

**Social Aspects of Dynamic Poverty Traps: The case of Madzuu  
location, Vihiga District, Kenya**

**Report Submitted as part of the Collaborative Research  
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Input Systems**

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## **1.0 Introduction**

This report focuses on the social aspects of dynamic poverty traps in Vihiga district, Kenya. Vihiga, a district in Western Province of Kenya, is a region that is faced by very high levels of poverty. Over 70% of its population is poor and cannot adequately afford basic needs e.g. food, shelter, clothing, education and Medicare (Amudavi, 2002, Republic of Kenya 2001). Dependency syndrome is very ripe in the district. Majority of the youth are unemployed. The life expectancy is relatively low as compared to other districts with similar agro-ecological potential in the country. The life expectancy for women is 60 years and 45 years for men (Amudavi, 2002). Because of high levels of poverty in the district, a big proportion of the population has started thinking that being poor is normal and is as a result of a curse that they cannot help.

The report is based on a study which is part of a project that is undertaking qualitative research at community and household levels to complement the survey based research that has already taken place in Madzui, Vihiga district, and other field sites such as Dirid Gumbo, Marsabit district, Ngambo, Baringo district, in Kenya and Fianarantosa and the Vakinankaratra in Madagascar. The main objectives of this social component are to characterize, identify and analyze dynamic poverty processes using social and historical methods. With particular attention being given to the effects of shock on welfare dynamics and the relationship between natural resources management practices, changes in natural capital (soils, forests, water) and human welfare dynamics. The research also aims at identifying existing and potential strategies for households to escape from poverty traps and understand the constraints in employing them.

The study is a collaborative project that involves, Cornell University, International Center for Research in Agro-forestry (ICRAF), Kenya Agricultural Research Institute (KARI) and University of Nairobi (UON) that have come together to undertake a research on rural poverty traps in East Africa. Broadening Access and Strengthening of Input Systems (BASIS) and Collaborative Research Support Program (CRSP) of USAID are funding the study. The work is also being supported by supplementary grants from IDRC (Canada) and the Rockefeller Foundation.

## **2.0 Research methods**

The overall approach to the research was qualitative. The following qualitative research methods were used in data collection:

1. The research began with one-day farmers' workshop held at uncle Sam Hotel, Emuhaya in Vihiga district. The workshop acted as a forum for giving a feedback for the previous research that had been conducted in the area while at the same time introducing the new study. During the workshop, community-level focus group discussion was the main method that was used to gather information from farmers. Sub-group discussions and presentation of various topics closely related to the research theme was another method that was used to solicit farmers' views in the workshop.

2. Case studies: This was the basic methodology that was used to explore the central analytical problems. Individual households formed the cases for in-depth interviewing. Ethnographic interviewing technique was applied in carrying out case studies. Through a historical analysis, household-specific histories of welfare and natural Resource Management dynamics were explored. Purposive sampling technique was used in selecting households to be interviewed for the qualitative work from quantitative survey sample of 126 households interviewed in the earlier study. The households were selected using poor - nonpoor matrices constructed from the quantitative panel data on per capita household income of the previous BASIS study. In Madzuu two households each were selected for interviewing from (i) poor – nonpoor and (ii) nonpoor - poor cells of the transition matrix for the site. Also sampled were two households each from the poor-poor cell who (iii) enjoyed an increase in income per capita between the two survey periods, (iv) experienced no significant change in income per capita between the two survey periods, and (v) who have suffered decrease in income per capita between the two survey periods. This was repeated on the non-poor – non-poor cell, covering two households each who (vi) experienced no significant change in income per capita between the two survey periods (vii) suffered a decrease in income per capita between the two survey periods, and (viii) experienced no significant change in income per capita between the two survey periods. A total of 16 households were selected and interviewed.
3. The last phase of the study involved interviewing key informants. Representatives from women group, an extension agent, chief of Mungoma location, and a village elder was interviewed.

### **3.0 The Study Site**

Vihiga District lies in the highlands of Western Kenya, which is part of the Lake Victoria basin. It lies between 34<sup>0</sup> 30' East and 35<sup>0</sup> 0'. The Equator cuts across the southern tip of the district. The district is 33 km wide from east to west and 19 km from north to south and occupies a total area of 563 km<sup>2</sup>. The annual rainfall range for the district is between 18000mm and 2000 mm, which is adequate for the area and its distribution is bimodal. The peaks are gradually reached between April and June, for the long rains, and September and November for the short rains. Its altitude ranges between 1300m and 1500m above sea level and slopes gently from west to east. Temperatures in the district range from 14<sup>0</sup>C to 32<sup>0</sup>C. High temperatures are generally experienced throughout the year. Temperature variations are minimal in the District. The geological formation of the district is composed of Kavirondian and Nyanzaian rocks system with notable ones being Nyangori and Maragoli hills. These rocks have high potential as building stones and ballast. The districts' two main agro-ecological zones dictate the land use patterns and population distribution. The upper midland zone with well-drained and fertile soils has high potential for crops like tea, coffee maize and covers most parts of central Sabatia, Vihiga and Tiriki Divisions. In total the upper midland zone covers 90 per cent of the district.

The lower midland zone covers the western parts of Emuhaya. The soils are red loamy sands, which have been derived from sediments and basement rocks. These soils support the growing of sugarcane, maize, coffee, beans, finger millet and sorghum. The

soils from both zones are losing their fertility through leaching and over cultivation. There is a need for undertaking conservation measures for ensuring sustainability of the fertility. Gully erosion is common in the district mainly due to high rainfall. Generally the fertility of the soils in the district have been subjected to considerable leaching due to high rainfalls and continuous cultivation over the years. This will require use of fertilizers to maximize productivity.

The District is divided into six administrative divisions namely: Vihiga, Sabatia, Tiriki East, Tiriki West, Emuhaya and Luanda. It has one of the most densely populated rural areas at 800 to 1100 people per square kilometer. As such, it is an example of many areas in Africa where the continued threat to the world's land resources is compounded by the need to raise food production and reduce poverty. Here, attainment of food security is intrinsically linked with reversing agricultural stagnation, safeguarding the natural resource base, slowing population growth rates, combating the negative impact of HIV/AIDS pandemic on the community and reducing poverty. The type of farming is mainly subsistence because of the reduced land size and large population. However most of the land is fertile. Food insecurity in Vihiga is high with some areas experiencing up to 9 months food deficit. The average farm size per household is 0.5 ha with an average household population of 8 (Amudavi, 2002). About one-third of each farm is planted to maize and most households are only producing enough maize to feed themselves for a few months or endure hunger periods. About 80% of the farms in Vihiga are severely deficient in phosphorous and most of them are deficient in nitrogen when phosphorous deficiency is overcome.

Madzuu, where this research was done, falls in Mungoma location of Vihiga division. In 1988 when the first study was done, Madzuu was one sub-location in the wider and former expansive Kakamega district. After the creation of Vihiga district Madzuu was subdivided into two sub-locations, Madzuu sub-location and Kisiyenya Sub-location. The households interviewed are scattered across the two sub-locations in different clusters.

Kisiyenya sub-location has sandy loamy soil. It is generally sloppy and most farmers have planted tea as cash crop. They also plant maize, beans, groundnuts, and bananas. Many of the people keep indigenous cattle. Apart from farming, some households depend on off farm income from employment. Either they receive money from their sons and daughters working in different parts of the country or others are employed mostly in the teaching profession and civil service in the district. There are no factories in the sub location. We have few shops and kiosks in the area.

Madzuu sub-location is generally flat with red loamy soils. The main road to Majengo cuts across the sublocation. The upper parts are rocky. The main crops in this area include maize, beans, groundnuts and bananas. There are a few people who have planted tea. Coffee does well in this area but people have neglected their coffee trees due to lower prices they get from the cooperative society. The pulping machine that was being used for processing coffee does not operate anymore. It is located at Bukuga market. There is a tea-buying center at the Bukuga market, due to its closeness to main road. Bukuga market has several shops, posho mills, and butcheries. The nearest hospital is situated in Majengo, the divisional headquarters, which is situated eight kilometers from Bukuga market. Maragoli an ethnic sub-group of the Luyha tribe occupies the two sub-locations. Most of the people are Christians.

#### **4.0 Community level factors affecting welfare change**

Farming is the main livelihood activity in Vihiga district, characterized by small, fragmented landholdings, generally smaller than one hectare. Households hold relatively few cattle, and cultivate predominantly maize, groundnuts and vegetables and the cash crops include coffee, tea and sugar. Food security is critically low. The community has many poor people who live below one dollar per day.

Due to high population density, land sizes per household have become very small. Average land size is estimated at about 0.5 hectare. The high population density has impacted negatively on the land. Soil fertility has gone down as people have over used the land through continuous cultivation for the last twenty years. Because of low nutrient resources, people realize very low yields from food crops that are cultivated. Most of the people in the community do not apply enough fertilizer on their farms. They site high prices of fertilizer that they cannot afford. The pressure on the land has resulted in soil erosion as people cultivate even on the slopes to get food. They have also cleared bushes to open up new farmlands thus interfering with the original vegetation. Now what we see dominating the area are exotic trees. Most of them are soft wood. Tree species that remain to depict the equatorial forest include the Elgon Teak, Celtis and Cordia. However even these ones are now becoming few. Eucalyptus, which is an exotic tree now forms about 70 per cent of trees grown on farm. It is the major source of timber and wood for fuel in the district. However it is not very much liked by farmers as it takes a lot of water from the soil. Some farmers lament that it is responsible for the drying out of some springs in the area particularly during dry seasons. The growing demand for building poles, fuel wood and fencing poles, due to the rapid population growth, has caused strains on soil resources leading to destruction of soils by soil erosions. Both hill and gully erosions are common in the district due to the high rainfall it receives.

The agriculture sector is also under pressure because of lack of alternative employment opportunities. An important part of the economic dimension is the poor state of the country's national economy. More jobs disappear than are created, and the government is trimming staff to meet the conditions for a restoration of World Bank and International Monetary Funds (IMF) loans. There are several households that were affected by government retrenchment. Most of the youth have resorted to bricklaying, which require a lot of timber to fire them in the kiln. This has led to indiscriminate cutting of trees and mining of soil in the area.

Another factor that affected peoples' livelihood in Vihiga is the collapse of the coffee market in the 1980s. Coffee farming in Madzuu was a major activity after independence; there was a cooperative that was marketing the coffee. The cooperative funded the construction of an all weather road linking Bukuga market to Mwironje market thus easing berry collection. In the early 1970s and parts of 1980s coffee was well paying and the community had started their own cooperative society. Most of the people who own commercial houses now in Majengo, Vihiga divisional headquarters, constructed them with the proceeds from coffee. The payment was instant and production was very high. There were households that depended purely on coffee farming for income. They were able to educate their children from coffee sales. However there are some people who

became poor because of coffee farming. Most households had planted coffee because of the benefits it had particularly during the coffee boom of the 1970s and thus neglecting tea. From 1987, the cooperative started paying very low prices and by 1988 farmers were now not being paid for the coffee berries they delivered. By 1990 the cooperative closed down and officials left the village. The newly picked berries went to waste, as there was no one to buy them. Children dropped out of school and people went hungry because they had no money nor had they planted other food crops. The government barred them from uprooting coffee stems. The cooperative is dead up to now and those who get coffee berries hawk them to middlemen or make their own beverage.

With the disappointments from coffee, there was need for a new cash crop. Tea is the major cash crop that is currently being planted by most farmers. Tea had already been introduced earlier on but many farmers were not keen partly because of attention on coffee and tea seedlings were not easily available. Tea farmers get support from Kenya Tea Development Authority to start tea plantation, then it is deducted from their pay.

Tea farming in Madzuu increased with the opening of Mudete tea Factory in Sabatia Division in the late 1990s. The factory employed extension officers who educated people on how to grow tea and establish their own tea nurseries. Currently half of the farmers in Madzuu are tea farmers. Tea is a major source of income to farmers who have planted it. It gives them regular income every end month and bonus at the end of the year. For the past two years the price has fallen from thirteen shillings per kilogram to seven shillings and fifty cents, current price. To them this is better than maize where they eat every thing from the farm. Many households hardly harvest maize that lasts for more than one month. They say in the late 1980s and early 1990s, tea caused an increase in rainfall in the area. Kenya Tea Development Authority (KTDA) maintains the two major access roads in Mungoma location. The two roads are Bukuga - Mwironje road and Kisienya - Madzuu road. In the past five years, the number of permanent structures has increased in Bukuga, largely attributed to a tea buying and paying center located at the market.

HIV/AIDS is another factor adding to the pressure on agriculture in Vihiga district. The epidemic is of serious concern in the research area. HIV/AIDS prevalence in Vihiga district now stands at 29% (DAC, 2003). The impact of HIV/AIDS on economic growth is such that, per capita income growth is reduced by 0.5-0.75 percent per year in countries with adult prevalence rates of 10-13 per cent (World Bank, 1997). This implies that the per capita income in Madzuu is likely to be reduced by more than 1.5 per cent. Withdrawal of labor from agricultural activities to provide home-based care for patients has direct impact on land use and agricultural production in general. Also during the terminal stages of the illness, many households sell off land to raise money for hospital bills and medication. Such cases are becoming increasingly common.

During long rains malaria attack is very high and the nearest hospital is eight to ten kilometers away. The long rainy season also coincides with the time when most farmers' grain stores are empty and they rely on the market for their produce. During this time the price of maize is normally very high. Farmers struggle to balance between buying medication and buying food. At government hospital they need a minimum of KShs 100.00 to get treatment while most of them work for KShs 50.00 to 70.00 per day. During the months of May to July there are many malaria-related deaths. The affected families do not have time to concentrate on farm work. At the same time trees are indiscriminately harvested and sold in whichever form to meet medical expenses or used to provide fuel

wood during funerals. These families will not have time to maintain terraces or allow their farms to rest (natural fallow). Currently there are many funerals in the community majority of them attributed to HIV/ AIDS related ailments. Others include malaria, typhoid and tuberculosis (TB).

In terms of infrastructure, Vihiga benefits from its close proximity to two major urban centers: Kisumu, the third-largest city in Kenya (located on the shores of Lake Victoria), and Kakamega, the administrative capital for Western Province. The proximity to two urban centers provides access to a wide variety of agricultural and income-generating activities.

These activities range from the production of food and cash crops and the trade of agricultural produce and livestock, to the sale of used clothing, consumables, and pottery, to other formal and informal trading practices. Mbale, the largest market town in Vihiga and the new administrative headquarters for Vihiga district, is favorably located on the tarmac road that runs from Kisumu to Kakamega. This serves as a major transportation link and provides good potential access to urban centers and towns.

The Majengo-Luanda road, which passes across Madzoo was a loose surface weather road before the 1980s and was almost impassable by vehicles during rainy season. However in the early 1980s the government of Kenya carpeted it. It links Kisumu-Busia road and Kisumu-Kakamega road. By 1980 when it was being carpeted, tea farming was taking root in western Kenya and there was need to open up the road network. At the same time, there were lorries from Uganda, which were coming to collect coffee from cooperative societies in Vihiga. The Mondo coffee factory was already a success story in Madzoo. Moreover the construction of the road saw the birth of Bukuga Market in Madzoo because vehicles started plying the route. People started constructing retail shops in the Bukuga market. All the shops in the market belong to community members. The people who own these shops are not really rich nor are they poor. However they are out of poverty.

The construction of the Majengo-Luanda road also opened up business opportunities for women in the village. With improved transportation means, women started taking the farm produce to big market centers such as Luanda and Majengo. From the market, they carry home farm produce, which are not in their villages, e.g. fish and other merchandise. There are women who have been in this business for over twenty years. Some inherited the businesses from their mothers and or mothers-in-law. Proceeds from the business have enabled them educate their children who are now working, some are still in school, buy cattle and build semi permanent houses.

The only major drought that can be remembered by residents of Madzoo is that of 1982 that hit the whole country. Madzoo was not spared, all the crops dried, many children lost their lives because of hunger. In the community there are few households that lost children due to this drought. Only one adult person died as a result of hunger that was brought by this drought. This was the severest drought experienced in the region in the past 20 years. Since then, Madzoo has been experiencing drought almost after every four years but not as severe as the one of 1982. The drought of 1982 saw most households fall into poverty of which some have never recovered to date. Some people lost herds of cattle and fell into poverty. Such people lost an opportunity of educating their children. Sons from such households also have their families now but are languishing in poverty. One respondent exaggerated that *“even dogs ate sugarcane in 1982”*.



The 1982 drought saw many students dropping out of school, because there was no food. Some of them never went back after the situation had stabilized, hence their low level of education to date. This has put them in a disadvantaged position, as they cannot get formal employment either in government or private sector. Most of them got casual jobs, that are low paying and that cannot enable them educate their children. Some men migrated to towns with the hope of getting good jobs but have never come back to date. It's a common story in the village that they became herdsmen in Kiambu District, Central Province. Their wives, who remained back, took care of the children but could not educate them. This is because they produce enough from the farm. The children ended up working for other people as house-girls or herds-boys after dropping out of school hence the families remained in poverty. Since 1982, there has been no life-threatening drought except one or two months' dry spell.

## **5.0 Household level factors affecting welfare change**

To fall or to remain in poverty in Madzoo depend on quite a number of factors. Results from case studies show that human and social capital play a great role in determining whether one falls into poverty, escapes poverty, remain in poverty or remain not poor at all. Reasons for escaping poverty in Madzoo tended to be different from reasons for falling into poverty.

### **5.1 Reasons for Escape from Poverty**

Acquiring good education and securing a well paying job either in public or private sector were very important factors for people who were poor ten to twenty years ago, and are now not poor i.e. have managed to escape from poverty. Other factors that have helped such individuals to escape from poverty are, hard work, discipline, diversification in on-farm and off-farm enterprises such as buying more land to diversify in crop production, investing on dairy farming and other livestock, owning other businesses such as shop-keeping etc. Other factors include having employed spouses or those with entrepreneurial thinking that can manage both petty and major businesses. Earnings from such businesses have helped in stabilizing households and cushioning them from slipping into poverty. The cases of Mashini Adolwa (*case study 8*) and Humphrey Obiayo (*case study 11*) illustrate these. By hard work, Mashini Adolwa managed to escape from poverty through education. He worked hard and paid his own school fees in secondary school and later joined a teachers training college. He is now employed as a primary school teacher and was also lucky to marry a fellow primary school teacher. From their salaries, they have managed to invest in a wide range of enterprises including dairy farming. Humphrey Obiayo (*case study 11*), though did not go past primary education, has managed to escape poverty through employment in the private sector. Through establishing social networks, hard work, discipline and willingness to change professions, he moved from a mere casual worker in various companies to a driver with a commercial bank that was well paying. From his salary in the bank he managed to educate his children, buy more parcels of land and venture into dairy farming. Through networking with the area Member of Parliament he managed to get his son employed in central bank as an office messenger.

## 5.2 Reasons for remaining non-poor

Acquiring good education and securing a well paying job either in public or private sector still remains an important factor for households that were not poor ten to twenty years ago and are still not poor today i.e. not falling into poverty. Individuals from such households came from good family backgrounds where parents laid emphasis on education. Thus they were lucky to get good education that landed them in well paying jobs. They said that other than the salary they earned, they also get access to loan facility and pension or benefits when they retire. They have managed to maintain their position of not slipping into poverty by using their earnings and through taking loans to invest into other enterprises including educating their children. Some of the on-farm enterprises such individuals have engaged in are, cash crop farming such as the growing of coffee and tea, buying land in Lugari settlement scheme and growing hybrid maize in large scale, and keeping crossbreed dairy cattle that gives high milk yield. Dairy cattle farming is considered in this area to be a very capital intensive and thus not an enterprise for the poor. Factors that are related to off-farm employment that have made these households not to slip into poverty include engaging in businesses such as shop keeping, plumbing, carpentry, and owning rental houses. Other factors include hard work, discipline, having children who are already working and can send remittances back home, and having spouses that are employed or are running businesses. See the cases of Peter Lomosi (*case 3*), Fred Chadeka (*case study 5*), Janet Demele (*case study 6*), Bennaih Chagala (*Case study 10*), Thomas Maloba (*case study 13*) and Meshack Kagali (*case study 16*). These individuals were not poor ten to twenty years ago and have managed to apply a combination of some of the above strategies to remain not poor.

It is worth noting that households that have managed to escape poverty or have managed not to fall into poverty are the ones that are concerned with natural resources management. These households have adopted ways of natural resource management, depending on their ability to mobilize labor. They hire labor regularly to construct terraces and maintain them in their farms. Terraces are the most popular method of controlling soil erosion in this area. Furthermore they are easy to construct provided there is labor. Bennaih Chagala (*case study no 10*) is able to repair his terraces annually before the on-set of rains. The same applies to Fred Chadeka because they are able to hire labor at a fee. They buy tree seedlings and plant in their farms to act as a windbreak and also provide timber when they are mature. The same households are the ones that made changes in their land use patterns in positive way in order to improve their welfare. Bennaih Chagala (*case no 10*) and peter Lomosi (*case study 3*) converted some parts of their land into tea farms. This has enabled them plant cash crops like tea that give regular income. Peter Lomosi (*case study no 3*) planted nappier grass for his cattle to improve on milk yields. He gets surplus milk, which he sells in the village.

Bennaih Chagala has home fenced with eucalyptus, jacaranda, grevillea and cypress trees. He said they prevent wind erosion. Tree leaves are mixed with animal manure to give farmyard manure. The farmyard manure is spread on the farm to help improve soil fertility. He is able to maintain such a big plantation because he is financially stable; if the trees are cut then it is for firewood in the household and not for sale.

### 5.3 Reasons for falling into poverty

Twenty years ago, there were individuals who were not poor in Madzoo but can be seen today as having fallen into poverty. From our case studies, we managed to identify nine most important factors that cast households into poverty.

The *first* and most important factor is death of major income earner in the family. Most households whose breadwinners die for whatever reason, very quickly degenerate into poverty. This is because overcoming the effects of death is very difficult because it requires a lot of money. If the deceased was the sole income earner, then it takes longer for the family to recover or they just do not recover at all and fall into absolute poverty. So many children drop out of school particularly after their parents, who had been paying for their school fees have died. For example Ombima Busaka (*case study 7*), when their father who was the main income earner died, their family started experiencing problems.

The *second* factor has to do with heavy funeral expenses when a member of the family dies. Families incur heavy expenses during funerals when one of their own dies. These expenses incurred are mainly related to buying the coffin and food for taking care of mourners and church ministers who conduct the funeral ceremony. In most cases family members use most of the assets of the deceased to meet these expenses. Slaughtering of livestock to feed mourners is a custom in Western Kenyan societies. Wealth is also lost when livestock and other assets are sold to raise money for meeting funeral related expenses. During funerals, there is indiscriminate harvest of trees to provide firewood that is used in cooking and lighting fire for people to warm themselves by at night, thus interfering with the natural resources. Ombima Busaka (*case study 7*) and Amos Kagavela Odando (*case study 4*) had to slaughter livestock to feed mourners during the funerals that took place in their families.

The *third* factor is loss of employment from the public and private sector through retrenchments and retirement. Amos Kagevela (*case study 4*) went for an early retirement after regular disease attack. *Fourth* factor is Poor health and health related expenses. Households where there is a very sick member tended to drift into poverty as most family resources go towards meeting their medical expenses. People with poor health can also not participate in productive activities. Their family members as well have to divide their time between taking care of them and engaging in productive work. See the cases of Amos Odando (*case study 4*) and Ombima Busaka (*case study 7*).

The *fifth* factor has to do with small land holdings. Reduction in land sizes is one of the major factors that have cast some households in Madzoo into poverty. Many of the households rely on farming as a source of income. Due to population increase and cultural requirement that every son must inherit a portion of his fathers land, land sizes per household have seriously reduced. Average land size per household in Madzoo is estimated at 0.5 hectare. Amos Odando (*case study 4*) has got only a quarter an acre piece of land yet he supports many descendants.

The *sixth* factor is unproductive land. Because households own very small land sizes which they cultivate every season; the soil fertility has gone down. Over-cultivation of these small land holdings coupled with non-use of soil fertility replenishment practices is the main cause of very low yields from these plots. Maize yields from these plots are too low that they hardly support farm households for three months. People have to turn to buying maize from the markets. This has increased the level of poverty in individual

households. Both Amos Odando and Ombima Busaka experiences very low crop yields from their farms.

Low level of education is the *seventh* factor that has cast some households into poverty. Amos Odando was not poor ten to twenty years ago because the ministry of agriculture employed him. However because of his low level of education, he could only be employed in the lowest carder where he earned a very low salary. With his poor health and increased responsibilities, he had to fall into poverty. Similarly Ombima Busaka, though was not poor initially as he used to receive support from his parents, could only be employed as a casual worker both in a coffee plantation in Muranga district and in his own village because he had low levels of education. When his parents died, he plunged into poverty.

The *eighth* factor is high dependencies. This can be as a result of having a large family of one's own or taking care of other relatives' families. High dependency on a few individuals in the family or on relatives is a cause of falling into poverty by some households that were not in poverty. Amos and Ombima have got so many dependants in their households that they have to take care of. Ten to twenty years ago they did not have many dependants.

The *ninth* factor has to do with conflicts over land and family instability. Because of high population densities, land disputes are very rife in Madzuu. During land subdivision a lot of conflicts arise in most families and there are many land cases lying in court. In such families, people fear making long-term investments on the pieces of plots that they work on. Amos Odando spent all his retirement benefits fighting for his land. Alcoholism and other domestic problems create instability in families. Such families are not productive and in most cases end up in poverty. See the case of Ombima Busaka (*case study 7*)

#### **5.4 Reasons for remaining poor**

For one to remain in poverty, he first must have been poor. To those who were poor ten to twenty years ago and have remained poor to date the above reasons apply as well. First they started their lives in poverty or they came from unstable backgrounds and since then they have been unable to move out of poverty because of one or a combination of factors of falling into poverty that have been discussed earlier. Having low levels of education that can land someone in a well paying job and small land sizes that are unproductive were the most mentioned reasons by those who remained into poverty. Other factors such as death of major income earner in the family, heavy funeral expenses, loss of employment, poor health and medical expenses, high dependencies, large family size and conflicts just added to one's remaining in poverty. Samson Magufu (*case study 1*), Peter Sabule (*case study 2*), Charles Madian (*case study 9*), Felda Kevogo (*case study 12*), Alphayo Musiala (*case study 14*), and Joseph Kamadi (*case study 15*) are examples of individuals that were poor ten to twenty years ago and have remained in poverty to date due to one or more of the factors above.

It was worth noting that these households that fell into poverty have not been very keen in preserving their natural resources. These are the households with lands experiencing severe soil erosion and they are the same ones that have engaged in indiscriminate harvesting of trees in search of their subsistence without planting new

ones. Alphayo Musiala and Makenzi Madian dug terraces initially but were unable to maintain them and some of the terraces got filled with soil. Alphayo Musiala is even in more trouble because he cannot do the work himself, nor can he hire labor. Madian is unable to maintain the terraces because during the rainy season he is always busy on other people's farms doing casual jobs to be able to buy food. The increase in soil erosion has led to reduction in crop yields hence continuous buying of food, which is an impediment for the two households to escape poverty.

Charles Madian (*case study 9*) cuts his trees for sale; this has increased soil erosion on his farm. This also applies to Alphayo Musiala, Peter Sabule, and Ombima Busaka. The trees are cut for sale to earn money for buying food. They are not able to buy tree seedlings to plant and their argument is that they are poor and no money to buy seedlings. Peter Sabule said he couldn't replant trees because there is no space for planting more and he cant afford to buy seedlings.

## **6.0 Appendix I: Case studies from individual households**

### **Case study 1: Samson Magufu: Poor – poor (no change)**

Samson was born in 1947 and is separated from his wife. He has seven children, four sons and three daughters. All the three daughters are married though no bride wealth has been paid yet. He lives in a grass-thatched house and owns a three-quarter-acre piece of land. He relies mainly on farming for his subsistence. His friends helped him to plant nappier grass, bananas and sugarcane. He exchanges nappier grass for labor and sells bananas and sugarcane to meet his household needs. He receives remittances, though not regularly, from his sons who do casual jobs in Nairobi. To him, it is just sheer luck that he receives such remittances.

Twenty years ago he was poor, which he attributes to his low level of education. He attended primary school up to class three and then dropped out following the death of his father who had been paying his school fees. This was the main cause of his being poor. He left for Nairobi where he was doing casual jobs that were low paying (earning KShs 30.00 to KShs 50.00 per day). He could not make any savings. The other cause of poverty in Samson's household is the small parcels of land he owns. Samson had four brothers with whom he had to share his father's land. After land subdivision, they ended up with very small parcels of land. Illness in Samson's household is another cause of him being poor. He has a back problem, which emanated from a dislocation of the backbone. Samson worked as a loader in trucks when he was in Nairobi. One day he attempted to carry a 135 kg bag on his back and dislocated his backbone. He had to retire from this job. He spent all his benefits on treatment. Due to his poor health, his wife went to look for job in Nairobi ten years ago and has never come back. Samson experiences labor constraint in his farm. He is unable to hire labor because a big portion of his money goes to medical expenses. He depends on handouts from his relatives to supplement his subsistence.

His family has remained in poverty due to low level of education among the children. None of them went beyond primary school. In this household, indicators of poverty as expelled by most people in this region are very much visible: poor conditions of the house, mud walls, which are not well maintained, leaking grass thatched roof and inside the house, the farmer has got old stools which need repair as seats. He does not own any livestock. The ones he had were sold out to meet medical expenses. He does not have sufficient food almost throughout the year. His land has been exhausted of nutrients as it has been tilled continuously for the last twenty years without nutrient replenishing techniques.

Diseases are very common in Samson's household and its neighborhood. Malaria attacks Samson regularly and this coupled with complication of his back has cast him into poverty. In the past three years the rainfall pattern has been fluctuating. This has caused loss of crops. Last year the rains started earlier than usual and after two weeks it disappeared. Most of the maize crop dried. He considers this a risk because if it recurs for two consecutive years there will be major hunger. This year rains disappeared in mid June for three weeks, when the maize was tussling, thus leading to low yields of maize.

Twenty years ago, Samson and his brothers were practicing monocropping, as the land was a bit big. But since land subdivision took place, Samson mentions that he plants almost all crops (maize, beans, potatoes, bananas etc) in the same piece of land. He has changed his land use pattern because of his small piece of land. Though there are social welfare groups in his village, he is not a member of any due to his ill health and poor financial status.

## **Case study 2: Peter Sabule: Poor – Poor (Decrease)**

Peter was born in 1937. He has a semi permanent house and grass-thatched kitchen. His farm is located close to the tarmac road and he owns two African zebu cattle. He went to primary school up to class three. He worked in Nairobi as a cook and driver until 1987 when he was diagnosed to have cancer. Since then he has been bed ridden on and off. He sold all his cattle to meet medical expenses. Nowadays he is so weak that he cannot farm or engage in any economic activity.

According to him poverty set in when he was diagnosed to have cancer. He was sick for a whole year and that is when he quit his driving job. For the past ten years he has been living in poverty. His wife died and the only son who was working also died. He says that people told him that his son could have succumbed to HIV/AIDS. When he went down with cancer, his late son was a major income earner for the family. He left behind three children. His sons' children and his own two daughters are living with him in his compound. The two daughters got married but later separated from their husbands. They all live with him. His other son has never been employed despite attending and completing secondary school. He does casual jobs. However he is an alcoholic and spends all his money on alcohol, leaving the family to starve. His daughters also do casual jobs to sustain him. He depends on the daughters to till his three-quarter acre farm.

From the household, indicators of poverty include begging for food and putting on tattered clothes. His household now has many dependants and he is sickly. For the past ten years poverty levels have been increasing in his household mainly due to unemployment. His son does casual jobs and earns between KShs 70.00 and KShs 120.00 depending on the type of the job. From this he has to buy maize, kerosene, vegetables, cooking oil and other family needs. Another major cause of poverty in his household is lack of land to practice proper farming. He owns a quarter piece of land and due to continuous cultivation; the soil fertility has gone down leading to low crop yields. From his quarter acre piece of land he harvests about 40 kg of maize.

Peter mentioned that twenty years ago the major way of escaping poverty was through payment of bride wealth when a daughter was married. Cattle paid as bride wealth could then be used to educate sons who could then land a good job and help the family. This is how his brother educated his son by selling the cattle to pay school fees. He mentions also that another way of educating a child was through exchange of labor for school fees. Peter worked for his area Member of Parliament who in turn paid school fees for his son who died. However he adds that education as a way of escaping poverty is changing because many people are unemployed and it is expensive to educate a child up to college level yet there are no jobs. Despite this, Peter mentions that people still believe that education is the key to escaping poverty.

Peter does not have a pastureland of his own nor does he have an access to communal grazing grounds. The communal grazing grounds have disappeared and nowadays they are people's private plots. He practices stall-feeding (an enclosed unit) for his cattle. His grandsons cut grass from the roadside and bring to cattle at the stall. He planted nappier grass on a public piece of land along the roadside, which his grandsons also harvest for the cattle.

Twenty years ago they were using animal manure plus other residues from the farm to be used as manure on the farm. This ensured long-term sustainability of soil fertility. They started making terraces in 1980s, terraces are the most common up to now, because they effectively control soil erosion, except that it requires a lot of energy to construct. Natural fallow is no longer common due to reduced land sizes due to increase in population.

One of Peter's daughters is a member of merry-go-round, which was formed to help purchase utensils. She has already benefited from the first round and now they have enough cups and plates. The group was formed out of the need for women in their village to have well equipped houses. The clan group deals with funerals and other calamities. Members are men and women of Luvuka clan.

Peter told us that there has been no group on soil conservation in their village. The only one that existed was in 1988. He was planting trees until 1987. Since he fell sick, he has not been planting trees nor does his son. This is because crops occupy all the land and there is no space for trees. The trees that were there are now being cut down for sale.

### **Case study 3: Peter Lomosi: Nonpoor – Nonpoor (No change)**

Lomosi is fifty-one years old. He is married and has eight children, five boys and three girls. He attained secondary school education up to form two, and then joined Rift Valley Technical Training Institute to train as a plumber. After college, he was employed by Kenya Breweries Company where he worked up to 1985 then resigned to start private business. He has also worked as a consultant at Mumias and Nzoia Sugar Company. Currently he is farmer.

He has a semi permanent house and three crossbreed dairy cattle in his farm. He has six acres of land he inherited from his father and four acres, which he bought in Lugari settlement scheme. Of the six acres, on two acres he has grown tea, one and half acres he has grown nappier grass, and in another 1-½ acres he has grown maize.

He said that he has never been poor but he was also quick to point out that he has never been rich. His father was a pastor and paid for their education. After completing his education he was lucky to have gotten a job. From his job, he has managed to save money and bought land. He also opened a plumbing business in Nairobi where he got contracts to work for different companies and individuals. He receives a constant supply of milk from his crossbred dairy cattle. He sells on average seven and a half liters of milk daily, which earns him KShs140.00. He uses the money to buy his household goods. He gets a regular income from tea and at the end of the year, he earns a bonus from Kenya Tea Development Authority (KTDA). From the farm in the settlement scheme he harvests seventy to ninety bags of maize annually. He stores his maize harvest and sells only when the prices are very good. Whatever he earns from maize sale he uses to pay



school fees. Apart from diversification he insists on hard work and discipline. *“I am always on the farm doing some work,”* he said.

He defines poverty as having shanty house, begging always and being lazy. He says that most poor people in his village have an ‘I don’t care’ attitude, are rude and are thieves. According to Lomosi, there are differences among households in his community. Households that are organized and are hardworking do not lack food. Households that have income earners who are alcoholics lack food, clothes and do not educate their children. To him these households are different from the ones, who are disciplined; he strongly believes that alcohol is the major contributor of poverty in Madzuu.

Twenty years ago the time taken to escape poverty was shorter according to Lomosi. Farming was profitable, his parents educated him through the sale of maize harvests and many of his village mates were selling different types of crops i.e. (maize, beans, bananas, and tea) to get money. Business was easy to start. One required little capital, as low as KShs 100.00 to open a kiosk and customers were many because there were few shops in the community. Currently there are no crops to sell due to reduced land sizes and reduced soil fertility. Business is very competitive, as there are many traders within and outside the village selling the same type of goods. It takes along time to accumulate enough capital to enable one to invest more in order to move out of poverty.

The Major shock that has threatened him was the death of his brother’s child and both of his parents. He had to foot all their hospital bills and funeral expenses. In the process he slaughtered two cattle. He survived all this because the previous year he had good maize harvests and had not sold the stock from the previous seasons harvest. Sometime Lomosi faces labor problems due to frequent malaria attack on his workers. He said that some of the people who work for him fall sick and they never come back to work. In order to keep them in his farm, he has resorted to taking them to hospital for treatment immediately they fall sick. He added that overcoming the effects of death is very difficult because it requires a lot of money to recover. If the deceased was the sole income earner, then it takes longer for the family to recover. For him he has the advantage of having a big land where he has grown tea and in some parts he grows maize. This has acted as a security to him whenever there is death in his family.

On natural resource management, he has been planting trees continuously for over twenty years. Part of his land is on a slope where he has practiced soil and water conservation by digging terraces.

He is a member of the Kenya Tea Development Authority Savings and Credit Cooperative Society (KTDA SACCO) an affiliate of Mudete tea factory that processes their tea. It belongs to registered tea farmers. They pay KShs 800.00 as membership fee. The SACCO gives farmers loans for farm inputs that they recover from their proceeds when tea is delivered to the factory. The SACCO markets farmers’ tea on their behalf. Lomosi said that it is beneficial because it has made tea delivery easy. His wife is a member of Mwangaza Women group, a merry-go-round group whereby members contribute KShs 500.00 every time they meet to one member. It was formed to enable them buy items that require a lot of money e.g. sofa sets, TV etc. Anybody who can afford to pay five hundred every month is free to join. His wife said that it is not easy to convince people to form a group that deal with natural resource management because they have other pressing problems. There are no immediate direct benefits from such a group.

Lomosi complains about the disappearance of agricultural extension officers from Madzuu. He mentions that they only come once in a while and they are not as motivated as they used to be 20 years ago.

#### **Case study 4: Amos Kagevela Odando: Nonpoor - Poor**

Amos was born in 1939 in Madzuu. He went to primary school up to class seven. After school, he worked with the ministry of Agriculture as an office messenger. However due to regular attack by diseases, he opted for early retirement for fear of being sacked. He owns quarter an acre piece of land, a semi permanent house and a zebu cow.

One of the things that have cast him into poverty is a long running legal case with his brother, who altered the boundary of their farm. He has spent all his retirement benefits fighting for his land. Furthermore regular disease attack has persisted and he is regularly hospitalized. What he gets from his farm is only enough for subsistence. His household has so many dependants, three of his sons are staying with him and they are unemployed. He is also taking care of his elderly and ailing mother.

Amos compared his situation and other households in the village and said that there is difference in poverty among families. He said that his household has so many dependants who are unemployed while some of his neighbors have fewer dependants and their children are employed and support them. Another factor that plunged his house into poverty is funeral expenses. It is a custom that when ones father dies he has to slaughter a bull to take care of mourners. When his father died, he had to borrow money to buy one.

According to Amos, today it takes longer for one to come out of poverty than it took twenty years ago. Because of their background, he says a child will take fifteen years to complete school and be employed or a good business takes same time to stabilize to enable one to escape poverty. He states that the best strategy for escaping poverty is education that leads to employment. It's after acquiring education that one is able to utilize improved farming methods and diversifies in business. The same strategy was used before to escape poverty but nowadays it's a matter of luck, as it depends on how one is able to get a job. Farming is no longer profitable without capital to invest in modern farming methods e.g. Zero grazing dairy cattle farming, tea farming etc.

The death of his father was a drawback to his household. He used a lot of his resources during his father's funeral that he has never recovered. Amos also associates his illness with some aspects of witchcraft. He has been hospitalized several times but the nature of his illness has never been diagnosed. Further more Malaria consumes a big portion of his money as every month he has to use money on treating Malaria, when any of his household members is infected. This consumes the funds that could be used in farming.

Unreliable rainfall has also become a factor that affects farming in Madzuu and it affects everybody. The season begins too late or too early and the rains disappear before crops mature. Frequent crop failure is one problem Amos is yet to cope with. In 1997 there was very heavy hailstones that destroyed the entire crops in his village and this led to severe famine in early 1998. Amos had to beg from relatives as he waited for the long rainy season harvest of 1998.

About coping with death, he says it requires money; some family members support the bereaved to educate their children and buy food. If the whole family is poor there is

nothing that can be done except to do casual jobs within the village to get food otherwise they pray to God.

Nowadays Amos has changed his land use pattern as compared to twenty years ago. He reduced the crops planted on one piece of land and now plants maize and beans only because the land is so small and the yields are low. Before he used to plant maize, beans sweet potatoes, cassava, and bananas. Since 1970s he has been digging terraces in his plot to conserve soil. When he was working he could plant trees because tree seedlings were being given free of charge. However now, people have to buy tree seedlings and he cannot afford.

Amos is not a member of any group. He believes this is a way of enriching other people. His wife is a member of a merry-go-round group. He has never been involved in any group that deals with natural resource management, as there has never been any in the area. Amos believes that natural resource management is an individual initiative and every family has its peculiar landscape, which they have to deal with on their own.

### **Case study 5: Fred Chadeka: Nonpoor - Nonpoor (Increase)**

Fred is sixty-three years old. After his secondary school, he joined Kagumo teachers training college to train as a primary school teacher. He has worked in various stations and retired last year as the headmaster of Isiagalo primary school. He married in 1973, and they have six children, four girls and two boys. The wife is a former nominated councilor.

He defines poverty as regular attack by diseases in a family; laziness, unfavorable social background, and owning a small parcel of land that cannot produce enough food to sustain a family for one year. He says that households whose family members are always sick are likely to be poor, as their children don't get education.

He admitted not being poor but not very rich. His father was a church minister and managed to take him to school. In his teaching profession, he used to take loans to educate his children, bought land, and built a semi permanent house. He has invested in farming. Every year he harvests fifty to seventy bags of maize depending on rainfall availability. He sells maize to enable him pay fees for his children. Two of his children are taking their degree courses in private university. He has half an acre of tea plantation, and two crossbred cattle from which he gets milk that he sells to villagers. *"I have been able to do all these things because I am hardworking disciplined and pious"*, he added.

According to him there are differences in poverty levels among households in the village. His household can afford food and pay fees for his children. While his immediate neighbor's household cannot. The wife to his neighbor is ever working as a casual laborer in other people's farms. His neighbor sometime begs for food from him and they have a grass-thatched house, which is not well maintained.

Fred says that in the past twenty years, poverty level has increased due to low levels of education and unemployment. Education is very expensive and many children in his village are dropping out of school after attaining class eight primary education. Secondary schools charge a minimum of KShs 10,000.00 per year, which most families who only rely on casual jobs cannot afford. He observes that due to low levels of education most youth in his village cannot get well paying jobs. *"Poverty levels were low*

*twenty years ago because anybody with secondary education was assured of a job; currently even university graduates are unemployed. High level of unemployment has resulted into unwanted pregnancies increasing dependency, theft and burglary and even continuous cutting down of trees,” he says.*

In the research area malaria is a common disease. At the time of interview, Fred had spent KShs 600.00 to treat his wife the previous day. His immediate neighbor’s wife had also just borrowed KShs 100.00 from him to buy drugs for her child the previous day. He said that she would work on his farm for two days to repay the money. According to him, laziness and ‘I don’t care’ attitude is common among the poor. Some poor people just idle, they don’t do anything to uplift themselves because they are poor. Another factor Fred observes to be responsible for pushing people into poverty is HIV/AIDS. He told us that there are many orphans in his village whose parents died out of AIDS scourge. Relatives of such children have to take care of them. However he adds that it is an extra burden because the relatives themselves are also poor. He has observed an increase in the number of young widows who are struggling to make ends meet. Their husbands have passed away and they have to take care of young families without any stable sources of income. Some are trying petty business and others work as casual laborers in other people’s farms.

Twenty years ago Fred mentions that poverty was a clan problem and people could pool resources to help the poor. Today individualism has cropped in and people are not as united as before. The recipient could reciprocate by working hard and giving community service e.g. help build a tent in case of function or funerals. He adds that twenty years ago people were hardworking. They were doing something on the farm not idling in the village. Right now there are so many idlers, partly because land sizes have reduced. He sees education as the only strategy for most parents. Educated parents who know the value of education will strive to educate their children. He advises children to emulate hardworking and honest people in the community.

According to him, the time it takes to escape poverty varies depending on the prevailing economic circumstances and rainfall reliability. Twenty years ago it took shorter time to escape from poverty because the cost of living was lower, land sizes were larger and more fertile. He says that he is sure for the last ten years only one or two people in his village managed to escape poverty. The rest are stuck in poverty due to small land sizes, high costs of living, and lack of employment opportunities.

Fred’s land use pattern has changed as compared to twenty years ago. He is nowadays using more of inorganic fertilizers than organic animal manure. He now plants fewer crops, maize, beans, and kales. Before he used to plant cassava, sorghum, and sweet potatoes. However, since 1999 cassava has been wiped out in the area due to cassava mosaic disease.

Soil and water conservation through terracing and afforestation have been part of his farming practices for a long time. He has dug terraces on all his plots to conserve soil and water. In his compound, he has planted a lot of trees to provide timber and act as a windbreak.

Fred is a member of Kisiyenya Teacher’s Welfare Association (KITEWA). They contribute six hundred and fifty shillings every month to the associations account. Four hundred is for merry go round; two hundred is for shares, which they share at the end of the year. Fifty shillings is for welfare i.e. medical, funeral expenses.

## Case study 6: Mrs. Janet Demele: Nonpoor - Nonpoor (Decrease)

Janet is thirty-three years old and her husband, Moses Demele, is forty-one years old. They both completed primary education. Moses did not proceed to secondary school because his father, who could support his education, died. Janet, his wife, got pregnant immediately after completing primary school. Moses is a driver of Kenya Bus Service. Previously he had worked for a white man where he learnt driving and later joined Nyayo taxi, which went under liquidation. Janet has a semi permanent house, one zebu cow and half an acre piece of land that her husband inherited from his father. They have seven children, four boys and three girls, all of whom are at different levels of primary school education.

Ten years ago Janet was not poor because her husband was working and she was operating a retail shop in the village. She also traded on second hand clothes at the nearest market. She owns a crossbred dairy cow and from it she gets sufficient milk for family consumption and surplus to sell daily. Furthermore by 1992 the land was not subdivided. She could till the whole land and the harvest was good enough to last a whole year. So she was not buying maize or vegetables.

Later the land was subdivided between her husband and her brothers-in-law. This led to Janet and Moses owning very small parcel of land. Moses her husband got sacked where he had been working. Her mother in-law was very sick and they incurred a hospital bill of KShs 24,000.00. Her business collapsed after many of her customers refused to pay debts they owed her and she has also incurred many debts during the illness of her mother in-law. Last year she had a large flock of chicken, about forty, but a mysterious disease cleared them when she was planning to supply them to Mbale chain of hotels.

She defines poverty as lack of money and food. Lack of money is due to lack of sources of income e.g. employment or small unproductive land. She says that poor people are lazy and beggars. *“Compared to twenty years ago, there are more poor people now”*, she said. The majority of the poor now, were the middle class twenty years ago. According to her, twenty years ago there was plenty of fertile land and the clan took responsibility of its members. From the 1990s the poverty level has risen because people have become more individualistic.

According to Janet, the new strategies available for escaping poverty now are *boda boda* (bicycle transport) business, raising exotic dairy cattle through zero grazing, and tea farming. She told us that ten years ago, high yielding exotic dairy cattle were a preserve for the rich. However nowadays she is seeing many middle class people acquiring them. Another way of escaping from poverty that she mentions is through education. *“I am struggling to give my children the best education I can”*, she said.

Asked to comment on the length of time it took people to escape poverty ten to twenty years ago, she said it took a shorter time. Land was big and fertile, and the population density was low. However she maintains that time taken to escape poverty depend so much on what one is engaging in e.g. if one concentrates on maize and bean farming on a quarter an acre piece of land, it will take long to escape poverty. But one who invests in big business in towns like Kisumu, Kakamega and Nairobi escape from poverty faster. She said that it took her ten years to escape poverty but one and half years to fall into what she describes as partial poverty at the moment. Diversification is important to

escape poverty. There are community members who combine their work, business and farming (tea and raising exotic breed of chicken).

Janet has planted trees on her farm to stop soil erosion and to act as a windbreak. The trees also provide firewood. She has also constructed terraces on her farm to control soil erosion. Janet is not a member of any group in their village.

### **Case study 7: Ombima Busaka: Nonpoor - Poor**

Ombima is forty-three years old and married. He has four children, two girls and two boys from his first marriage. His second wife has got no child and his first wife separated from him because she felt he is an alcoholic and irresponsible. He inherited all the two acres of land of his father as the only brother he had died. Ombima attended primary school up to class seven after which he went to Muranga District in Central Province where he was employed as a casual worker in a coffee plantation. He came back home after continuous malaria attacks. He has a semi permanent house and no livestock. Twenty years ago he was not poor because he was depending on his father who was working in Nairobi. More so their land was giving high maize yields (twenty to thirty bags per season) because of regular and continuous application of animal manure. His father could sell surplus harvest to support him and his siblings. The father had seven cattle that produced surplus milk and manure.

Following the death of his father, mother and brother, he has been left poor as all the cattle were sold to meet their funeral and medical expenses. He is unemployed and depends on low paying casual jobs in the village. His land is unproductive because he no longer has cattle to provide him with manure that he can use to rejuvenate soil fertility and at the same time he cannot afford to buy fertilizer. His sister who supports him fell sick sometime in 2002 and has not yet recovered and can no longer provide him with farm input. He rents out one and half acres of his land and works on half an acre, which yields half a bag of maize.

He recognizes the importance of education in escaping poverty. The help he used to get from his sister is because her sister gets remittances from her sons who acquired secondary education and are employed.

There are terraces in Ombima's farm that were constructed by his late father. However they are not well maintained because Ombima is busy with casual jobs on other people's farms. His late father planted the trees on his farm. Ombima has never planted trees on the farm himself as he claims that the tree seedlings are quite expensive.

Ombima has never been a member of any group as he claims that he does not have money to pay for the contribution. His current wife is member of Mwenyiliza women group. This is a merry-go-round group where members contribute ten shillings for another member when there is a problem like death.

### **Case study 8: Mashini Adolwa: Poor - Nonpoor**

Mashini Adolwa was born in 1955. After his secondary education, he trained as a primary school teacher. He is married and his wife is also a primary school teacher. They have six

children, three sons and three daughters. They own a permanent house, one acre piece of land, and two crossbred dairy cattle. Twenty years ago he was poor. This was caused by family feud on land boundary and they had to flee from their home to Kitale in trans Nzoia district where they lived for several years. When they decided to return, his father was already burdened with school fee problems and feeding the family. His father's brothers had also grabbed the piece of land that could have been allocated to his father leaving him with a very small portion. While in Kitale his father was employed as a casual worker in a white man's dairy farm. He was being paid KShs 3.00 per month which was not enough to maintain the family. Life was tough for him when he was in primary school. He and other friends formed a work group, which used to dig for people and save the money to pay school fees. This is how he managed to go through his primary education.

He was admitted to a prestigious Maseno school due to his sterling performance in primary school, but due to lack of school fees he joined a cheaper Secondary School in his area. Mashini was a day scholar and he used to sell sugar cane in the evening to primary school students from which he earned money to pay for his own school fees. His father was working on people's farms to support him. He went up to form two and did Kenya Junior Secondary School Examination (KJSE). He then joined Siriba Teachers Training College and trained as a primary school teacher. Since then he has received several promotions on merit.

He managed to escape from poverty through education. "*Compared to twenty years ago I am better off,*" he says. Through taking loans from the Teachers Savings and Credit Cooperative Society, Mashini has managed to build a permanent house, bought a commercial plot and acquired another one acre piece of land in another village. He is now educating one of his children in college, two in secondary school, and three in primary school. He said they take loans in turns. When he takes a loan this year, his wife takes a loan the following year. He also ventured into zero grazing dairy farming. He pulled out after realizing it was expensive to run. He was keeping exotic chicken, but they all died after they succumbed to fowl typhoid. He lost the chicken after spending twenty thousand shillings. The farmer said that these have been the major factors derailing his efforts to widen the gap between his current state of being non-poor and being poor.

Mashini has changed the land use pattern on his farm. His father used to plant many crops on different plots of the farm but for him, he plants several crops in one plot to maximize profit. Because his farm is located on a sloppy area, he has constructed several terraces to stop soil erosion. The trees he has are just planted along the fence, as he has no space in his farm to plant them.

His wife belongs to *hodi hodi* women group whose members are teachers from their village. Every month, each member contributes KShs 500.00, which is kept in the group account. In case of an emergency like death or school fees, a member can be loaned at an interest of 5%.

### **Case study 9: Charles Makenzi Madian: Poor – Poor (No change)**

Charles was born in 1956. He is married and they have got eight children. They own a semi permanent house, one-acre piece of land, which is located on a slope. His major sources of livelihood are casual jobs on people's farms and tea farming from which he

earns KShs 200.00 per month. The casual jobs include working on people's farms. His son, who is a primary school drop out is in Nairobi doing casual jobs. His level of education cannot allow him to get a job from where he can derive a decent earning to help the family.

Madian's land is unproductive because it has been cultivated continuously for over fifty years without proper soil amendment practices. Furthermore it lies on a slope where erosion presents a problem. He has constructed terraces in his farm but due to over-commitment with casual jobs, he is unable to maintain them. He also faces serious problem of striga (witch weed) infestation in his maize plot. Sections of the plot where there is heavy striga infestation, gives very low maize yield. In such sections he now plants nappier grass. Madian does not have cattle as the ones he had, he sold to pay school fees for his daughter who has completed her secondary education but is unemployed.

Given that he has a large family, coupled by his mother's ill health that requires regular medical attention, Madian does not see any hope of escaping from poverty. His earning from tea is too little. He does not know why, yet tea is well paying in his area. His land is less productive. He harvests less than a bag of maize from his farm. This lasts for less than a month. He has to buy food throughout the year. Moreover casual jobs have become very competitive and there are many unemployed people in the village. He said jobs are constant during the month of February to March and August-September, which are normally peak periods.

His late father planted the trees that are found in his farm. He says that he has harvested most of them for sale and firewood. He himself has no time to plant more; furthermore the tree seedlings available are quite expensive. His father also dug the terraces and Madian has been maintaining them.

He is not a member of any group because groups require that you contribute money for membership. The money does not give returns as officials embezzle the funds and eventually the groups collapse. The wife belongs to *chama cha huruma*. It a group of mixed men and women from the their village. They pay a minimum of twenty shillings whenever a member has a problem especially when bereaved. She said funeral groups are common because they give direct support and there is no keeping of money that can stir conflict.

### **Case study 10: Bennaih Chagala: Non-Poor – Non-Poor (Increase)**

Bennaih is seventy-two years old and his wife Winnie is sixty-seven years old. Bennaih was a registrar of the high court while his wife Winnie was a primary school teacher. They are all retired civil servants. They had six children, two died and the remaining four are all employed. He owns a permanent house. He said that twenty years ago he was not poor because he was already working and had bought four acres of land where he planted tea. He also inherited six acres from his father. Of the six acres of land he planted coffee on four acres. He also owns crossbred dairy cattle, which he keeps in a zero grazing unit. Another six acres of land, which he owns, is in the settlement schemes in Lugari district and he has settled his eldest son there.



He said that because of education, he has been able to think ahead not to fall into poverty. He performed well in secondary school and was offered a job in the civil service immediately. He attributes this to hard work and ambition. When they were working he was a member of Harambee Savings and Credit Cooperative, which was, by then, a cooperative group for all civil servants who were under the office of the president and the judiciary (currently the judiciary has its own cooperative). He severally took loans to finance his children's education and other development projects in the family. Before taking a loan they could discuss with the wife and agree on what to do. Above all he developed the culture of saving. He has been able to avoid poverty through diversification in various enterprises and by educating his children who are all working. He owns a commercial plot in Bukuga market where he has constructed a bar and a restaurant, which are both operating. He encourages his children to save and invest in business and farming. He rarely asks money from them, as he is comfortable with his retirement benefits and income from farming. "*Children need education to make informed decisions,*" he concludes.

His land use pattern has changed over time; earlier on he was planting maize and beans only. He planted coffee in the 1980s and started using hybrid maize in late 1980s. In early 1990s he started growing tea. From 1995 when the coffee cooperative started offering low prices, he converted the coffee farm into maize and beans farm. There are terraces on his farm, which he constructed in the 1970s. He has maintained them. Parts of his land lie in sloppy areas. He has planted nappier grass on the embankment of the terraces to stabilize them.

He randomly spreads animal manure on the farm to help improve on soil fertility and reduce the amount of fertilizer use during planting time. He has a woodlot in his farm, which comprises of eucalyptus trees. On the boundary of his farm he has planted other trees such as grevillea, jacaranda and cypress trees to act as windbreak and stop soil erosion. From the trees he also gets firewood.

Bennaih doesn't belong to any group. However his wife is a member of *Indulo* women, which is a welfare group that supports its members when they are in problems. Group members are women from Indulo village. His wife said that she couldn't join any formal group because she had a bad experience with the earlier groups she had joined. Most of them collapsed because the officials embezzled funds. This generated into bitter rivalry and hatred among the officials and members. She adds that there are many cases of defunct women groups due to leadership struggles and mismanagement of funds.

### **Case study 11: Humphrey Manani Obiayo: Poor – Non-Poor**

Humphrey was born in 1949, in Kisienya village, Kisienya Sub-location. He went to school up to standard eight and dropped out after his father died. His mother was not able to educate him and his other brothers and sisters. "*My father's death was a misfortune because it was so sudden and it left the whole family disoriented because he was the sole breadwinner,*" he said.

After his father's death, life became very tough for him that he decided to go and look for a job in Naivasha, in the Rift Valley Province. He felt that there was a need to support his brothers and sisters to continue with education. His uncle who was working in Naivasha by then helped him get a job at Pana Foods Company as a loader. In early

1970s to late 1980s he was very poor. This was because as the eldest son in his father's family, he had to take charge of caring for his sisters and brothers after his father's death. What he earned from his job as a loader, (KShs 200.00) was so little to meet his family obligations. *"I was always in debts because the little money I earned, I had to remit home and then look for alternative ways of surviving in town"* he added.

His father had three acres of land. In 1984 this piece of land was subdivided between him and his three brothers. He ended with a very small parcel, which was being cultivated every season. Because fertilizer was not being used in the farm, it became quite infertile and produced very low crop yield. In 1985 he left Pana Foods Company and joined Kenya Breweries Company, packaging department still as a loader. In Kenya Breweries, he earned far much better pay. At this time he was already married and they had two children. This increased his responsibilities, as he had to take care of his own family as well as his father's family. His last-born brother was in secondary school and Obiayo was paying school fees for him. Whatever little he was left with was enough to buy food and clothes only. Obiayo's cousin had a petrol station in Kisumu and he asked Obiayo to manage it on his behalf. *"My cousin understood my problems and thought it wise to help me. The petrol station job was a turning point in my life because while at the garage, I learnt how to drive and got driving license"*, he said. It was while in Kisumu and working in his cousin's petrol station that he managed to build a semi-permanent house. Through his own networks he managed to get a driving job with Cooperative Bank, Kisumu branch. According to him, this was a well paying job that he had to leave working at his cousin's petrol station. He worked in the bank for eleven years. *"In the bank my life was better off because I was being paid well and I also received many allowances"*, he added. It is during this time when he was working in the bank that he managed to educate his children, built a small permanent house and bought two cross bred dairy cattle. He also used to lease land from neighbors and plant maize, as his family had grown larger. He was now growing hybrid maize that is high yielding and he was also using farm inputs such as fertilizer as he could now afford to buy. In 2001, he was retrenched from the bank. He says that he is neither poor nor rich. Though he has four of his children in secondary school and one in a teachers' training college, he can afford to pay their school fees with his retrenchment benefits. *"Were it not for school fees I would be a very rich man now"*, he laments. His eldest son is an office messenger in the Central Bank of Kenya and he helps him in paying school fees. The eldest son was helped to get a job through a former Member of Parliament. A part from education good rapport with friends and relatives helped him move out of poverty.

Currently he concentrates on farming. Apart from crop farming, he also owns two crossbred dairy cattle, which gives him milk on a daily basis that he sells to villagers. Every day he earns KShs 140.00 per day from milk sale. He has several local chicken, two turkeys and two pigs. The turkeys and pigs are sold when there is an emergency like school fees, and disease attack on a family member. From his retirement benefits, he has been able to build a shop in Bukuga market. The shop is not operational yet.

On natural resource management there isn't much change on his farm for the past twenty years. He planted trees long time ago in his farm and now they are mature. He sells some for firewood. He has constructed terraces in his farm to prevent soil erosion. The terraces, he said, are now ten years old.

Humphrey does not belong to any group in the village. However his wife belongs to a merry-go-round group.

### **Case study 12: Felda Mmbone Kevogo: Poor-Poor (No change)**

Felda was born in 1948 in north Maragoli. She is a widow and never went to school because her parents were very ignorant about education. They used to argue that it was a white man's idea and it was going to spoil their girls. She has always been poor. Her late husband Mr. Kevogo, used to work in tea estates in Kericho as a casual worker. He left and went to work in Nairobi as a watchman. He left this job too when he was attacked by thugs when on duty. Since then, her late husband came back home and settled into farming. He had 1 ½ acre plot which he inherited from the father and out of this, Felda has planted tea on half an acre.

Felda was lucky to have one of her daughters educated for her by Felda's brother in-law. Her daughter is now a primary school teacher and has helped in educating her children up to secondary school level. Her daughter is married and her husband paid bride wealth of four cattle. Two were sold when Mr. Kevogo was very sick to pay for his medical bills. Mr. Kevogo later died of what people suspect was severe malaria.

All of Kevogo's sons are working in Nairobi as casual laborers. They abandoned him before his death because he decided to marry a second wife. The second wife came with three other children from her first marriage. Mr. Kevogo then decided to abandon the house of his first wife. This also did not go well with Felda who also had to contend with rivalry from her co-wife. Mr. Kevogo, after marrying a second wife, turned to be an alcoholic, plunging the family further into poverty. The little money he got he spent in alcohol. By the time of his death, he had grown to be very weak and was not working in the farm.

From 1995 Felda decided that she was going to be self-dependent. Her younger son gave her KShs 2000.00, which she used to start petty business in the village. She buys vegetables, fish and other goods in Luanda market and comes to sell them in the village. Though still poor, Felda expressed confidence that she will one day come out of poverty God willing. Felda is very bitter because she has to share the proceeds from tea farming with her co-wife, who was not there when she was planting the tea.

Felda appreciates the help she got from her brother in-law who educated her daughter. Her daughter has been quite supportive. She now wishes that her sons could get a better job so that they can live a better life than hers. She approached the area member of parliament to help her sons join the military this year.

There has been no change on land use in Felda's farm since she got married. She still plant, maize, beans and vegetables on the same piece of land. On crop choice there has been some changes because she uses hybrid maize variety for planting. She realized that hybrid maize variety yield more than the local maize varieties. On half an acre of land where she used to harvest one bag of maize, she currently harvests 1½ bags of maize if she applies fertilizer mixed with animal manure.

Felda belongs to Kisiyena clan group whose members are from the Bamabi clan. They make monthly contributions, which are normally used to solve problems, that crop up in

the clan or if a member of the clan dies. Sometime they lend money to a clan member to solve a pressing problem.

### **Case study 13: Thomas Mahonga Maloba: Non-Poor – Non-Poor (Decrease)**

Thomas was born in 1932. He went to primary school up to class two and dropped out due to family problems. His father died and there was nobody willing to pay his school fees. He has six children, four sons and two daughters. He started working at the age of ten years due to financial problems at home. He joined his uncle who was working in a tea estate in Kericho where, he learned how to pick tea. After one year he moved to Kitale at the age of eleven years to work as house help on white man's farm. When the independence struggle began he moved to Nairobi because they were told there were more job opportunities there. He started working as a turn boy at the age of thirteen in a transport company. He went to Sagana to work in a fish farm owned by Asians and after five years in Sagana he went back to Nairobi to work as a mason at Kahawa Garrison. Later he moved to East African Tanning Company in Eldoret where he rose through ranks to become a foreman and senior driver until 1992 when he retired.

He said by 1985 he had moved out of poverty because he had bought land where he settled his brothers. He used to take loans from the company. *“Because I knew what problems are, I used to work very hard and made sure that I earned respect from the factory. I never used to arrive late on duty and I always asked my seniors where I was not sure. Despite the fact that there were educated people behind me the management recommended me for a promotion to the level of a foreman. While working at the tanning factory I bought another three and half acres of land where I have settled,”* he said.

The Company took them for a tour in Uganda and Burundi. He told us that during this time, he saved his allowances as he used to spend sparingly. When they came back from the tour, he bought a piece of land from his savings. In 1998 he started a shop for his wife in Kitulu shopping centre. From this business he could pay school fees to his children. In 1990 he bought two crossbred dairy cattle and started dairy farming. Savings from the shop business and milk sale was used to buy a plot in Eldoret. He then took a loan and constructed rental houses on the plot he had bought. From the rental houses, he earns KShs 4000.00 every month.

In 1992 Thomas retired and that is when his life changed because all his children were now in secondary school and he was paying school fees. At the time of retirement he had not cleared his loan and quarter of his benefits were deducted to recover the loan. Back at home he concentrated on his shop business while educating his children. His first-born son was already working as a driver in Nairobi. He spent a bigger part of his retirement benefits educating his children but they are unemployed and they are at home farming. From 1995 the profits from the shop started declining. There were so many kiosks that were mushrooming in the village, which were selling the same goods but at smaller packages that suits most buyers in the low-income category. Household expenditure had risen and income reduced after he retired. School fees and other households needs depended on sales from the shop. He was not able to invest more in the business. He has also sold three out of the five of his dairy cattle to clear school fees balance. The

remaining two still give surplus milk that can be sold. He gets three and half liters of milk from his two cows daily. Of this he sells 2 liters at Kitulu or Bukuga Market. *"My cows lack enough because I cannot afford to buy commercial feed. I depend on banana stems and nappier grass that grow wild down the river,"* he said. The maize harvest started reducing in 1998 because he used to plant using artificial fertilizer but now he does not apply enough fertilizer. By the year 2000 he had started buying maize because the farm could not produce enough. The same year, his shop collapsed, as he was not having enough stock.

He states that his early retirement and school fees are some of the factors that have pulled him down. He is very bitter as all his children have secondary education and apart from his eldest son, the rest are unemployed. They still seek support from him. He had expected that the children would take care of him old age. His daughters are married but no bride wealth has been paid. Death has robbed him of all his brothers who could have helped him because they were in well paying jobs. He was hoping that they were going to help his sons get employment. Nowadays he depends on his rental houses and farming. His eldest son can no longer assist him as he has established his own family. According to Thomas, education is no longer an effective way of moving out of poverty now as compared to twenty years ago. He gives an example of his children and many more in the neighborhood. Poor people used to invest in education. It was cheap and once the child succeeds in his or her education then he could support the family. He laments that education has become so expensive and yet there are no jobs. Many people have been rendered poor after investing heavily on education and finally their children have remained unemployed and are still depending on them.

Thomas says that it took him over forty years to come out of poverty, but it has taken him five years to make a drastic decline towards poverty.

Thomas' wife is a member of Kitulu women group. It was started last year after the area Member of Parliament encouraged them to form groups so that he could help them start businesses. Since he lost in the elections they have never seen him again and the group has not done any project. He has dug terraces on his farm to prevent soil erosion; some parts of the farm are sloppy. He has planted Eucalyptus trees on his compound. From these trees, he gets firewood and timber, which he sells. He is not aware of any natural resource management group in his village.

#### **Case study 14: Alphayo Musiala: Poor–Poor (Increase)**

Alphayo admitted that he is a poor man. He went to primary school up to class two. In 1972 he was working as a houseboy in Nairobi. One day when he was traveling from Nairobi to attend a funeral at home, the bus they were traveling in was involved in an accident and his spinal cord got injured. He was hospitalized in Nakuru general hospital for seven months. He cannot normally walk upright and is disabled. His efforts to seek court redress for compensation were frustrated by the police.

He retired at home and started farming. In 1983 he lost his first-born son, then twin daughters at birth in 1985. By then his wife was still strong and she used to sell fish from the market for their survival. He had two cows, which used to give him milk that was enough for family consumption and surplus for sale. However one night thieves stole

them. This year his brother in-law gave him another cow to rear but he will have to give him back the first two calves before he retains the cow as his own.

Alphayo's household has been plagued by a series of deaths. In 1987 lost a son due to malaria. In 1994 he lost another son who was living in Nairobi. His sickness was not known. In 1995 the second last-born son died while in prison. He had been jailed for five years for robbery with violence. In 1999 he lost his fourth born son to unknown disease. In the year 2000 his daughter who was staying in Kisumu died leaving behind two children. He suspects she was suffering from AIDS. From 1996, his wife has been very sick and she is too weak to farm. He has only two sons left. One is serving a jail sentence for assaulting him and a neighbor. The other son ran away from home and for the last ten years he has not been seen. He suspects he must have died as nobody hears from him. The remaining daughter is married and his son in-law volunteered to pay some one who planted tea for him on his half an acre plot. He is unable to raise eight hundred shillings to be registered by the Kenya Tea Development Authority (KTDA). For the past twenty years he has been depending on his daughter and son in-law to give him food. His land experiences serious erosion because it lies on a steep slope.

The death of his children has made him become poorer. One of the grand daughters he is living with is epileptic and cannot work in the farm. Twenty years ago people were good. They could donate food and clothes to the poor in the village. Nowadays people have become quite individualistic and mean. The neighbors tell him that they are equally poor. One day when we visited Mr. Musiala, he made the following remarks:

*"I am a very unfortunate man. I have been requesting the government to release my son so that he can help us with casual jobs at home but in vain".*

His brothers have abandoned him and have made him a laughing stock. They say that he is a pretender and likes free things instead of working hard. There are more poor people like him in the village. However Musiala thinks that he is the poorest. He has not put any strategy in place to escape from poverty because of his family status and the misfortunes that befell his family. *"If I had registered with KTDA then I could be a bit better,"* he lamented.

To cope with lack of food especially during the months of May to June he has always trained himself to eat once in a day so that when there is no food its not surprising to him. Most of the people in the community with a similar situation like his might never move out of poverty. He now lives with two grandsons and granddaughter who is sick. He has requested the chief to help him find children's home where he can take his grand children. He is afraid his grandchildren will suffer after their grandmother who takes care of them dies. We don't know the father of the children and we suspect he could long be dead as his daughter was suspected to have died of AIDS.

Since he got an accident, land use in his farm has not changed so much a part from the tea his son in-law planted for him. He has been planting crops that are easy for him to maintain for example maize and beans. Due to his health status, he cannot construct soil and water conservation structures in his farm as they demand a lot of labor. There are trees on his farm that were planted long time ago by his late father. He cuts them for sale as timber. Luckily, the trees are eucalyptus variety that regenerates, hence they have been there for some time since 1975.

Musiala does not belong to any group in the village as his health does not allow him to make many movements out of his home. His wife is a strong member of Salvation Army church.

### **Case study 15: Josephat Kamadi: Poor-Poor (Increase)**

Josephat is sixty-two years old while his wife, Jane, is fifty-seven years old. He has seven children, two sons and five daughters. Josephat was working in Uganda as a workshop manager in an Asian firm. He had learnt carpentry at Sigalagala Technical Training Institute. He ran away from Uganda in 1976 after Iddi Amin gave an ultimatum to Asians to leave the country. He felt his life was in danger and left all the property he had acquired in Uganda.

In 1983, Josephat's both parents died and he had to spend a lot of money in meeting their funeral expenses. The cattle they had were all sold to meet his parents' medical expenses and in taking care of mourners during their funerals. Joseph was left with the responsibility of taking care of his three brothers who were still in primary school at the time of the death of their parents. Joseph was already having five children by 1987. Two of them were from another marriage. When he left Uganda he stayed at home for five years doing casual jobs. Whatever money he earned from the casual jobs, was used in buying food for the family. In 1985 his first-born son was admitted in secondary school. Because he was not having money by then, he leased out a big portion of his land to pay for his son's school fees. Josephat said that:

*“at this point I had to think. I went to Nairobi and teamed up with one of my former classmates and started a carpentry workshop. The business was good and we had many clients. From the business I bought another one acre piece of land and managed to educate my three children to secondary school. My elder son is now a primary school teacher”.*

However in 1992 his workshop business started dwindling. The cost of timber increased and they had to charge more for their products. Most of their clients could no longer afford to buy their furniture. He decided to come back home and relocate in Bukuga market. The advantage he had at home is that there were no qualified carpenters. At home his business picked up very fast, as timber was cheap. At the same time his wife, Jane, started petty trade on vegetables. She was buying them cheaply in Luanda and Kapsabet and bringing them to the village. Since he was at home, he also concentrated on farming. He used proceeds from his carpentry business to buy farm inputs such as fertilizer and hybrid maize seeds. This improved his maize yield. He also bought two crossbred dairy cows, which is now on milk.

In 1998 he fell sick and was admitted in Kisumu district hospital for three weeks. This was a major drawback to his efforts to move out of poverty because the carpentry shop was mismanaged by his workmates. Currently he concentrates on farming and taking care of his two crossbreed dairy cattle. He is not very poor compared to twenty years ago because he acquired another piece of land, built a semi permanent house and all his children have got secondary education. However apart from his first-born son, the rest are still looking for jobs. His hope was that they could get jobs and help him at old age. He has approached the area Member of Parliament to help his children get jobs.

There has been a slight change in the way he uses his land. He abandoned growing of cassava, millet and sorghum because they are low yielding. He believes that they reduce soil fertility. After attending a meeting at Bukuga market he changed from using indigenous maize variety to hybrid maize variety, which is high yielding. From 1995 he has been practicing semi-zero grazing dairy farming.

In his farm he has preserved a section which he has planted trees. These trees have been useful as they provide him with timber and fuel wood, which he sometimes sells. Since his farm neighbors a stream, the lower part is marshy. He has reclaimed the marshy part through drainage and planted vegetables and trees. During dry season, he gets a lot of money from his vegetables, as he is always able to irrigate.

He used to hire people to construct for him terraces on his farm. However for the last three years these terraces have not been maintained because he cannot pay for the labor. His children are unwilling to work on them because they feel it is tedious job that requires strong men. The terraces have controlled water erosion since he constructed them in 1987.

Josephat does not belong to any group. His wife Jane is a member of a women's group that deals in petty trade such as selling vegetables and other foodstuff. They make contributions of fifty shillings every week, which is kept by a trusted treasurer. The money is used to help a member that might get into problems. A member can borrow incase he has incurred heavy losses.

### **Case study 16: Meshack Kagali: Nonpoor - Nonpoor (No change)**

Meshack is sixty years old. After his secondary school he joined Kagumo Teachers Training College to train as a primary school teacher. He is married and has ten children, six sons and four girls. Twenty years ago he was not poor because he was already a teacher. His father had a big piece of land and he was able to educate his younger brothers and sisters without any help. His father retired as a chief chef at a hotel in Mombasa. Because his father was a staunch Salvation Army follower, he laid emphasis on Christianity and education. The teacher's service commission in 1970 employed Meshack and it is during the same year that he married. His wife was a nursery school teacher until 1999 when she retired.

In 1982, their father subdivided his land between him and his brothers. They ended up owning 0.32 hectares each after subdivision. Meshack was lucky because the part of his father's land that was given to him was already having coffee planted on it. His father insisted that he had to pay for the coffee trees so that he does not have an advantage over the rest of his brothers. He did not mind this and he had to take a loan in order to pay his father for the coffee trees. In the 1970s he could harvest up to a 100 kilograms of coffee berries per month. From this he could earn up to KShs 350.00 per month. This was considered to be a lot of money at that time because the cost of living was very low. However by 1985, the Coffee Cooperative Society started delaying farmers' payment for a very long period for coffee berries delivered. In 1990 the cooperative collapsed and many people started leaving their coffee bushes unattended and started concentrating on growing maize. However they could not uproot the coffee trees as it was against the law.



Despite this drawback, tea farming was picking up more or less at the same period and villagers were really enthusiastic about it. He applied for a loan and bought 0.32 hectares of land from one of his brothers who had bought land in another village and decided to migrate. He converted one acre of the inherited farm into tea plantation. To help establish the farm, he went for farm-input loan (tea seedlings, fertilizer, and insecticides) from Kenya Tea Development Authority (KTDA)

Currently he harvests 100 kg per month for which he earns KShs 750.00 from KTDA and a bonus of KShs 11, 160.00 at the end of the year. He said the tea price keeps on changing depending on climate and world market prices. He does not understand what the world market prices means but the KTDA clerks tell them that whenever they pay low prices. When it's too cold, the kilograms produced reduce. In the year 2000 the price per kilogram was four shillings and twenty cents the lowest they have ever been paid. A part from his retirement benefits, earnings from the farm help him make ends meet. He also owns two crossbred dairy cattle and one zebu cattle. They are both on milk and he earns KShs 150.00 per day from milk sales.

He is not poor today because most of his children have gone through school and he has got little school fees to pay. Two of his children are already working. His eldest son is a teacher at Kabarak High School and his second-born daughter is a nurse at Kenyatta National Hospital. The rest of the children are in Nairobi looking for jobs. Sometimes they get casual jobs, which he feels is good enough as this can sustain them. He mentions that educated people are exposed and with hard work plus intelligence they cannot be poor. *"Its education that made me avoid poverty and be able to educate my children"*, he commented.

He practices crop rotation in his farm in order not to exhaust nutrients in his farm. He learnt this in school. He also sometime receives visits from the ministry of agriculture extension agents who teach him of what to do in his farm. Researchers from Kenya Agricultural Research Institute (KARI) sometimes carry out on-farm research with some farmers in his village and from them he learns a lot about farming. One day in company of some farmers from his village, he was taken to Bukura Agriculture Training College where they learnt a lot about different farming technologies.

He keeps his crossbred dairy cattle in a zero grazing unit. From the zero grazing unit he gets a lot of manure that he uses to improve his farming. He uses the manure to grow vegetables. He spreads the manure on the farm before planting. He says that manure helps to increase soil fertility.

With the help of school children he dug terraces on his farm, they were using his farm as a demonstration site for digging *fanya juu* and *fanya chini* terraces. He annually maintains them himself. The terraces have reduced soil erosion on his farm since he dug them. In his compound he has planted cypress and eucalyptus trees, which provide him with firewood and timber. They also act as a windbreak thus preventing soil erosion by wind.

Meshack and his wife are members of Mwenyeliza group. This is a group that is composed of both men and women and their aim is to improve the welfare of its members. They pay five hundred shillings per month as merry go round and two hundred and fifty shillings as shares. The money for shares is lent out to a member who has an emergency, which he or she pays back with interest.