





THE REGIONAL PASTORAL LIVELIHOODS RESILIENCE PROJECT (RPLRP)



SUCCESS STORIES ON SITING WATER PROJECTS IN TURKANA COUNTY, KENYA

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Regional Pastoral Livelihoods Resilience Project (Kenya) Hill Plaza Building (10th Floor) Ngong Road P. O. Box 34188-00100 Kenya Email: ptl.resilience@gmail.com Telephone: +254-20-2099167 Website: www.resilience.go.ke

Authors

Stephen Rono (Turkana County Project Team Leader, RPLRP) and Bobby Ekadon (Turkana County Project Monitoring and Evaluation Officer, RPLRP)

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INTRODUCTION

The Government of Kenya through the Ministry of Agriculture, Livestock and Fisheries, is spearheading the World Bank aided Regional Pastoral Livelihoods Resilience Project (RPLRP-Kenya), whose objective is to enhance livelihoods resilience of pastoral and agro-pastoral communities in crossborder drought prone areas and improve the capacity of the government to respond promptly and effectively to an eligible crisis or emergency. The project is implemented in 14 arid and semi-arid counties in Kenya, among them Turkana County.

Turkana County is situated in North Western Kenya. It borders West Pokot and Baringo Counties to the south, Samburu County to the South East, and Marsabit County to the East. Internationally it borders South Sudan to the north, Uganda to the west and Ethiopia to the northeast. The county shares Lake Turkana with Marsabit County. The total area of the county is 77,000 km². The county is administratively divided into seven sub-counties, 17 divisions, 56 locations that are further sub-divided into 156 sub-locations. According to the Kenya Population and Housing Census (KPHC) 2009 results, the county population stood at 855,399. It is projected to have a total population of 1,036,586 in 2012 and 1,427,797 in 2017.

The county shares the border with Ethiopia, South Sudan and Uganda. The western border of the county lies in the Karamoja cluster where neighbouring tribes of Tepesi, Dodosi, Jie, Pokots and the Turkana share a common grazing resources which often leads to resource conflicts especially during the drought periods. All the project investment sites were determined using the project criteria for siting of the projects and specifics about the type of the investment and the exact location of the investment was determined using the Community Managed Disaster Risk Reduction (CMDRR) tools. In summary, project areas identification was based on the following criteria:

- Vulnerability to recurrent droughts
- Cross-border resource-based conflicts prone areas
- Trans-boundary livestock trade routes
- Clustering around common issues
- Potential for fodder production and storage
- Level of environmental degradation
- Community priorities
- Complementarity with other projects

The project covers the whole county, with a focus on migratory routes of trans-boundary significance but the main investments are in Loima and Turkana West sub- counties. Disease surveillances and vaccination campaigns cover Turkana North and Kibish besides the latter two. RPLRP selected these sub-counties because other partners are covering the remaining sub-counties.

SIRIAMPAK COMMUNITY WATER PAN



PROJECT LOCATION

The sub-project investment is located in Turkana West County, about 3km from Nalapatui Village, Nalapatui Sub-Location in Kalobeyei Ward of Turkana West, Turkana County. The site is inhabited by the Turkana people, and it was targeted for the investment on account of the area being on a main livestock migration route into Northern Uganda and is also prone to the lack of water for livestock and humans due to frequent drought.

The main water source for the animals and people in the area is a water pan constructed by Oxfam, which has since silted and its capacity of about 10,000 m³ is not enough to meet the requirements of the village and





migratory herds. The water pan is located 15 km from the main grazing area in Siriampak hence forcing animals to trek to the water pan in search of the little water that can be found there.

The Siriampak community water pan is intended to improve access to water for livestock. The project directly targets an estimated livestock population of 10,981 cattle, 21,676 goats, 18,296 sheep, 12,312 camels, and 6,000 donkeys. It also targets a human population of 4,016 persons (2,162 male and 1,854 female). The project will indirectly benefit the pastoralists from the Kalobeyei location, which encompasses six sublocations, among them Nalapatui. Kaloboyei location has a human population of 18,272 persons (9,442 male and 8,830 female), constituting 2,577 households.

PARTICIPATORY PROJECT IDENTIFICATION

Initial identification of the site

Initially, the sub-project was identified during the first work planning through inference from extension reports of the Turkana County Government and the broad sub-project site identification criteria of the RPLRP project such as: Vulnerability to recurrent droughts; cross-border/trans-boundary resource-based conflicts prone areas; trans-boundary livestock trade routes; and clustering around common issues e.g. geographic, geo-political, socio-cultural and being amajor dry season grazing area and along the livestock migratory route for animals.

Participatory and Disaster Risk Assessment

During the inception of RPLRP activities the County Project Service Unit (CPSU) teams undertook a Participatory and Disaster Risk Assessment using the CMDRR process to ground truth the community needs for disaster resilience. The CMDRR process involves bringing people within the same community together to enable them to collectively address a common disaster risk and collectively pursue collectivedisaster risk reduction measures. It is also a process of mobilising a group of people in a systematic way towards achieving a safer and resilient community, which takes place in a geographically defined living area or in a sector group not necessarily living in the same location.

During the CMDRR it was Siriampak is derived from the Aturkan language, and means 'a gap between two hills.' During severe dry

observed that the name "It will reduce the walking distance from the grazing fields and also reduce pressure from the already existing water pan," says elder Napao Lokiru.

periods the area had always been an important grazing area with lots of pasture, and so it was identified as the best site for putting up a water pan. The community also noted there is an advantage of the catchment hills nearby and that there are fewer tsetse flies in the area.



Nalapatui Chiefs Baraza for Community mobilisation and Site identification visit. Credit: RPLRP Turkana County, Kenya.



Support through participating in Feasibility Studies. Credit: RPLRP Turkana County, Kenya.

PROJECT ENVIRONMENTAL, SOCIAL AND TECHNICAL SAFEGUARDS

Safeguard screening baraza

Several project safeguards activities were undertaken to ensure conformity to various in order to meet World Bank operational policies. These began with thesafeguard screening baraza held on 23 March 2016 at Nalapatui, which was attended by 116 community members comprising of equal number of men and women. RPLRP team made effort to engage all the key decision makers during the community mobilisation phase of the project. During the screening exercise it was observed that the siting of the investment enjoyed broad community support as was evident during the baraza and the participation of the community in the feasibility studies and survey of the site. This support was captured in the minutes of the meeting.



Community support by the show of hands. Credit: RPLRP Turkana County, Kenya.

Feasibility studies and environmental and social impact assessments



Support through participating in Feasibility Studies. Credit: RPLRP Turkana County, Kenya

A technical feasibility study was done to determine the requirement and water catchment potential of the sub-project site; to ensure that the site of the project is available for the implementation of the activity without triggering the World Bank's safeguard policy on involuntary resettlement, OP 4.12; and to establish a grievance resolution mechanism to minimise conflicts or grievances that may arise as a result of the project. This was followed by an environmental and social impact assessment undertaken by a lead expert in accordance to the requirements of the Environmental (Impact Assessment and Audit) (amended) Regulations, 2009, pursuant to The Environmental Management and Coordination Act, (EMCA) 2015.

PROJECT DESCRIPTION

The water pan has a stepped design to strengthen the embankment. Its dimensions are designed to collect 37,000 m³ run-off from the Siriampak hills catchment. The total cost of was about 19 million Kenya Shillings (approximately US \$ 190,000).

Met expectations

The community members around Nalapatui have been relying on the Oxfam water pan which is about 7km from the village and 12km from the Siriampak grazing site, but which has a lower capacity and has since filled up with silt. The new Siriampak water pan will provide enough water to last the community throughout the dry season and will help reduce the livestock trekking distance from the grazing lands in search of water. It will also alleviate the need for trans-boundary migration into Uganda in search of water and hence reduce resource-based conflicts with the neighbouring communities in Uganda. This will reduce exposure to transboundary animal diseases such as peste de petits ruminants, Contagious Caprine Pleuropneumonia and Contagious Bovine Pleuropneumonia that the migratory herds may be exposed to when crossing the border.

Project collaboration

In order to guarantee resilience through entrenching sustainability before, during and after the handing over to the community, RPLRP Turkana actively incorporated local leaders and the county government in the various aspects of the implementation, especially in the CMDRR strategies that were beyond the RPLRP project mandate.

Expected long term impacts

- The major positive impacts of this project will include improved access to clean drinking water thereby improving hygiene and sanitation conditions as well as mitigating related diseases for the livestock and the residents.
- Reliable availability of water to the Nalapatui community is expected to spur other developments identified in the CMDRR community action plan. These include the establishment of a school, hospital facility and an administrative office to increase security in the area.
- The cost incurred by the county government in undertaking water trucking to the area during the dry season will be eliminated and the resources will be used to provide other more urgent services.
- The reduction in the trekking distances for the livestock will improve the health and body condition of the livestock, which will result in higher prices when the animals are sold.
- The pastoralists will be able to increase the size of their herds which is an important cultural asset in the Turkana community; and the urge to undertake raids in the neighbouring communities will reduce. This will result in a peaceful co-existence along the common border between the two countries.

NAKITONGO COMMUNITY BOREHOLE: A STORY ON PROPER TARGETING, INCLUSIVE COMMUNITY CONSULTATION AND EFFECTIVE TECHNICAL FEASIBILITY STUDIES



PROJECT LOCATION

Nakitongo village, is located in Namoru Kirionok Sub-location, Loreng Location of Turkana County.



Nakitongo village showing the seasonal livestock migratory route in search of pastures and water.

Nakitongo has approximately 100 households with approximately 4,500 cattle, 3,000 camels, 1,500 donkeys and 12,000 small stock. They rely on traditional dug wells on dry river beds for domestic water and also for some of their livestock. During the wet season the community relies on the traditional well located 1km away at Kongobot, which is highly polluted by livestock waste. During the dry season when the water sources along Nakitongo stream dry up, the community is forced to walk to Namorkiriono stream, nearly 10km away and dig up wells for their domestic water needs. The water is greenish in colour and it is highly contaminated.



Namorkiriono stream with highly polluted water. Credit: RPLRP Turkana County, Kenya



Kongobot traditional hand dug well with polluted water. Credit: RPLRP Turkana County, Kenya.



Kongobot traditional dug well with community. Credit: RPLRP Turkana County, Kenya.

Because the available water points are not sufficient for all the animals, most are forced to migrate across the border into Uganda to look for water. This normally exposes the communities to the hazards related to resource conflicts and cattle thefts. The county attempted to address this problem in 2015 and a contractor was engaged to drill a borehole nearby, about 200m from the village.This turned out to be a dry borehole that was then capped.



Dry borehole drilled by county government. Credit: RPLRP Turkana County, Kenya.

Ngimoruarengak water pan site was visited by the screening team enroute to Nakitongo on 23 January 2016. The water pan was constructed by the Government of Kenya, the Japan Government and the United Nations Development Programme between 2012 and 2013. There was no water at the pan though it looked big enough to accommodate water that can last for 6 months. The water pan has a problem with the inlet, which was not designed well. There is no spill way in case the pan fills up. The local area chief told the screening team that the contractor did not consult the local community before embarking on the project.

The RPLRP had initially intended to construct a shallow well at the village but discussions with the community elders led to the realisation that the site may be unsuitable for a shallow well. This necessitated a technical feasibility study, which confirmed the views of the community and a borehole was instead recommended for the area after a hydrogeological survey.

The project directly targets a livestock population comprising an estimated livestock population of 2,540 head of cattle, 4,830 shoats, 894 camels, and 423 donkeys: and a human population of 2,491 comprising of 1,353 females and 1,138 males. The project will indirectly benefit the pastoralists from

the neighbouring sub-locations of Loreng, Loritit, Tulabalany, Katelemot, Lokipoto and Loito which comprises of a total population of 32,616 persons (about 19,200 male and 13,416 female). The total project cost is about 20 million Kenya Shillings (approx. US \$ 200,000). This includes contribution by the Turkana County Roads department who repaired the Kakuma-Nakitongo road and constructed a new temporary road from the village to the project site.

COMMUNITY MOBILISATION AND SENSITISATION

At Nakitongo centre, the team members met with local leaders and kraal leaders attending a wedding ceremony nearby at a place called Katiko.They held discussions with 19 elders and community members (15 male and four female).



Support through participating in Feasibility Studies. Credit: RPLRP Turkana County, Kenya.

PARTICIPATORY PROJECT SITE IDENTIFICATION

The Nakitongo Community Borehole Project was identified initially during the first work planning through inference from extension reports of the Turkana County Government and the broad sub-project site identification criteria of the RPLRP project such as, vulnerability to recurrent droughts; cross-border/trans-boundary resource-based conflicts prone areas; transboundary livestock trade routes; and clustering around common issues e.g. geographic, geo-political, socio-cultural and being major dry season grazing area and along the livestock migratory route for animals.

During the inception of RPLRP activities the CPSU teams undertook a **Participatory and Disaster Risk Assessment** using the CMDRR process to ground truth the community needs for disaster resilience. The CMDRR process involves bringing people within the same community together to enable them to address a common disaster risk and pursue collective disaster risk reduction measures. It is also a process of mobilising a group of people in a systematic way towards achieving a safer and resilient community, which takes place in a geographically defined living area or in a sector group not necessarily living in the same location.

During the CMDRR it was observed that the origin of the name Nakitongo is derived from Aturkan language 'elalak ngitunga,' meaning to be crowded by people. It was given this name because during the severe dry periods, the area was often crowded by pastoralists and their livestock in in search of pasture.

Despite the lush pastures there are very few and unreliable watering facilities for animals and humans in the area. The residents are forced to trek for long distances into Uganda to find water for their animals leading to frequent conflicts among the neighbouring communities. Until 2014, the area around Loreng was a no-go zone and most schools were closed or relocated to Kakuma because of insecurity. Whole towns such as Loreng were moved closer to Kakuma and renamed Loreng B. Loreng A is the name given to the village in the original town. The road to Nakitongo which Links Muoroto to Kakuma is almost impassable from Namuranget to Nakitongo. Namuranget is a small village on the way to Nakitongo. It was named Namuranget from the Swahili word Blanketi or Blanket in English, referring to the spot where old men literally left their blankets while fleeing from attacks from raiders from Ugandan.



A family migrating towards Uganda with all their belongings via Nakitongo. Credit: RPLRP Turkana County, Kenya.

PROJECT ENVIRONMENTAL, SOCIAL AND TECHNICAL SAFEGUARDS

A technical feasibility study was done to determine the requirement and water catchment potential of the sub-project site; to ensure that the site of the project is available for the implementation of the activity without triggering the World Bank's safeguard policy on involuntary resettlement, OP 4.12; and to establish a grievance resolution mechanism to minimise conflicts or grievances that may arise as a result of the project. This was followed by an environmental and social impact assessment undertaken by a lead expert in accordance to the requirements of the Environmental (Impact Assessment and Audit) (amended) Regulations, 2009, pursuant to The Environmental Management and Coordination Act, (EMCA) 2015.



Hydrogeological Survey of the Nakitongo Borehole site. Credit: RPLRP Turkana County, Kenya.

PROJECT DESCRIPTION

The Nakitongo borehole construction project comprised of the four main steps outlined below;

- 1. Geophysical survey to identify drill site
- 2. Drilling, installation of casings and development
- 3. 24-hour test pumping to determine optimum discharge capacity and suitable pump
- 4. Pump installation, final electrical works and commissioning of borehole



Drilling of the Nakitongo Borehole. Credit: RPLRP Turkana County, Kenya.



Women scrambling for water during test pumping at the Nakitongo site. Credit: RPLRP Turkana County, Kenya.

Met expectations



World Bank Implementation Support Mission safeguards team, led by Mr. Mark King on a supervision visit to Nakitongo community members. The teamassured the community that they would fast-track the release of funds for the construction of the borehole. Credit: RPLRP Turkana County, Kenya.

One of the reasons Nakitongo is a success story is because it met all the expectations of the various stakeholders of the project such as the Turkana County Government, the key funding agencies, that is the Government of Kenya, the World Bank and IGAD. However, a more important reason is that it achieved the desires of the people, especially the women of Nakitongo village who had for many years adapted to a miserable life of living without or with very little and dirty water that was not adequate to allow them live their life in dignity as women.

The pastoralists, especially young men had to learn to use the AK 47 rifle from an early age and often had to miss school so as to play their roles as warriors to protect their animals or lead raids into the neighbouring communities to restock their animals that were either stolen or lost during droughts.



Armed pastoralist enlisted to provide security to borehole construction workers at the Nakitongo borehole site. Credit: RPLRP Turkana County, Kenya.

Project collaborations

In order to guarantee resilience through entrenching sustainability before, during and after hand-over to the community, RPLRP Turkana actively incorporated the local leaders and the county government in the various aspects of the implementation especially in the CMDRR DRR strategies that were beyond the RPLRP project mandate. During the CMDRR and also during the safeguards studies, it was realised that the poor condition of the Kakuma-Muoroto road was a major constraint to the development of Nakitongo village; the CPSU sought other stakeholders to ensure that the road is improved so that contractors could access to the area. The Turkana County Government public works department undertook to grade the road all the way from Kakuma to the project site to ensure access by heavy rigs and the RPLRP supervision teams.



The Turkana County Government (TCG) public works personnel prepare a grader for the grading of the Kakuma-Muoroto road to improve access to the village. Credit: RPLRP Turkana County, Kenya.

Expected long term impacts

The major positive impacts of this project will include improved access to clean drinking water, thereby improving hygiene and sanitation conditions, as well as mitigating related diseases for the residents. According to the members of Nakitongo community, water is the catalyst that is expected to spur other developments identified in the CMDRR community action plan. These include the establishment of a school, hospital facility and an administrative office to increase security in the area. The development will also increase settlement in the village, which will increase cross-border trade in livestock products and consumer goods. This will likely increase county government revenues from the taxes charged on this trade and in turn will trigger more development of the area by the county government.



Contacts

Regional Pastoral Livelihoods Resilience Project (Kenya) Hill Plaza Building (10th Floor) Ngong Road P. O. Box 34188-00100 Kenya Email: ptl.resilience@gmail.com Telephone: +254-20-2099167 Website: www.resilience.go.ke