

The role of local institutions in shaping climate risks adaptation processes and practices among the semi-arid rural households of Mwingi, Kenya.

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Abstract

Low, erratic, unreliable rainfall and frequent droughts are not new to the predominantly subsistence farming households of Mwingi region of Kenya. But the recent increase in drought episodes and unpredictability of onset of rains is perceived as new to this region. Consequently, livelihoods are being lost through crop failures, inaccessibility of water and death of livestock due to lack of pasture and water. A rainbow of institutions, governmental, non-governmental and private are using different strategies in an effort to build capacity of these rural households to live with these climatic vagaries. These strategies include relief food, grants, loans, training on production and value addition, market networking among others, with key delivery mode being through community self help groups. Based on the results of an on-going Phd research on local climate risks adaptation processes and practices, this paper explores the effectiveness of these strategies and the extent to which they embrace concepts of good governance. The target-user evaluation of the strategies and their mode of delivery is discussed. Critical to the debate will be the extent to which these strategies address short- and long-term livelihood needs as well as their feasibility as pathways for sustainable adaptation. In conclusion, the paper will explore amicable strategies and processes for delivering adaptation options.

Key Words: Local institutions, climate risks, adaptation, households

1. Introduction

There is increasing recognition that adaptation to climate change is inevitably local and its effectiveness depends on local and extra-local institutions through which incentives for individual and collective action are structured. It is postulated that households' and by extension, communities' capacity to adapt depends significantly on the ways institutions regulate and structure their interactions both among themselves and external actors (Agrawal, 2010; Diaz, 2006). Since societies have in the past had to live with risks, that is, threats posed by a variable climate, understanding the current role of institutions is undoubtedly important in assessing challenges and opportunities for their strategic positioning to build capacities of their constituents in preparedness for climate change. After all, the impacts of climate change may already be happening and there will not be clear-cut delineation between past, present and future adaptation practices (there will be overlaps). However, given that global discourses on impacts of climate change discourses are still slowly trickling to local level scales, studies focusing on institutional preparedness to 'midwife' households' adaptive capacities at local levels particularly in developing countries are still few and wide apart (Agrawal, A. and Perrin N. 2009). Moreover, given the clear overlap between adaptation practice and development practice, lessons from current development practices that are relevant for adaptation remain largely unexplored. What the institutions do in order to support local communities to manage current climate risks is important. But even more important, particularly for lessons learning, are the delivery mechanisms that they use to reach their constituents. It is in understanding the "how", that local community needs are captured and equity issues addressed. This paper reflects on

strategies used by local institutions to support rural households to improve livelihoods in the semi-arid Mwingi region of Kenya.

2. Background

The climate change discourse at global level has gained momentum over the last two decades. It is noted that the continued emission of greenhouse gases into the atmosphere is causing a rise in global temperatures and this trend will continue if measures to cut these emissions are not put in place. The increase in temperatures is observed to be leading to changes in the average weather and distribution of weather events. Furthermore, there is also consensus amongst scientists that even if emissions were cut, the existing greenhouse gases in the atmosphere will still result in the rise in global temperatures thus necessitating that human and natural systems adjust in order to moderate harm or exploit the beneficial opportunities, hence the increased focus on the concept of adaptation (Parry *et al.* 2007).

The IPCC Fourth Assessment Report (*Ibid*) identifies Africa as “one of the most vulnerable continents to climate change and climate variability”, as manifested through impacts that lead to reduced agricultural production, worsening food security, increased incidence of both flooding and droughts, spreading disease and an increased risk of conflict over scarce land and water resources. The continent’s sensitivity of its social systems to climatic variations stems from its over-dependence on rain-fed agriculture, compounded by factors such as widespread poverty and limited human, institutional and financial capacities to anticipate and respond to the direct and indirect effects of climate change (ADB *et al.* 2004).

Addressing vulnerability, to increase capacity to adapt is closely linked to development practices that aim to improve livelihoods of households and local communities in general. Huq and Ayers (2008) note that the impacts of climate change can impede development and threaten the efficacy and sustainability of development investments, and on the same breath, sustainable development can reduce vulnerability to climate change, because vulnerability depends on factors linked to development. Adaptation activities are therefore often regarded as synonymous with development activities and key to good development practice.

But managing challenges posed by climate parameters such as rainfall and temperatures has been part and parcel of life of communities that heavily depend of climate sensitive production systems like agriculture, particularly in the semi arid areas which experience impacts from normal climate variability such as droughts and floods. At local level, institutions interact to support local livelihoods. These institutions range from household, to local community, as well as to external actors. Agrawal (2010) notes the central influence that institutions have on how different social groups gain access to and are able to use assets and resources. He points out that institutions not only structure impacts and vulnerability, they also mediate between individual and collective responses thus shaping adaptation outcomes. In addition, they act as the means of delivering external resources to facilitate adaptation and thus govern access to such resources. This paper focuses on external actor institutions, specifically the Governmental and Non-governmental agencies working at local levels to improve the welfare of rural communities living in semi arid environments.

Given the extensive overlap between adaptation and development processes, assessing institutions’ activities that focus on livelihood improvement in the context of constraints of climatic

limitations manifested through frequent droughts provides a good window for drawing experiences and lessons useful in planning and preparing for unprecedented impacts likely to result from climate change.

3. The Framework research Study

The paper explores the role played by local institutions in influencing and facilitating rural households' capacities and practises to manage climate risks. It draws from a case study based on an on-going PhD work in a semi arid area in Kenya where long dry spells and droughts are the most commonly articulated climate challenge to local livelihoods. The overall research study seeks to explore how local community adaptation practices are generated and sustained. Perceptions, knowledge and adaptive capacity are presumed to form the foundation of local adaptation practices. It is expected that conditions that enhance learning and application of local knowledge will be brought to the fore for purposes of supporting local communities to improve and sustain livelihoods in a context of uncertainty occasioned by climate variability and change.

As a high-profile frontier area, the predominantly semi-arid *Ukambani*¹ region which constitutes part of eastern Kenya has for more than a century been at the centre of environment variability/development crisis labelling and intervention in Kenya (Rochelleau, 1995). Droughts are linked to the frequent crop failures and death of livestock and consequently the impoverishment of households. It is in this region that the study area, Mwingi is located. Local livelihoods, which are predominantly based on subsistence cultivation and livestock keeping, are realised in a context of low, erratic and unreliable rainfall as well as frequent droughts. In addition, the area has poor or non-existent physical infrastructure such as roads, and is noted to have been marginalized by past central government policies (ALRMP & Pricewaterhousecoopers, 2007; Orindi *et al*, 2007). The area is also one of the 28 districts in which the *Arid Lands Resource Management Project* (ALRMP), an initiative of Kenya Government with support from World Bank is implemented. Numerous government departments, non-governmental organisations (NGOs) and private companies work in the area supporting local populations through different livelihood improvement projects. These conditions offer a good opportunity to study how local peoples adopt to climate variability risks and the current status of their adaptive capacity.

Mwingi, which is 10,030.3km.sq, lies between latitude 0.03 and 1.12 and longitudes 37.47 and 38 degrees. It comprises of Central, Migwani, Kyuso, Mumoni, Nguni, Ngomeni, Nuu, Mui and Tseikuru which have in the last three years been reconstituted into six districts from the original Mwingi District. The region is generally plain with a few inserbergs in Mumoni, Nuu and Migwani areas. The highest point is Mumoni Hill, with an altitude of 1,747meters above sea level. The landscape is generally flat, with a plain that gently rolls down towards the east and northeast where altitudes are as low as 400m. The highlands namely Migwani, Mumoni, Central and Mui receive relatively more rainfall compared to the lowland areas of Nguni, Kyuso and Tseikuru. The region has two rainy seasons, i.e. March-May (long rains) and October-December (short rains). Rainfall ranges between 400 mm and 800 mm per year, but is erratic. The short rains are more reliable than the long rains. Climate of the region is hot and dry for the greater part of the year. The maximum mean annual temperature ranges between 26⁰C and 34⁰C. The minimum mean annual temperatures in the

¹ *Ukambani* is the region occupied by the Akamba people of south eastern Kenya. It comprised of Kangundo, Kibwezi, Kitui, Machaks, Makueni and Mwingi sub-regions

region vary between 14°C and 22°C. The region has red sandy soils, loamy sand soils and patches of black cotton soils. River valleys have saline alluvial soils of moderate to high fertility. Soils are of low fertility and prone to erosion. Most hills are covered by shallow and stony soils. In Migwani, Central and Mui areas, crop farming is more prominent than livestock keeping because of the agricultural potential.

Mwingi is a homogeneous region inhabited mainly by *Kamba* community. The region had a population of 303,828 (1999 population census) and a projection of 377,081 people in 2009 with a growth rate of 2.4 per cent. It has an average population density of 30 persons per km. More than 95 per cent of this is rural based while 5 per cent is the urban population of which, Mwingi Town has 4 per cent while the rest is distributed in other trading centers. The ratio of men to women is imbalanced in favour of women. In 2000, at an age bracket of 20-59, there were 66,234 women compared to 52,111 men. The projection for 2010 for the same age bracket is 78,885 women to 62,048 men. The last official population census put the percentage of female headed households at 32%. The region shows a very high prevalence of poverty, which is estimated at 60% with the poor residing in the driest zones namely Tseikuru, Kyuso, Ngomeni, Nguni and Nuu.

Given that local livelihoods are based on rain-fed cultivation and livestock keeping in a water-scarce area, local governmental, non-government and private institutions occupy themselves in strategies for assisting the local community to improve livelihoods through water access and increased agricultural production. The Ministry of Agriculture, Ministry of Water, and Ministry of Livestock Development are the most active in this respect. The key non-governmental organizations include Action Aid-Kenya, World Food Programme, German Agro Action, Adventist Development and relief Agency (ADRA) and Farm Africa.

The field work for the overall study was undertaken for a period of 8 months between 2009 and 2010. The study deployed expert and narrative interviews as well as focus group discussions and transect walks to elicit perceptions and practices of the rural households of Mwingi as they relate with their biophysical environment. The results provided in this paper are sourced from expert interviews with the representatives of governmental and non-governmental agencies. Data from focus group discussions with local community members are also utilised to provide the beneficiary perspective of interacting with external interventions in adapting to uncertainties of climate variability.

4. Interventions by Government Institutions

The Ministry of Agriculture is quite visible in its efforts to promote food security. Through training for technology transfer and farmer to farmer extension, the Ministry provides technical support in agronomy to the local community. Downscaled weather forecast information is also provided to the farmers through the local administrators. In the last 2 years, the Ministry has focused on playing a partnership linkage role to bridge marketing gaps for local agricultural produce. While farmers have in the past appreciated the benefits of planting drought resistant crops, lack of markets has acted as a demotivation for successful adoption of these crops. On the other hand, the Ministry of Livestock Development takes up the livestock docket and strives to improve pastoral livestock production within limits of intermittent pastures due to frequent droughts as well as provision of veterinary services. Ministry of Water and Irrigation is involved in expansion of water

supply infrastructure especially through sinking of boreholes. They also provide technical expertise to other organisations involved in water supply infrastructure. The Ministry of Planning, National Development and Vision 2030 is represented by the District Development Officer with the mandate of harmonising development initiatives in a district. Ministry of Gender, Children and Social Development coordinates the National Women Enterprise Fund. It is also in charge of registration of community-based associations. The Office of the President, headed by the District Commissioners, and comprising of District Officers, Chiefs and Assistant Chiefs plays oversight role coordination in addition to providing information dissemination channel. The Assistant Chief is in charge of the smallest administrative unit, the sub-location. He is assisted by village elders. Any organization, governmental or non-governmental requires a go ahead from this chain of provincial administration.

5. Interventions by Non-Government organizations

The challenges posed by climate risks has necessitated and attracted numerous non-governmental organisations. The World Food Programme (WFP) through Action Aid Kenya (AAK) provides general food relief to targeted vulnerable² members of the local community under the emergency operations programme. The “food for assets” programme aims to support local households to invest in soil conservation measures and increase water supply points through construction of community-managed earth dams. German Agro-Action (GAA), in close collaboration with the Ministry of Water is involved in improvement of rural drinking water through spring protection, construction of sub-surface dams, shallow wells, rock catchments and roof catchments. Through “cash for work”, the local community provides labour in the construction stage of the works. Thereafter management committees are constituted to run the water points. *Adventist Development and Relief Agency (ADRA)* in conjunction the World Vision are implementing a water improvement programme aimed at increasing access to clean water. They support construction of boreholes, sand dams and installation of water storage tanks in public institutions such as schools as well as communal cattle water troughs. The local community is mobilised to form management committees that oversee the location and management of the installed water facilities. *Farm Africa* works in collaboration with the Ministry of Livestock Development, to implement a Dairy Goat Model, under which, in groups, the community is supported to improve knowledge and practices of goat-keeping, breeding and animal healthcare. This initiative aims to improve nutrition by increasing poor households’ access to goat milk, improving local goats through cross-breeding, training local residents in animal health services so that they become community animal workers.

6. Capacity delivery strategies

Capacity delivery strategies are as vital as the capacity packages themselves as they determine not only the successful implementation but also the sustainability of benefits thereof. In the next section, I highlight some of the key delivery mechanisms that have been used by these institutions. Under each mechanism, I discuss the merits and demerits arising thereof.

6.1. Community groups

Community groups have become a channel through which many external organisations deliver their services to the community. The local community either constitute themselves into groups and

² Vulnerable members of the community targeted include the aged, the orphaned, the sick

approach the organisations for support or the organisations requests formation of groups for specified purposes. The Ministry of Agriculture has for instance used this strategy after realisation of ineffectiveness of its previous approaches of agricultural technology transfer through demonstration farms in the hands of the government's research institutions. Under Farmer Field Schools (FFS) programme, a government extension officer works with a community group. The group volunteers a host farmer who offers his or her land for use and experimentation by the group. The extension officer meets the group once a week for one year and supports the group in whatever they choose to be supported in. After the end of the year, the members of this group graduate and support formation of new groups where each participant in the original school becomes the teacher to the new group. The idea behind the programme is to use farmer to farmer extension and increase reach/penetration. The group approach therefore allows for reaching many farmers at the same time. In the group, members are able to exchange and articulate their specific needs.

Farm Africa has used the same strategy of groups to enhance local community nutrition through upgrading of the local *East African Somali* goat with the exotic Toggenburg goat. The local community leaders assisted in the selection of the "poorest of the poor" from the community. Starting in 2004, those who are identified were training in groups on all processes of cross breeding the local goat breed. Volunteers from the same groups were also trained as community health workers to support the members with veterinary services. An extension officer from the Ministry of Livestock Development was a core team member in the trainings and follow up sessions that continue to date.

The Kenyan Government, through the Ministry of Gender, Children and Social Development, introduced in 2006, the Women Enterprise Fund (WEF) with the objective of economic empowerment of women. To access this kitty, women who do not have already established individual businesses have to form groups and have them registered with the Social Development Department of the Ministry. This initiative has witnessed massive registration of women's self help groups. The Social Development officials provide basic trainings on business management and group dynamics.

A number of pertinent issues arise from the Group targeting strategy. Autonomous voluntary groups are plausible since they define their own problems and how to solve it. They seek external support with clear ideas of what their needs are. This ensures that external support is directed at a community's felt need. But on a different perspective, self-selection can risk excluding some of the needy members of the community.

Realisation of intended benefits remains a challenge despite the increase in the number of community self-help groups in the last decade. In just six years for instance, the registered number of community groups almost tripled. Some 204 groups were registered in 2001, 401 in 2003 and 598 in 2007. But the number of annual renewals has remained low, prompting the activeness of the registered groups. Between 2008 and April 2010, only 74 groups had renewed their registration. It may seem that the availability of funding was the major motivation and some groups may have been hurriedly put together to access the funds. In fact there is high probability that there are varied motivating factors attracting local community's participation in externally supported capacity building initiatives, as I observed from a discussion with one informant who participated in a field tour to a region outside his home district:

“I tell you, these people were spending a lot of money. There was one time we went for one week. We were accommodated in Thika, in a storey hotel building. They catered for everything. The sleeping room had everything – even a bathroom inside! When you come back from field, you would go to the bathroom and shower. Even in the morning, when you wake up, don’t touch the bed, leave it!...(loud laughter...) and it was a whole week!. We had four Nissans, for the farmers! Then the officers had the company vehicles - four of them too. And food..., you would eat what you want..and if you don’t want goat meat you say what you want. You see that was a lot of money. Image hiring a Nissan for a whole week!”

While this farmer may have gained useful insights on how to improve his farming activities, narrating his experiences to his neighbours is likely to influence their relations with external actors as they too would wish to get opportunity to enjoy lifestyles that they cannot afford on their own. It is also likely to result in lobbying and rent-seeking behaviours.

Follow up support to the individual groups is limited particularly because of their high numbers. But Farm Africa for instance, has worked with a smaller number of groups and sustained follow up. This may explain the general observation that the Dairy Goat groups appear to be performing better than other groups.

Even though group targeting has been viewed as a better option for capacity building of local households, the old methods still persist. Perhaps the introduction of “performance contracts³” by the Kenya Government in 2003, may be motivating staff to continue working with “progressive farmers” who will not disappoint them when their seniors are taken around the region to see the staff’s work. As one respondent narrated:

“..you saw the sweet potatoes, I was brought by MRM, of the District Agriculture Office....he told me to take very good care of them, because when he gets visitors he will bring them here to see. Last year, they visited farmers around this area looking for farmers good. I got that opportunity. That is how I was provided with the sweet potato vines⁴”.

While this may be good for the individual staff performance, it creates the danger of neighbouring households feeling left out, since a particular neighbour is selected and supported by government staff and is consequently frequently visited by external guests.

6.2. Focus on entire value chain

A number of crops and animals are better adapted to the dryland climate of Mwingi region. The Kenya Agricultural Research Institute (KARI) based at Katumani, Machakos, is the Kenya’s largest dryland farming research station and specialises in breeding crop cultivars that are drought escaping/drought resistant. Some of the crops promoted in the study area include millet, sorghum and grafted mangoes. But at harvest season, the local markets are flooded with the local produce thereby lowering the selling prices. Poor road infrastructure also limits access to markets. These scenarios create conducive conditions for middlemen who buy the farmers’ produce at very low prices. Yet money is a vital component of household needs if they are to satisfy their non-food requirements such as school fees, clothes and medicine. The promotion of these drought resistant crops has therefore not yielded much impact. Moreover, dietary patterns in the region have changed

³ Performance contracts – agreement on individual personnel delivery of outputs

⁴ Transcription notes from an interviewee no. KYS.SMFI

and crops such as millet and sorghum form only a part of the diet and require to be supplemented. This was well captured by a focus group discussion:

“When we plant, we hope to make good sales of the harvest. But this does not happen. In the market, the prices are very low. Even when you sell a one bag, the money is not enough to cover the household financial needs e.g. soap, school fees, sometimes the children have to dropout of schools.”⁵

In recognition of these challenges, the Ministry of Agriculture has devised a strategy for promoting drought resistant crops on a commercial orientation, the new input being linking farmers with guaranteed external markets and even negotiated prices in advance. At the time of this study, the Ministry had negotiated a memorandum of understanding with the biggest brewing company in East Africa, the East African Breweries Ltd (for sorghum) and the World Food Programme (for sorghum and greengrams). Under this arrangement, the Ministry would support local farmers with training on greengrams as well as *Gadam* sorghum which is a close substitute of barley in beer manufacturing. A logistics company is charged with the responsibility of collecting the sorghum from the villages. Individual farmers are organised into small groups in order to consolidate their harvests as well as being a focal cluster for purposes of agronomy training by the Ministry of Agriculture. Payments to the farmers are made via mobile phones through Equity bank’s *M-Kesho*⁶ Accounts, a financial institution that is nationally renowned for setting its business focus on the mythically perceived “unbankable” masses. This process has assisted local residents who did not have bank accounts, because they did not have anything to bank, join the banks and can now acquire credit to buy farming inputs.

6.3. Mobile extension services

This is a creative and innovative strategy of reaching local households that is based on the mobility of local people around local markets. Open air buying and selling of goods takes place on particular days of the week at specific spatial locations on rotational basis. On a market day, traders come from the local region and beyond to sell or buy goods. The local residents hence take this opportunity to religiously go to the market place, either to sell their farm produce or to buy what the household needs. By providing a help desk at the market centre on the market day, the Ministry of agriculture ensures that farmers who may have particular queries can have them responded to without having to schedule a separate day to go the Ministry’s office. With this strategy, capacity constraints related to staffing and resources such as availability of vehicles to visit farmers in their households are addressed. Likewise, households save time as they don’t have to plan a different day to visit the Agriculture office. This strategy exhibits flexibility and innovation to adapt and accommodate local livelihood contexts. Although no assessments of the strategy’s impacts have been carried out, its potential to engage with local contexts is plausible.

6.4. Relief food

During the drought period, the government, through the provincial administration, and the World Food Programme through Action Aid-Kenya, provide relief food to the local community. Given

⁵Ukasi Focus Group Discussion

⁶ This is a recent innovation of accessing and managing ones funds on mobile phones

the long history of droughts in the region, relief food has become part and parcel of many of the poor local households. The “food for assets” programme by Action Aid-Kenya is an additional form of relief food, distributed to the local households even after drought episodes. It is intended to encourage individuals to construct soil and water conservation structures so that households can increase farm production. Labour is also provided for digging communal water points, meant to shorten distances to water points.

But continued relief food distribution can be viewed as part of the problem than a solution. The long history of relief food is an assurance that even if a household does not harvest there will be food from the government or from the NGOs. A political hand too is involved particularly with the government provided aid. Local politicians argue that since the food is provided by the government, it should be given to all without discrimination – this is a sure ticket of royalty by the recipients of the food, some of whom may not be deserving the allocations. The “food for assets” arrangement has not necessarily motivated people to work in their own farms to improve production. Instead, they move around to the work sites for the guaranteed food rations rather than working in their farms where a harvest is not guaranteed.

The challenge posed by relief food is the comprise between short-term needs and long term sustainability of food security. Food aid is a welcome gift for impoverished households at heights of looming famine occasioned by crop failures and deaths of livestock resulting from a persist drought. But this type of support has not made headways in enabling households to become self sustaining, an observation that leads to the conclusion that it has contributed to dependency syndrome. Short-term focus may therefore be in conflict with strategies that aim to solicit active involvement of local households in development/adaptation processes.

7. Evaluation of strategies for good governance

7.1 Reach

A snapshot of early 2010 indicates that there were not less than 10 initiatives in the region addressing community water access and crop/livestock production alone. Other initiatives of general nature but closely linked livelihood improvement include the provision of funding mechanisms through government as well as private institutions. Despite this seemingly large effort, significant reach remains doubtful. The commonly visible organisations are those providing direct cash or food aid to the people. Staffing and material resources may be contributing to this scenario. Creation of six districts from one in a span of 3 years has stretched the staffing capacity of government ministries since the split was not accompanied by adequate staffing. The Ministry of Water for instance has only skeleton staff with some of the new districts being served by 2 staff instead of the ideal 15. Government staff movements are limited by lack of vehicles in the new districts headquarters. In one instance, even the District Commissioner has no government car and has to be taken around the district using a motorcycle. The organisation’s reach and visibility to the target community is thus characterised with statements such as “we don’t see them” ... “..they don’t come here...”.

7.2 Addressing local people’s priority needs

Accessing income tops the list of the challenges the participants of the study survey experience. Education is also viewed to play a key role:

“Because of lack of rain, education is very low here. Children do not get education because there is no money to educate them. This makes us lag behind in development. If education was promoted we could develop faster. The other thing, also related to rainfall,... if we were brought water, because we have big farms, we can do irrigation and plant trees. We can then get money to manage and support our livelihoods⁷”.

The initiatives of the institutions stop at providing access to domestic water for human and livestock use. In deed this has reduced distances to water points but falls short in holistically addressing local water needs for livelihood improvement. Consequently the local community options are limited to preservation of the unreliable rainwater, whose scale is also dependent on financial capacity of households – e.g. to buy water storage tanks, to pay labour for making bench terraces and water trenches.

“Those who have roofed their houses with corrugated iron sheets can use gutters to collect water. But many houses here are roofed with grass - so when it rains, the water flows away and you just have to follow it down the river beds. But money to buy containers or construction of tanks is not there. We try to fetch and put in the 20 litre jerricans even if they are ten. Beyond that you let the water flow..you have no other capacity. We go to fetch from the rock catchment in the neighbourhood. But there are people who come from as far as 3km or even more. Some people take as many as two hours to get to the rock catchment. We use the donkeys, which can carry 4 jerricans.”⁸

An irrigation option is a preserve of those whose land is located on a river valley where the water table is likely to be within reach, and requires an individual or a group to explore it. An individual would also require mobilising substantial labour in hand-digging of a shallow well to access the water.

Provision of alternative credit through the Government’s women enterprise fund as well as access to multiple micro-finance institutions has been plausible in addressing one of the common barriers to capacity building. But it appears that it is not an end in itself and requires a level of community’s socio-economic capacity threshold below which it remains ineffective in achieving its goal as it gets diverted to other more pressing needs and then the loan takers are unable to pay – as was observed by this women group⁹:

“We fear those loans!! When you start a business, it is also problematic because people don’t have money so that if you start a shop or a hotel, you strain very much. You can stay a whole day in the shop with good stock but you sell very little. Even a hotel, if you go round here, you cannot get more than two hotels where you can get food. Majority only make tea and *Chapati*¹⁰ because that is what is cheap, that people can afford..... When the repayment time comes, you find you have no money. You are forced to sell a cow or goat and cover the repayments.... At the end of the day you make losses.”

“You know, you get these loans when you have so many other problems...school uniform, you get a pair of shoes if you did not have one, you pay school fees... You repay the loan for two months and then get stuck.”

“....at my age, I am too old to start a business. I have a son of 39 years. He assists me, I entirely depend on him.”

⁷ Ukasi Focus group discussion

⁸ Ukasi Focus Group Discussion

⁹ Ukasi Focus Group Discussion

¹⁰ *Chapati* – a form of flat bread made of wheat flour and cooked on a flat flying pan

While eligibility/qualification has been relaxed to include women who do not have the conventional security requirements such as title deeds, some conditions remain a nightmare to meet and failure to repay comes with unpleasantities that deter potential applicants:

“If you want to take a loan of Ksh10,000¹¹, you have to put halve of that. If you don’t have anything, what will you put? We are aware of what they do when you do not honour to repay. They will sell everything you own to repay themselves. We fear these loans. They will sell even packets of flour in your shop”¹².

Local Gender relations have to be trended on carefully and strategically so as not to abruptly disrupt family unity. Capacity building interventions should strive to address the ways in which inequalities in accessing vital livelihood resources can be enhanced.

“If a woman needs money for the household operations, they sell the chicken and eggs - without having to ask the husband. A woman cannot sell a goat without permission from the husband. This can result in a beating by the husband. He has to agree.”¹³

However, some of the efforts already being implemented may be perpetuating rather than reducing the structural causes of inequalities:

“*Mzee*¹⁴ has to be the first guarantor in every case (loan application). If the refuses, that is it! But when the man goes to take a lone, the woman (wife) is not required to be present to guarantee...that is how it is here”¹⁵.

8. Conclusion

Local institutions play a vital role in enabling households to manage threats posed by uncertainties of climate. The foregoing discussion has laid emphasis on how local institutions delivery capacity packages to their constituents, the local communities. While targeting households through groups may be sensible in terms of efficiency and effectiveness, care must be taken that group formations are motivated by the intended objectives and that the strategy does not exclude some deserving members of the community. The value chain focus holds promise to fill the gaps in local livelihood production. It will need to be monitored keenly and lessons taken up by other institutions for scaling up to cover other local products. It is still early to evaluate the effectiveness of the mobile extension but it is a good example of institutions adjusting to the local community set ups. It is an encouraging example of innovativeness likely to arise when actors accommodate views and contexts of each other. The debate on relief food remains politically sensitive. Focusing on awareness and dialogue with politicians could open doors for realistic support that aims at enhancing independence of households.

¹¹ 1Ksh=0.01€; Ksh10,000=100€

¹² Mumoni Focus Group Discussion

¹³ Ukasi Focus Group Discussion

¹⁴ *Mzee* – Elderly person. In this context, it means “my husband”

¹⁵ Mumoni Focus Group Discussion

References

- African Development Bank et al. (2004). *Poverty and Climate Change - Reducing the vulnerability of the poor through adaptation*.
- Agrawal, A. Local institutions and adaptation to climate change. In Mearns, R. et al. (2010). *Social dimensions of climate change: Equity and vulnerability in a warming world. New frontiers of social policy*. Washington, DC: World Bank. (pp. 173–197).
- Agrawal, A., and Perrin, N., 2009. Climate adaptation, local institutions and rural livelihoods. In: Adger, W.N., Lorenzoni, I., O'Brien, K.L. (Eds.), *Adapting to Climate Change: Thresholds, Values, Governance*. Cambridge University Press, Cambridge.
- ALRMP & Pricewaterhousecoopers (2007). *Mwingi District Vision and Strategy*. Arid Lands Resource Management Programme.
- Huq, S. and Ayers J. M., 2008. Supporting adaptation to climate change: What role for official development assistance?. Presented at DSA Annual Conference 2008 'Development's Invisible Hands: Development Futures in a Changing Climate.' 8th November 2008, Church House, Westminster, London
- Orindi V., Nyong A & Herrero M. (2007). Pastoral Livelihood Adaptation to Drought and Institutional Interventions in Kenya. *UNDP Human Development Report Office Occasional Paper no 54*. UNDP, Nairobi.
- Parry, M.L., O.F. Canziani, J.P. Palutikof and Co-authors 2007: Technical Summary. *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 23-78.
- Republic of Kenya. (2002). *District Development Plan, 2002-2008: Effective management for sustainable economic growth and poverty reduction*. Ministry of Finance and Planning, Nairobi, Kenya
- Rocheleau, D.E., Steinberg, P.E. and Benjamin, P.A. (1995). Environment, development, crisis, and crusade: Ukambani, Kenya, 1890-1990. *World Development* 23, 1037-1051.