INITIAL RAPID ASSESSMENT REPORT FOR FLOODING IN NAROK COUNTY

BASED ON FINDINGS FROM 5TH -12TH MAY 2013

PARTICIPATING AGENCIES
NDOC, UNDP/MOSSP, KRCS, NDMA, G.O.K -COUNTY DEPARTMENTAL REPRESENTATIVES
CONTEXT

Description of the event and location

The onset of long rains season in most parts of Kenya began during the second week of March 2013 and was characterized by flooding that affected many regions in the country. The months of March, April and May have been characterized by steady rise in death toll and displacement of population resulting from flooding effects of heavy rains. The Government in partnership with Humanitarian agencies have been closely monitoring and responding to the effects of the flooding in order to contain a possible humanitarian crisis as the long rains continue. Reports by the Kenya Red Cross Society (KRCS) indicated that as of mid-May, 2013, 93 people had lost their lives with about 100,980 people affected; 87,000 of them being displaced. It was reported that Marsabit and Isiolo, West Kenya and coast regions were the most affected regions (KRC).

Narok County is one of those areas that were affected by the raging flooding menace where 15 lives were lost and about 350 people displaced. The effects occurred in three out of the five constituencies namely Narok North, Narok South, Trans Mara East and West. Loss of property including livestock deaths and damage of over 200 acres of food crops in Kikuyani were some of the findings of KIRA mission. In addition, heavy rains resulted in extensive damages to infrastructure- particularly roads and bridge
Background on the location:
Narok County; located in Rift Valley Province of Kenya comprises Narok North, Narok South, Narok East, Narok West, Emurua Dikirr and Kilgoris constituencies all which lie on a land mass of 17,944 km². Narok County has a total Population of 850,920 with a population density of 47 persons per square kilometer (KNBS 2009). More than 90% of the settlement is rural with only 6.9% comprising urban population (Ibis). The major urban centers are Narok, Kilgoris, Naigarie Enkare and Lolgorian. More than one third (33.8%) of the population in Narok County lives under Poverty line (KIHBS 2008) in spite the County being endowed with Natural resources such as Maasai Mara Reserve, Mara River and Arable Land suitable for agriculture. The main economic activities in Narok County are tourism in Maasai Mara, Commercial Farming, and Livestock Farming.

The health indicators show that 33.6% of households have improved water. Almost three quarters (71.4%) of children less than one year are fully immunized. The HIV rate in the county is reported as 3.4% in Trans Mara District (MOH Trans Mara).

The Rural development indicators are indicative of low development with electricity coverage estimated to cover 5.9% of the households. Regarding infrastructure, about 4.6% of the roads are paved and 41.2% of the roads are described to be in a fair state (KNBS 2009).

The education indicators show that more than one third of the population in Narok County (41.4%) can read and write.

**Objective of Assessment:** To obtain rapid flooding information explaining the humanitarian situation to enable effective management of the situation
Specific objectives

1. To Identify the effects of floods on various sectors
2. To determine priority needs for community affected by flooding
3. Identify response gaps and propose appropriate mitigation measures

Scope /scale of situation:

Loss of lives, property and displacement were reported in Narok North, Narok South and Kilgoris constituencies. In Narok North (Mau Division) two people lost lives both of them after their houses were damaged by landslides in Mosiro and Sintakara villages. Fear of more landslides resulted in movement by residents of Mosiro village to safe grounds. The 60 families are camping at near Sintakara primary School.

Forty seven (47) households had been registered by the Kenya Red Cross and the number had increased to 60 families (approximately 350 people) camping near Sintakara Primary school. In Nairakienkare, majority of the houses had been damaged due to weak structures and poor drainage systems in most homesteads. In addition deep gullies and trenches formed in Nairakienkare farms have negatively affected farming activities. Extensive damage to roads and bridges was observed in Mau Division. Destruction of farm crops such as maize, wheat, Irish potato and more than 200 acres of wheat due to flooding of farms. In Kikuyani village, the Kikuyani full gospel church was marooned by flooding and learning activities have been affected at Kikuyani Primary School due to floods which had cut off the school from the neighborhood. Water table has risen and toilets have filed-up flooding its surroundings and causing a health risk. Majority of people affected by flooding are hosted within the community and the coping mechanism is by moving out to neighborhood and return when water levels subsides.
(Deep gullies and Trenches in Nairakienkare area- Mau Division)

Displaced people being addressed by administrative chief at Sintakara camp

( Damaged Drift on Ololulunga – Eretet, Spot where some locals lost their lives(Source Kenya Roads Authority –Narok region))
In Narok South (Olulun’ga area), ten people lost their lives when a vehicle was swept by raging floods on Ololulunga – Eretet road landed in Ndoroboni Bridge. In Ndoroboni village, houses have had flooding episodes but this has since subsided with decreasing rains. The affected communities are not displaced; they reside in the affected structures. Farms are flooded with rain water causing losses for farmers. No other major incidents have been reported in the area except extensive damage of farms, crops, roads and bridges.

In Trans Mara, two people died after they drowned in a river in Kilgoris town while shelters belonging to 20 households were damaged by the raging floods. The affected households have been integrated and are being supported by neighbors and families. Majority of farmers have been affected by floods as crops have been destroyed by the flooding water resulting in increased cost of marketing farm produce and as well as food insecurity. In Trans Mara East and Trans Mara West, crop destruction was reported and increased insecurity particularly in Kuria East where cross border livestock raiding and looting had increased. The incident saw a person from Maasai community killed in the neighboring Tanzania as he tried to raid livestock. Maize farming has also been affected by the floods as well as a viral infection *lethal Necrosis* disease which was discovered two years ago, but worsened during the flooding seasons.
Damaged infrastructure resulting from flooding has reduced freedom of movement in Mapashi-Enasai, Galalo, Enortek, Osupuk roads as well as Kilgoris-Angaga road. This has affected access to Emeti, Kimidet, Nganaio, Endaraget, Odanyat and Shangoi Health facilities causing delay in quarterly supply essential medicines. Although the affected people in Kilgoris had not received any relief supplies, they have been integrated and assisted by family and neighbors.

The priority needs for families affected in Narok North, South and TransMara (Kilgoris) are support to procure farm inputs such as fertilizers and drought resistant seeds to enable farming activities during the short rains season. In addition, improving the road network was identified as a priority in all affected areas. In Trans Mara for example, affected community identified Kilgoris-Loman, Kilgoris – Angaga, Kilgoris- Kilindoni, Kilgoris – Trans Mara roads as those which require urgent upgrading. They also indicated the need for capacity building of District teams on disaster risk reduction and response as a priority.
METHODOLOGY

Information compiled for this assessment was from both primary and secondary sources. The Kenya Red Cross Society, Ministry of State for Special Programmes (MOSSP), National Disaster Operation Centre (NDOC), the County Commissioner, the Deputy County Commissioners, and the Sub County Disaster Committees (formally District Disaster committees) for Narok North, South and Trans Mara provided useful Secondary information particularly in identification of areas that were affected, estimation of damages and loses caused by flooding.

Primary data was collected by a multisectoral team using a pre-designed KIRA questionnaire. The team comprised NDOC (representing Environmental health and Security), UNDP/MOSSP (Representing Disaster Risk Management) from the National level and were joined by Kenya Red Cross Society (representing the front line responding agency). At County level Education, Agriculture, Forests, NDMA and Administration so participated in the KIRA exercise.

Data was collected using qualitative methods mainly Focus Group Discussions (FGD), Key Informant Interviews (KII) and observation. The KIRA team visited sites where flooding had caused losses as identified by County leadership. The respondents included various county leaders, sub county leaders, Sectoral representatives and affected communities. A total of eleven (11) gender disaggregated FGD and six (6) KII were conducted. The information gathered through the interviews and discussions were recorded on the questionnaire. For each FGD and or KII, two data collectors conducted the interviews, one read out questions to the respondent while the other person documented information provided by the respondents. This data was then organized in the analysis table at the end of each day to summarize information provided and identify the priority needs for the affected population. The data compilation was done by the same data collectors.
## PRIORITY NEEDS PER AFFECTED AREAS

<table>
<thead>
<tr>
<th>Constituency</th>
<th>Affected community</th>
<th>Vulnerable groups</th>
<th>Flooding effects</th>
<th>Interviewed group</th>
<th>Immediate needs</th>
<th>Emerging needs</th>
<th>Cross cutting issues</th>
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</thead>
<tbody>
<tr>
<td>Narok North:</td>
<td>Sintakara IDP camp (Site 4)</td>
<td>Infants, women, men</td>
<td>2 lives lost, Displacement as a result of landslides, -massive losses for farmers due to crop damage in farms</td>
<td>Female</td>
<td>-Material to build spacious alternative shelters with adequate privacy -Adequate relief food and equitable distribution of relief food - addressing discrimination in food rationing by committee members -NFI such as Blankets, kitchen sets -clean water for drinking, relief seeds, fertilizers, small grand for rebuilding livelihoods once the rains subside</td>
<td>Relocation of people living in Mosiro to safe habitable areas</td>
<td>-People requiring special needs living at Sintakara Camp (one blind man, 8 orphans), Those with chronic illness</td>
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| Nairakienkare village | Infants, women, men, girls boys | Deep gullies and trenches on farms, flooded houses, Destruction of farm crops including Irish potatoes and other groceries | female | -Construction of resilient structures  
-Relief seeds, fertilizers, food, small grand to support rebuilding livelihoods  
-construction and improvement of Sintakara-Enkare road, agricultural extension services, health promotion on hygiene and sanitation (open defecation, flooded toilets)  
-Delayed distribution of relief food  
-NFI-Blankets, sanitary towels  
-Resettlement of community to safer land  
-Research on and prevent further formation of gullies and trenches  
-Increasing prostitution as a result of poverty and youth unemployment  
-Reduced opportunity for agro based casual labor |
| Narok North DSG | | Insufficient food and NFI -relief does not address actual needs  
-Construction of roads and Bridges Chebuuya-Emuruchak Emartini, Maasai Mara-Serena-Talek, NarokNkareta, LoitaEnkara, NairobiNakuru | Male | -Relief seeds, fertilizers, food, small grand to support rebuilding livelihoods  
-Upgrading Sintakara-Enkare road,  
-Agricultural extension services  
-Resettlement of community to safer land  
-Excessive deforestation ongoing |
| CBD | CBD | KII | -Blocked infrastructure  
-Inadequate water for Narok CBD increasing population | -Need of community based afforestation program |
<p>| 10 | | | -Improve CBD drainage system | -Improvement of roads &amp;bridges, capacity building of communities on drainage of roads |</p>
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<thead>
<tr>
<th>Area</th>
<th>Villages/Location</th>
<th>Affected Groups</th>
<th>Impact/Issues</th>
<th>Female (KII)</th>
<th>Male (KII)</th>
<th>Recommendations</th>
</tr>
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<tbody>
<tr>
<td>Narok North</td>
<td>Kikuyani village</td>
<td>Men, school</td>
<td>23 households live in fear as their houses were damaged by the floods</td>
<td>Male</td>
<td>- water drainage system for stagnant mass water at Kikuyani</td>
<td>- construction of dams</td>
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<td></td>
<td></td>
<td>children</td>
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<td>shelter, food</td>
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<td>Improvement of roads</td>
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<td>Relief food, seeds and fertilizers</td>
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<td>Females, school</td>
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<td>-23 household structures damaged by floods, -Kikuyani primary school cut off from neighborhood</td>
<td>Female</td>
<td>- Construct an outlet to drain off water mass at Kikuyanivillage</td>
<td>- Construct an outlet to drain off water mass at Kikuyanivillage</td>
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<td>children</td>
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<td>- Relief food, seeds and fertilizers</td>
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<td>Santakara,</td>
<td>all community members particularly</td>
<td></td>
<td>-Infestation of maize plantations with <em>lethal Necrosis</em>, Farm crops washed away by run off surface water</td>
<td>KII</td>
<td>- Improvement of road drainage systems, Relief supplies for affected households</td>
<td>- capacity building on environmental conservation</td>
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<td>Suswa, Ntuka and</td>
<td>farmers</td>
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<td>Naroosora</td>
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<td>Narok south-</td>
<td>Ndoboboni area</td>
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<td>- crop destruction and flooded farms -Loss of ten lives when vehicle swept by raging floods by floods.</td>
<td>Female (one KII)</td>
<td>- Relief seeds for drought resistant crops, improvement of roads and bridges</td>
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<td>Olulung’a</td>
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<td>- Destitute living in Pangani area in Olulung’aneed to be supported to build their stable livelihoods</td>
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<td>Location</td>
<td>Affected Groups</td>
<td>Issues</td>
<td>Aid Provided</td>
<td>Further Needs</td>
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<tr>
<td>Narok South</td>
<td>School children, farmers, crop destruction and flooded farms</td>
<td>Water treatment and awareness on water borne diseases Insufficient aid -Construction of Langato-Ololika Bridge, Olepalos bridge, ndoroboni bridge</td>
<td>Need to be supported to build their stable livelihoods -Reduced chance of casual labor hence unemployment -Girls secondary school and health facility at Lashspsn Oloipani</td>
<td>- sensitivity on soil conservation methods, tree planting regulated charcoal burning, alternative livelihoods Construction of roads, bridges and dams in Olun’a to Alashapani, Olepolos, Narusa bridge, Naikara, Narosa Birdges, Nalosura-loita road, Ngoringori-Lemek road, Ngorwari-Posmor road -Insecurity along Narosura road -Need for AP post, need address lethal necrosis in Mulot area -Maize infestation by viral disease -Increasing cases of insecurity along major roads (Bandits)</td>
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<tr>
<td>Trans Mara -Kilgoris</td>
<td>DSG Kilgori Seeds for short term crops that are drought resistant, household items, improve roads and bridges</td>
<td>Need to improve road -upgrading and improve road drainage system for maintenance</td>
<td>- Construction of Kilgoris – Logman, KilgorisKilondi, KilgorisTra nsMara</td>
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**Early recovery needs:** In Narok North, South and Trans-Mara, the community needs to support to be supported with farm inputs to enable them to embark on planting short season food crops to address food shortage and malnutrition during early recovery phase. In addition, improvement of road network to an all-weather road, improvement on road drainage as well as construction of resilient bridges and dams will ease mobility and support economic activities. Sensitization of communities on building stronger housing structures that are resilient to extreme weather as conditions is important. Sensitization on water and sanitation matters particularly disposal of excreta and treatment of drinking water. Improvement of access to primary health care services by Provision of mobile MCH clinics in areas affected by flooding.

**Response capacity:** Immediate response capacity of flooding by local community was commendable as the immediate family and neighbors supported those affected which checked on a possible humanitarian crisis. In addition, the KRCS supported distribution of NFI s for the displaced person as well as supporting National Government in distributing relief food in Santakara and Melile villages. The capacity of local community to fully respond to flooding situation can be enhanced by strengthening Disaster risk reduction strategies and law enforcement. This includes supporting the establishment of disaster risk reduction at all levels, empowering the community on environment conservation and proper land use practices. This will ensure that deforestation is contained through sustainable charcoal harvesting systems, regulated sand harvesting in Suswa, practicing soil conservation measures and effective early warning and alert systems.

The National government and Development partners supported the County by providing food, continuous monitoring of the flooding situation, issuing meteorological alerts, conducting KIRA assessments and mapping of response partners. As at Mid May, 2013, 150 bags of Maize, 50 bags of beans, and 50 cartons of corn oil, 50 bags of Rice have been distributed by MOSSP through the KRCS. The KRCS provided 100 tarpaulins to affected persons of Narok North, similarly in Olulunga 25 bags of maize were donated and 100 blankets. The need to review the suitability of Nairakienkare, Suswa, Mosiro and Sintakara villages for human settlement and a review by seismologist on the systematic linear formation of gullies and deep trenches. In addition, the national and county government need to prioritize improvement of infrastructure; roads, bridges and dams.
**International Response capacity:** The International actors may support the community by supporting developmental activities such as supporting county government in building of bridges that can withstand water with high pressures, support construction of water harvesting systems such as dams to store water for use during drought seasons.

Supporting the government efforts in awareness creation and enforcement of soil conservation activities and strengthening disaster risk reduction structures.

**RESPONSE PRIORITIES**

**Sectoral gaps:**

1. **Health sector:** Improving access to primary healthcare services in areas that were cut off from access to health facilities
2. **Food Security:** Support farmers to access farms inputs such as seeds and fertilizer for farming during short rain season as this will address the transitory food insecurity during the early recovery phase.
3. **WASH:** Under utilization of toilet facilities, possible collapsing of flooded latrines and outbreak of waterborne diseases
4. **Education:** Provide alternative arrangement for affected pupils in schools such as Kikuyani to continue with schooling during the flooding season.
5. **Roads and Infrastructure:** Improvement of roads and construction of resilient bridges
6. **Devolved governance:** Need for the devolved structure to move with speed to ensure that priority is given to infrastructure development particularly upgrading of feeder roads, construction of strong bridges, sensitization and law enforcement on environmental conservation measures
7. **Protection:** Address gender needs and needs for people requiring additional needs during disasters such as women, those with physical challenges and those with chronic illness
Constraints
There were no major security concerns experienced in accessing the affected areas in Narok County. However infrastructural damage resulted in increased cost of transport and some areas such as Sintakara could not be accessed by vehicle. Information gaps continued to pose a challenge due to inadequate coordination of the response effort at National and county levels. Regarding funding, no major funding gaps were identified for response to immediate needs since KRC responding partner had received support from Government of Japan, MOSSP to continue with monitoring and response efforts. However funding for construction of infrastructure by the government faces budgetary challenges

RECOMMENDATIONS
1. **Environmental conservation and Soil Conservation**: Awareness creation on tree planting, alternative Livelihood and Regulated charcoal burning
2. **Infrastructure maintenance**: The County government to invest in improvement of infrastructure such as Construction of dams, strong bridges and upgrading existing road network particularly upgrading feeder roads and road drainage system
3. Sensitize farmers on soil conservation through good agricultural measures like constructing gabions and terraces.
4. **Strengthening Disaster Committee at all levels**: Focus on Risk reduction activities, putting in place early warning, early action for flooding, law enforcement and community based early recovery strategies.
5. **Strengthen research on early warning and Early Action**: Need for further review of cause of formation of linear deep trenches and gullies.
6. **Public Health**: Health promotion activities including awareness
ANNEXURE

ANNEX 1: MAP OF NAROK COUNTY

![Map of Narok County](image)

ANNEX 2: ASSESSMENT TEAM CONTACTS:

1. Jonathan Kertich (NDOC) Email: kertich@ndockenya.org
2. Nyagoha N.E –(MOSSP/UNDP)-: nancy.nyagohaa@undp.org
3. Felisters Kioko- KRCS Email: kioko.felister@kenyaredcross.org
4. Mukaria Samson –NDOC

   **Participating officers from the County**

5. County Commissioner, Deputy county commissioners, DSG from Narok North, Narok South and Trans Mara west,
   Administrative, Chief of Nairankare and Sintakara
6. Helen Wambui -NDMA-Narok County
7. GOK Departmental heads for Narok County

ANNEX 3: PHOTO GALLERY OF EFFECTS OF FLOODING (See attachment)

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