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# INSURANCE INDUSTRY RESPONSE TO FLOOD RISK IN KENYA

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# INTRODUCTION

As of May 3rd, a report by the UN Office for the Coordination of Humanitarian Affairs (OCHA) indicated that over 205,000 individuals were affected by recent floods in Kenya, with 195,304 displaced, at least 210 lives lost, 164 injured, and 72 missing. Heavy rains resulted in substantial losses, casualties, deaths and displacements, especially in informal settlements.

Long rains in Kenya often lead to disasters as seen in 2018, one of the wettest years on record, where over 300,000 people were displaced, and more than 132 deaths were reported. Major floods are a recurring issue in Kenya, with at least 17 significant flood events recorded since the 1960s.

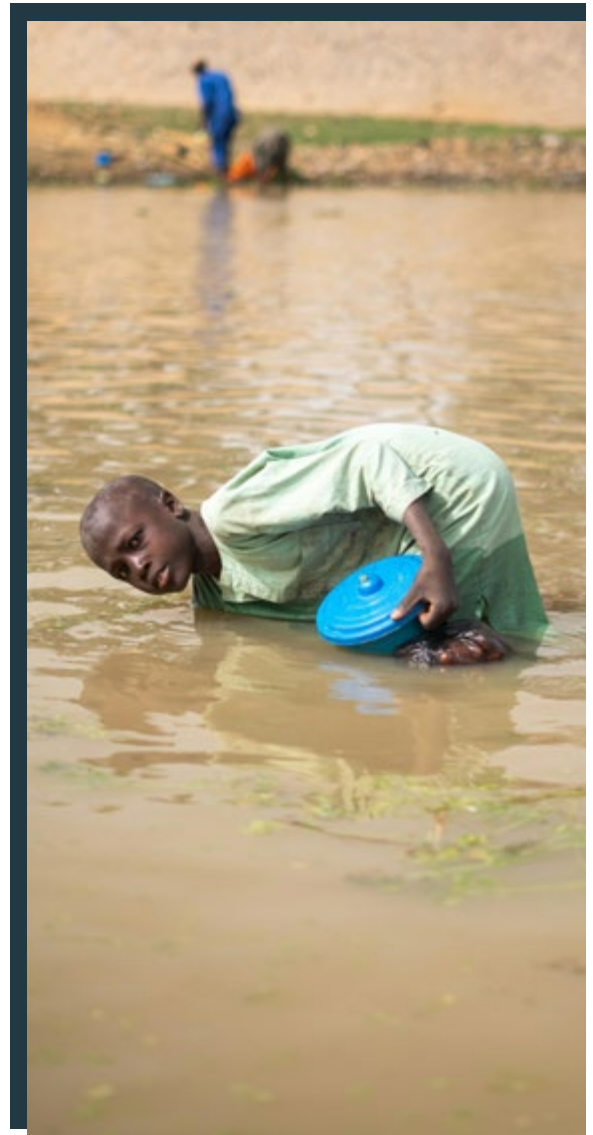
This article explores the insurance sector's role in managing flood risk and examines how the increasing frequency of such disasters is reshaping the insurance landscape. By examining the measures taken by the insurance industry and the challenges it faces, we can better understand the evolving dynamics of flood risk management in Kenya.



## INDEX BASED INSURANCE AND FLOODS

Index-based insurance is primarily designed to cover risks that can be measured using an index like weather-related events or natural disasters. This insurance uses predetermined indices, such as rainfall or river water levels to trigger payouts. AI enhances this insurance by analyzing satellite imagery and weather forecasts to create accurate risk models, enabling reliable and timely payouts based on flood indices. By enhancing coverage accessibility for vulnerable communities and promoting proactive risk management, this approach contributes to greater resilience against flood events. Several African countries including Kenya, Ethiopia and Senegal have implemented this scheme.

The concept of index-based insurance in Kenya began in the late 2000s, primarily targeting drought insurance for pastoralists and small-scale farmers, addressing the frequent droughts that affected agricultural productivity. An example is the Kenya Livestock Insurance Program (KLIP) launched by the Kenyan government in 2015. By 2020, the program had insured 18,000 pastoralists, providing payouts totaling \$5 million. There is also the African Risk Capacity( ARC) which has disbursed over \$60 million to member countries since 2014, aiding 3 million people during drought and flood events. A groundbreaking initiative in Kenya offers a flood insurance solution specifically designed for small-scale farmers along the Tana River banks. This program comprehensively assesses flood risks in the region and compensates farmers when rainfall exceeds a predetermined threshold. The goal is to shield farmers from the financial impacts of increasingly frequent and severe floods due to climate change.



# BENEFITS OF INDEX-BASED INSURANCE FOR FLOODS

- **Quick and Transparent Payouts:** Since payouts are triggered by objective indices, they can be processed quickly without lengthy claims assessments. This is crucial for providing timely financial support to affected individuals and communities.
- **Reduced Administrative Costs:** The automated nature of index-based insurance reduces the administrative burden and costs associated with assessing individual claims, making it a cost-effective solution for both insurers and policyholders.
- **Wider Coverage:** By relying on objective data, index-based insurance can be extended to areas that might be difficult to assess using traditional methods. This makes it particularly useful for remote or underserved regions.
- **Incentivizing Risk Reduction:** The use of indices can encourage better risk management practices. For example, communities might be encouraged to invest in improved drainage systems or flood defenses if they know that such measures could affect their insurance premiums.



## EXCLUSIONS IN INDEX-BASED INSURANCE COVERAGE

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While index-based insurance provides valuable protection against water-related damages, it's important to understand that certain exclusions may apply to coverage. Here are some common exclusions typically found in flood-related insurance policies:



- **Non-Indexed Events:** Losses that do not meet the specific index criteria, such as insufficient rainfall levels for triggering a drought insurance payout or water levels that do not meet the flood insurance threshold.
- **Negligence:** Damage resulting from poor maintenance or neglect of property and assets.
- **Intentional Acts:** Losses due to deliberate damage by the policyholder.
- **Non-Weather Related Events:** Damage caused by factors unrelated to the weather index, such as fire, theft or vandalism.
- **Indirect Losses:** Financial losses not directly covered by the index, such as business interruptions, lost income or secondary economic impacts, unless specifically included in the policy.

# CHANGING INSURANCE LANDSCAPE IN RESPONSE TO FLOOD RISK

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The increasing frequency and severity of flood events are significantly reshaping the insurance landscape. Here's how:

- **Rising Costs:** As flood risks increase, insurance companies raise premiums to match the higher likelihood of claims. This can make flood insurance pricier and less accessible for individuals and businesses in high-risk areas.
- **Market Innovation:** Insurers are embracing innovative solutions like parametric insurance, which provides predetermined payouts triggered by factors like rainfall or river levels. This approach streamlines claims processing and provides more predictable outcomes, enhancing financial resilience during flood events.
- **Risk Selection and Pricing:** Insurers are reassessing risk assessment and pricing models due to increasing flood risks. This could mean being more selective in underwriting high-risk areas or adjusting premiums to better match actual flood risk. In some cases, coverage might be withdrawn from flood-prone areas with inadequate defenses, impacting affordability and availability.
- **Regulatory Changes:** Governments and regulators are driven to enact reforms to tackle growing flood risks. This involves investing in stronger flood defenses and mandating insurance for high-risk properties. These measures aim to boost community resilience and safeguard against flood-related losses.

The escalating frequency of flood disasters is prompting insurers to reassess their strategies, products, and pricing models. This aids in effectively managing flood risk while striving to maintain the accessibility and affordability of flood insurance for those most in need.



# IMPLEMENTATION MEASURES TO FREQUENT FLOOD RISKS

The changing insurance landscape in response to frequent floods reflects a dynamic shift in how insurers should approach risk management, coverage and resilience building through the following ways:

- 1. Risk Assessment and Mapping:** Utilize Geographical Information Systems (GIS) and remote sensing technology to create flood risk maps. This will help in identifying high risk areas.
- 2. Product Development:** Develop parametric insurance products that pay out based on predefined parameters like rainfall or river water levels rather than actual losses. This can provide faster payouts and reduce administrative costs.
- 3. Infrastructure Investment:** Invest in infrastructure such as flood barriers, drainage systems and water reservoirs. Insurers can fund or co-finance these projects in order to reduce overall risks and lower insurance payouts.
- 4. Partnerships and Collaboration:** Working with government agencies and NGOs to enhance flood risk management, pool resources and share expertise. This can also include partnering with the meteorological departments and research institutions to share data and improve risk modeling and weather forecasting.
- 5. Education and Awareness:** Conduct education campaigns to inform communities about flood risk and importance of insurance. This can include information on preventive measures and response to flood events.
- 6. Policy Advocacy:** Push for laws that require thorough flood assessments for new buildings and promote flood resistance construction practices. They should work with the government as well to offer benefits to property owners who take steps to minimize flood damage like using flood resistance materials.

# CONCLUSION



The insurance industry's response to flood risk in Kenya is increasingly aligned with the Environmental, Social and Governance (ESG) agenda, highlighting the critical role of innovative solutions like index-based insurance in enhancing resilience against climate-related disasters. By adopting advanced risk assessment technologies, developing parametric products and investing in infrastructure, insurers can mitigate risks while promoting sustainability. These principles ensure that practices support sustainable development, protect vulnerable communities and foster environmental stewardship. Transparent governance within the sector guarantees fair distribution of resources, aiding those most affected by floods. Ultimately, the industry's commitment to ESG aims not only to address immediate financial impacts but also contributes to long-term, sustainable development goals, creating a more resilient and equitable future for Kenya.





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