



May 2019

**Tracking subnational
government
investments in
disaster risk
reduction in Kenya**

report

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Executive summary

This report assesses the level of investment in disaster risk reduction (DRR) programmes in four counties in Kenya – Baringo, Laikipia, Kisumu and West Pokot. These counties were chosen for this analysis as they are prone to droughts and, in the case of Kisumu, to flooding. Availability of county budget data also informed the choice of the counties.

Following recent studies that are increasingly using the OECD-DAC marker to assess public expenditures on DRR,¹ we have applied the marker to systematically screen county budget documents (2016/17–2018/19) to analyse and evaluate the extent to which programme budgets are aligned to DRR objectives.

The value add of this paper is three-fold. First, it narrows the knowledge gap in DRR investment at county level; and DRR mainstreaming across departments. Secondly, it can be used as an input in the analysis of the DRR investment gap in the future as information on needs requirements becomes available. While it is beyond the scope of the report to conduct cost-benefit analysis or even investment gap analysis, a risk-sensitive budget review is useful to understand the level and trends of DRR investment counties have been making. Thirdly, the report, being the first assessment for the select counties, can serve as a baseline for future tracking.

Key findings

Some of the key findings of the report include:

- Laikipia is the only county of the four considered, where the DRR coordinating office is not anchored in the respective governor's office. Placing DRR coordination function at the highest level of power elevates its visibility and allows disaster risk management to be positioned as a priority.
- At the county level, timely and reliable data on vulnerabilities to disaster risk that are driven by poverty and climate change is limited; and more so, the information that links these elements.
- Kisumu county has the highest number of departments with DRR-principal spending (where DRR is a primary objective of that spending). The county also has the highest DRR-principal spending. This might be because of the deliberate effort the county, particularly Kisumu city, has been making towards DRR, including being the pioneer in localising Sendai Framework indicators²; as well as being part of the global 'Making Cities Resilient' campaign.³
- The four counties invested a total of KES 6.4 billion on DRR between financial years 2016/17 and 2018/19. Baringo had the highest investment (KES 1.9 billion), followed by Kisumu and West Pokot (KES 1.7 billion each) and Laikipia (KES 1.1 billion).

- Counties spend the bulk of their DRR-principal funding on disaster response, preparedness or disaster prevention and mitigation DRR-significant investment (where DRR is a secondary objective of that spending) is directed towards development and rehabilitation of roads, provision of water and preventive and promotive health care services.
- The share of allocations to DRR-principal programmes in respective total county budgets is less or equal to 2%. Such programmes also take less than a quarter of total marked DRR budget (except in Kisumu); while the rest goes to programmatic activities that consider DRR as a secondary objective ('Significant') in all the counties.
- Mainstreaming of DRR investment is not limited to a small number of departments. Most DRR-principal investments are made by the office responsible for disaster risk management. DRR-significant investments are made mainly in water, roads and health departments.
- By aligning the counties' budgets to the Sendai Framework's priorities, the OECD marker finds DRR-principal allocations towards building disaster risk knowledge (Priority 1) only in Kisumu county. DRR-principal sub-programmes are aligned mainly to disaster response (Priority 4) in Laikipia and Kisumu while in West Pokot and Baringo the focus of DRR-principal funding is on building resilience (Priority 3). As expected, marked DRR-significant investment prioritises building resilience (Priority 3) in all counties. This is expected given that DRR-significant investment, by its nature, is development oriented.

Recommendations

- There is a need to mainstream DRR budget in more institutions. There is an opportunity to involve more institutions in DRR budgeting given that disaster risk management is coordinated from the governor's office in the three counties.
- Counties need to make deliberate efforts to understand disaster risk (Priority 1 of the Sendai Framework). Assessment and regular monitoring of the vulnerability of lives and livelihoods should be carried out to make informed planning and resource allocation. Such information should be kept at a central repository accessible by all government institutions.
- To make a conclusive recommendation on the DRR investment gap, there is a need to assess investment requirements for DRR by county.

Introduction

Kenya is prone to natural and human inflicted hazards. Floods, drought, epidemics, conflict and fires are the most commonly reported hazards. According to INFORM index (2018),⁴ Kenya scores the highest among its immediate neighbours, Uganda, Tanzania and Ethiopia, in terms of natural hazard impacts and probability of occurrence.

Extreme weather events, high poverty levels, and the vast size of arid lands have been identified as causes of disaster and exacerbators of its impact. On average, the death toll directly from extreme weather between 1997 and 2016 was 57.4 people.⁵ Arid and semi-arid land (ASAL) covers the vast majority of Kenya (89%) and is home to more than one-third of Kenyans (36%).⁶ ASALs have some of the highest poverty indices in Kenya. Eight out of the ten counties with the highest poverty headcount figures are in the most arid areas with aridity figures of between 85% and 100%.

Losses resulting from disasters can be economic, environmental and social. These losses not only reduce the coping abilities of the affected population but also increase vulnerability to recurring disasters. Human and economic losses due to disaster reduce overall economic productivity and disrupt overall wellbeing of residents sinking them deeper into poverty.

Investments in DRR not only ensure sustainable development but also minimise losses from future disaster. Loss of lives, damage to property and infrastructure can be prevented by investment in disaster risk reduction. Human and economic resources channelled towards response and recovery during disaster could otherwise be directed to other development projects that improve lives. Additionally, investments in DRR potentially attract county investors that seek to minimise exposure to disaster risks.

Why track DRR budget?

In the last two decades, the frequency and intensity of disaster in Kenya has been increasing. Vulnerability to disaster and risk exposure are exacerbated by location (ASAL), poverty, climate change and poor infrastructure. Human and economic losses associated with recurring disasters worsen resilience and reduce their coping capabilities, sinking communities deeper in poverty and inequality.

Programmes that are DRR-principal by and large benefit the poor by reducing risk exposure. Such programmes may include disaster risk mitigation and prevention projects, early warning systems and community sensitisation in their DRR programmes.

Limited budget allocation and late disbursement, however, characterise county DRR budgets in some counties. This is highlighted in a study by Development Initiatives that

also finds underspending of county government budgets and personal or political beliefs motivating resource allocation.⁷

Capacity to manage disaster risk is also constrained by a lack of deliberate action towards proactive disaster risk management. An evaluation of drought responses between 1999 and 2001 indicates, only US\$171 million would have been spent on relief responses instead of double that amount had the country put in place appropriate mitigation and preparedness measures.⁸

This report aims to narrow the knowledge gap in DRR investment at county level; establish the extent of DRR mainstreaming across departments; as well as document county DRR policy and institutional frameworks. Furthermore, it can be used as an input in the analysis of the DRR investment gap in future as information on needs requirements becomes available.

Policy and institutional frameworks

All the four counties under review have bills and policies governing management of disaster risk. Kisumu County Disaster Management Act 2015,⁹ Laikipia Risk Management Policy 2016,¹⁰ West Pokot Disaster Management Act 2016¹¹ and Baringo County Disaster Management Policy 2017¹² are the main reference documents for disaster risk management in the counties. Generally, these policies are used to guide effective coordination and management of DRR activities, public awareness and sensitisation on DRR through community involvement and public participation and the integration of modern scientific technology to promote early warning systems.

Additionally, these policies promote the creation of various institutions and mechanisms to help in mainstreaming DRR in the county development agenda. They are also used as directives for financial provision supporting budgetary allocation to DRR programmes to ensure preparedness, mitigation, response and recovery.

Counties, in their policy documents, have undertaken to promote data collection and dissemination to inform various sector players on DRR. This is in recognition of weaknesses in data quality, timeliness and data infrastructure at the county and national levels. Public participation and awareness through early warning signals have also been strengthened at the county level promoting dissemination of disaster risk.

Major progress is being made in addressing the DRR legislation both at the county and country level. However slow implementation of the policies as a result of slow progress of policies at the debating stage, lack of political will and competing priorities in government will derail the overall goal of DRR legislation. Political interference during draft stage, poor prioritisation and weak coordination additionally add to the legislation hurdles.¹³

In terms of institutional frameworks, DRR-principal programmes at the county level are managed by departments that coordinate and support DRR activities between national and county level governments. These functions are anchored in the office of the governor, county public administration and public service or the county Treasury and

economic planning. Other departments performing ad hoc tasks on DRR include departments in charge of health, road, water, environment and roads. These departments are required to liaise with the specific DRR department in the event of a disaster.

While DRR is a responsibility of both county and national government, where counties are the first responders, the latter lack capacity to implement programmes.¹⁴ The institutions created by some of the policies and acts discussed above lack implementation structures and legal backing to execute programmes or policies in DRR. This coupled with competing priorities in the development (including education, roads and health) minimises economic resources available for DRR.

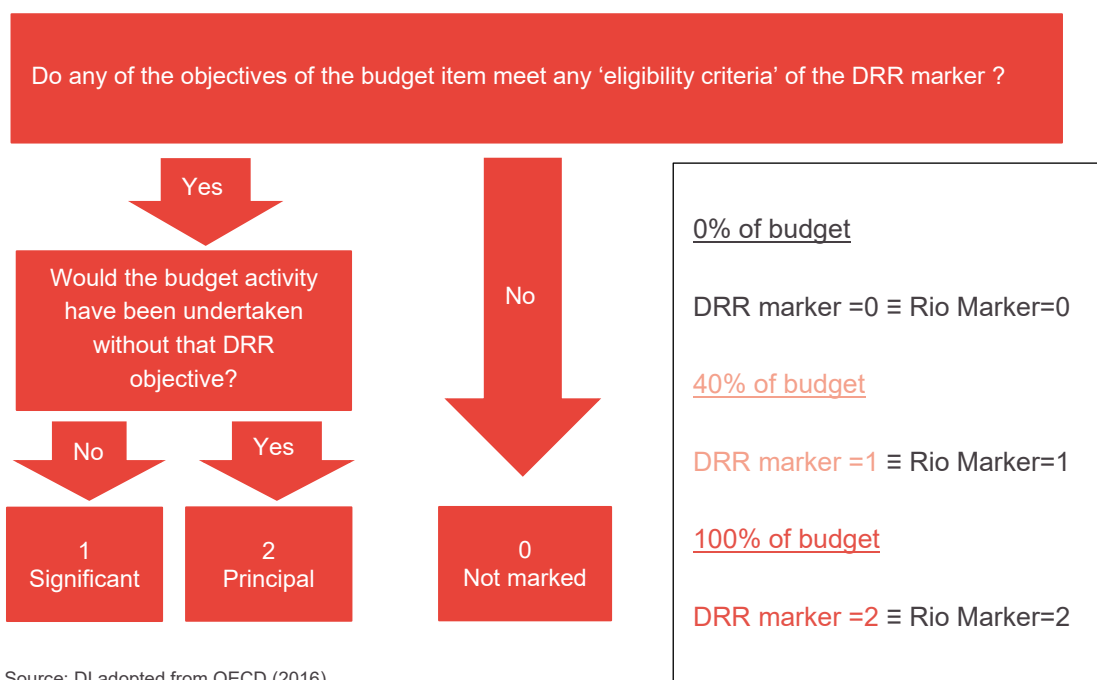
The remainder this section outlines the methodology – the OECD-DAC marker, the rationale behind using the marker and its limitations. Section 2 sets the scene by presenting counties' risk profiles, impacts and frequency of disasters and drivers of vulnerability. Section 3 provides results of the budget tracking exercise. Summary and recommendations conclude the report.

Methodology

Our risk sensitive budget review analysis applies a categorisation by the Organisation for Economic Co-operation and Development – Development Assistance Committee (OECD -DAC) policy maker¹⁵ complemented by the Sendai Framework for Disaster Risk Reduction 2015–2030. The OECD-DAC policy marker is a quantitative tool that assesses the extent to which programmes are aligned to DRR objectives. It is used to track the extent of public investment to programmes that are either directly or indirectly related to disaster.

DRR activities are marked as 'Principal' or 'Significant' or 'zero' (Figure 1). DRR-principal investments are those activities or programmes that are undertaken primarily with a disaster risk management objective (marked 2 as the Rio marker). Programmes or activities that are indirectly related to DRR are categorised as DRR-significant investments (marked as 1). Activities that are neither 'Principal' nor 'Significant' are marked as zero. Principal spending is allocated 100% of the total value while Significant allocations are discounted 40% of the total value. The total DRR spending in a county is the sum of both the 'Principal' and 'Significant' budget. The table below shows an overview of the scoring method.

Figure 1: Decision tree for scoring an activity against the DRR marker



DRR investments are further categorised by the four Sendai Framework priorities. These are sub-programmes related to understanding disaster risk (Priority 1); those related to strengthening disaster risk governance to manage disaster risk (Priority 2); investments on disaster risk reduction for resilience (Priority 3); and those activities aimed at enhancing disaster preparedness for effective response and to 'build back better' in recovery, rehabilitation and reconstruction (Priority 4).

The other two methods of categorisation applied to identify the focus of counties are by risk category and disaster risk management cycle. Budget items that are focused on risk prevention, mitigation and preparedness are marked as pre-disaster risk reduction (PDRR) while risk categories related to recovery, reconstruction, response and relief are considered as post-disaster crisis management (PDCM) cycle.

We note, however, that the OECD-DAC marker tends to be subjective, and dependent on the analyst's discretion. This can be challenging in the absence of disaggregated budget by activity, as is the case of all county budget documents. Development Initiatives suggests a comprehensive list that standardises and guides categorisation of possible public expenditure items. Furthermore, discounting Significant DRR budget by 40% is unclear.

Setting the scene: County risk profile

Rapid population growth, poverty, extreme weather conditions and poor infrastructure exacerbate the effects of disasters. Assessing the risk of disaster in the four counties reveals they are affected mainly by natural hazards, particularly droughts and/or floods. Due to poverty and inequality, residents are left with limited options to regain their livelihood after disaster. Additionally, the effect of disaster is further aggravated by poor agricultural practices such as overgrazing and the cumulative impact of recurrent disasters.

Kisumu

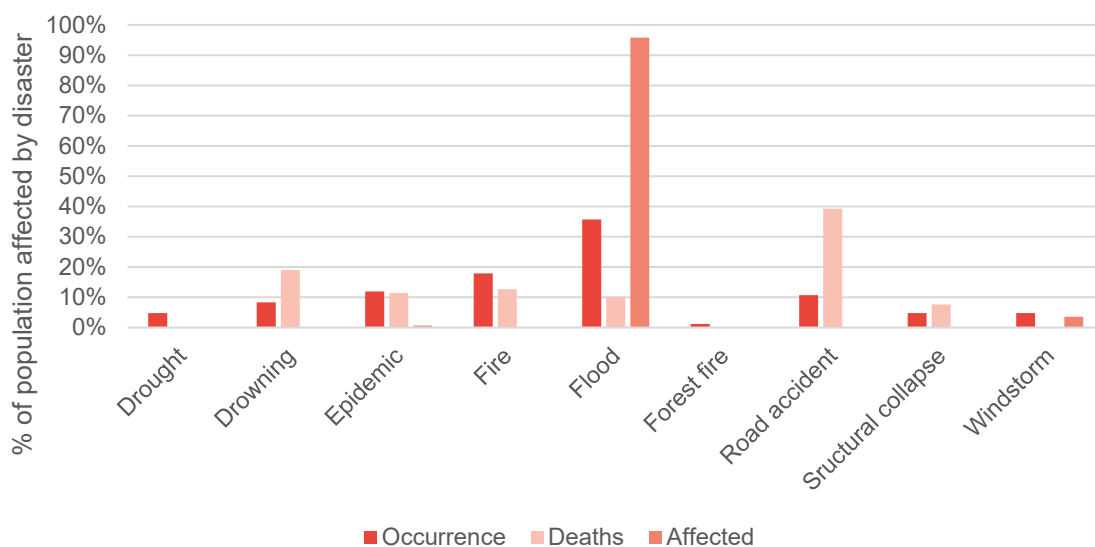
Kisumu county has an estimated population of 1.2 million residents.¹⁶ The county is divided into seven sub-counties, namely Kisumu West, Kisumu Central, Kisumu East, Seme, Muhoroni, Nyando and Nyakach. About 34% of Kisumu residents are income poor at county level, contributing 2.3% of the total income poor nationally. In terms of food poverty, 32.5% of the county's residents at county level and 2.5% at national level are food insecure.¹⁷

Farming, subsistence and commercial, fishing and small-scale trading are the main economic activities of Kisumu residents. Large scale plantations of sugarcane (Chemelil) and rice (Ahero) and fishing on the shores of Lake Victoria offer livelihood opportunities for the community

Extreme weather (related to climate change), poverty, poor county infrastructure and population pressure are the main drivers of risk exposure and vulnerability in Kisumu county. The county's topography, mainly plains, and its soil type with high water retention increase the likely occurrence of floods.

According to administrative level data from DesInventar,¹⁸ which has reports on intensive and small-scale disasters between 1997–2016, the most frequently reported disaster causing hazards for Kisumu county are floods (36% of all disasters) distantly followed by fire outbreaks (18%), epidemics (12%) and road accidents (11%) (Figure 2). During this period, of the total population indirectly affected by all types of disasters, floods had a share of 96%, destroying property and infrastructure and causing damages to crop.¹⁹

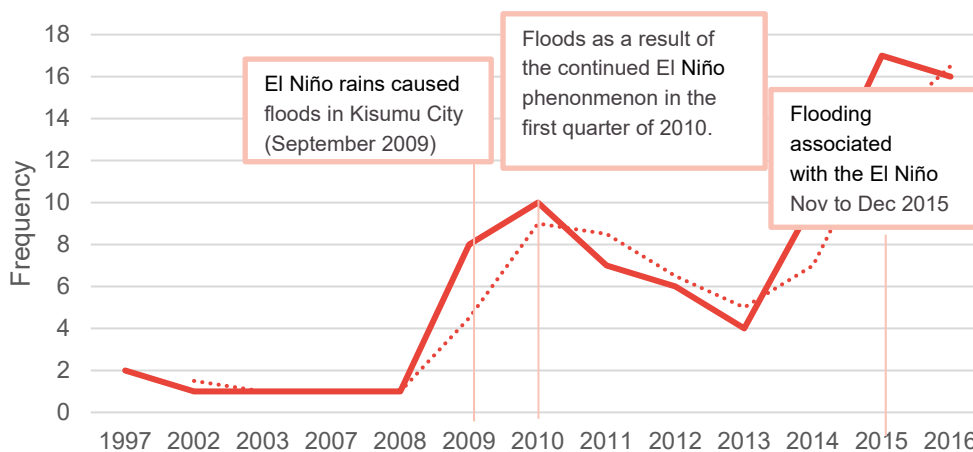
Figure 2: Kisumu county risk profile, 1997–2016



Source: Development Initiatives based on DesInventar Disaster Database, UNISDR, 2018

Trends in disaster occurrence in Kenya are characterised by periodical peaks. The peaks in disaster frequency between 1997 and 2016 are explained by floods related to the El Niño phenomenon (Figure 3). These surges were notable in 2009²⁰, 2010²¹ and 2015.^{23,24}

Figure 3: Disaster occurrence frequency, 1997–2016



Source: Development Initiatives based on DesInventar disaster databases, UNISDR, 2018; ReliefWeb, Anlap, NDMA

Kisumu city, the third largest city in Kenya, is hit with frequent disaster from structural collapse, flooding, and ferry sinking accidents.²⁵

West Pokot

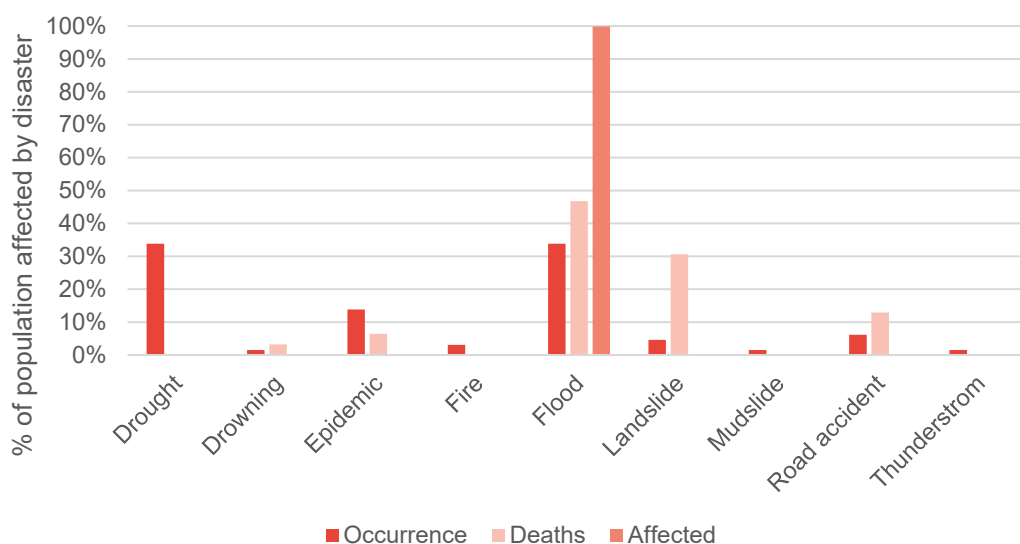
West Pokot county has an estimated population of 0.7 million residents²⁶ of which, just over half (57.3%) are classified as both income and food poor. The county accounts for 2.3% of income poor and 2.6% food poor nationally.²⁷

Besides pastoralism, residents practice subsistence farming by growing maize, millet, potatoes and beans. Tourism and mining remain sectors whose full potential is yet to be explored. The county has a rich cultural heritage and scenic sites coupled with natural resources such as gold, limestone and sand deposits.

Vulnerability to disaster has been exacerbated by high poverty levels, extreme weather related to climate change, overgrazing and poor market and road infrastructure. Overgrazing as a result of overstocking of livestock has exposed the land to flooding and animals to malnutrition causing epidemics, such as tse-tse fly infestation or foot and mouth disease. Extreme weather events associated with environmental degradation has worsened the effects of disaster such as droughts and flash floods, this coupled with poor transport and communication infrastructure increases disaster impact.

Droughts and floods are the most frequently reported hazards in the county. According to administrative data from DesInventar, floods and landslides are the major causes of disaster deaths (77.4%). Similarly, floods have the highest impact in affecting a larger proportion of the population.²⁸

Figure 4: West Pokot county risk profile, 2005–2016

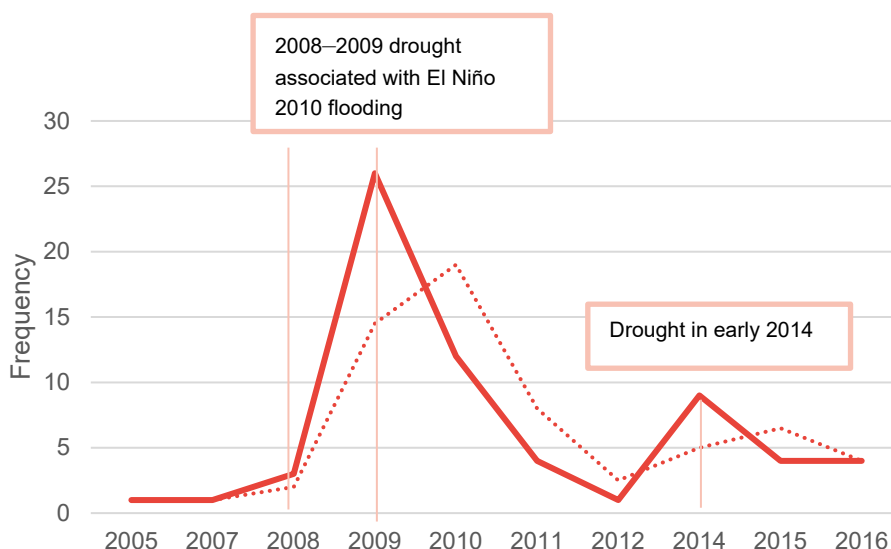


Source: Development Initiatives based on DesInventar disaster databases, UNISDR, 2018

Reported disasters between 2005 and 2016 show fluctuations with upsurges in 2009–2010 and in 2014 (Figure 5). Kenya was hit by drought between 2008 and 2009,²⁹

affecting mainly ASAL districts.³⁰ In 2010, drought was replaced by flooding, which affected the county greatly.³¹ In 2014, droughts were reported for the county.³²

Figure 5: Disaster occurrence frequency, 2005–2016



Source: Development Initiatives based on DesInventar disaster databases, UNISDR, 2018; Relief Web, Anlap, NDMA

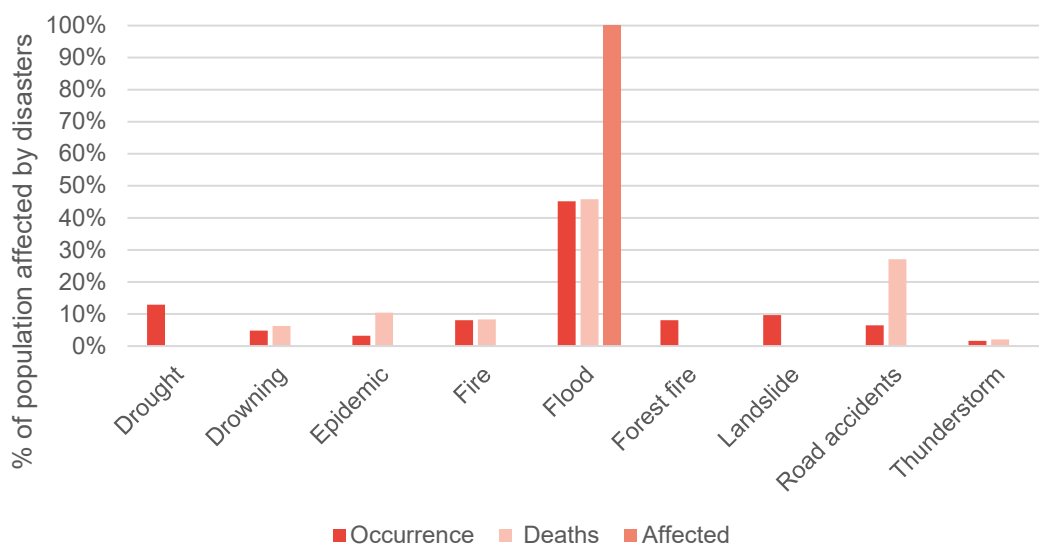
Baringo

Baringo is a semi-arid county with a projected population of 0.7 million people.³³ About 40% of the population is income poor and 41% is food poor. Around 291,000 people or 2% of the county’s population are food poor while 278,000 or 1.7% are income poor.³⁴

Agriculture is the backbone of the county. Residents practise both subsistence and commercial farming. Commercial farming is mainly practised in the highlands where coffee, cotton, maize and beans are grown. Livestock-keeping, to supplement crop farming, and tourism-related activities are the other two major economic activities. The county has prominent scenic sites including Lake Bogoria and Lake Baringo which attract tourists, boosting the county’s revenue.

Baringo county is prone to frequently occurring floods, droughts and landslides. Floods cause the highest deaths (45.8%) and affect a large number of people. Human-inflicted disasters such as road accidents, fire and drowning are also reported to have caused disaster casualties between 1997 and 2016 (Figure 6).³⁵

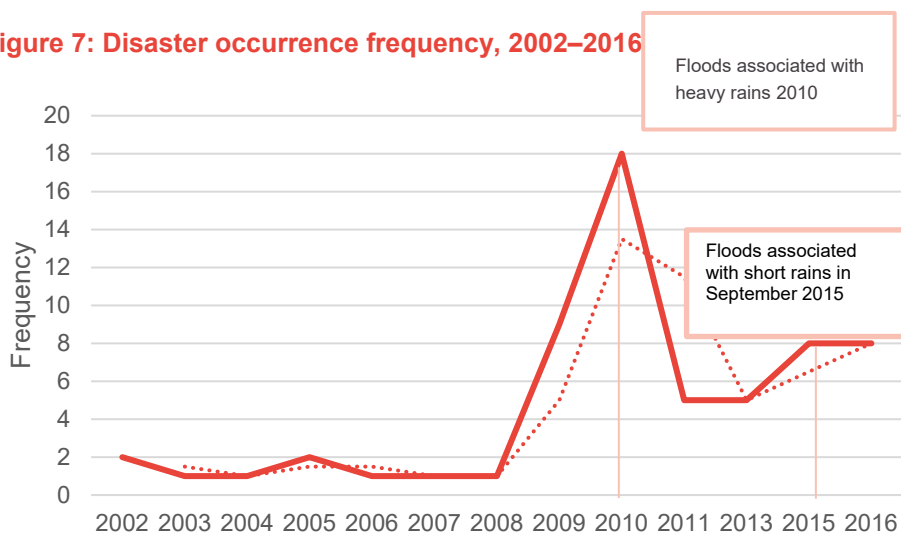
Figure 6: Baringo County Risk Profile, 2002–2016



Source: Development Initiatives based on DesInventar disaster databases, UNISDR, 2018

A steep rise in the frequency of disasters was witnessed between 2008 and 2010 followed by a depression in 2011. Peaks in 2010 and 2015 can be explained by flooding in late 2010³⁶ and 2015.³⁷

Figure 7: Disaster occurrence frequency, 2002–2016



Source: Development Initiatives based on DesInventar disaster databases, UNISDR, 2018; Relief Web, Anlap, NDMA

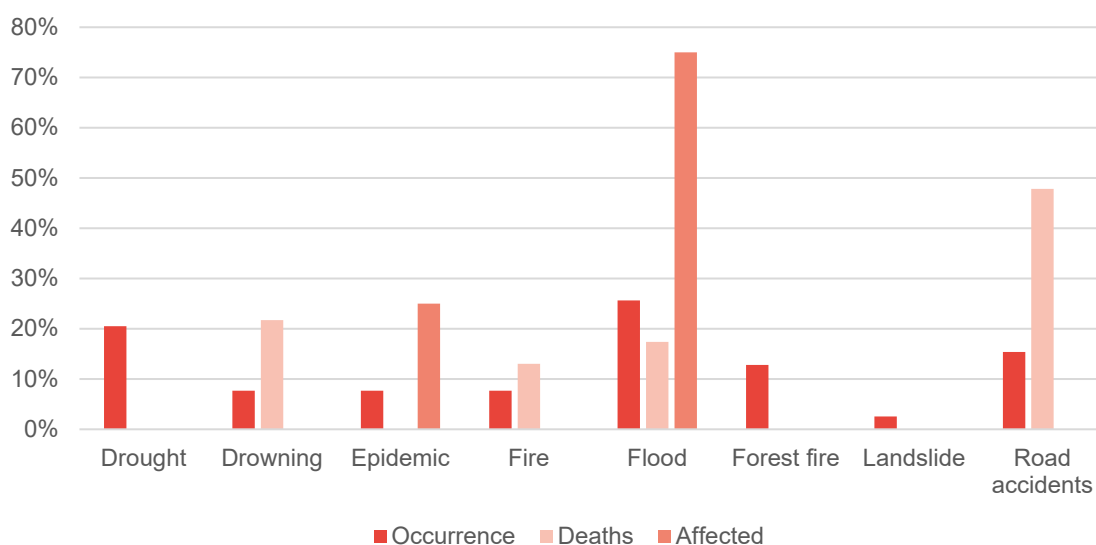
Laikipia

Laikipia is a semi-arid county with a population of 0.5 million people.³⁸ A large proportion of the population, 45.9%, is income poor while food poverty (28.5%) is relatively lower than the national average (32.5%). The share of Laikipia county in national income poverty is 1.4% (233,000 people) and 1% (145,000 people) in food poverty.³⁹

Agriculture is the main economic activity in the county. In addition to growing crops such as maize, carrots, peas, potatoes, wheat as well as horticultural crops for both subsistence and commercial use residents rear livestock for beef and milk in extensive ranches in Borana, Oljogo and Solio. Laikipia county is home to wildlife conservancies and scenic sites like Thompson Falls which promote both local and foreign tourism.

Of the counties chosen for this study, Laikipia has the least occurrence of disaster events from natural hazards. However, it is prone to floods and drought. Of natural hazards, floods are the most frequently occurring hazard and result in the largest number of deaths. Human-inflicted disasters were also commonly reported including, road accident and drowning and fire, between 2002 and 2016 (Figure 8).

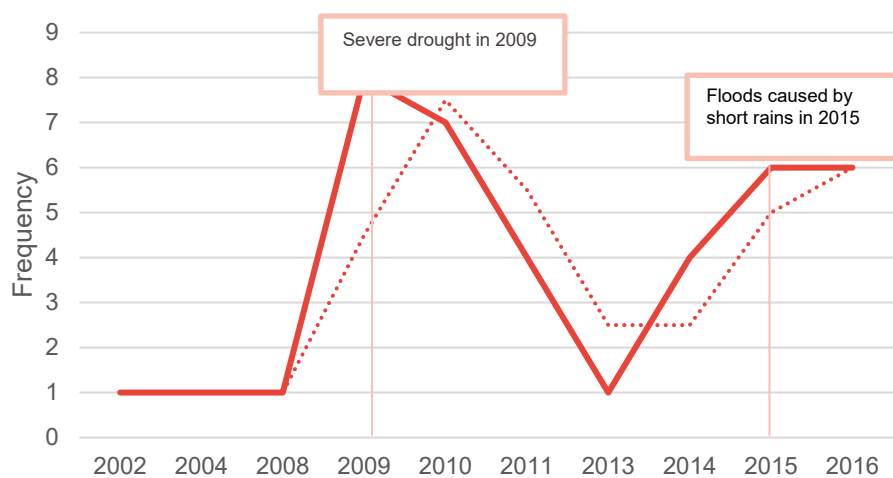
Figure 8: Laikipia county risk profile, 2002–2016



Source: Development Initiatives based on DesInventar disaster databases, UNISDR, 2018

Disasters in Laikipia county increased between 2008 and 2009 followed by a decrease between 2010 and 2013 (Figure 9). The county experienced another round of increases in disasters from 2013 to 2015 before levelling off. Peaks in 2009⁴⁰ and 2015⁴¹ were due to droughts and floods, respectively.

Figure 9: Disaster occurrence frequency, 2002–2016



Source: Development Initiatives based on DesInventar disaster databases, UNISDR, 2018; Relief Web, Anlap, NDMA

In conclusion, the four counties are prone to disasters triggered mainly by natural hazards and specifically floods and droughts. In the section below, we present how much is being spent on preparation, mitigation, prevention, response and recovery.

Risk-sensitive budget review

This section presents risk-sensitive budget analysis using county budget documents between 2016/17 and 2018/19. The official budget items, however, are neither broken down by activities – and remain at sub-programme level – nor indicate sources’ funds. Such pieces of information would have enriched the analysis further but are not currently available.

The study marked a total of 193 sub-programmes that meet are DRR-principal or DRR-significant. Laikipia and Baringo have the highest number of sub-programmes marked as DRR investments with each having 59 sub-programmes between financial years 2016/17 and 2018/19. The study identifies 54 sub-programmes relevant to DRR in Kisumu and 21 in West Pokot (Table 1).

Table 1: Number of departments, programmes and sub -programmes with marked DRR spending

County	Component	Department	Programme	Sub-programme
Kisumu	Principal	6	8	13
	Significant	7	20	41
West Pokot	Principal	1	3	4
	Significant	9	15	17
Baringo	Principal	5	7	14
	Significant	9	21	45
Laikipia	Principal	4	6	12
	Significant	6	16	47

Source: Development Initiatives based on county budgets

Yearly review of the DRR-principal component indicates that allocations fluctuate. However, it is difficult to draw implications from such fluctuations when we are considering only three years of budget cycles.

In terms of DRR mainstreaming, Kisumu has the highest number of departments with DRR-principal spending. In 2016, Kisumu county, particularly Kisumu city, became a pioneer in localising Sendai Framework indicators.⁴² The City has also been part of the UNISDR's (now UNDRR) the global 'Making Cities Resilient' campaign, to reduce disaster risk in the face of rapid urbanisation.⁴³

Risk-based budget review at county level

The total DRR investment by the four counties amounts to KES 6.4 billion for the three financial years. Kisumu and West Pokot allocated KES 1.7 billion each to DRR programmes. Baringo and Laikipia invested KES 1.9 billion and KES 1.1 billion respectively on DRR.

Splitting allocation into Principal and Significant DRR components shows, the highest Principal DRR investment is 34% of total marked DRR budget allocations by Kisumu county (Figure 10a).

Analysis of the overall DRR investment as a percentage of the total county budget shows all counties' DRR budgets are more than 5% of the county budgets, where West Pokot leads with the highest share (10.2%), of which 8.7% is on DRR-significant investment. The highest share of DRR-principal spending out of county budget (2.0%) is made by Kisumu county (Figure 10b)

Figure 10 Share of DRR components in total DRR vs Share of Principal and Significant DRR investments in county budgets

Figure 10a: Share of DRR components in total DRR budget

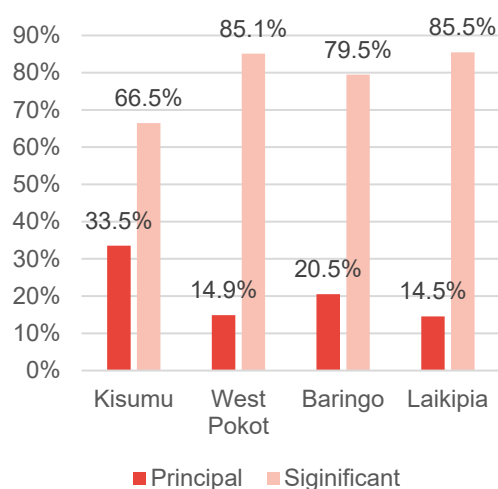
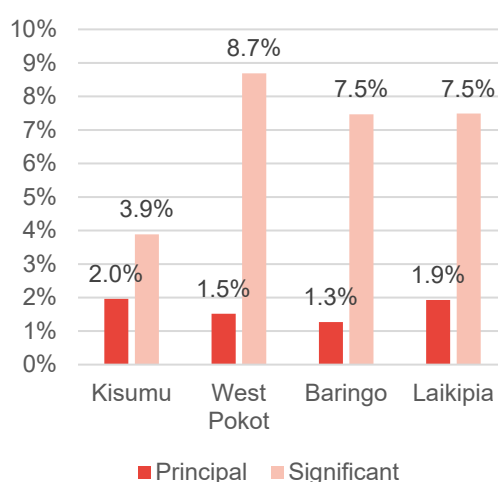


Figure 10b: Share of DRR components in total county budget



Source: Development Initiatives based on county budgets

Most of DRR-principal investment is made by the office responsible for disaster risk management. While all DRR-principal investment is made by the office responsible for DRR in West Pokot, more than half of DRR-principal spending is under this office in the other counties (Figure 11).

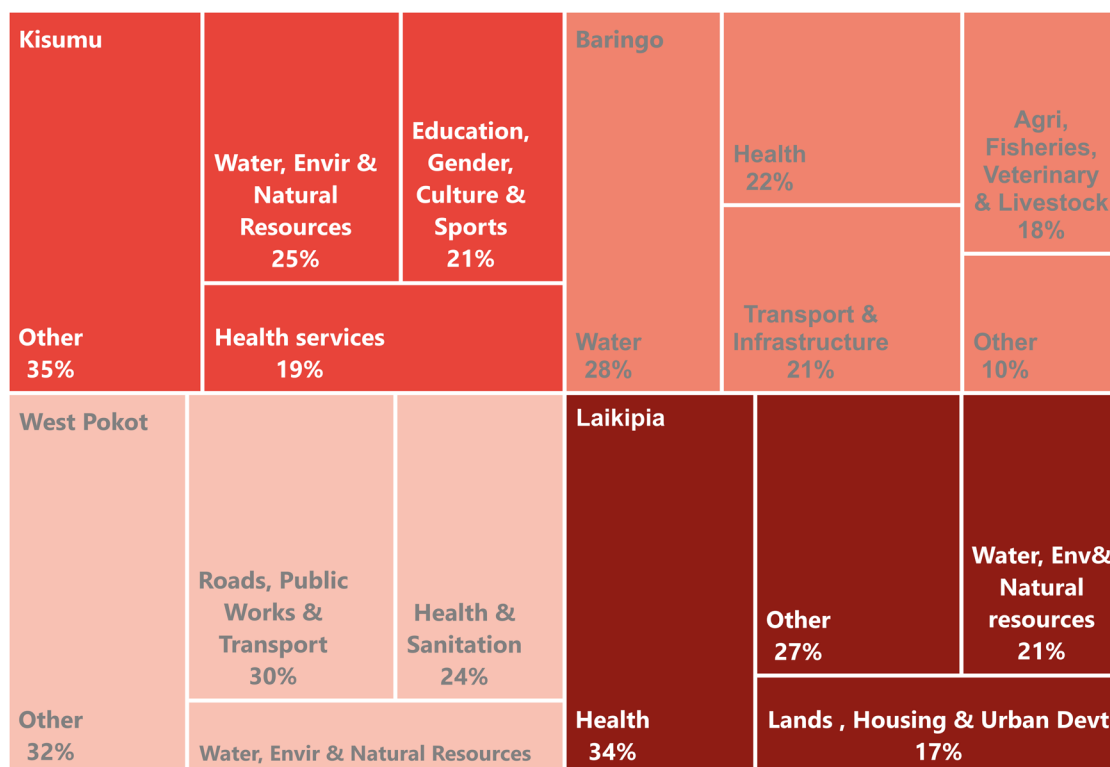
Figure 10: Top institutions by highest share in total DRR-principal spending at the county level, 2016/17–2018/19

Kisumu	Water, Envir & Natural Resources 20%		Laikipia	Water, Envir & Natural Resources 34%		
	Office of the Governor & County Admin 63%	Business, Industry & Energy 9%		Other 8%	Public Service & County Admin 55%	Other 11%
	West Pokot			Baringo	Environment 24%	
Intergovernmental Relations, Peace Building & Disaster Management 100%		Treasury & Economic Planning 51%		Lands, Housing & Urban Devt 13%	Other 13%	

Source: DI based on the county budgets

County spending on DRR-significant investment is based on county development priorities. These are mainly on provision of water, environmental conservation, roads construction and rehabilitation and preventive and promotive health department services. In Kisumu almost half of the DRR-significant component was allocated for water and education. In Baringo DRR-significant budget items were found in water and health projects. Laikipia and West Pokot spend over half of their total DRR-significant spending on water, roads and health departments (Figure 12).

Figure 11: Top institutions by highest share in total DRR-significant spending at the county level, 2016/17–2018/19



Source: Development Initiatives based on the county budgets

DRR investment by risk category and disaster risk management

Of the total sub-programmes marked as DRR relevant, over 88% were identified as disaster risk mitigation activities, while the rest were relevant to disaster as preparedness (7%) and disaster response (5%). Breaking this down by DRR component indicates that mitigation is still the highest risk category priority while preparedness and response have equal share (Figure 13). The study could not trace any investment towards recovery.

Figure 12: Share of marked Principal DRR sub-programmes by risk category



Source: Development Initiatives based on the county budgets

Kisumu

Of the total KES 1.7 billion marked as DRR investment for Kisumu county, KES 558.1 million or 34%, was earmarked for DRR-principal activities and KES 1.1 billion on the DRR-significant programmes. Breaking down these investments further by risk type indicates that KES 1.3 billion of the total budget was spent on mitigation programmes (78.4%), KES 343.3 million (20.6%) on response and KES 15.8 million (1%) on preparedness.

Kisumu county's DRR-principal investment is more geared towards response than mitigation, preparedness and recovery (Figure 14a). While DRR-principal spending is distributed among mitigation, response and preparedness activities, the DRR-significant component is relevant only to risk mitigation. Response relevant programmes received more than three-fifths of the total DRR-principal investments, (61.5%). The other DRR-principal allocations were received by mitigation (35.7%) and preparedness (2.8%) programmes (Figure 14b).

Figure 13: Kisumu County DRR spending components by disaster risk category and risk management cycles

Figure 14a: DRR-principal spending by risk category and risk management

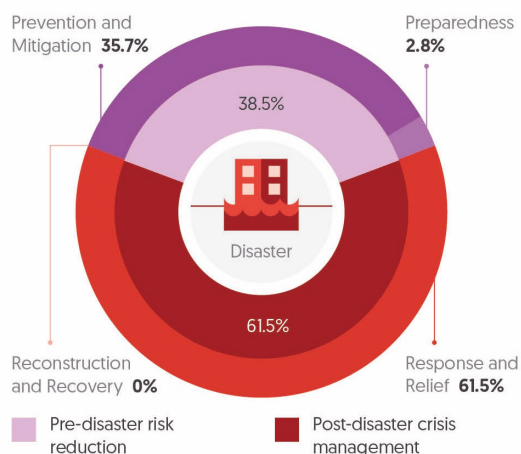
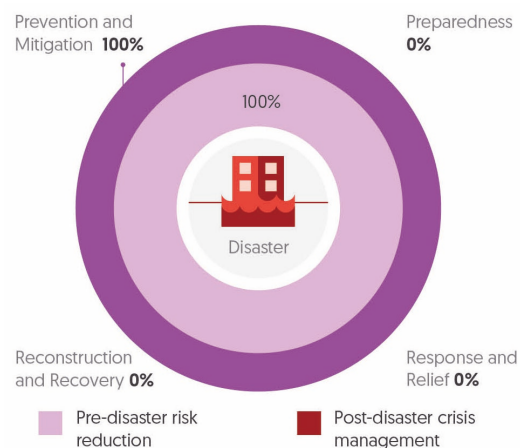


Figure 14b: DRR-significant spending by risk category and risk management



Source: DI based on county budget

Breaking down the DRR-principal allocation by risk category shows, the focus of Kisumu county's DRR-principal investment targets post-disaster crisis management (PDCM) rather than pre-disaster risk reduction (PDRR). Close to two-thirds of DRR-principal investment is on activities identified as PDCM while the rest, 38.5%, is allocated to PDRR. Because of its nature, the DRR-significant component allocated 100% of the total budget to mitigation risk category, which is all on PDRR.

West Pokot

More than four-fifths of tracked DRR budget is formed by DRR-significant component. Of the total KES 1.7 billion West Pokot county spent on DRR over the three financial years, only KES 247.9 million, 15% of total DRR budget, was allocated to DRR-principal component and the rest, KES 1.4 billion, as DRR-significant investment.

Shares of risk categories in total DRR budget show KES 1.4 billion was spent on mitigation programmes (85.1%), KES 183.5 million on preparedness (11%) and KES 64.3 million on response (3.9%)

Breaking this down further by DRR components indicates, priority in DRR-principal investment is on preparedness programmes (Figure 15a). Close to three-quarters of the total DRR-principal funding (74%), is spent on risk preparedness while the rest is on response. Similar to Kisumu county, all DRR-significant investments went to disaster risk mitigation activities (Figure 15b).

Figure 14: West Pokot County DRR spending components by disaster risk category and risk management cycles

Figure 15a: DRR-principal spending by risk category and risk management

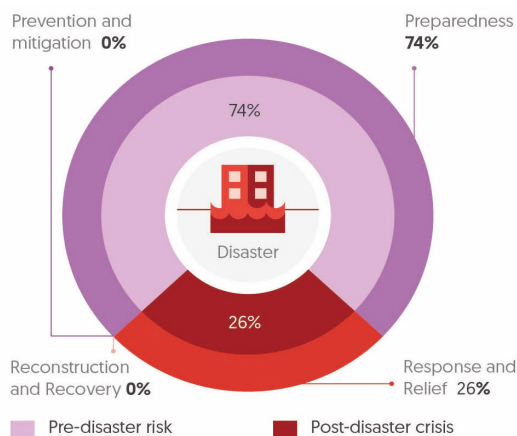
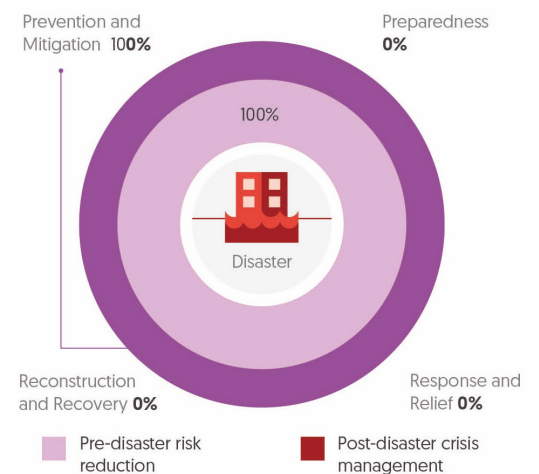


Figure 15b: DRR-significant spending by risk category and risk management



Source: DI based on county budget

Further categorising DRR-principal and -significant investments by disaster risk management cycle reveals all allocations were directed to pre-DRR rather than post disaster crisis risk management.

Baringo

Close to 80% of Baringo county's DRR budget is traced to DRR-significant investment. The county invested KES 1.9 billion in DRR activities between 2016/17 and 2018/19. Of

this, KES 388.3 million (21%) was allocated for DRR-principal sub-programmes and KES1.5 billion (79%) on those that DRR-significant.

While the DRR-principal component is spread across risk cycles, DRR-significant activities are targeted towards mitigation. DRR-principal funding focuses on response and relief programmes (Figure 16a). DRR-principal investment also targets prevention, mitigation and preparedness for disaster. Of the 1.5 billion spent on the DRR-significant component, 100% was allocated to mitigation activities (Figure 16b).

Figure 15: Baringo County DRR spending components by disaster risk category and risk management cycles

Figure 16a: DRR-principal spending by risk category and risk management

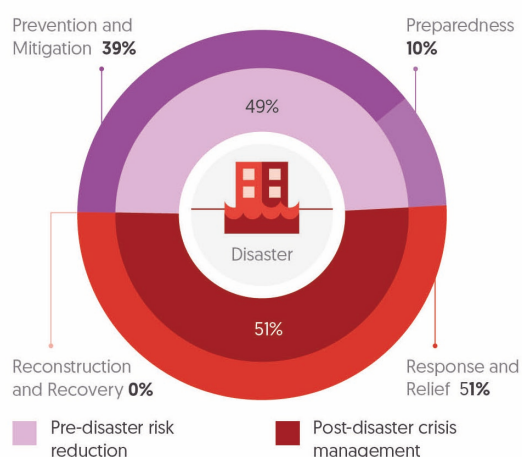
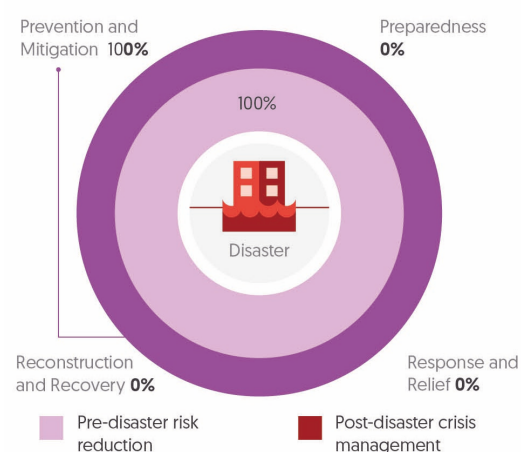


Figure 16b: DRR-significant spending by risk category and risk management



Source: DI based on county budget

Categorisation by disaster risk management cycle indicates, the DRR-principal budget is almost equally distributed between pre-disaster risk reduction and post-disaster crisis management. Over the years, on average, PDRR has been receiving 49% of the total DRR-principal budget while PDCM was allocated 51%. As is the case in other counties, DRR-significant investment is on PDRR.

Laikipia

Similar to the other three counties, the OECD marker finds the bulk of Laikipia county's DRR budget invested on DRR-significant activities. The county spent a total of KES 1.1 billion on DRR programmes between 2016/17 and 2018/19. Of this, KES 164 million or 15% was allocated to the DRR-principal component while the bulk of it, KES 965.2 million or 85%, was on the DRR-significant component.

Prevention and mitigation risk cycles characterise Laikipia’s total DRR investment. While the bulk of DRR-principal investment is still on prevention and mitigation, spending response and relief and disaster preparedness also feature in this component (Figure 17a). Unlike other counties, Laikipia’s DRR-significant budget features a small fraction of risk categories other than mitigation (Figure 17b).

Figure 16: Laikipia County DRR spending components by disaster risk category and risk management cycles

Figure 17a: DRR-principal spending by risk category and risk management

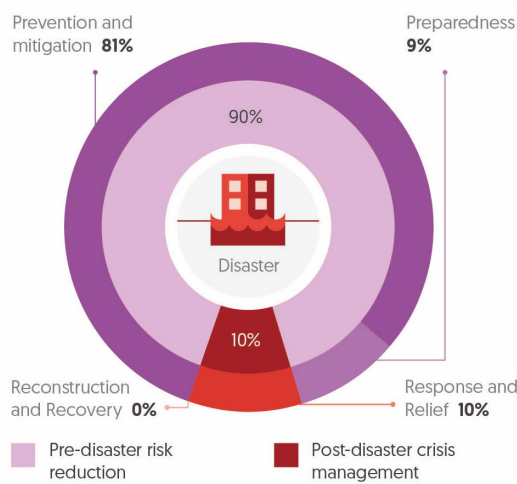
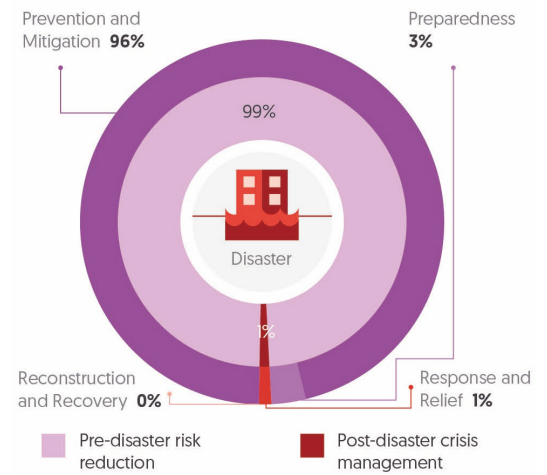


Figure 17b: DRR-significant spending by risk category and risk management



Source: DI based on county budget

In terms of disaster risk management, DRR-principal allocation leans heavily towards PDRR (90%) and so does Significant DRR (99%).

Alignment to the Sendai Framework

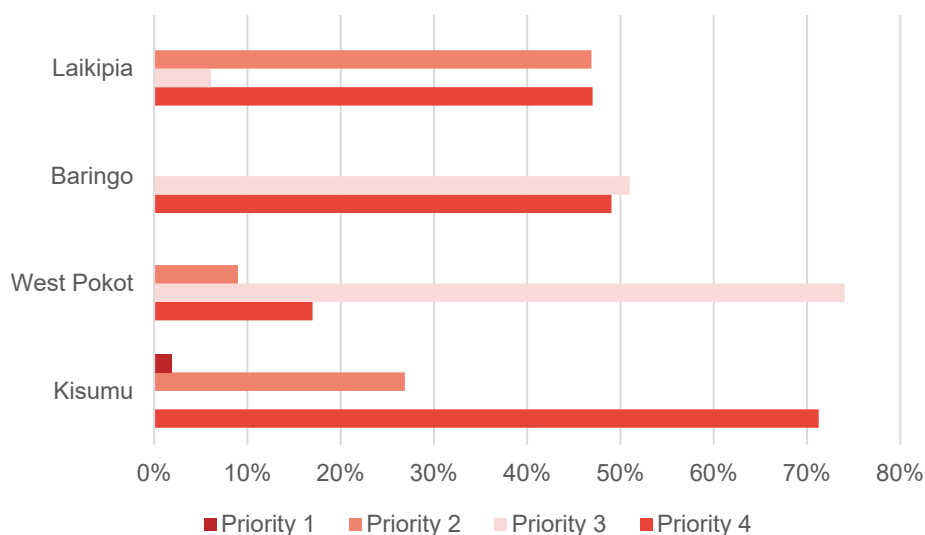
County legislation on DRR is expected to be aligned with the Sendai Framework of Action (2015). The Sendai Framework has four priorities. These are: understanding disaster risk (Priority 1); activities related to strengthening disaster risk governance to manage disaster risk (Priority 2); investments on disaster risk reduction for resilience (Priority 3); and those activities aimed at enhancing disaster preparedness for effective response and to “build back better” in recovery, rehabilitation and reconstruction (Priority 4).

DRR-significant investments by their nature are development oriented and hence, by default, tend to fall under Priority 3.

Priority 1, which should be the basis for planning has the least priority in all the counties. None of the counties, except Kisumu allocate their DRR-principal spending for building knowledge and understand disaster risk (Priority 1). We managed to trace a small share of DRR-principal spending on Priority 1 (1.9% of total DRR-principal investment of Kisumu county). A total of 127 sub-programmes were traced to Priority 3; 59 sub-programmes to Priority 4; 6 sub-programmes to Priority 2; and 5 sub-programmes to Priority 1.

Figure 18 presents alignment of counties' DRR-principal budget towards the four Sendai priorities. West Pokot and Baringo's DRR-principal investments prioritise building resilience (Priority 3). Kisumu's spending has clear preference towards effective response (Priority 4). Laikipia's DRR-principal spending aligns towards both Priority 4 and Priority 2 with a share of 47% of total Laikipia's DRR-principal budget.

Figure 17: Share of Sendai Framework priorities in DRR-principal budget by county



Source: Development Initiatives based on county budget

From the above analysis, we find the four counties give little attention to determine the level of vulnerability, exposure and capacity (Priority 1); and the policies and institutional frameworks (Priority 2). All counties should attend to these priorities as part of a holistic approach to disaster risk.

Conclusion

Spending that is DRR-principal allows counties to mitigate and prevent disasters from happening, prepare adequately, respond effectively and recover quickly. Investments that are related to DRR indirectly such as provision of clean water and preventive health care boost the capacity of residents to withstand shocks. Investment on Significant DRR component not only improves coping mechanisms but also ensures sustainable poverty reduction.

According to the Disaster Risk Management Bill (2018), both county and national governments should set aside funds for DRR programmes that are to help in disaster mitigation, preparedness, response and recovery. However, our findings show that resources are skewed heavily towards one or two risk categories, either mitigation or response, and focus on pre-DRR.

The key findings of the report are:

- Counties have shown progress in developing disaster management policy and institutional frameworks. The frameworks are key to managing disaster risk and coordinating disaster risk management in the counties.
- Allocations to programmes with DRR-principal objectives are less or equal to 2% of respective county budget and less than a quarter of total marked DRR investment, except for Kisumu. Kisumu county has the highest spending on DRR-principal objectives. Overwhelming allocation of budget is provided to activities that indirectly achieve DRR-significant objectives.
- The four counties made a total of KES 6.4 billion investment on DRR between 2016/17 and 2018/19. Baringo leads with the highest DRR allocation (KES 1.9 billion), followed by West Pokot and West Pokot (KES 1.7 billion each) and Laikipia (KES 1.1 billion).
- Few offices host DRR investment, particularly those charged with DRR-principal objectives. Principal spending is made by offices responsible for DRR which includes the Office of the Governor in Kisumu County, Public Service and County Administration in Laikipia, Treasury and Economic Planning in Baringo and Intergovernmental, Peace Building and Disaster management in West Pokot.
- The bulk of DRR-significant budget is spent by offices responsible for water provision, preventive and promotive health services, and roads and transport construction and rehabilitation. Funding was allocated to programmes on water provisions, infrastructure construction and rehabilitation and promotion of preventive health care services.

- All counties' total DRR investments focus on pre-DRR rather than post-disaster crisis management. However, breaking this down by DRR component reveals that Kisumu and Baringo counties' DRR-principal budget is more focused on response while that of West Pokot and Laikipia is focused on disaster risk preparedness and mitigation respectively. No allocation was traced to recovery.
- Alignment to Sendai Framework's priorities reveals that marked DRR-significant investment prioritises building resilience (Priority 3) in all counties whereas under DRR-principal budget allocation, Kisumu and Laikipia prioritise disaster response (Priority 4) and West Pokot and Baringo prioritise building resilience (Priority 3).

Recommendations

1. **By recognising DRR as a development priority, ASAL county governments need to make deliberate efforts to allocate more funds to activities that directly target DRR; and mainstream across more departments.**
2. **Budget documents should contain breakdown of sub-programmes to projects and activities as well as sources of funding.** Such information lends strong evidence for tracking of DRR budget analysis.
3. **We recommend considering at least 5 years budget cycles for future DRR budget tracking.** Yearly fluctuations in budget allocations may imply that one needs to consider longer budgets budget cycles. It is difficult to make sense out of trends in budget allocations when there are fluctuations in three years' budget analysis.
4. **There is need for costing of disaster impacts and financial requirements for disaster risk management.** To close the loop for investment-gap analysis and/or carry out cost-benefit analysis of DRR investment, there is need for institutions to undertake costing of not only disaster impacts but also resource requirements.
5. Periodic assessment and data collection are required to inform planning and budgeting of programmes. Counties need to carry out comprehensive assessment of disaster risk (Priority 1 of the Sendai Framework), particularly for high exposure areas. Assessment of the affected population, their needs and the likelihood of the disaster recurring should be done so that information is shared on time with concerned actors.

Note

- ¹ The UNDRR recently carried out DRR budget assessment for 16 African countries, two of which DI participated in (forthcoming).
- ² Sendai Framework for Disaster Risk Reduction, 2015 -2030. Available at https://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf
- ³ Kenyan city pilots Sendai risk monitoring. <https://reliefweb.int/report/kenya/kenyan-city-pilots-sendai-risk-monitoring>
- ⁴ Index for Risk Management (INFORM 2019), release date October 2018, version 0.3.6.
- ⁵ The Global Climate Risk Index 2018. Available at <https://germanwatch.org/sites/germanwatch.org/files/publication/20432.pdf>
- ⁶ Ministry of Devolution and ASALs. Available at <http://demo.devolutionasals.go.ke/>
- ⁷ Development Initiatives (2017). Assessment of Kenya's preparedness to disasters caused by natural hazards: Floods, drought and disease outbreak. Available [here](#)
- ⁸ UNDP's note on governance on DRR in Kenya. Available [here](#)
- ⁹ Kisumu Disaster Management Act 2015. Available at <http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/KisumuCountyDisasterandEmergencyManagementAct2015.pdf>
- ¹⁰ Laikipia County Disaster Management Risk Policy 2016. Available at <http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/KisumuCountyDisasterandEmergencyManagementAct2015.pdf>
- ¹¹ West Pokot Disaster Management Act 2016. Available at <http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/WestPokotCountyDisasterManagementAct2016.pdf>
- ¹² Baringo Disaster Management Policy 2016. Available at <http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/WestPokotCountyDisasterManagementAct2016.pdf>
- ¹³ See note 5
- ¹⁴ See note 5
- ¹⁵ OECD DRR Marker. Available at [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DCD/DAC/STAT\(2017\)26&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DCD/DAC/STAT(2017)26&docLanguage=En)
- ¹⁶ KNBS 2012 Analytical report on population projections volume 14. Available at <https://www.knbs.or.ke/download/analytical-report-on-population-projections-volume-xiv-pdf-2/>
- ¹⁷ KNBS 2016, Kenya Integrated Budget Household Survey. Available at <http://statistics.knbs.or.ke/nada/index.php/catalog/88>
- ¹⁸ DesInventar, Country Disaster Risk Profile. Available at <https://www.desinventar.net/DesInventar/profiLetab.jsp?countrycode=ken&continue=y>
- ¹⁹ See note 9
- ²⁰ Otiende, B./weADAPT (2009). The Economic Impacts of Climate Change in Kenya: Riparian Flood Impacts and Cost of Adaptation.
- ²¹ Standard Newspaper 2009, Five die as El Nino like floods hit Kisumu. Available at <https://www.standardmedia.co.ke/article/1144024620/five-die-as-el-nino-like-floods-hit-kisumu>
- ²² ReliefWeb (08 July 2010). Kenya: Floods 2010 - DREF operation n° MDRKE011 - Final report. Available at <https://reliefweb.int/report/kenya/kenya-floods-2010-dref-operation-n%C2%B0-mdrke011-final-report>
- ²³ UNICEF (Quarter 4, 2015). Kenya: Humanitarian Situation Report. Available at <https://reliefweb.int/sites/reliefweb.int/files/resources/UNICEF%20Kenya%20Infographic-%20Sep-%20Dec%202015.pdf>
- ²⁴ Daily Nation, 2015. Floods Displace 1500 more in Kisumu. Available at <https://www.nation.co.ke/counties/kisumu/Floods-Kisumu-Displaced-Persons/1954182-2677600-130voc1/index.html>
- ²⁵ See note 3
- ²⁶ See note 8

- ²⁷ See note 9
- ²⁸ See note 18
- ²⁹ ReliefWeb (2011). An assessment of the response to the 2008 - 2009 drought in Kenya. Available at <https://reliefweb.int/report/kenya/assessment-response-2008-2009-drought-kenya>
- ³⁰ ILRI, (2010). Assessment of the response to the 2008–2009 droughts in Kenya. A report to the European Union delegation to the Republic of Kenya.
- ³¹ Relief Web Kenya, 2010. Kenya: Floods Cause Death, Destruction and Displacement. Available at <https://reliefweb.int/report/kenya/kenya-floods-cause-death-destruction-and-displacement>
- ³² Reliefweb (31 January 2014). West Pokot County: Drought Early Warning Bulletin for January 2014. Available at
- ³³ See note 8
- ³⁴ See note 9
- ³² See note 10
- ³⁶ Reliefweb (05 September 2010) Floods displace hundreds in Kenya. Available at <https://reliefweb.int/report/kenya/floods-displace-hundreds-kenya-0>
- ³⁷ Daily Nation (2015). Fear of flooding as Baringo lakes rises. Available at <https://www.nation.co.ke/counties/baringo/Fears-of-flooding-as-water-levels-in-Baringo-lakes-rise/3444812-4721292-5hou5s/index.html>
- ³⁸ See note 8
- ³⁹ See note 9
- ⁴⁰ MoALF (2017). Climate Risk Profile for Laikipia County. Kenya County Climate Risk Profile Series. The Ministry of Agriculture, Livestock and Fisheries (MoALF), Nairobi, Kenya.
- ⁴¹ Daily Nation, 2015. Nurse, driver feared dead as floods sweep away ambulance in Laikipia County. Available at <https://www.nation.co.ke/counties/1107872-2965616-h7w3n8/index.html>
- ⁴² See note 23
- ⁴³ See note 39

Acronyms

ASAL	Arid and Semi-Arid Lands
AU	African Union
DAC	Development Assistance Committee
DI	Development Initiatives
DRM	Disaster risk management
DRR	Disaster risk reduction
EAC	East African Community
EU	European Union
FY	Financial year
OECD	Organisation for Economic Co-operation and Development
PDRR	Post Disaster Risk Reduction
PDCM	Post Disaster Crisis Management
UN	United Nations
UNISDR	United Nations International Strategy for Disaster Reduction
UNDRR	United Nations Office for Disaster Risk Reduction

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