives
5	Complete Food aid
6	Combination of all above

Table 12 Sources of food ranking

Coping Strategies Index (CSI) Scale

Coping Strategies	Scale Index
Sell Livestock and Assets	4
Migration	3
Alternative Livelihood	5
Wait for Relief Aid	1
Reduced food intake and low quality	2

Table 12 Coping Strategies

Sources of Food Scale

Source of food	Scale
We grow food	3
We buy food	2
grow and Buy food	1
given by relatives	4
receive all food aid	5
Grow, by and receive food aid	6

Table 13 Sources of food scale

Coping Strategies Index (CSI) Scale

Coping Strategies	Scale Index
Sell Livestock and Assets	4
Migration	3
Alternative Livelihood	5
Wait for Relief Aid	1
Reduced food intake and low quality	2

Table 14 CSI Scale

Sources of Food Scale

Source of food	Scale
We grow food	3
We buy food	2
grow and Buy food	1
given by relatives	4
receive all food aid	5
Grow, by and receive food aid	6

Table 15 Sources of Food scale